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THE BUILDINGS OF THE UNIVERSITY OF WISCONSIN

JIM FELDMAN

DEDICATION

This book is dedicated to Robert Feldman (1919-1965) and Grant Killoran (1937-1970). They both would have known I could do it.

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ACKNOWLEDGMENTS

This work could not possibly been completed without the help of a large number of people. Foremost among these are the staff of the University Archives: Director Frank Cook, director of iconography Bernie Schermetzler, head of staff Cathy Jacob, and computer specialist Steve Masar. These people were unflaggingly helpful and considerate during the span of five years in which I occupied their space, time and resources to research this book. Publishing funds were provided by a grant from the Evjue foundation.

Special mention must go to University administrator and historian Arthur Hove, who provided assistance and faith when both were in short supply. Likewise University historians Dr. David Cronon, John Jenkins, and Barry Teicher who were extremely encouraging. Del Brown provided photographic expertise where none existed. J.G. Stalnaker, Dave Wieck, and Peter Burke supplied invaluable computer publishing experience.

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And a special thanks to the staff at the State Historical Society, James Draeger, Joe De Rose, and Tim Heggland.

To all those who helped me but whom I have forgotten to thank, my sincerest gratitude and apologies.

Among my very loyal friends and family members who helped with encouragement, suggestions and proofreading, I particularly wish to thank: Mary Liz for her help with the grant proposal, Bob and Margaret Stephenson and their wonderful daughter Mary Theresa.

PREFACE

About Using the Book:

This book contains an account of every building used by the University of Wisconsin. It includes all buildings that the UW built or bought, whether now in existence or not. It includes buildings within the modern boundaries of the Madison campus, with the addition of a few that fall outside that limit, but that are used by the campus (e.g. the Knapp house). Specifically excluded from the book are the buildings of the off-campus agricultural stations, the Hill Farms buildings, the Arboretum, and the Pine Bluff observatory buildings.

A short article about each building explains when why and where the building was erected or purchased. In most cases the architect, contractor and cost of construction are included. All articles contain at least one picture of the building. The articles are presented in a roughly chronological order. A full index at the back of the book will enable the user to search by building name, address, and by some aliases. A quick reference table provides quick access to the most important information about each building. The book is also available in computer searchable CD-ROM form.

About the Photos:

Each photo in the book is labelled (in the caption) with an identifier. Most photos are available for copies in any size. Nearly all the photos are available from the University Archives iconography collection (B134 Memorial Library). When the photo citation is a number preceded by an 'X' (e. g. X2200) there is a copy negative available to reproduce that photo at a relatively low cost. When the photo citation has a series number the photo will be found in the folder cited, but may not have an existing copy negative. Such a citation is "series 9/1, Social Science, jf-77". The series number and folder name tell the Archives in what folder the photo is located, and the jf number serves as a unique identifier within that folder. Photos labelled with an AP number (i.e. AP-81) are in the author's collection which will be filed by the archives with the research material for this book, or some other appropriate place [no jokes Bernie]. In rare instances, a photo from the State Historical Society Collection was used, and is so labelled.

Source Citations:

Each article is footnoted to provide access to the sources of information for further research. In almost all cases (except where noted) the material cited will be found in the University Archives, listed by series number. This number will be sufficient for the Archives staff to locate the material.

INTRODUCTION

At the dedication of the new Babcock Hall in 1949, regent John Jones paraphrased James Garfield in saying "A University is Mark Hopkins at one end of a log and a student at the other." The regent went on to point out that the University had a steady (indeed increasing) flood of students, and an equally remarkable number of skilled educators (Jones mentioned Babcock, E. B. Hart and Conrad Elvehjem). But Jones' main point was that of the three ingredients of the University the "*state must provide the log*".

This book is an account of the log. It had its genesis in my return to Madison after an absence of decades. I discovered that as an adolescent student in the riotous and ructious late 1960s, I had completely overlooked the astonishing beauty and diversity of the University as a physical object. Upon revisiting the haunts of my youth (Adams Hall where I lived, the Memorial Union where I played, and Birge Hall where I met my wife) I noticed a number of beautiful buildings that had gone unremarked at the time. This discovery led me to another surprise. When I enquired at local libraries, including the University library, I found that no book had ever been compiled telling the story of the University buildings. There were many histories of the University but they dealt (and properly so) with the students and educators, but never, except peripherally, with "the log".

After a few weeks (in the summer of 1993) of preparatory investigation to determine whether sufficient source material survived to compile such a history, I decided, with the encouragement of Arthur Hove (the author of one of the general histories I had seen) to attempt to assemble a history of the University buildings, both present and past. The decision was facilitated by the existence of a tremendous collection of historic photographs of the University that resides in the University Archives. The focus of the book would be a photo of every known building, and an account of the circumstances surrounding its existence.

Nothing (save curiosity) in my training as an engineer prepared me for the task I had thus set for myself. The research and writing were skills I was forced to develop as I proceeded. Only now as I near completion do I recognize the hubris which accompanied the outset of the project. Indeed, my ignorance of standard research techniques of record keeping and citation required the laborious retracing of my steps at many points.

My feelings about the finished work are summed up perfectly by the words of Carl Sandburg's introduction to his American Songbook:

> I apologize for the imperfections in this work. I believe no one else is now, or ever will be, so deeply aware and so thoroughly and widely conscious of the imperfections in these pages.

I have had wonderful time working on this project. It has led me down innumerable interesting pathways, where I met fascinating people and discovered the depths of the amazing story of the University of Wisconsin. I hope that this volume makes a useful and permanent addition to the previously recorded histories of that University.

Jim Feldman
Madison Wisconsin, April 1996

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NORTH HALL

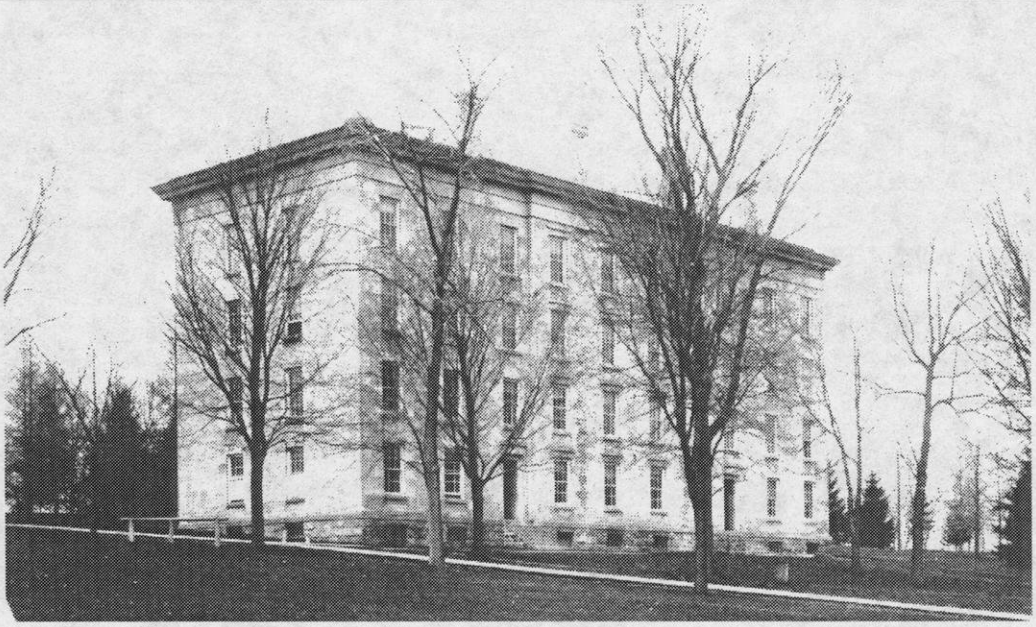


Fig. 1. The first building on campus, in the days when the Bascom Elms were young and North Hall had a hitching post, c. 1885. [series 9/1 North Hall, x25-310]

North Hall was the first building of the University of Wisconsin. Constructed in 1851 at a cost of $19,000, it served as the entire physical plant of the University for four years. When the first Science Hall burned in 1884, the University eliminated the dormitory function of North Hall in favor of instructional space. Since then it has housed a series of academic departments, and is listed on the National Register of Historic Places.

The original plan for the University was developed in 1850 by Chancellor Lathrop, regents Mills and Dean, and drawn by architect John Rague. Rague's plan, which has since been lost, called for four dormitory buildings and a "central edifice."[1] When the teenaged D. K. Tenney, a Madison youth and student at the "Wisconsin College", walked up College Hill to view the progress of the first building of the fledgling University of Wisconsin in May of 1850, he had hiked through thick and untracked woods from the end of State Street at Gilman Street. He told the workmen that he meant to attend the University when they had completed the building. They replied: "Young man, if you intend studying here, now is your chance. You may lay the corner stone."[2] Tenney had apprenticed as a bricklayer to his father and complied. The building, proceeded under the direction of contractor James Livesey and was built for a total cost of about $19,000. At this time the projected maximum enrollment of the University was 256 young men.[3]

On September 17, 1851, North Hall opened, and for the next four years North Hall contained the entire University. The University comprised about thirty students, three faculty (J. W. Sterling, O. M. Conover, and John H. Lathrop) and a janitor (John Conklin). The students and Conklin were housed on the first three floors, which contained 24 suites, each with a study and two bedrooms. On the fourth floor were the lecture rooms, studies and chapel. The bulk of the resident students were members of Professor Sterling's previous year's preparatory class which had met in a small building in downtown Madison. The following year's preparatory students, who were not yet college students, did not live in North Hall but took their class work and study

periods there.

Student pranks and behavior were an issue from the earliest days of the University. The faculty insisted on daily room inspections, rigidly enforced study and class times[4], including a prompt 6 AM class time enforced by a large bell installed on the second floor. This schedule lasted until the rebellious students removed and hid the clapper until a more reasonable class time was negotiated.[5]

Students could board with residents in town, eat at restaurants, or feed themselves which was sometimes considerably cheaper. Many financially strapped students, including John Muir, were said to have survived principally on baked potatoes and "involuntary contributions of the surrounding inhabitants many of whom had cows, pigs or poultry who took turns contributing to the rising generation."[6] Later a general mess hall was established on the first floor to lower student costs. The catalogs for the 1860s promise board may be had for less than $3 per week. It is also likely that some students kept cows on the grounds. In 1861 the regents formally banned all pasturing of animals on campus.[7]

The living conditions were quite primitive even for the frontier. One alumnus described the well water as being so hard it was like chewing limestone and "as hard to get as to drink. It's a wonder it didn't kill us all."[8] For sanitation there were privies, which were regularly upset or set afire. The regents were proud to boast that the building was heated by woodburning furnaces, but the contractors were ordered to install two additional furnaces to keep the temperature tolerable for the students. On any cold day with a wind the cry would go up from the windward side of the building for the janitor to stoke the furnace: "Wood up John! Wood up!"[9] Since all students spent hours in the building all were required to contribute to the firewood fund even if they lived off campus. In 1865, as a budgetary step, the furnaces were replaced by stoves in each room, and students had to furnish their own wood. Much damage ensued to the woods surrounding the building.

The litany of pranks and hijinks (after one of which D. K. Tenney "received an invitation to adopt some other institution as his alma mater" [10]) continues for more than three decades. Finally when the first Science Hall burned in 1884, the last dormitory spaces in North Hall were switched to instructional space, never to be switched back. North Hall was later in turn the home of pharmacy, German and Scandinavian, mathematics, the Madison Weather Bureau, and political science. These various tenants required many and massive interior modifications. The continued presence and practical use of "the crude stone box of North Hall" [11] serves as a reminder of the day when the University of Wisconsin was a tiny flickering dream on the frontier.

1) Curti and Carstensen, *The University of Wisconsin*, vol. 1, pp. 66-68.
2) *Wisconsin Alumni Magazine,* Some Early University and North Hall History [L. S. W.] Feb. 1904 p. 146. The Wisconsin College was the contemporary name of the University, which met in the Madison Female Academy building in 1849-1850, and became the University of Wisconsin.
3) Ridiculous as this figure seems now, it was 30 years before this figure was regularly exceeded, making this one of the most accurate long-range enrollment predictions in the University's history.
4) 6-7 AM, 9-12 AM, 2-5 PM, 7-9 PM, and curfew at 9 PM. According to one alumnus, the first elevator used at the University was a large basket and rope used to hoist late students into the building. (*Wisconsin Alumni Magazine,* 1904 p. 150.).
5) *Wisconsin Alumni Magazine,* April 1906 p. 329.
6) *Wisconsin Alumni Magazine,* Some Early University and North Hall History [L. S. W.] Feb. 1904 p. 151.
7) Minutes of the Board of Regents, January, 17, 1861, Vol. A p. 293. The regents say: "No person what-ever shall be allowed to pasture any cows, horses or other animals in the University grounds...".
8) *Wisconsin Alumni Magazine,* April 1906 p. 329.
9) *Wisconsin Alumni Magazine,* April 1906 p. 328.
10) *Wisconsin Alumni Magazine,* Some Early University and North Hall History [L.S. W.] Feb. 1904 p. 149. "He received an invitation to meet the faculty, but the art of conversation deserted him and he was not as entertaining as he might have been."
11) Thwaites, Reuben G. *The University of Wisconsin Its History and Its Alumni*, p. 174.

KEYSTONE HOUSE

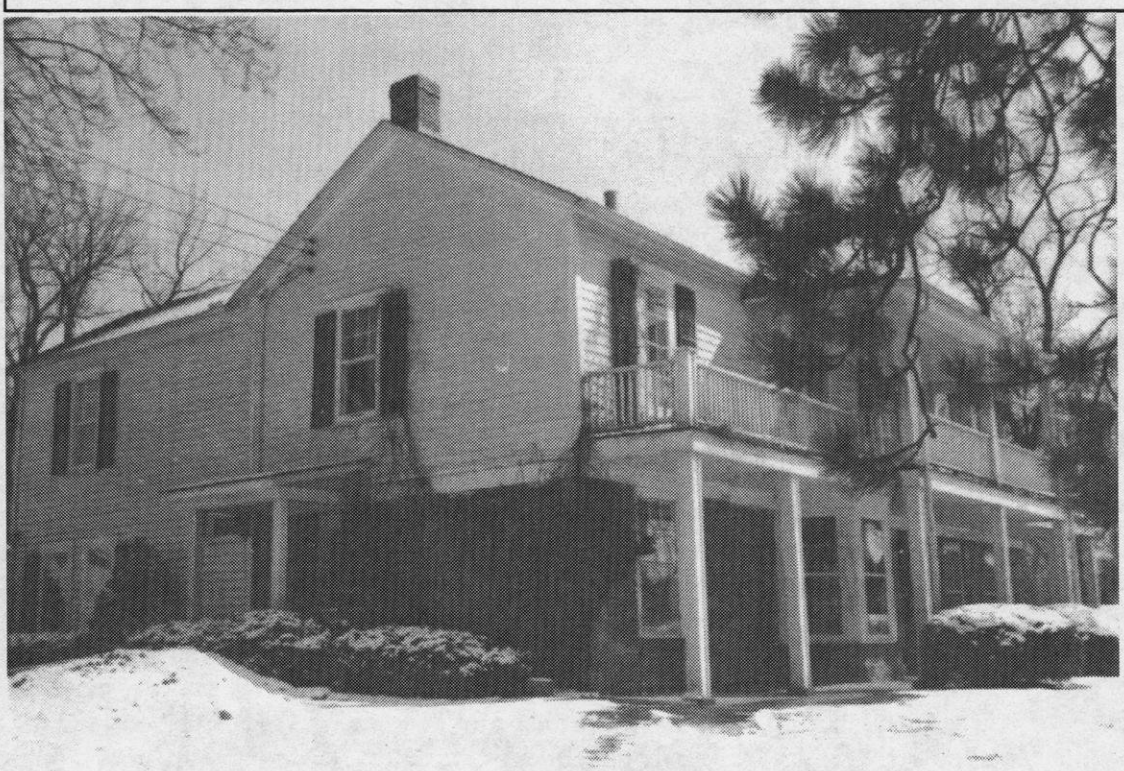


Fig. 1. Keystone House 1970. [folder 9/1-jf1]

The Keystone House was built in 1853 by Englishman "Squire" William Petherick, restored in the mid 1940s by Mrs. Freda Keys Winterble, and sold to the University through The Wisconsin Alumni Foundation (WARF) in 1966. The house is now the home of the Max Kade Institute for German-American Studies.

The Keystone House was built in 1853 as a farm house by an English lawyer and gentleman farmer "Squire" William J. Petherick, who came to Madison's west edge after living on Johnson Street and in Sun Prairie. He had the house built of local sandstone and timber. Petherick chose the site because he believed that State Street would eventually be extended straight to the west and pass by his front door.[1]

The Petherick family lived there until William's death in 1873. The house then passed into the hands of several owners, in whose possession it was divided into flats and gradually deteriorated. In 1943 the house and thirty-acre lot were purchased by Mrs. Freda Keys Winterble. Under the oversight of local architect Frank Riley, Mrs. Winterble restored the house as nearly as possible to its original condition. Mrs. Winterble, whose children were grown, was a prominent citizen and often allowed her house (which she named "Keystone house" after her family name of Keys) to be used for public gatherings, such as concerts on the lawn by the Pro Arte Quartet.[2]

Mrs. Winterble first approached the University about selling the property in 1960 but funds

were unavailable. Again in 1965 she suggested that the University purchase the property, since it would be needed for the proposed development of the new medical center.[3] Since funds were still not readily available, the University asked WARF to purchase the property. They did so for $110,000 in October 1965, and in the summer of 1968 donated the property to the regents of the University.[4] The University intended the house to be used as a president's or chancellor's house, but beginning in 1970 assigned it as office and conference space for a succession of small programs, the first of which was the University of Wisconsin Arts Council. It is currently occupied by the Max Kade Institute for German American Studies.[5] In 1972 the house was designated a Dane County Historical Landmark and outfitted with a bronze plaque, which misspells Petherick's name as "Pethrick."[6]

1) *Wisconsin State Journal*, December 12,1976 p. 6, sec. 7.
2) Freda Keys Winterble, interview by Mrs. Fannie Taylor, summer 1970, copy in University Archives Subject file "Keystone House".
3) Freda K. Winterble to Dr. Peter L. Eichman, July 28, 1965.
4) C. A. Engman to Fred Harvey Harrington, April 26, 1966. For date of real estate transactions, see Dane County Register of Deeds Records, Deed Record #1145983, dated October 26, 1965, recorded October 28, 1965, and Deed Record #1221804, a quit claim deed dated July 30, 1968.
5) Records of University Space Management Office.
6) See Dane County Register of Deeds Vol. 18, p. 495. Assignment: Charles Farrigan and wife to William J. *Petherick*, June 7, 1853.

KNAPP GRADUATE CENTER

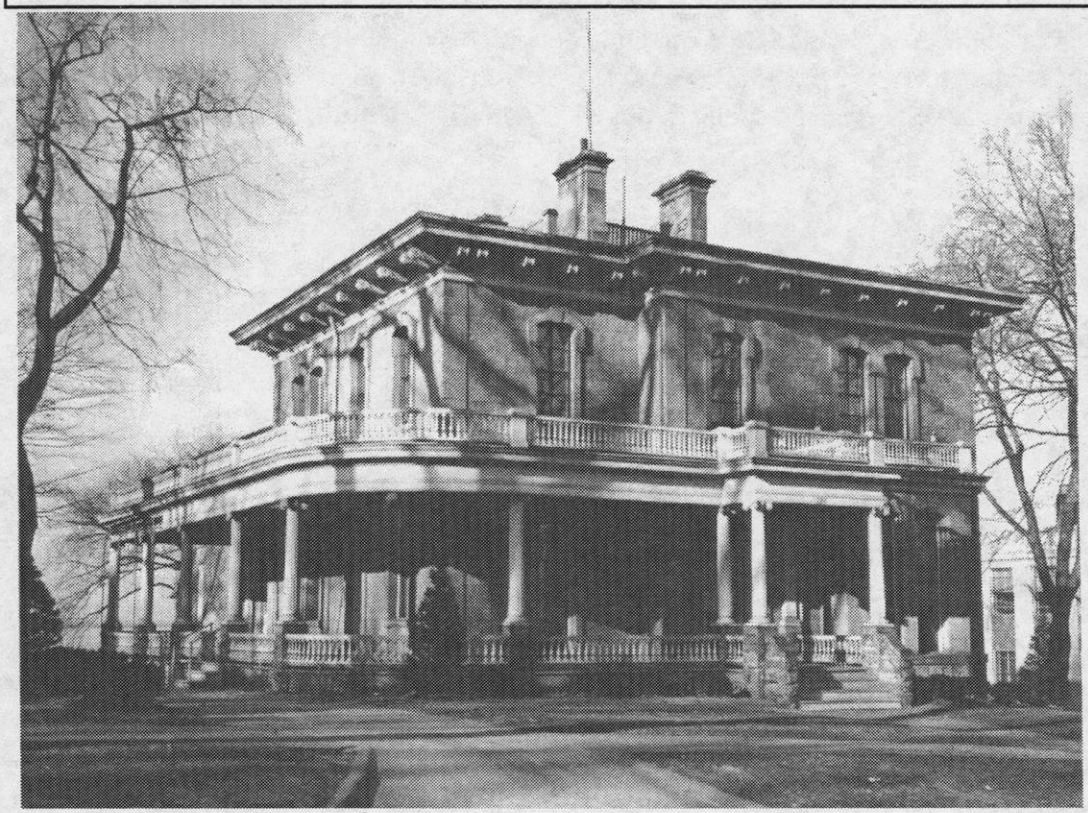


Fig. 1. The Knapp Graduate Center in 1957. The wrap around porch was removed and the smaller current porch was built in the mid-1960s. [series 9/2, Knapp Graduate Center, ns-1512]

The Knapp Graduate Center was built in 1854 as a private residence by Julius White. In the next 30 years the house was the home of several socially prominent Madison families. The house served as the state governor's mansion from 1885 to 1950. In 1950 the house was sold to the University and became the Knapp Graduate Center.

In 1854 the prominent businessman and legislator, Julius T. White[1] and his wife Catherine built one of the first mansions of local sandstone on what became known as Mansion Hill. He selected the site "for its magnificent elms and its view of Lake Mendota below." He purchased almost the entire block, from real estate dealer George Delaplaine, believing that it would become a desirable residential area.[2] White was an art collector and had a leading role in the artistic and social life of Madison until his departure in 1857. White sold the house to George and Emeline Delaplaine from whom he had originally purchased the land. The Delaplaines followed White's habit of lavish and frequent parties and entertainments (with notable guests such as Horace Greeley) for more than a decade. In 1868 they sold the house to J. G. Thorp[3] and his socially ambitious wife Amelia Chapman Thorp, a newly wealthy couple, for $18,000. The Thorps came from Eau Claire where they had compiled a fortune in the lumber business, but felt socially constrained. The mansion was regarded as the loveliest house in town at that time, and Mrs. Thorp "ruled Madison's social community from this house until 1883, a reign whose crowning achievement was the marriage in 1870 of her 20 year old daughter Sara to the 60 year old world famous violinist Ole Bull."[4] Bull married Sara privately in

Norway, then they remarried in Madison to provide Mrs. Thorp with a chance to parade her catch to Madison society. This wedding was the most lavish social spectacle in Madison's history. The Thorps altered the house to make it more suitable for entertaining, opening the rooms, adding hardwood floors and the rear wing. Bull used the mansion as his American home, altering the grounds and building according to his Norwegian tastes.

In 1883 the Thorps sold the mansion to governor Jeremiah Rusk for $15,000. Rusk lived in it for two years, then in 1885 sold it to the State of Wisconsin for $20,000 for use as a permanent executive mansion. All seventeen governors from 1885 until 1949 lived there. The house maintained its social standing and festive reputation throughout this period. After a newer governor's mansion was purchased in Maple Bluff in 1950, the state sold the house to the University for $60,000, the money coming from the earnings of the Kemper K. Knapp[5] endowment fund.

The University used it as a center for graduate students. Those chosen to live there were students who were within one year of their Ph.D. and were to live together and discuss their respective specializations with each other at regular seminars. This scheme (largely championed by Professor William Kiekhoffer) was an attempt to offset some of the drawbacks of increasing specialization on the part of scholars. The University also intended the 52,000 square foot lot to be used for the eventual construction of additional housing units for graduate students.[6] Originally there were twelve graduate students selected from hundreds nominated by the faculty, based on their wide range of interests, level of scholarship and likelihood of contributing to the experiment. They predictably became known as the twelve disciples. According to contemporary accounts this experiment worked very well, the participants believed that it was a strong contribution to their education, president Elvehjem and the Knapp directors were happy. But such a huge and old building was expensive to run and maintain and would "require a considerable expenditure to place in good condition."[7] It was neither well located nor well adapted for the purpose of the graduate center. So in 1957 the regents voted to sell the mansion and use the money to build a more suitable building. This sale never took place. The mansion is still the Knapp Graduate Center, and according to interviews with current [1993] students the house continues in its tradition of a lively social center.

1) Born in 1816 in New York, Julius White went into business in Illinois, and moved to Madison in 1849. He became a colonel in the Illinois Fremont rifles, became a general, lost his command at Harper's Ferry in September 1862, was captured, released, and arrested by the government. His trial for failure of duty exonerated him completely. He resigned his commission in 1865, and returned to business in Illinois. General White died in 1893. National Cyclopaedia of American Biography, Vol. 4 p. 335.

2) This optimism was in spite of the fact that the land was involved in a lawsuit against Leonard J. Farwell, a local developer who had built a mill at the mouth of the Yahara River which raised the water level in Lake Mendota by four feet. Delaplaine and his partner Elisha Burdick sued Farwell for damage to their real estate holdings along the lake [Dane County deed 25/102 July 15, 1854]. It is also reported that Delaplaine was the subject of ridicule for his unsuccessful attempt at Madison's first central heating system [Barbara Anne Lyons, The Mansions on Mansion Hill].

3) Joseph G. Thorp was born on April 28, 1812 in Otsego County, New York. He built up a merchandising partnership in New York, then in 1856 moved the business to Eau Claire, Wisconsin. He went into the lumber business and amassed a fortune of more than a million dollars. He became a state senator in 1866, and maintained a large home in Eau Claire as well as the lavish mansion in Madison. He eventually sold the lumber business to Weyerhauser (1887). Thorp retired to Cambridge Massachusetts, where he lived with his daughter Sara (the widow of violinist Ole Bull). Thorp died on Jan 15, 1895. Dictionary of Wisconsin Biography p. 351.

4) National Register of Historic Places--Nomination Form (1972). Wisconsin State Historical Society Historic Preservation site file.

5) Kemper K. Knapp was a graduate of the University (a B. S. in 1879, and an LL.B. in 1882) who left to the University an endowment of nearly 2.5 million dollars on his death in 1944.

6) *Wisconsin Alumni Magazine,* February 1950 p. 5-6.

7) *Regent's Minutes,* May 11, 1957 p. 11.

SOUTH HALL

Fig. 1. South Hall, c. 1892, at that time called Agriculture Hall. Note the privy near the lower right side of the building. South Hall was externally identical to North Hall. [folder 9/1-jf2]

South Hall was built in 1855, the second building of the University, at a cost of $20,000. It was used as faculty and student living, laboratory and instructional space until the 1890s when it became the first Agriculture Hall. Since then it has served several academic departments and is now departmental offices for the College of Letters and Science.

At the time of the construction of North Hall in 1851, the Board of Regents contracted for the foundation of the second dormitory. Since South Hall was not funded for another three years, this foundation "yawned open to the elements for three Wisconsin winters without a superstructure,"[1] the regents having been assured that it was suitably protected from the weather.

Within a year of the opening of North Hall the regents were calling for more space. "In the present building no adequate provision can be made for a laboratory and other wants of the chemical department. Additional public rooms will be needed, ... the enlargement of the number of students will imperatively demand a corresponding increase of rooms for their accommodation. It is the opinion of the board, therefore, that the second dormitory building should be completed next year."[2] The earlier appeal to the legislature was couched in different language: "This building is intended for the uses of the Normal Department[3] and the board deems it highly important to the educational interests of the State, that the superstructure should be erected during the next season and be ready for the reception of a class of Teachers early in the spring of 1852."[4]

The state allowed the University to borrow $15,000 from the principal of its endowment fund to build the second dormitory. In the summer of 1855 contractors Bird and Larkin completed South Hall to the satisfaction of the regent's Building Committee, though the $18,000 contract had come in at $20,107.40. The building was externally identical to North Hall, but the interior arrangement was considerably different. The north half of the building was arranged for four public rooms, the chemical laboratory, cabinets for physical sciences, a philosophical chamber, student rooms, and a library. The entire south half of the building was to be finished "for residence, or for occupation as for studies, as may be deemed expedient."[5]

In the fall of 1855, Professor Sterling along with most of the faculty (Lathrop, Conover, Carr, Read, and Butler)[6] and their families moved into South Hall. These families paid $3 per week for rent and board for each family member over age five. Professor Sterling and family lived rent-free in return for personal superintendency and management of the boarding establishment. Professor and Mrs. Sterling's daughter Susan (later a faculty member) was born in South Hall in 1858. The students who lived in South Hall boarded at the table of Professor and Mrs. Sterling, and were charged the actual cost of their board not to exceed $2 per week.

This period of the University when students and faculty lived in close proximity was generally remembered fondly by the participants. Professor James D. Butler, a professor of classics who alone among the faculty lived in South Hall throughout his entire career at Wisconsin[7] writes: "Through my classes came William Vilas, John C. Spooner, John Muir, Levi Vilas, Dwight Treadway and both the Steins. No foresight or second sight showed me to what acmes these youths were destined to climb. So while entertaining angels unawares, I very composedly eked out their shortcomings, and detected their blunders, like those of ordinary mortals."[8] In 1859 financial losses, and the need for classroom space, led the regents to oblige the professors to leave South Hall or buy into the establishment and provide board to such students as desired it. Within a year all the faculty except Butler had left. During this period South Hall was also a busy and crowded classroom building. The chemistry laboratory, library, literary societies, and the collections of the natural history department were housed here.

In 1856 the building finally became the home of the Normal School. The Normal Department was moved in 1870 to the Chadbourne inspired Ladies Hall. In September 1884 South Hall was turned over to the Department of Agriculture, heavily remodelled, renamed Agriculture Hall and in 1890 was the site of the development of the world-famous Babcock milk test. Never again used as a dormitory, it passed through the hands of bacteriology, biochemistry, home economics, journalism, pharmacy, and since 1904 has housed administrative offices for the College of Letters and Science. As for the style and materials of the building J. F. A. Pyre's history points out: "The taste of later decades has sometimes patronized them, while committing expensive atrocities in other materials ...."[8]

1) Pyre, J. F. A. *Wisconsin*, p. 76.
2) *Regent's Report,* 1852 pp. 17-8.
3) The Normal Department was the traditional name for the teaching of the theory and practice of elementary instruction. It was organized in 1856 and widely regarded as one of the University's primary functions. The name Normal is a derivative of the French term Ecole Normale. See Curti and Carstensen vol 1 pp. 444-445.
4) *Regent's Report,* 1850 p. 5.
5) *Regent's Report,* 1854 p. 28.
6) *Wisconsin Alumni Magazine* Mar. 1904 p. 179.
7) The lower suites were more desirable than the upper, and as a result of a kind of tenure by gravity Dr. Butler made the entire trip from top to bottom in his nine years.
8) Butler, J. D. *The Early Decade of Wisconsin University*, p. 7.
9) Pyre, J. F. A. *Wisconsin*, p. 77.

OBSERVATORY HILL OFFICE

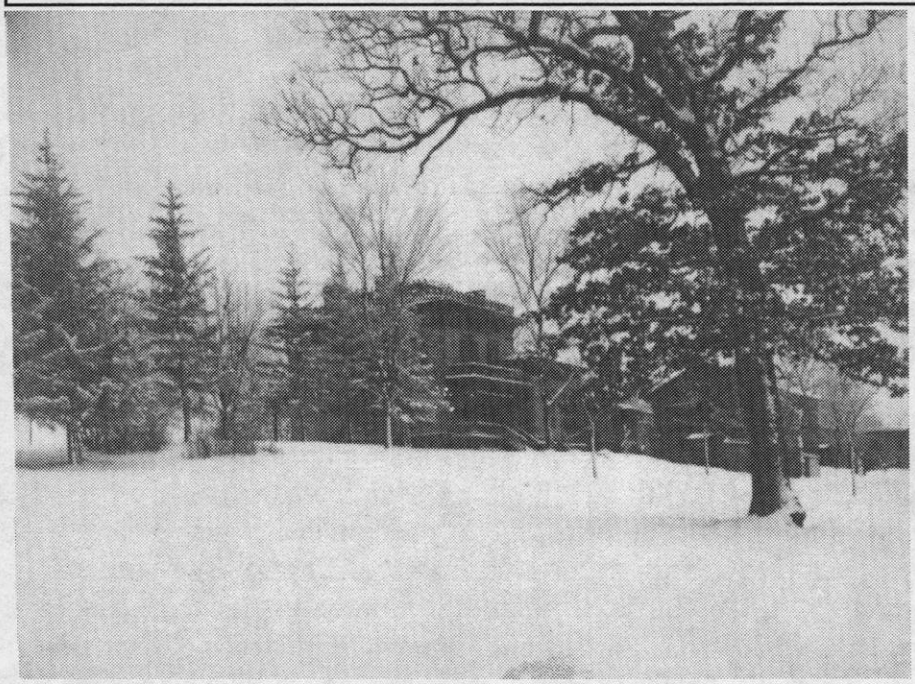


Fig. 1. Observatory Hill Office 1900. [Series 9/1, Observatory Hill Office, jf-101]

Built as a private residence about 1855 by Loring Guild, the house and land was acquired as part of the University's experimental farm in 1859, from professor Daniel Read. The house was used as the home of the University president until President Bascom moved to a house on State Street and it became the home of the resident director of the Observatory. Since the 1959 departure of the Astronomy Department, the building has held several academic programs, and now houses the La Follete Institute for Research in the Social Sciences.

In 1882 President John Bascom described Observatory Hill as "a spot not to be surpassed in beauty ... a point at which the beauty of earth and the peace of heaven touch each other."[1] Anyone who has been to Observatory Hill, even briefly, can understand what Bascom meant. One supposes that this is similar to the feelings that led the ancient indigenous mound builders to choose this spot overlooking Lake Mendota for some striking effigy mounds extant.

After the area was acquired by James Doty in the 1830s the spot occupied by the Italianate house later known as the Observatory Hill Office was bought and sold several times in the ebb and flow of the booming of Madison real estate. Previous to 1855 it was owned by Loring Guild, a local merchant, and the area was known as "Guild's addition." The property's assessed value rose sharply in 1855, presumably as the result of the construction of the house. Loring Guild lived there until November of 1855 when it was sold to Oliver Morley for $1000 , then to A. Eugene Morley in 1862 for $1000. A. E. Morley and his wife Lydia lived in the house until July 19, 1864, at which time they sold

everything "except the use of the house until the 15th of September next, and reserving one-third of the potatoes in the ground ..."[2] for $3500 to Professor Daniel Read of the University. Professor Read was living in South Hall and making $1000 per year. Although the purchase price was a major investment for Read, the clear probability of expansion by the University made it a safe one.

The 1866 legislature required that the University acquire land for an experimental farm, in the immediate vicinity of the University, not less than 200 acres. The money was to be raised from the sale of $40,000 worth of Dane County bonds. The land selected by the regents was the 195 acres directly to the west of University Hill, between University Avenue (then the Sauk road) and Lake Mendota.[3] Because this land had been platted as residential lots its acquisition by the regents was very complicated. Historian Pyre reports that regent N. B. Van Slyke arranged the purchase of 60 titles.[4] ,including the land and house belonging to Professor Read. On January 29, 1859 Daniel and Alice Read sold to the U.W. board of regents the "spot not to be surpassed in beauty" for $6000. On April 24, 1867 the UW regents resolved: "That inasmuch as it is desirable that the President should reside on the University grounds, the late residence of Prof. Read be hereafter known as the 'President's House' and that it be appropriated to that use without change."[5]

Modifications to the house began with the northwest addition by D. R. Jones in the 1870s. In 1903 a major remodelling, designed by architect J. T. W. Jennings[6], the half story above the brick was added giving essentially the current configuration. President Chadbourne lived there, as did his two successors, presidents Twombly and Bascom. President Bascom's job offer from the regents explicitly includes the use of the house. Judging from the oldest available plans of the house it appears to have originally had at least three grand rooms on the first floor, possibly including a kitchen, and four to six rooms on the second floor and a full attic above. It was beautifully finished with a fancy oak staircase in the entry hall. Porches on the north and south sides took advantage of the spectacular view. Bascom, his wife and their five children eventually moved to a new president's house on State Street in 1878[7], partly for the additional space, and partly as an example of increased town and gown connection which Bascom was championing. The house then became known as the astronomer's house and was occupied by the directors of the Washburn Observatory (including the first director James Watson and the famous Joel Stebbens) until the Observatory was abandoned by the Astronomy Department in 1959 when the Pine Bluff site was opened.

The building was used in the 1960s for the Departments of Social Work and Preventive Medicine, then stood empty for a short time. In 1973 the house became the home for Programs in Health Administration which included one of the first Administrative Medicine programs in the country. It is currently [1993] occupied by the LaFollette Institute for Research in the Social Sciences.

Standing on the porch of the building one can imagine what it was like to live there when Madison was a village of 2,000 people a mile away, and the French and Indian fur trade was only twenty years gone.

1) [John Bascom] description of Washburn Observatory State Historical Society Historic Preservation site file.
2) Dane County Deed vol. 65 p. 7.
3) *Regent's Report* 1866 p. 4.
4) Pyre, J. F. A. *Wisconsin*, p. 167.
5) *Regent's Minutes*, April 24, 1867, Vol. C. p. 72.
6) Department of Planning and Construction flat file #9-4.
7) Pyre, J. F. A. *Wisconsin*, p. 167.

OLD ADMINISTRATION BUILDING

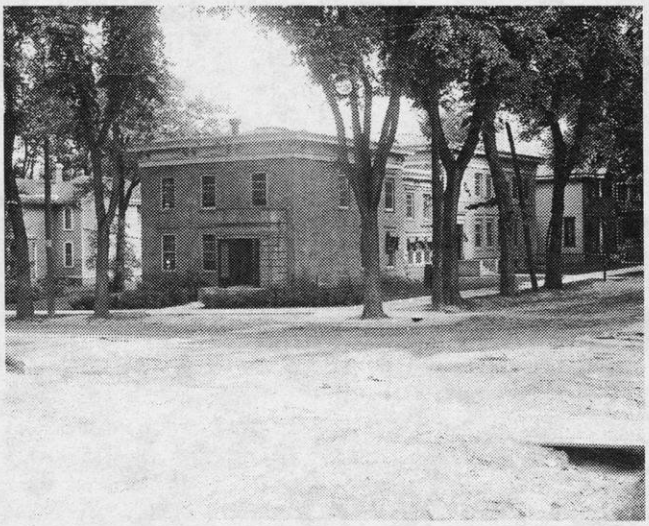


Fig. 1. The Porter House looking SE c. 1890. [series 9/2 administration, old, x25-1338] .

Fig. 2. From the Park Street side after addition, c. 1940. [series 9/2, Administration, old, ns-264]

This building was constructed as a private home in 1855 by Isaac DeForest, later owned by architect Lew Porter, who sold it to the University in 1906. The University added to it and used it for administrative offices until it was demolished in 1965 .

In 1855 a Belgian immigrant named Isaac De Forest bought land for $650 from New York real estate speculator John D. Clute who had purchased land in western Madison from the Regents of the University (the deed was signed by John Lathrop). In 1855 De Forest built on his lot, located at the corner of State and Park Streets a substantial but plain sandstone home for himself and his family (see fig. 1). They added to their yard the adjoining lot on the Park Street side. In the next fifteen years they lived there raising the first seven of their children, in the thickly wooded and somewhat isolated homestead on the western edge of Madison.

De Forest had earlier (1854) purchased considerable land north of Madison and in the middle 1860s platted and developed the town of De Forest. In the late 1860s the De Forests sold off their Wisconsin lands; the house in Madison was sold to speculator Shepard L. Shelton for $6000 in 1870.

In 1871 Shelton sold the house and both lots for $4500 to Henry E. Howe and his wife Mary Ann (Sweet). The Howes raised four children in the house, and on Henry's death the house passed to his wife. By 1885 she was taking in boarders, one of whom was a young civil engineering student at the University named Lew Porter. During a visit to her mother, Carolyn Howe met Porter, and in 1887 they were married. In 1892 after the death of their mother, who left the four Howe children equal shares of the property, the Porters bought the shares of the other Howe children and took ownership of the property. By this time the extra lot along Park Street had been sold.

The house at State and Park would be known as the Porter house for many years. It must

Fig. 3. Making way for Humanities, 1965. From Park Street. [folder 9/2, administration, old, jf3]

have been a wonderful place for Lew Porter (the principal architect of the red gym) to live. The location meant that he could view the progress and effect of the construction from his own home. For the first time in its history, the house was home to no children. In the face of financial necessity the Porters decided in 1905 to sell the property to the University.

The regents paid Lew and Carolyn Porter $20,000 for the house and lot. According to the alumni magazine the university had long had plans for an administration building on that site.[1] In their report of 1906, the regents say that they have purchased the house and built an addition to it "so that it very well serves the needs of the regents as an administration building."[2] The addition was designed by Arthur Peabody and constructed by T. C. McCarthy along the Park Street side (See Fig. 2), and indeed the building did serve well and for a very long time as the administration building. For sixty years the students of the University came here to register, pay entrance and lab fees, collect pay checks, and visit the student loan officers.[3]

With the enormous growth of the University after WW II, the house that had served so many so long, was hopelessly swamped. A new administration building was erected at University Avenue and Murray Street in 1962 and by 1965 most of the residents of the old administration building had moved to the new Peterson Building. In that year [1965] construction began on the Humanities Building, a huge structure which engulfed the entire block in which Isaac De Forest had built his house, and the 110 year old house was demolished (see Fig. 3). The sandstone block from the house was saved by the University to be used in repairing the older sandstone buildings on campus. It is said that more than half the house has now become part of Bascom Hall.

1) *Wisconsin Alumni Magazine,* October 1905 p. 36.
2) *Regents Report* 1906 p. 7.
3) *Wisconsin Alumni Magazine,* May 1965 p. 7.

BASCOM HALL

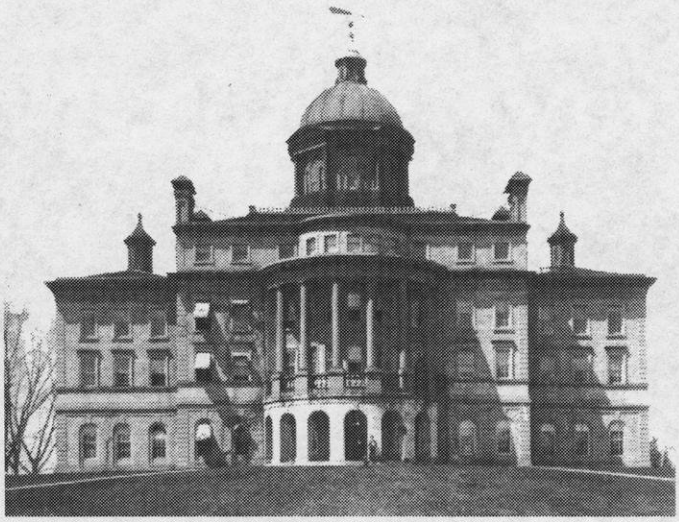
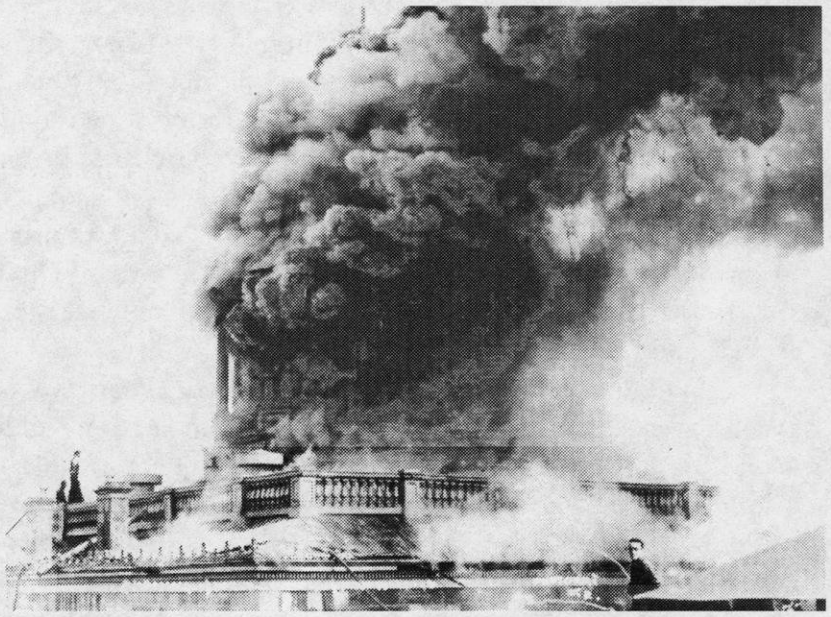


Fig 1. The 'Main Edifice' c. 1880 [9/1 Bascom Hall folder #1, x25-839]

Fig 2. New portico, new dome, new south wing. c. 1900. [Bascom folder #2, jf5]

Fig. 3. Dire combustion and confus'd events, the burning of Main Hall Oct. 10,1916. Students from the nearby Engineering building (visible on the roof in the picture) tried to put the fire out, but the fire hoses were so rotted that they would deliver no water to the blaze. [9/1, Bascom Hall Fire, x25-2359]



Bascom Hall (designed by William Tinsley) was opened in 1859 as the first entirely instructional building at the University. Its construction and financing caused the University considerable difficulty and embarrassment. It was known variously as the Main edifice, University Hall, and finally Bascom Hall. It was added to in 1899, 1905 and 1927. Its dome was lost in a 1916 fire.

In his 1852 Annual Report to the Regents, Chancellor Lathrop states "After the completion of the second dormitory building [South Hall], I shall not be disposed to recommend the application of

any farther portion of the present endowment to building purposes. The balance will barely be sufficient for a permanent productive fund."[1] If by this statement Lathrop meant that the building days of the University (from the original endowment) were near an end, his resolve did not survive the decade. Only four years after Lathrop's indisposition for more building, the regents say: "The whole number of students for the year ending December 17th 1856 is 169 an increase of more than fifty on the numbers for 1855 ... it has become a matter of strict necessity to proceed to the erection of the main edifice of the University." [2] By the time Main Hall was opened on August 10, 1859, the finances and to a degree the reputation of the University were seriously damaged. What did the regents expect to build?

> This building is designed for public rooms, for recitation, lecture, library, cabinet, apparatus. It will contain also, the astronomical observatory, the working laboratory, apartments suitable to the residence of two families of the faculty, the principal dining hall for the use of Students, and a chapel. All the departments in Science, Literature and Arts and in the professional schools of Medicine and Law will find ample accommodation in the proposed edifice.[3]

Later it would be made to serve as a drill hall and a water tower too. It is difficult to imagine that a board of men experienced in business and the University's operation could have seriously believed that it was possible to do all that with a building that they could afford to erect. To pay for it the regents asked the legislature for a loan from the university fund of $35,000 to build the main edifice. The 1857 legislature responded with authorization for a $40,000 loan (from the University's original endowment fund). The regents gave in part the following instructions to the building committee (made up of some regents): "In a word it should be plain, substantial, comfortable and exactly adapted to the purposes for which it is designed and no other."[4] In a word it would be none of these things. The plan selected by the building committee was submitted by William Tinsley of Indianapolis. Mr. Tinsley's biographer says: "As originally designed and built [see fig. 1] , it was a handsome and dignified if somewhat pompous, edifice in the grand manner of the high Italian Renaissance ."[5]

By the time Tinsley's plan was announced the building committee could also report that the contract for the building had been "awarded to James Campbell of Madison for the entire work complete, at $36,550." The contract called for completion of the entire structure by November 1, 1858.[6]

This was slightly disingenuous of the committee who would later report that when they first put the contract out there were no bids at or under the total appropriations for the work ($40,000). To circumvent this difficulty, the committee reduced the project's specifications until they got a bid under the limit. The problems with this method of meeting a budget were immediately obvious. The new plan did not include a basement, or once the basement was put back in the plan, the necessary structural strength or finishing for the upper levels of the building. As construction commenced these items were put back in the plan in the belief that they could be paid for from the excess income from the endowment fund. [7]

Adding to these machinations were a nationwide financial panic in 1857, and contractors who were increasingly skeptical of the financial solidity of the University. It is not surprising then that the committee states in referring to the regent's involvement in the construction of the main edifice: "The history of their financial affairs is one of considerable embarrassment".[8] Some of this embarrassment was due to an unsympathetic legislature. At several points in the construction process money to pay for the work was generated by selling bonds at 10% to local citizens. When the building was finally opened for use in August 1859, it was a year late and had cost over $60,000, a cost overrun of 50 per cent. It also had unfinished rooms on the upper level, and a roof that leaked badly. The board of regents in 1860 admitted that the affair had been difficult and embarrassing, and that the financial resources of the university had been and would be restricted for years.[9]

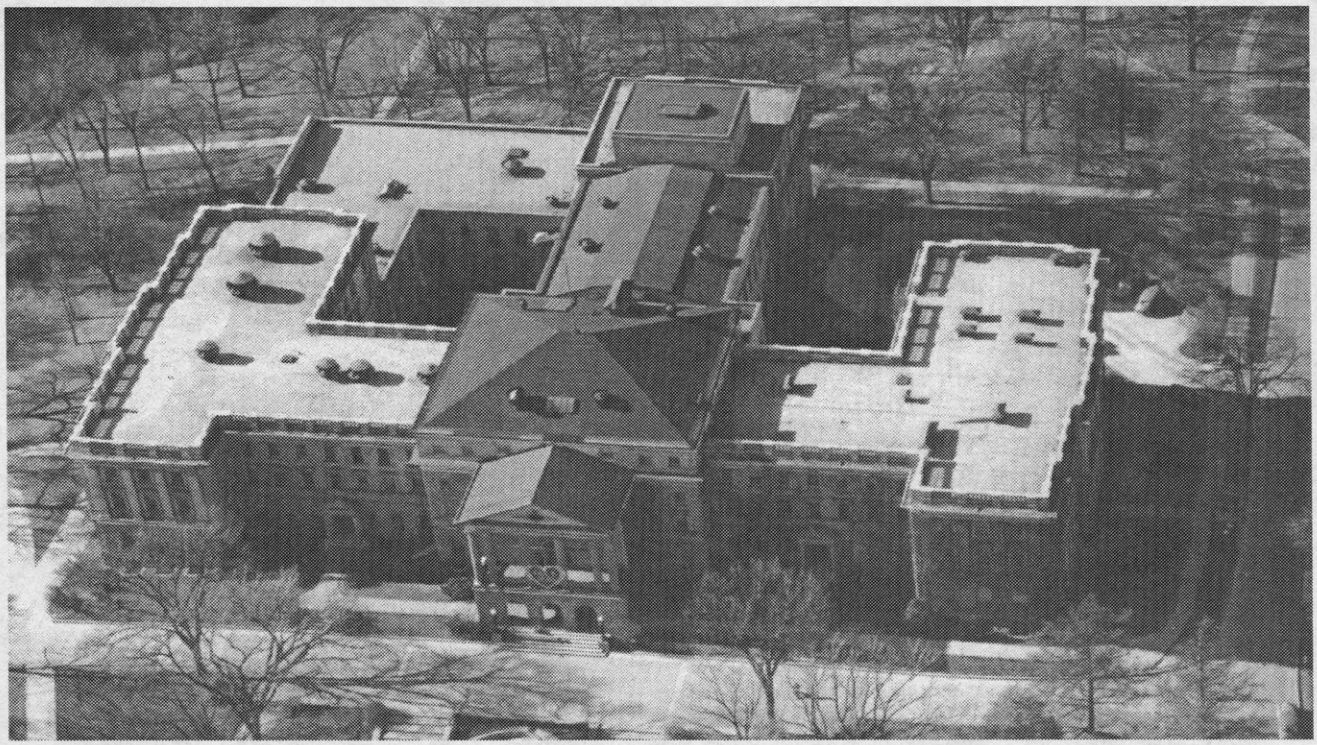


Fig 4. Modern configuration of Bascom Hall c. 1955. [series 9/1, Bascom folder #3 ns-640]

What had the University gotten for all this effort and cost in dollars and credibility? The regents say in 1860:

> Though ... it may be criticized in some of its parts, it is upon the whole the best building for educational purposes that has yet been erected in the West ... the central point of educational interest in Wisconsin for generations yet to come.[10]

The first hints of how well the building was designed came early. In 1859 President Barnard hired a professor of hygiene, Dr. David B. Reid, known as the man who ventilated Parliament. Dr. Reid left after one year declaring what they needed was heat rather than ventilation . Students who had known this from the first cold days, kept warm by huddling over fires built on the basement floor.[11]

Within twenty years of the its opening University Hall was being described as "never a fortunate building ... very small, ill-furnished and ill-ventilated"[12] The board of visitors in 1882 referred to the "criminally stupid method" of ventilating the main building [13].

The edifice intended for generations to come needed rebuilding before the second generation had gone, due mainly to a large and rapid increase in enrollment. When University Hall was begun [1857] there were 169 students. By 1892 the enrollment had passed the one thousand mark. Since in the intervening years no other building intended for the general student body had been erected, the crowding was fierce. A new portico with wider stairways was built in 1895. A new dome followed in 1898. After repeated failures of the legislature to appropriate more funds for the alleviation of the crowding, in 1899 the regents report the completion of the south wing addition to University Hall which doubled the number of classrooms, added plumbing, provided a lecture hall with a capacity of 347 and allowed the University's administrative officers to return from their temporary exile in the recently finished Law Building. Of the south wing addition [see fig 2], the regents make this mysterious statement:

> The architects—Messrs. Ferry and Clas—have succeeded in the difficult task of remodelling an old building of inferior architectural appearance into a dignified and impressive edifice, while preserving almost unchanged the essential features of the older structure.[15]

The plans by Ferry and Clas included a provisional north wing identical to the south wing. The construction of this north wing was deferred until 1905 when the enrollment had passed 3000. In 1904 the regents report declares: "the construction of the north wing has begun and will be ready for occupancy by the end of 1906."[16] Those old grads who mourned the alteration of the old campus landmark were reassured: "The completion of the new north wing ... will add a charm which even alumni of early days will not be slow to recognize."[17]

The charm was nearly lost forever when in October of 1916 a fire of unknown origin completely destroyed the dome of University Hall [see fig. 3]. Though the regents took it calmly, it had been a very near miss. The long forgotten water supply tank in the base of the dome doused the blaze when the dome collapsed into it, saving the rest of the structure. The dome was never replaced.[18]

In 1927 nearly unnoticed in the uproar over the construction of the Memorial Union, a large and badly needed theater wing (originally conceived of as a liberal arts building) was added to the west (back) side of University Hall. The theatre was dedicated May 18, 1927. Except for interior remodelling this completed the modern [1993] configuration of the building [see fig. 4].

The name of the building was originally the main edifice, then (July 1859) University Hall, and in June 1920 under president Edward Birge became Bascom Hall, perhaps with the same sense of irony that led Birge to rename Ladies Hall Chadbourne Hall, since it was Bascom who in 1880 had referred to University Hall as "never a fortunate building".

1) *Regents Report of the University of Wisconsin* 1852 p. 22.
2) *Regents Report of the University of Wisconsin* 1856 p. 10.
3) *Regents Report of the University of Wisconsin* 1856 p. 11.
4) *Regents Minutes* April 14, 1857.
5) Forbes, *Victorian Architect*, p. 82. Forbes goes on: "The most reasonable hypothesis is that in hiring Tinsley the regents gave him considerable latitude but specified that University Hall must conform fairly closely to the general pattern and aspect of the long-accepted Rague drawings." These John F. Rague drawings were the original campus plan, calling for four dormitories and a main edifice on College Hill. These drawing have been long since lost.
6) *Report of the Regents of the University of Wisconsin* 1857 p. 35. Documents list payment authorization to Campbell March 10, 1860 by supervising architect Joseph Chatterson. (Memorial Library Archives series 1/1/3/6).
7) *Report of the Regents of the University of Wisconsin* 1860 p. 5.
8) *Report of the Regents of the University of Wisconsin* 1860 p. 9.
9) *Report of the Regents of the University of Wisconsin* 1860 p. 5.
10) *Report of the Regents of the University of Wisconsin* 1860 p. 6.
11) *Daily Cardinal* Aug. 11 1959, p. 5.
12) *Report of the Regents of the University of Wisconsin* 1880 p. 27.
13) *Report of the Regents of the University of Wisconsin* 1882 p. 51.
14) *Report of the Regents of the University of Wisconsin* 1899-1900 p. 8.
15) *Report of the Regents of the University of Wisconsin* 1904-06 p. 13. Daily Cardinal, November 1, 1895.
16) *Wisconsin Alumni Magazine,* May 1906 p. 370.
17 *Wisconsin Alumni Magazine*, May 1906 p. 367.
18) Daily Cardinal Aug. 11, 1959 p. 5. A collection was taken up by the class of 1923 to be used for a new dome or a clock tower on library mall. The latter use was made of the fund.

HORSE BARN

Fig. 1. Horse barn c. 1910, looking from the SE. [folder 9/3, Horse Barn, jf7]

The horse barn evidently was originally the 1868 farm barn. It was extensively reconstructed and enlarged in 1899. It is the oldest wooden building on the University campus. The building now houses sheep, classrooms, and offices for the Department of Meat and Animal Science.

There is some mystery surrounding the precise date of construction of this building. There are two dates commonly proposed. The most commonly used is 1899, in the University Fact Book, and other works who use the Fact Book as a source. The Fact Book mentions, without comment, that the date is sometimes given as 1868. The 1868 date is by far the most likely, partly because there is considerable evidence for the 1868 date, but especially because the evidence against the 1899 date for first construction is overwhelming.

Most of the plans and existing drawings pertaining to the horse barn, and a list of expenses for construction (in the regents report) are dated 1899 and signed by J. T. W. Jennings (the University's supervising architect from that date). But in a March 1899 letter to the regents Dean of Agriculture W. A. Henry's discusses *rebuilding* the horse barn: "It is very important that we begin the study of the re-arrangement and building over of the horse and carriage barn at the earliest possible moment." [1]

A month later, Dean Henry reports to University president Adams that he wishes to place architect J. T. W. Jennings in a supervisory position on the project "owing to the uncertainties regarding the present structure and the difficulties which always follow the remodelling [of] an old building".[2] It is also significant that director of the Experimental Farm W. W. Daniels specifically says that the land as purchased by the regents contains no buildings, eliminating the possibility that the barn existed when the land was purchased.[3] Clearly what was done in 1899 was the substantial

Fig. 2. Detail of 1878 etching, showing original Horse Barn. [etching on wall of Archives]

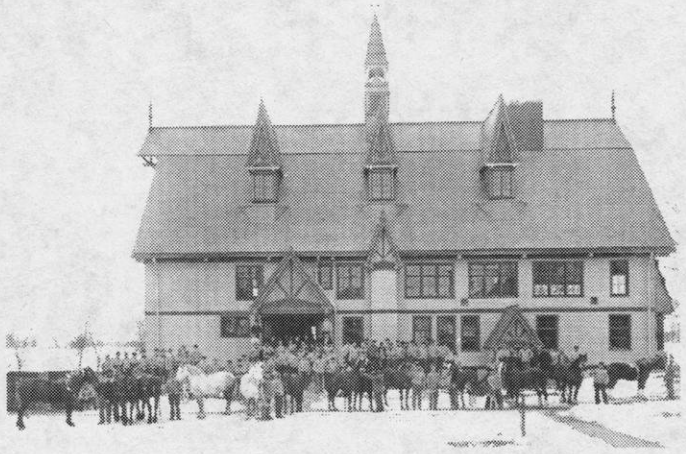


Fig. 3. Horse barn with class of 1901, looking north. [folder 9/3, Horse Barn, jf8]

reconstruction of an existing building.

As for the original construction of that building, in Director Daniel's report to the regents in 1868, shortly after the formation of an Agricultural Department to take advantage of the Federal Morrill Act we read:

> A farm barn 50 by 60 feet, with 24 feet posts, is completed. This barn contains horse and cattle stables, a granary, a carriage and tool room, besides bays for hay and grain. The stone basement, eight feet in height, has a fine fruit and root cellar 30 by 36 feet, a manure cellar 20 by 60 feet, and an apartment 24 by 30 feet, to be used for the present as a sheep fold.[4]

This describes the "farm barn" that later became known as the horse barn. This barn was constructed by William T. Fish, and A. R. Moxley at a cost of about $1800.[5]

The examination of a surveying map published by the regents as a part of their 1871 report demonstrates that the building then called the farm barn was located at the spot now occupied by the Horse Barn. Since there is no indication of the construction of an entirely new barn, this strongly indicates that the original (1868) barn was the building made over in 1899 by Jennings. An 1878 commissioned artist's drawing of the building is shown in Fig. 2. The inexact nature of the etching as representational art does not allow any more than speculation about size and layout from this source.

The modern configuration of the horse barn is a cellar and three stories. The first level contains offices and classrooms, the second story holds animal stalls, and the attic level (once used for hay storage) is now empty. The cellar opens up to the animal pens on the west side of the building.

As the scientific method came into use in agriculture and animal husbandry in the twentieth century, the old, small, and deteriorating horse barn became more and more of an instructional liability. The University has not had a horse program since the late 1970s. The old barn's functions were gradually supplanted by other buildings, especially the livestock laboratory, and at the present time it is used mainly for sheep studies, classrooms and offices for the Department of Meat and Animal Science. Sometime before WW II, the picturesque ventilator towers and dormers on the building (see Fig. 1) were removed and power ventilation installed. Its slate roof was replaced with asphalt shingles in 1995.

1) Letter W. A. Henry to E. F. Riley, secretary Board of Regents, March 13, 1899. University Archives series 1/10/1-3.
2) W. A. Henry to C. K. Adams, April 18, 1899. University Archives series 1/1/3/ box 16.
3) *Report of the Regents of the University of Wisconsin* 1868 p. 25.
4) *Report of the Regents of the University of Wisconsin* 1868 p. 27.
5) *Report of the Regents of the University of Wisconsin* 1868 p. 38.

ARTIST- IN- RESIDENCE HOUSE

Fig. 1. The Artist-in-residence house, looking toward Russell Labs, 1994. [Author Photo AP-1]

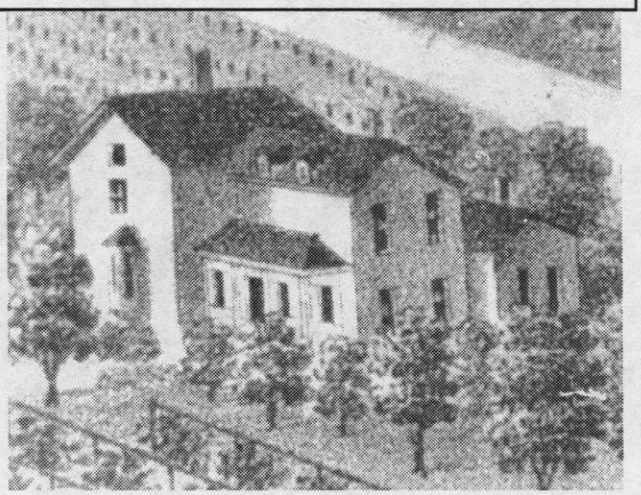


Fig. 2. The farm residence from an 1878 etching. This view is from the opposite side of the house from Fig. 1. [etching on wall in Archives]

This house was built in 1868 as a home for the superintendent of the experimental farm. At that time it stood just to the east of the horse barn. In 1900 Dean William Henry had the house moved to its current location, which at that time was called 438 Farm Place. It has since held the studio of artist-in residence Aaron Bohrod and several other academic departments.

This building was built in 1868 as the residence for the experimental farm. The residence and the farm barn (now the horse barn) were built to provide the start of a College of Agriculture as required of the University by the Federal Morrill Act of 1862, which made land grants to states that founded colleges of Agriculture. The first director of the experimental farm was W. W. Daniels, who in his 1868 report to the regents says "A farm house 20 by 38 feet with a wing 22 by 24 feet to be finished the first of January 1869 is in process of erection."[1] The following year Daniels reports "The farm house, which was being built at the time of my last report, is completed, and has been occupied since January last by the farm superintendent."[2] The disbursements of the Experimental Farm Fund for 1869 show expenditures of $2743 for construction of the house.[3] The contractors were Sorenson and Fredrickson. Augustus Kutzbock, a pioneer architect of Wisconsin, was paid $50 for plans and specifications.[4]

In the earliest days of the University farm this building was used to house the farm superintendent and farm laborers. When William Arnon Henry came to the University in 1880 and before he became a dean with a concomitant salary, he lived in the farm house at a rental rate of $200 per year.[5] An 1871 survey map shows the original location of the farm house as just to the east of the horse barn.[6]

In 1901, as dean of the College of Agriculture, Henry successfully petitioned the regents to move some of the old farm buildings to new locations.[7] Among the buildings to be moved was the farm house. The house was moved to a lot on Farm Place, a small lane running west and north from Babcock Drive to Linden Drive. The farm house became 438 Farm Place. Farm Place although still (1995) marked with street signs serves mainly as a parking lot behind Babcock Hall. The removal of these small buildings left an area near the horse barn which "is reserved for future educational buildings, such as poultry, veterinary, etc."[8]

After the move to Farm Place professor G. C. Humphries lived at 438 Farm Place. Humphries lived in the old farm house until his retirement in July 1942. Other professors lived in the house until 1947 when it was taken over by the Home Economics Extension department, who stayed in the building until 1962. By this time Farm Place had been vacated and the new address of the house was 1645 Linden Drive.

In 1962 the University department of planning and construction remodelled the north side of the house to provide an artist's studio for the University artist in residence, Aaron Bohrod. This is the remodelling that added the half-timber trim on the house to match the adjoining Stock Pavilion. This and other remodellings, as well as artistic license, account for the differences in details between the etching in Fig. 2 and the photograph in Fig. 1.

From 1962 until his retirement in 1972, Bohrod used the studio at 1645 Linden Drive. In the years after Bohrod's retirement the house went through a steady stream of occupants: 1973 Agriculture and Extension, 1974-1981 Landscape Architecture; 1982-1991 Food Science. In 1993 a major interior remodelling prepared the house for its current occupant, the Center for Environmental Awareness.

1) Annual Report of the Regents 1868 p. 27.
2) Annual Report of the Regents 1869 p. 37.
3) Annual Report of the Regents 1869 p. 81.
4) Kutzbock did work on the old Madison City Hall, the second state capitol building, the Napoleon Van Slyke house on Mansion Hill and the Farwell octagon house. Despondent over personal matters, Kutzbock committed suicide by walking into Lake Mendota on November 1, 1868, while the farm house was under construction. One of the regent's payments to Kutzbock was written after his death.
5) Glover, *Farm and College* p. 135.
6) This map is bound into the 1871 Regents report, and was kindly analyzed by graduate civil engineering student Tod Hepworth.
7) 18th Report of Agriculture Experimental Station, 1901 p. 1-2 Steenbock Archives.
8) 18th Report of Agriculture Experimental Station, 1901 p. 1-2 Steenbock Archives.

OLD GYMNASIUM

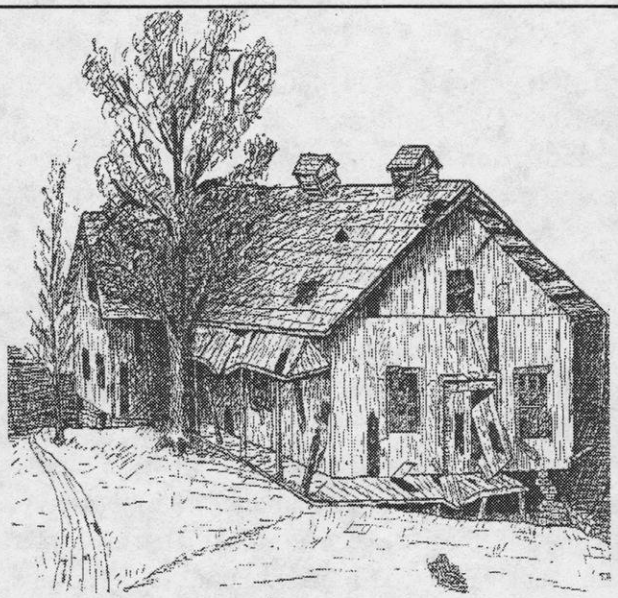


Fig. 1. from the 1891 Badger. [1891 Badger p. 158]

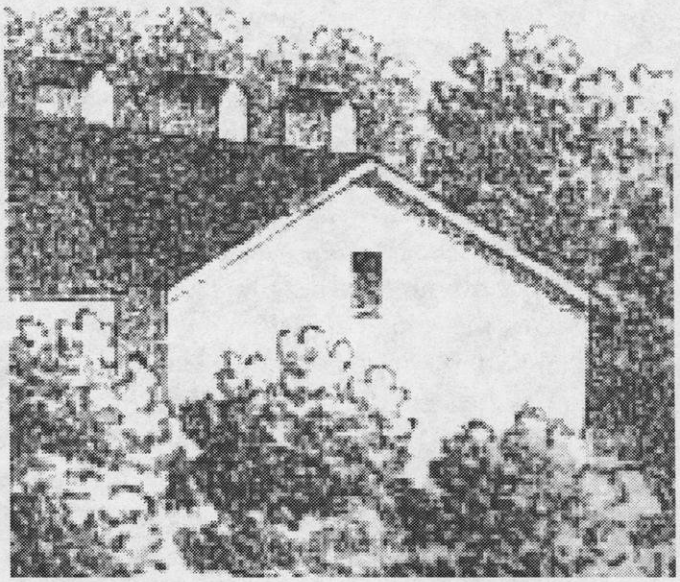


Fig. 2. Detail from an etching of the U.W. c. 1880. [x25-258]

Built in 1870 to provide drill and storage space for the University battalion, and some recreational space, the old gymnasium burned in 1891.

For several years after the Civil War the military department of the University was forced to use various parts of University Hall as a drill hall. This was a very undesirable situation since it disrupted all aspects of the school's operation. On June 22,1870, the board of regents called Col. W. S. Franklin to explain "the proposed building to be used for drill and gymnastic exercises."[1] The colonel must have been persuasive because later in the same meeting we find the following resolution: "That the Executive Committee be authorized to expend a sum not exceeding three thousand dollars in the erection of a suitable building for military drill and gymnastic exercises." By the time of the regents report of September 1870, they could write:

> A building for drill and gymnastic exercises has just been completed at a cost of about $4000. It is a plain substantial structure admirably adapted for the uses for which it was designed. The main building is 100 feet by 50 feet. To this is attached a wing, 34 feet by 20 feet, containing an armory and office for the Professor of military tactics ... It leaves at our disposal much room in University Hall before occupied for military purposes ... It relieves the building of much noise and disturbance incident to military drill. Besides it affords commodious room not only for drill but for exercise during cold or rainy weather.[2]

In meetings in the following year the board gave increasing latitude to the Professor of Military Science in constructing and furnishing the gym as well as rules for its use. Col. Franklin having withdrawn by 1871, this professor was W. J. L. Nicodemus, who was also Professor of Civil

Engineering.

The location (300 feet northwest of University Hall and 500 feet east of the Observatory Office) as shown on campus maps is approximately where the carillon tower now stands. The uses to which this cheap wood-framed structure was put nearly guaranteed a short and troubled life, and the gym did not disappoint. By 1884 the regents were asking for a new one: "If we are to receive the full benefit from our campus we need a new gymnasium in connection with it."[3] Then in a shriller tone in 1886: "Our gymnasium is altogether superannuated and meets its purpose in a very clumsy and inadequate way."[4] This is near the beginning of the discussion that culminated in the building of the Red Gym and Armory on Langdon St., and the language increasingly reflects, in retrospect, this new goal. Also as the student enrollment grew the gym was no longer so commodious. "The increasing size of the battalion made it necessary to abandon the gymnasium and to conduct the drill in inclement weather in Library Hall. This was not done without some protest ... The need for a suitable drill hall is pressing."[5]

No clear photographs of the old gym are known to exist, but the two drawings (from opposite ends of the reliability spectrum) above, Fig. 1 (a student drawing from the 1891 Badger year book), and Fig. 2 (a detail from a commissioned etching of the University), make it clear that the gym was essentially a farm building.

On the night of June 12, 1891, the old gym was destroyed by a fire of unknown origin. An eyewitness report in a student diary says: "I was just going to bed when I saw the sky all lighted up. We ran down and it [the gym] was all ablaze. An alarm was sounded after a while and the fire department turned out, but it was a half an hour ... before water was put on the building and then it was too late to do anything but save the sidewalk ... The building was not worth much but it is bad for the reputation of the University to have it go in this way."[6]

The *Wisconsin State Journal* reported that "President Chamberlin is of the opinion that the building was fired by some representatives of a low class who have been hanging around the place for the past two weeks."[7]

This fire caused so little stir that neither the *Daily Cardinal* nor the next regents report even mentioned it. The *Aegis* (a student publication) printed a memoriam for the building on Sept. 11, 1891 (p. 7). They reported that "dutiful Patrick [Pat Walsh the longtime University janitor] who had guarded the Gym for years stood by and joyfully watched the angry flames as he thought of the mighty burden that was lifted from his shoulders."[8] At the subsequent meeting the regents vote that "the $3000 insurance on Gymnasium when received be covered into the general fund was by vote concurred."[9] Thus passed and was quickly forgotten the fifth building on the UW campus.

1) Minutes of the board of regents of the University of Wisconsin June 22,1870, Vol. C p. 134
2) Report of the Regents of the University of Wisconsin 1870 p. 30-31
3) Report of the Regents of the University of Wisconsin 1884 p. 36
4) Report of the Regents of the University of Wisconsin 1886 p. 36
5) Report of the Regents of the University of Wisconsin 1888 p. 45
6) Sidney Dean Townley, *Diary of a Student, 1886-1892* p. 105, Archives series 20/0/3
7) *Wisconsin State Journal*, June 13 1892 p. 3 The Journal also says that the city fire department could not use the U.W. hydrants, a lesson that had apparently not been learned in the Science Hall fire of 1884.
8) *Aegis* Sept. 11, 1891 p. 7
9) Minutes of the regents June 16, 1891, Vol. D p. 100

OLD CHADBOURNE HALL

Fig. 1. The initial configuration of Ladies Hall c. 1880. [series 9/1 Ladies Hall ns-1649]

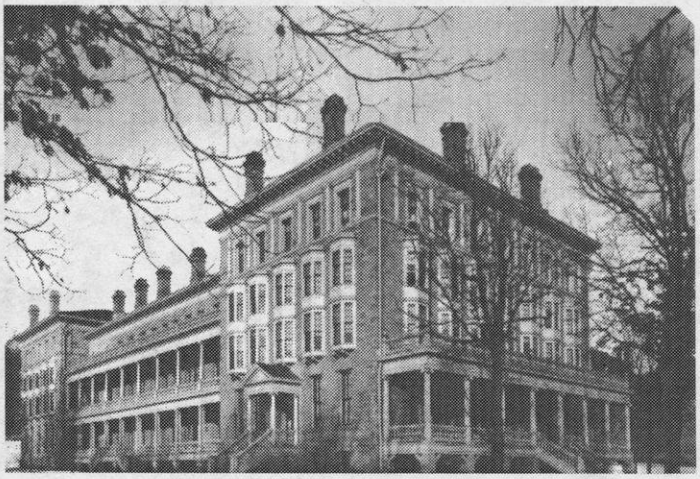


Fig. 2. Remodelled Ladies Hall c. 1899. The bay windows were part of the 1895 remodelling. [series 9/1 Ladies Hall, x25-02655]

Old Chadbourne Hall was built in 1870 as home to the Normal School, then called the Female College. Old Chad was the first University building built with direct state funding, rather than the University's own fund. After the removal of the Normal School in the 1870s, Ladies Hall was used exclusively as a women's dormitory with a capacity of 80 students. It's capacity was enlarged to 125, and a gymnasium added in 1895. In 1957 it was demolished to make way for a new, larger, and fireproof dormitory.

In 1865 the regents of the University had two particular problems. Firstly, their prospective new president, Paul Chadbourne, did not want the post because of his disinclination to preside over a coeducational University. Secondly, the University needed more room for students and had damaged their financial standing so badly with the 1850s Main Hall project that they could not construct a building from their own fund. The way in which these problems were overcome is a testimony to the ingenuity of the officials of the University and is the story of Chadbourne Hall.

They first dealt with the coeducation problem[1]. The regents explained to the legislature in their 1866 report that they were finding it "extremely difficult, if not impossible, to secure the services of a thoroughly competent and experienced educational man at the head of the institution"[2] unless the coeducation law was modified. They deemed essential the "necessary authority for the erection of a separate female department."[3] In the 1867 legislative session the offending law was amended to read: " The University shall be open to female as well as male students *under such regulations and restrictions as the board of regents may deem proper*. [italics added]"[4] With this change and some others, Paul Ansel Chadbourne agreed to take the job and on June 22, 1867 was formally elected by the regents. The regents had solved the problem of getting a suitable leader.

For the second problem, that of expanding the physical plant, the regents had begun the campaign as early as 1867: "... it is confidently expected by the regents that the State will provide for the erection

Fig. 3. February 1957, the oldest coed dorm at a public institution in the U.S. is demolished to make room for a new one. Some stone was saved to trim the entrances to the new Chadbourne Hall. [series 9/1 Ladies Hall, ns-1673]

of another building."[5] Then in 1868 the regents state: "*The University must have another building* [italics original].... It is impossible to put up such a building from its own resources, and it has therefore, to rely upon the generosity of the state to furnish the means." Under Chadbourne's administration the blame for the intense crowding of the young men at the University was laid directly at the door of the space the young ladies of the Normal School were taking up (including all of South Hall and part of University Hall) for want of a building for the Female College. "We need for the young men every particle of the room occupied by the young ladies, and to this end, we are in immediate want of a building to be used as a Female college."[6]

Under Chadbourne and Edward Salomon, former governor and president of the board of regents, the pressure on the legislature now became sharp. The pair made a very strongly worded argument (written by Salomon) that the state had done almost nothing for the University and that it could and should rectify that policy by making payments to cover what should have been given in the past and to follow the lead of Michigan in liberally supporting the state University. In 1870 the three years of high-powered lobbying paid off. In September 1870 the regents report:

> The Female college, for the erection of which $50,000 was generously appropriated at the last session of the legislature, is fairly underway. The basement is fully completed, and it is expected that the building will be ready for occupancy at the opening of the next term.[7]

The problem of erecting a new building had been solved. This direct appropriation for a University building set an important precedent in that it represented the end of the idea that the University could

build itself up using the income of the original land endowment, and the beginning of the idea that state funds should be used to support the University.

The building was designed by Chicago architect G. P. Randall and contracted to John Fellenz of Milwaukee in August of 1870 for $41,500. It was 50 by 75 feet with a 40 by 88 foot wing with three stories above the basement all of stone, and located 133 feet southeast of South Hall.[8] It was ready to open in time for the 1871-72 year. It had dormitory rooms in the wing and recitation rooms in the main building. Ladies Hall had the first indoor privies of any University building. The Board of Visitors says of it: "The Ladies Hall, recently erected, is a model of neatness, comfort and convenience. It seems to be complete in all its appointments and must be homelike and pleasant to the occupants."[9]

Note that the appellation Female College has already disappeared. Chadbourne had resigned at the end of the 1870 school year. His system for a separate educational system for women at the University was cheerfully guaranteed as far as the door. Chadbourne's successor, President Twombly, spoke out strongly for complete coeducation, and in 1874 the Regents passed a resolution completely accepting full coeducation: "The University shall be open to female as well as male students, with no other regulations or restrictions on the part of the Board of Regents, than those that may be deemed necessary and proper for the preservation of order and discipline."[10]

Within a few years the building was used, except for music classes, entirely as a dormitory. There followed a relatively calm period in which the only question surrounding the Ladies Hall seemed to be the degree of oversight the young women required. "With the Ladies Hall in the university standing on the same footing of entire freedom from any restraint of authority (except the statute laws of the land) as are all the other halls of the university, the fear of loving parents is increasing."[11]

By the late 1880s the building had some serious problems. The 1888 legislature appropriated $5000 for improvements of Ladies Hall including fire safety, steam heat, and modern plumbing.[12]

Within a short time increasing age, rising enrollments of women, and the lack of a gymnasium for the women forced the regents to remodel again: "The condition of the old building was so extremely unsatisfactory that practically a new building seemed to be required. The Regents ... adopted a comprehensive scheme not only for improving the building as it stood, but also for very considerably enlarging it."[13] The job (designed by Ferry and Clas), begun in the fall of 1895 and completed in the summer of 1896, included a whole new west wing which held a two story gymnasium, and a complete reconstruction of the old sections to provide more and larger rooms, elevators, lighting both by electricity and gas, and a new and large dining room on an upper floor. [See Fig. 2]. The ceiling of the old section had been found to be high enough that another floor could be added, and the entire remodelled building became four levels and a basement. It was said to be sufficiently large to accommodate all the young women likely to be in attendance at the University for many years to come. Its new capacity was 125. The Board of Visitors saw the new building as a complete success and for several years had nothing adverse to report about it, except that the presence of the school of Music in the building was a distraction to those trying to study, and indeed the student's affectionate nickname of "Howling Hall" must give something of the flavor of the problem.

Around the turn of the twentieth century there were some efforts to apply a more dignified name to the building than Ladies Hall. The 1896 *The Daily Cardinal* reports an attempt by the women to rename the remodelled building Sterling Hall.[14] It was not until the combination of the new president E. A. Birge and the petitions of the Ladies of 1901 (the "Naughty Ones") that the name Chadbourne Hall became official. In a letter to a friend Birge explain the choice of name:

> First President Chadbourne secured the appropriation for the building. [Second] I thought it was only fair that Dr. Chadbourne's contumacy regarding coeducation should be punished by attaching his name to a building which turned out [to be] one of the main supports of coeducation.[15]

Starting around 1905, the University began to encourage the women to live in the sororities springing up around the Langdon Street area. In WW I Chadbourne Hall served as a men's dormitory and drill hall to house the Student Army Training Corps. As early as the 1940s there was talk of tearing down the oldest housing unit on campus usually based on its fire dangers and expense of operation. The severity of the post WW II housing shortage saved it from the wrecker for several more years. In 1952 Slichter Hall was converted to a women's dorm to empty Chad for demolition, which was again delayed. Finally in 1957 the end came [See Fig. 3] and the oldest women's dormitory on a coeducational public campus in the U. S. was demolished to make way for a new, fireproof, larger and more modern dormitory on the same site. Some stone from the old building was saved and used to trim the entrances to the new one.

1) Chadbourne had no specific objection to women obtaining an education, but believed that they should not attend classes with the men, and therefore favored the establishment of a physically separate school.
2) *Report of the Board of Regents of the University of Wisconsin,* 1866 p. 10. The previous president Barnard had been gone since 1861, and the University was floundering through lack of leadership.
3) Ibid p. 11
4) Chapter 117 of the General Laws of the State of Wisconsin of 1867.
5) *Report of the Board of Regents of the University of Wisconsin,* 1867 p. 13
6) *Report of the Board of Regents of the University of Wisconsin,* 1869 p. 28.
7) *Report of the Board of Regents of the University of Wisconsin,* 1870 p. 30.
8) *University Press* August 1870 p. 23. The original plans for Old Chad are in the University Archives map case drawer #11.
9) *Report of the Visitors of the University of Wisconsin* 1874, p. 11.
10) Curti and Carstensen, The University of Wisconsin V. 1, p. 373-374.
11) *Report of the Visitors of the University of Wisconsin* 1883-1884, p. 53.
12) *Report of the Board of Regents of the University of Wisconsin,* 1888 p. 46. The regents remark, "It is gratifying to note that with these improvements and the most excellent management of the hall it is now fully occupied, indeed, fails to meet the demand."
13) *Report of the Board of Regents of the University of Wisconsin,* 1896 p. 35. Some of the pressure for a women's gym was due to the fact that the gymnasium and armory, opened in May 1894, was available only to the men.
14) *The Daily Cardinal* Dec. 3, 1896.
15) E. A. Birge to Rudolph Schuchardt Mar. 11, 1922. Quoted in *The University of Wisconsin*, Curti and Carstensen, vol. 1, p. 138.

WASHBURN OBSERVATORY

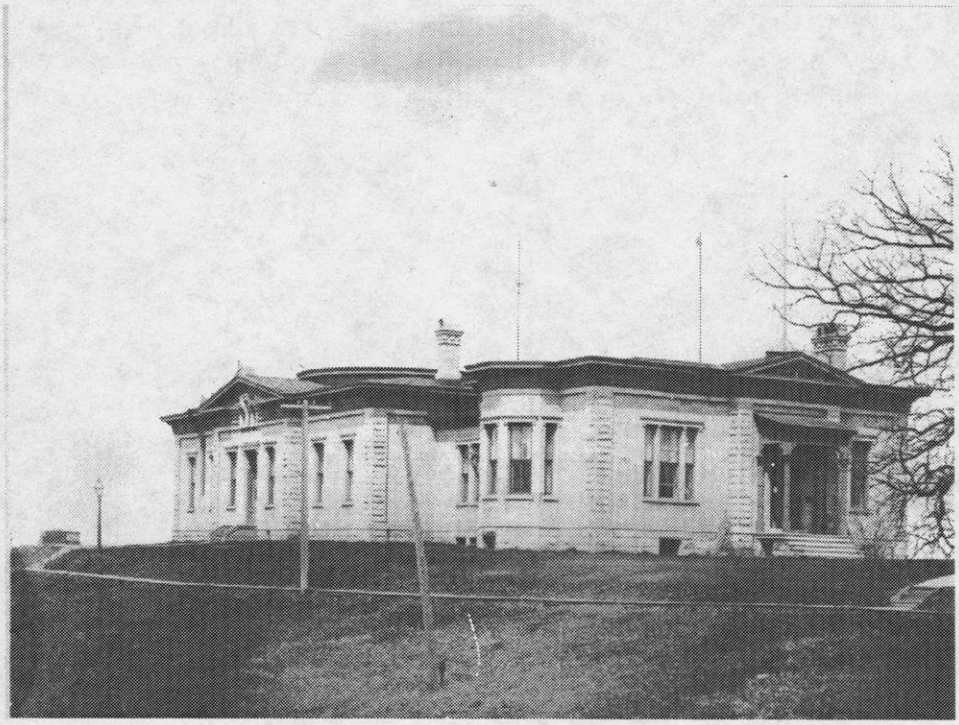


Fig. 1. Washburn Observatory with Library wing complete c. 1900. [folder 9/1, Washburn Observatory jf-9]

Constructed in 1877, the Washburn Observatory was erected entirely with funds donated by ex-governor Cadwallader Colden Washburn. It was the first building donated to the University. It houses a 15.6 inch refracting telescope, that was in constant use by the Astronomy Department from 1881 until 1959 when the new observatory at Pine Bluff opened. The old observatory now houses the Institute for the Study of the Humanities, and has been placed on the National Register of Historical Places. The old telescope is still used for elementary instruction and is available to the public on the first and third Wednesday of each month.

As early as 1867, when Professor Sterling requested that the Main Hall building committee include an observatory in the dome of that building, it was felt that without an astronomical observatory there was some truth to the charge that the University was little more than a glorified high school. This was most clearly expressed in the 1875 regents report: "In this age, an astronomical observatory is one of the characteristic and essential features of every educational institution of this order. It is scarcely possible to conceive of a university worthy of the title, where professors and attendants are denied this necessary instrumentality."[1]

It is probable that in 1875 Bascom had already discussed the donation of an observatory with ex-governor Washburn. The legislature of 1876, as part of the 1/10 mill tax levied for the University income, added an amendment that set aside $3,000 per year "for astronomical work and for instruction in astronomy so soon as a complete and well equipped observatory shall be given the University

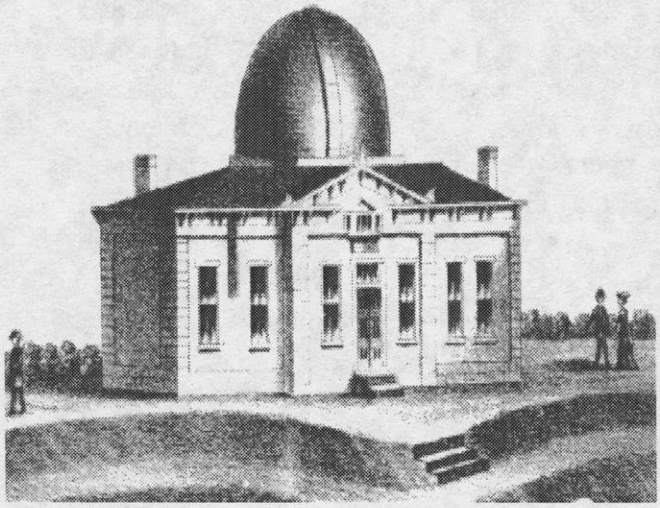


Fig. 2. A detail from an 1878 etching of the University, showing the Observatory, which had not actually been completed at that time. This view is from the south. Director Watson convinced C. C. Washburn to add a small wing to the west (left) end as a clock and transit room, and a large wing on the east, for calculating rooms, living quarters, and a darkroom. [etching on wall of Archives]

in its own grounds without cost to the state."[2] Several sources state or imply that ex-governor Washburn was the driving force behind this amendment.[3]

Whether or not the act was orchestrated, the local press carried in September 1877 an announcement , written by John Bascom, that C. C. Washburn intended to "erect and fully equip a superior astronomical observatory for the University of Wisconsin."[4] The announcement of the gift to the board of regents came at their meeting of November 20, 1877. The formal notification to the legislature was contained the regent's report of 1877, in which president Bascom referred to an act of "private munificence... [allowing] an astronomical observatory to be constructed and furnished wholly at the personal cost of the donor."[5]

Washburn left very little for the University to do; he selected the site, hired the architect (David R. Jones), selected the contractor (who began construction in May of 1878), kept a close eye on the progress of the work, and paid the bills. He may have also helped select the equipment. By the time of his report to the regents in 1878 president Bascom could say, "The Observatory ... is now nearly completed and ready for the instruments and when finished and in operation, I feel confident that no better equipped or more convenient observatory, and none better adapted to the purposes sought, can be found in the country."[6]

In October 1878, while the building was under construction, Bascom was able to obtain the services of the Michigan astronomer James C. Watson who came partly for the research possibilities at the new facilities and partly for the use of the beautiful house on the hill, then being vacated by president Bascom. The beautiful observatory site inspired a popular song in the 1930s "It's Dark on Observatory Hill", which extolled its virtue as a place to take a date.[7]

The building at that time was only intended to be the central drum, which supported the dome and containing the main telescope [see Fig. 2.]. Watson immediately convinced Washburn to add two wings to the tiny observatory, a west wing for a transit and clock room, and an east wing for calculating rooms, and living quarters. The Observatory was in use and the east wing completed by April 18, 1881.[8] The east wing later (1883) became the home of the Woodman Astronomical Library. The $3000 annual payment from the legislature was enough to support the Observatory and to pay Watson a salary second only to Bascom's at the University. By the time the Observatory was complete and dedicated in 1882 both Washburn and Watson were dead, Washburn in May of 1882 at age 64, Watson of pneumonia in 1880 at age 42.

The building as dedicated [see Fig. 1.] is described as: "A Neo-Classical Revival building in

the Italianate style .... 80 ft. long, 42 ft. wide, with a 48 ft. high dome."[9] It's cost is estimated at $40,000 to $50,000. On Jan. 6, 1880 the regents had mason James Livesey install a plaque inside the main entrance reading: "Erected and finished A. D. 1878, by the munificence of Cadwallader C. Washburn, and by him presented to the University of Wisconsin—a tribute to general science. In recognition of this gift, this tablet is inserted by the regents of the University".

The Observatory was intended primarily as a research facility, and its instruments were of very high quality for the time. Washburn's instructions to Alvan Clark and Sons of Cambridge for the telescope were that it should be superior in size to the telescope at Harvard. Its lens size was 15.6 inches, making it the third largest refracting instrument in the country at that time. This telescope remained the principal instrument of the observatory for 80 years.[10]

An unusual function of the observatory, in the early days, before the wide availability of accurate clocks was the precise determination of local time. Director Holden set up the practice of selling the time service to railroad companies passing through Wisconsin as well as a small number of local businesses, and regulating the University's clocks.[11]

A distinguished roster of directors followed Watson, including Edward Holden (1883-1886), George Comstock [1886-1922), Joel Stebbins (1922-1948) and Alfred Whitford (1948-1958). Substantial astronomical discoveries made here include the development of photometry (astronomy by recording amplified light) by Alfred Whitford. It was said that this technique would detect a candle a mile away.[12]

By 1950 it was clear that due to automobile traffic and city encroachment the site was no longer suitable for a first class research observatory. As Director Joel Stebbins said, "The ... road past the observatory has cured the darkness."[13] In 1959 the new facility at Pine Bluff (15 miles west of Madison) opened, and the Department of Astronomy moved to the sixth floor of the Sterling Hall wing. The Washburn Observatory was taken over by the Institute for the Study of Humanities and the interior space was remodelled for that purpose. The Clark telescope remains available to the general public on 1st and 3rd Wednesdays (weather permitting) as requested by C. C. Washburn in his 1877 bequest.

1) *Report of the Regents of the University of Wisconsin,* 1875 p. 4.
2) Laws of Wisconsin 1876, Chapter 117.
3) J. F. A. Pyre, *Wisconsin* p. 212, University Press, May 31, 1879 p. 4, and the University Press October 5, 1877 p. 5.
4) *Wisconsin State Journal*, September 18, 1877.
5) *Report of the Regents of the University of Wisconsin,* 1877 p. 8. No trace has been found of any original offer from Washburn to Bascom.
6) *Report of the Regents of the University of Wisconsin,* 1878 p. 7. The unavailability of the financial records for this project is due to the fact that the state, and therefore the University did not yet require complete control of donated building projects. This change would come in the wake of the Science Hall dispute in 1888.
7) R. C. Bless, Washburn Observatory, 1878-1978, University Archives Washburn Observatory subject file. Bless says that Watson was "wooed [by Wisconsin and Michigan] with an ardor nowadays reserved for football coaches". The home, now the Observatory Hill office building, was specified as part of the job offer to Watson. The song was written by Harold Spina and Johnny Burke. I am indebted to Margaret Stephenson for bringing this song to my attention
8) *University Press* April 18, 1881, p. 3.
9) Washburn Observatory site file State Historical Society Library Historic Preservation Department
10) R. C. Bless, Washburn Observatory, 1878-1978, pp. 1-2. University Archives Washburn Observatory subject file.
11) University Press, September 15, 1881, and February 3, 1882. Detailed descriptions of the timekeeping technique are included.
12) R. C. Bless, Washburn Observatory, 1878-1978, pp. 3-12. University Archives Washburn Observatory subject file. It is said that this experiment was actually tried by grad students, and a candle on picnic point was rather easily detected.
13) Stebbins Joel The Washburn Observatory 1878-1958, from Publications of the Astronomical Society of the Pacific Vol. 70, No. 416, Oct. 1958.

OLD MUSIC HALL

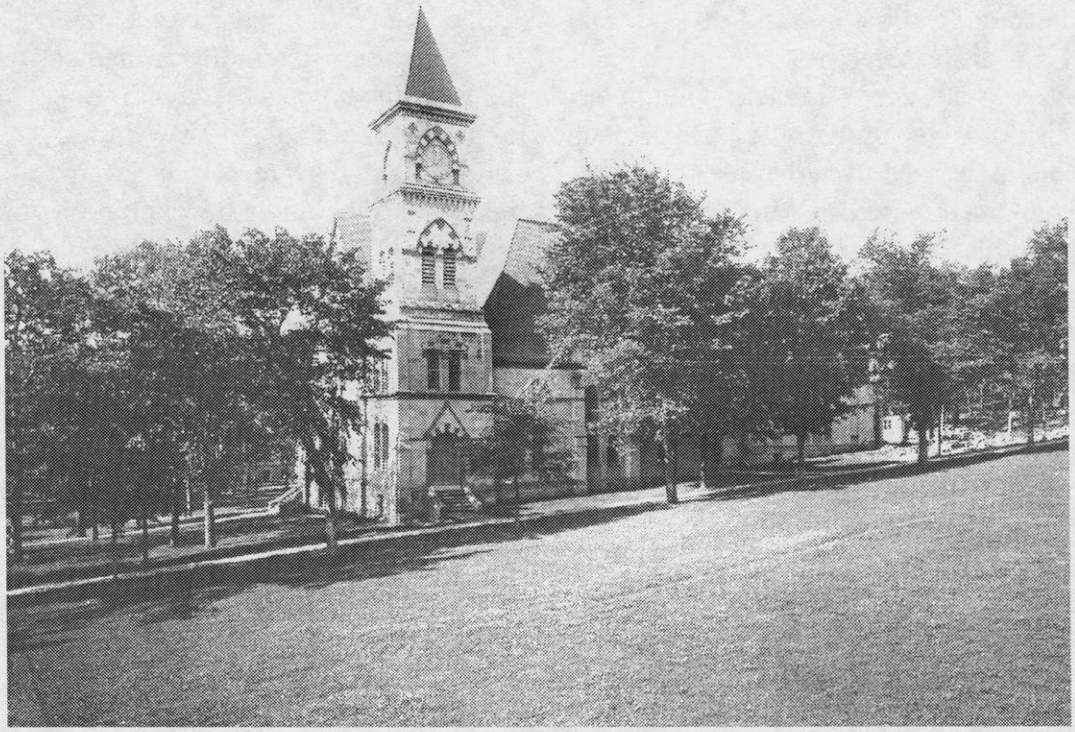


Fig. 1. Assembly and Library Hall c. 1890. [x25-1566]

Music Hall was built in 1878 as a combination assembly hall and university library. Its function as an assembly hall was superseded by the Red Gym in 1892, and as a library by the Historical Society Library building in 1900. It was the home of the music department from 1900 until 1969 when Humanities opened. It is now home to the opera department and the department of regional and urban planning. Music Hall is listed in the National Register of Historic Places.

When the University Press released a special supplement on March 2, 1880, to celebrate the formal dedication of the University's new Assembly Hall it marked the climax of a long and unusual campaign on the part of the regents, the legislature and University president John Bascom.

As early as the 1869 requests were heard for a new building: "We need a public hall for the use of the College Societies. There is not in any of our present buildings a room large enough to accommodate the young men of the University."[1] The enrollment at this time was a little over 400. President Bascom arrived in the fall of 1874 bringing with him a strong moral sense and a conviction that he should exercise it upon the students of the University. The fact that he had no way to do this is made clear: "The University can be expected to have no adequate *esprit du corps*, until there is a room in which the whole body of students and the faculty can be assembled for ... those occasional talks, frequent hints on discipline ... which are never so appropriately or effectively given to detachments as to the entire body of pupils."[2]

The regents quote a member of the 1874 board of visitors as saying "I think the library of the University is a disgrace to the state."[3] The library was indeed in sad shape; housed in tiny quarters in Main [Bascom] Hall, without a catalogue or librarian on site. Expenditures on books and publications were running around $250 per year. These two pressing needs of the University, an assembly hall and a library would be beautifully united by Bascom, the regent's building committee, and David R. Jones, the architect eventually selected by them.

The funding of the Assembly Hall was unusual. In the winter of 1874 the state legislature gave to the University the property on Madison's east side known as the Soldiers' Orphans Home, previously the home of real estate developer Leonard J. Farwell, with the orders to establish a medical college. Since there was no support in the state for a medical college the regents asked permission of the legislature to dispose of the property and use the money for needed buildings.[4] This wish was granted and the amount realized from the sale was enough to allow the regents to ask for design proposals and bids for the projected Assembly Hall. For several reasons, including the expiration of a $10,000 yearly appropriation, Bascom's influence, and a general recognition that the state had not been fair to the University, the legislature in 1876 passed an act providing a one-tenth mill (that is one hundredth of a cent for each dollar of assessed property value) in the state tax to go to the University as income. This levy was intended to provide for all needs and redress all past failures and irregularities in regard to the University's funding. The combination of the 1876 mill tax and the Soldiers' Orphans home sale provided enough money for the Assembly Hall.

On June 21, 1876 the regents voted that an Assembly Hall should be built and also appointed a committee to decide on the best location.[5] The committee reported to the board in January of 1877 that they had not been able to agree on a spot for the building, and that since the building would have to be exactly adapted to its site, no plans had been procured. President Bascom then presented to the board the "plan, seating capacity, and location for Assembly Hall."[6] Apparently Bascom and the architect had been busy. The Executive Committee of the regents on July 30th, 1878 examined plans by architects H. C. Koch and D. R. Jones and selected Jones' plans for a combination Assembly Hall and Library. David R. Jones, a Welsh immigrant with a private practice in Madison, was paid approximately $1700 over the next 2 years for the plans and construction superintendence.

Jones' "pseudo Gothic" design, with its lancet windows of stained glass, its Gothic arches and buttresses and its square central tower, is so called because it is reminiscent of the Gothic style of Cathedral design in Europe without rigidly adhering to that style. Many beautiful features are apparent: the overall proportions; the contrast of the light Madison sandstone from the Stephen's Quarry (at the current site of Hoyt Park), with the dark Superior sandstone trim. This effect is especially striking in the arches over the windows. The magnificent stained glass is best viewed from the entry hall to the auditorium on a sunny day.

Work began in the spring of 1878, by the principal contractor John Bentley and Son of Milwaukee. Chicago craftsman George A. Misch was hired in April 1879 to supply all the stained glass for the building and was payed a total of $775 upon fitting the sashes in the building. Most of the original glass has been lost and replaced over the years.

The tower's and its clock have been a city landmark and familiar symbol of the University campus since its erection. In the contract with the Seth Thomas Clock Co. dated January 29th, 1879 and signed by Seth E. Thomas Jr., the company promised to provide the regents with an eight day hour-striking tower clock with four six foot faces, and a clock that would be in all particulars as to size, quality and performance equal to the tower clock recently put up at Ann Arbor, Michigan. This included a 2000 pound bell cast in Troy, New York. It would keep accurate time not varying over ten seconds per month for five years. In 1933 the mechanical weight crank mechanism (a two hour, two man job every eight days to raise a one-ton weight from the ground to treetop level) was electrified.

The campus clock that was in the 1880s a rare and valued source of carefully regulated time for the city of Madison still keeps excellent time and rings the hours on the 2000 pound bell.[7]

Jones' specification called for the building to be completed by October 1879. Unknown holdups delayed its acceptance by the regent's building committee until January 6, 1880, and its formal dedication until March 2, 1880. The dedication was a major event in the city, attended by a large crowd (the Hall then seated 800) who heard music by the students, and speeches by the governor and president Bascom. The University Press commented: "The music ... was the pleasantest feature of the evening .... The whole entertainment was marred by the unpardonable rudeness of some occupants of the gallery.[8]

The reception Assembly Hall got was not uniformly good. Many complaints were heard about the conduct of the balcony audiences. Within a year the University Press was complaining that it was neither large enough nor conveniently located to the city. Students frequently complained about the rules governing the use of the library. Historian J. F. A. Pyre opines "Though not in itself unpleasing or inappropriate, it was unfortunate in setting the precedent of a departure from the simple rectangular lines of construction which had hitherto prevailed."[9] In June 1885 the regents received a request from Lyman Draper of the Historical Society to change the name of the building from "Assembly Hall" to "Lathrop Hall' to honor the first chancellor and to alleviate confusion with the "Assembly chamber" at the capitol. The regents cheerfully obliged by changing the name to "Library Hall".[10] The auditorium proved to be extremely useful for events that drew crowds that did not overwhelm the building's capacity. Its good acoustics and pleasant setting made it ideal for the frequent literary society debates and free lectures series, both well attended by Madison residents. Class parties and Greek Society socials were also common, attended by some debate on whether it was appropriate to hold such events in a "chapel". It was made clear by a University Press editorial that however much it looked like a church or how many times or by whom it had been referred to as a chapel, it was no such thing and had never been intended to be anything but secular.[11]

By 1894 with the greatly increased student enrollment its place as a meeting hall for large crowds had been taken over by the new Gymnasium and Armory. Library Hall (whose reading room had a capacity of 75) became unsuitable for the University library with the growth of the student body and rising standards for libraries. In 1900 with the opening of the Historical Library Building, the University library moved out and the building was taken over by the Music Department, previously housed in Ladies Hall (Old Chadbourne Hall). As part of this change the building was remodelled to make the library stack area into two floors, which involved the removal of some of the large stained glass windows on the north and south sides, and the addition of several new windows. In 1908 the regents had electrical wiring installed to replace the existing gas lighting. The building became popularly known as Music Hall, although the name was not officially changed until 1910. These changes were followed by another major renovation in 1924, when a new entrance was created on the south side and the auditorium was largely remodelled. The Hall continued its life as a lecture hall hosting such speakers as Governor Robert LaFollette, John F. Kennedy, F. L. Wright and 'Wild Bill' Kiekhofer. Significant incidents in the building's history include the founding of the University Bookstore as the Co-op (1892), the introduction of the song 'On Wisconsin' by its authors Purdy and Beck (1909), and the memorial services for University presidents John Bascom (1911) and Charles Van Hise (1919).[12]

Until 1969 the building served as the main School of Music facility, playing host to musicians such as artist-in-residence Gunnar Johansen, Ray Dvorak, the Pro Arte Quartet, Aaron Copeland, and the Chicago Symphony. After the removal of the Music School to the Humanities building in 1969, the building became home to two programs: The School of Music's Opera department in the auditorium and eastern offices, and the Department of Urban and Regional Planning in the western end. A

huge and successful remodelling of the auditorium, including a reconstruction of the stage, acoustical redesign and new seating, was donated by the Rennebohm family and carried out between 1982-1985.[13]

1) *Report of the Regents of the University of Wisconsin*, 1869 p. 29.
2) *Report of the Regents of the University of Wisconsin*, 1874 p. 14.
3) *Report of the Regents of the University of Wisconsin*, 1874 p. 14.
4) *Report of the Regents of the University of Wisconsin*, 1875 pp. 4-5.
5) *Minutes of the Board of Regents*, June 21, 1876. Vol. C p. 264.
6) *Minutes of the Board of Regents*, January 16, 1877. Vol. C p. 270.
7) Gerloff, Barbara, *Pastiche A History of Music Hall*, University Archives Music Hall subject file. p. 5. This is a very complete and interesting article about Music Hall, and contains much detail about subjects mentioned here.
8) *University Press,* March 2, 1880 Supplement
9) J. F. A. Pyre, *Wisconsin*, p. 213
10) *Minutes of the Board of Regents*, June 24, 1885. Vol. C p. 452.
11) *University Press* January 25, 1880 p. 5. This debate began because the building was frequently referred to as the "chapel", both during planning and after construction. Bascom's preaching style, often evident in speeches given in Assembly Hall, added to the misconception.
12) Gerloff, Barbara, *Pastiche A History of Music Hall*, University Archives Music Hall subject file. pp. 24-30. For the action regarding electricity see Minutes of the Executive Committee January 27, 1908.
13) Gerloff, Barbara, *Pastiche A History of Music Hall*, University Archives Music Hall subject file. pp. 15-25. The new seating capacity of the concert hall is 375.

SOLAR OBSERVATORY

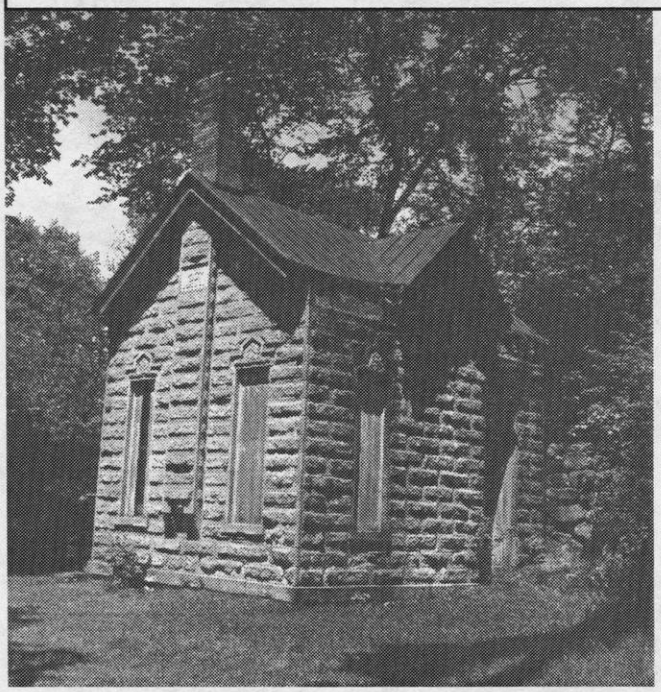


Fig. 1. The Watson Solar Observatory c. 1920. Below the building was a twenty foot deep cellar, and a 55 foot horizontal shaft through the hill to a reflector at the surface on the north side. This building was erected by Professor James C. Watson using his own money and labor. Because of the stone reading "Watson Solar Observatory", the building became known as the Watson Mystery House. [series 9/1 Solar Observatory folder, jf-4]

The Solar Observatory was built by astronomer James Watson, with his own funds and labor for the purpose of looking for a hypothetical planet near the sun. The experiment did not reveal the planet, and the building was used for storage until its demolition in 1949.

When C. C. Washburn agreed to build an observatory for the University in 1876, the legislature appropriated $3000 per year to fund the staffing and operation of the observatory. The person hired for this job by President Bascom was James Craig Watson, the director of the observatory at Ann Arbor, Michigan. Watson had been a prodigy in astronomy, and was published at 19. His major professor Brunnow, when reproached for the small size of his teaching load exclaimed, "Yes I have only one student, but that one is Watson!"[1] Watson became director of Michigan's observatory at age 25 in 1863. Within a year he had discovered the first of what are called Watson's family of asteroids.

In July of 1878 Watson went to Separation, Wyoming to observe a solar eclipse. During the darkness of totality he swept the sky around the sun. What he saw convinced him that there was at least one planet inside the orbit of Mercury the innermost known planet. He named this possible planet Vulcan.[2] Coming on top of his other remarkable achievements, this event made Watson the subject of a bidding war between his employer and alma mater, Michigan, and Wisconsin, which was developing a first class astronomy department. Late in 1878, Wisconsin prevailed, with an offer that included better instruments, a significant salary, and a house on Observatory Hill (now the Observatory Office building).[3]

When Watson came to Wisconsin, he began to build an observatory to look for Vulcan. On the principal that you can see the stars at midday from the bottom of a well, Watson dug a 20 foot deep cellar under a 16 by 20 foot stone building. He then drove a twelve inch tiled shaft from the cellar 55 feet through

Fig. 2. This picture shows the relationship between the positions of the Solar Observatory and Washburn Observatory. The solar observatory is in the foreground, with Washburn observatory in the background. The shaft from the cellar of the solar observatory went north through the brow of the hill and emerged at the surface just to the west (left) of the Washburn Observatory. [series 9/1 Solar Observatory folder, x25-2882]

the crest of Observatory Hill, to a pier on the surface on the north side of the hill where a mirror could reflect any part of the sky down the tube to a six inch telescope in the cellar of the observatory.[4] Watson had not completed this project when he contracted pneumonia and died in November 1880 at age 42.

C. C. Washburn agreed to fund the completion of Watson's projects, including the solar and student observatories. Because Watson's work was highly regarded and widely published it was decided that his successor, Edward Holden, should attempt to complete Watson's search for Vulcan. Holden reports in detail his experiments with the solar observatory. After reporting the entirely negative results of his experiments in detail he concludes, "I am satisfied that there is no use in prosecuting this particular experiment further ... No evidence has been collected in regard to the existence or non-existence of Vulcan. It has simply been demonstrated that this particular device is not suitable for detecting such a planet."[5] The most plausible theory is that Watson had sighted an unknown comet, since comets increase greatly in brightness as they approach the sun, and having moved off would no longer appear when checked for later.[6]

After the abandonment of the experiment for which it was built, the solar observatory was used by Holden and later directors as housing for observatory assistants, and later for storage of unused books and equipment. In 1940 it was decided to demolish it to make way for a new home economics cottage.[8] It was not however, until November 23, 1949 that the University got around to it. In the process of tearing it down a fire started and engulfed the building drawing four fire engines and a crowd of 250 students who then as now will use any excuse to avoid going to class.[9] Thus ended one of the brilliant J. C. Watson's many projects, leaving standing only the student observatory.

1) Heber, Curtis T., *James Craig Watson 1838-1880*. In Biographical Memoirs of the National Academy of Sciences Vol. 3 pp. 45-57, 1895.

2) Heber, Curtis T., *James Craig Watson 1838-1880*, Michigan Alumnus July, 1938. University Archives biographical file, Watson, James Craig.

3) Bless, R. C. *Washburn Observatory 1878-1978*. p. 2. University Archives, subject file, Washburn Observatory.

4) Holden, Edward S., *Publications of the Washburn Observatory* Volume 1 p. 36, University Archives, 7/4/1 box 1.

5) Report of the Regents, 1882, pp. 34-37. This is not only a good scientific statement, but a diplomatic one considering Watson's reputation and certainty regarding his observations.

6) See Heber fn. 2 p. 312. One reason that so many astronomers were looking for a planet near the sun was to explain observed anomalies of the orbit of Mercury. The anomalies were later a successful test case for the predictive value of Einstein's theory of special relativity.

8) *Wisconsin Alumni Magazine*, July 1940 p. 341.

9) *Daily Cardinal*, November 23, 1924 p. 1

MAGNETIC OBSERVATORY

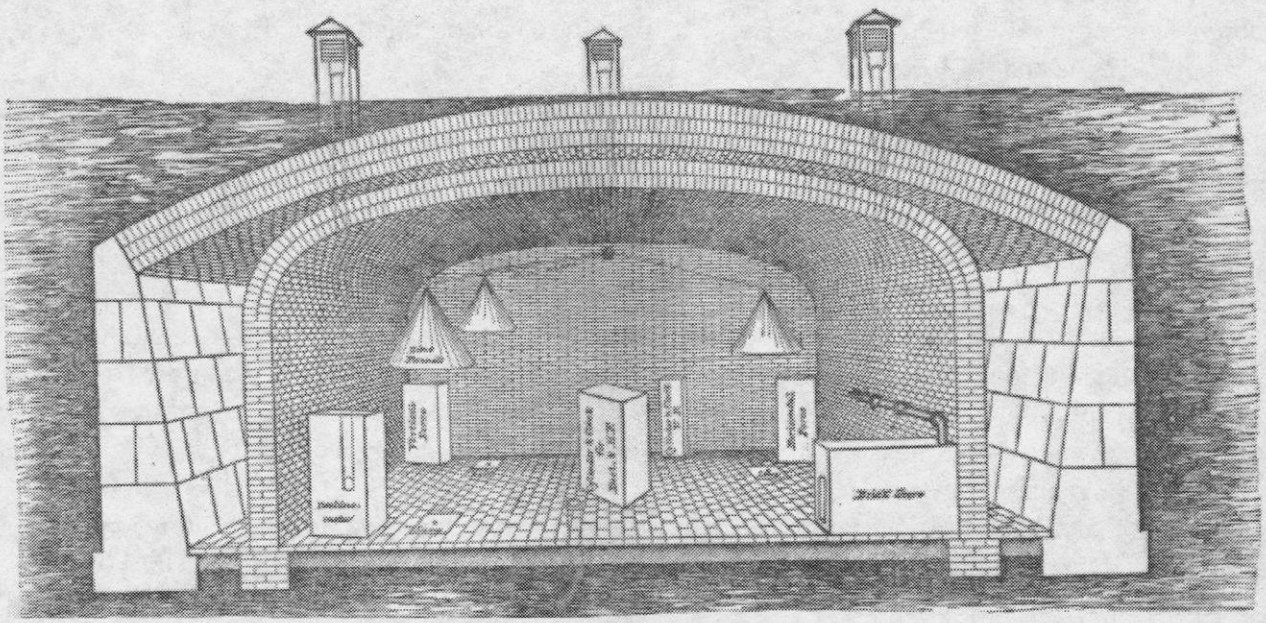


Fig. 1. Cutaway etching of the magnetic observatory from the 1877 Regents Report frontispiece. The door to the observatory is not shown.

The Magnetic Observatory was constructed in 1876 to house the federal Coast and Geodetic Survey project's instruments that measured and recorded fluctuations in the earth's magnetic field. The federal program ended in the middle 1880s, and the observatory was used for other purposes, and is now used by the department of zoology to strip flesh from animal skeletons.

In 1875 the Coast Survey Department of the U. S. approached the University of Wisconsin about establishing a magnetic observatory on the UW grounds. The government's interest in Wisconsin was largely due to the work of Professor John Eugene Davies who was an instructor of Astronomy and Physics at the University of Wisconsin from 1868 until his death in 1899. Among other achievements, Davies contributed largely to the U. S. Coast and Geodetic Survey literature, and some of his articles attracted the attention of Charles Peirce, the son of Benjamin Peirce director of the Coast Survey.[1] In 1876 President Bascom reports:

> The officers of the survey proposed to furnish all the necessary instruments ... upon simple condition that the University would provide the building required for conducting the observations prescribed. The interests of science, as well as State pride, dictated a prompt acceptance of the proposal. The result is the construction of the proposed observatory, now nearly completed, under the direction of an officer [J. E. Davies] of the department named.[2]

The structure was designed by D. R. Jones, the architect of Assembly Hall and the Washburn Observatory. Built for about $1200 in 1876 by James Livesey, a local mason who had built North

Hall in 1849, the underground chamber was reached by a long passage into the side of the hill, with its door at the end of the passage just flush with the ground. The chamber was 16 feet by 18 feet with an arched brick ceiling about 6 feet below grade. It was built entirely of masonry laid with hydraulic cement to make it waterproof. To avoid interference with the magnetic measurements no iron was used in its construction . As shown in Fig. 1, there was an outer wall to the chamber which created a 3 foot dead air space which helped keep a steady temperature. There were several ventilator shafts which were the only visible part of the observatory. The location of the observatory is just below the southern edge of the Birge Hall greenhouses. The passage to the door is visible from the corner of University Avenue and Mills Street.

There were magnetic observatories at several longitudes. The scientific purpose of the observatories was to produce: "A continuous and reliable record of the variations in the direction and intensity of the earth's magnetic force, by means of photographic self registration."[3] To make the measurements the chamber contained a self-recording magnetograph and a magnetic declinometer, instruments which kept track of the motion of an extremely precise and isolated pendulum.[4] The data from the observatories was used to investigate sunspot activity, aurorae effects and an attempt to predict the weather. The Coast and Geodetic Survey Department gradually collapsed under the forces of financial and management scandal, and Congressional and public ridicule of its charter. The instruments were eventually removed from Madison to Point Barrow Alaska. Ten years after it was completed, the observatory's purpose had disappeared, and it became a campus curiosity.[5]

In 1896 Dean of Agriculture W. A. Henry wrote to the regents that Dr. Harry Russell was planning some experiments in the curing of cheese where an extremely stable temperature was required. "The old magnetic observatory, just southwest of Agriculture Hall [now South Hall] fulfills our requirements very closely, and as the observatory is of no use whatever to the University at the present time I ask that it be turned over to the Agricultural College."[6] After the experiments done by professor Russell, the observatory is listed on various inventories as the oil storage house (before the service building was built), and the potato cellar. The physical plant now refers to it as the root cellar.

In 1950 the regents spent $4134 to repair and remodel the root cellar for animal rooms needed by zoology.[7] The zoology department uses it to strip the flesh from bones to be used in displays. The animal parts are placed in cages with a kind of beetle, which feed on the remains until the bones are completely clean. The cellar has been equipped with modern heat and a new door, and the smell is no better than might be expected. This is the first known structure erected at the University for a federal science project.[8]

1) Thwaites, Reuben Gold, *The University of Wisconsin Its History and Its Alumni*, p. 321, 112.
2) *Report of the Regents of the University of Wisconsin*, 1876 p. 5; 1877, p. 33.
3) *Report of the Regents of the University of Wisconsin*, 1876 p. 5. There were magnetic observatories at Greenwich, Paris, Toronto, and Madison.
4) The intent of the Coastal Survey in making these measurements was the determination of the exact shape of the earth which could be used to more precisely generate surveys and maps of the earth. Thomas G. Manning *U. S. Coast Survey vs. Naval Hydrographic Office,* pp. 74-90.
5) *The Daily Cardinal*, December 20, 1899, p. 9
6) *Minutes of the Board of Regents*, April 6, 1896.
7) *Minutes of the Board of Regents*, September 30, 1950 p. 26.
8) Later ones included the Forest Product Laboratory and the Sterling Hall addition that housed the Mathematics Research Center.

STUDENT OBSERVATORY

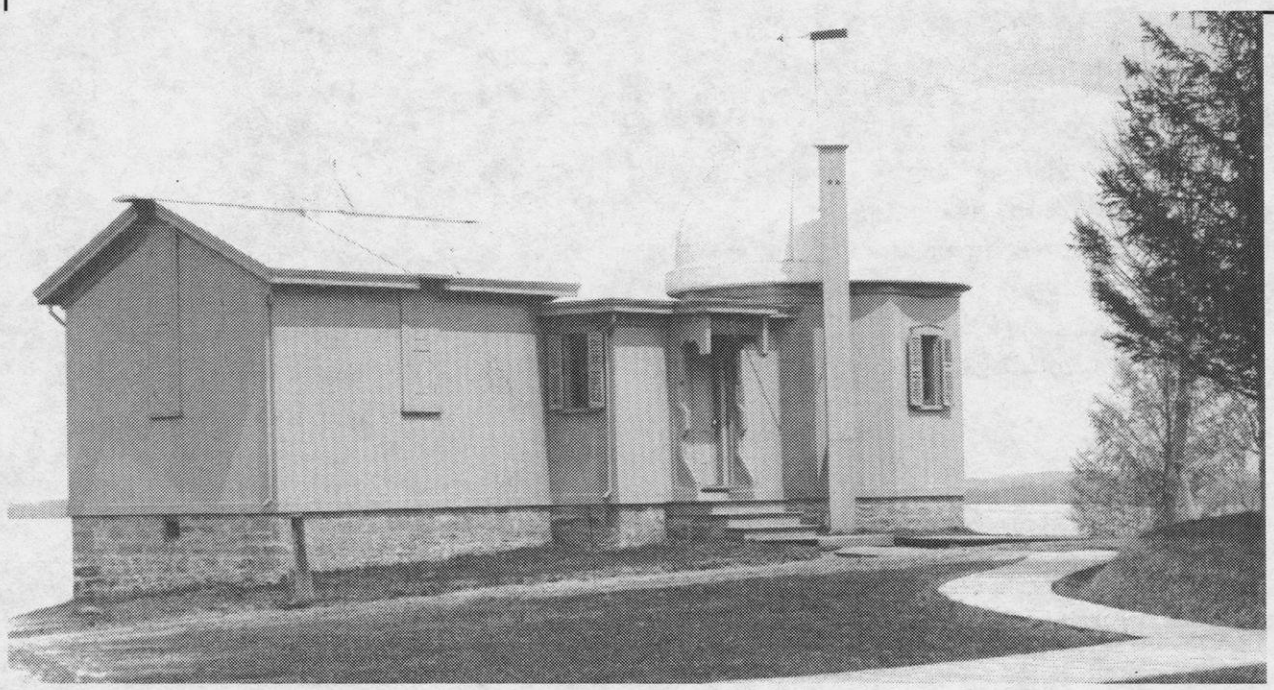


Fig. 1. The Student Observatory c. 1890. [Series 9/1, Student Observatory, jf-107]

The student observatory was erected by James Watson (the first director of the Washburn Observatory), in 1880 to provide basic instruction and to free the main equipment for research. Located on Observatory Hill just to the east of Washburn Observatory, the student observatory was in use until 1959 when the astronomers left the Hill for the new Pine Bluff Observatory. In 1960 the student observatory was donated to a local amateur astronomy group.

The genesis of the student observatory lay in the determination that the state of the art equipment at the new Washburn Observatory should be protected from the onslaught of the students and kept free for research purposes. The first director of the Washburn Observatory, J. C. Watson, was a talented and popular lecturer, but his principal interest was research. He came to Wisconsin at least in part because the new Washburn Observatory had superior research instruments.[1]

In his first and only report as director of the Washburn Observatory in 1880, Watson informs the regents:

> In order supply the need of a smaller observatory for the purposes of more elementary instruction ... I have commenced the erection, at my own expense, of suitable buildings for this purpose ... I shall provide the necessary instruments without cost to the university.[2]

Watson was stricken with pneumonia and died in November 1880. His successor at the Observatory was Edward Holden, who reported to the regents in 1881:

> The student's observatory was left entirely without instruments at the death of Prof. Watson.

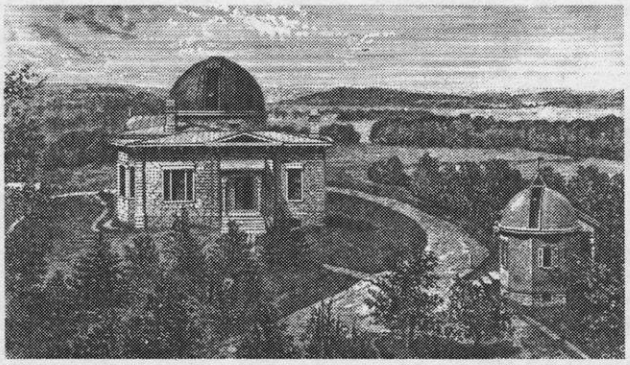


Fig. 2. This 1881 etching from the frontispiece of the Washburn Observatory Publications volume 1, shows the position of the student observatory relative to the Washburn Observatory. [series 9/1 Washburn Observatory folder #1, x25-326]

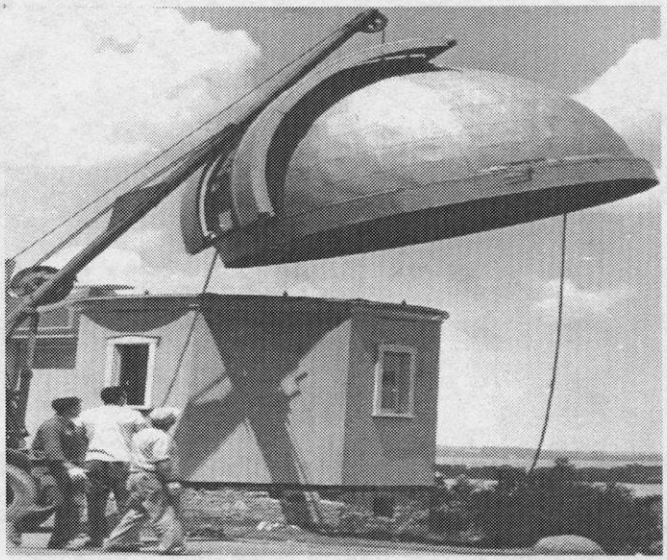


Fig. 3. July 19, 1960. The dome comes off. [Washburn Observatory folder #1, ns-123]

> Since that time Gov. Washburn has finished the building in a complete manner ... The six-inch equatorial is now mounted in the small dome ... It is obvious that the large equatorial is too costly and delicate an apparatus to serve as a means of general instruction.[3]

The student observatory was completed and fully equipped by 1882. It was a one-floor wooden building over a cellar. It was 45 feet long, had an seven foot dome, and a 12 by 14 foot transit room. It was equipped with a six inch telescope, and a three inch transit.[4] For the next 70 years almost nothing is heard of the little dome. It was in continuous use and probably had the same kind of difficulties as the big dome, constant upkeep and increasing optical pollution from the nearby roads and the growing city of Madison. At some unknown time the six-inch telescope was replaced with a 12-inch one.

When the astronomy department abandoned Observatory Hill in 1959, the University offered to donate the student observatory to the Madison Astronomical Society who wished to reassemble it on the grounds of the Bjorksten laboratory south of Madison.[5] In July of 1960, trucks and cranes removed the last of J. C. Watson's Observatory Hill projects from Observatory Hill. [Fig. 3]. The student observatory still stands, its site now owned by the Promega company, just off Fish Hatchery Road at Bjorkstein Place, but is no longer in active use.

1) When Watson was hired away from the directorship of the University of Michigan observatory in 1878 by UW President John Bascom, he was already a world figure in astronomical research. He had been published regularly for 11 years, discovered a number of asteroids, and written about the possible existence of a planet inside the orbit of Mercury called Vulcan.

2) *Report of the Regents of the University of Wisconsin,* 1880 p. 36.

3) *Report of the Regents of the University of Wisconsin,* 1881 p. 31. C. C. Washburn was the benefactor who had provided funds for all the astronomical projects at the University.

4) Holden, Edward S. *Publications of the Washburn Observatory*, Vol. 1, pp. 33-36. University Archives 7/4/1 box 1. Holden also says (p. 20 and 33) that the design of the student observatory and many features of Washburn observatory were largely the work of a student, F. D. Winkley.

5) *Daily Cardinal*, July 21, 1960 p. 1.

OLD SCIENCE HALL

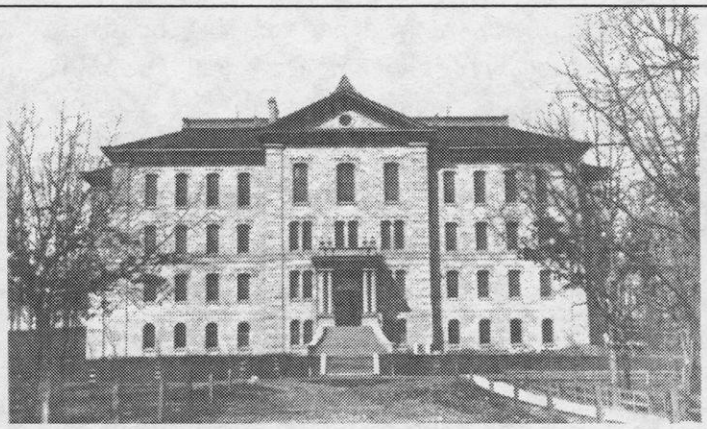


Fig. 1. Old Science Hall 1878 (from Park Street). [series 9/1 Old Science Hall, x25-315]

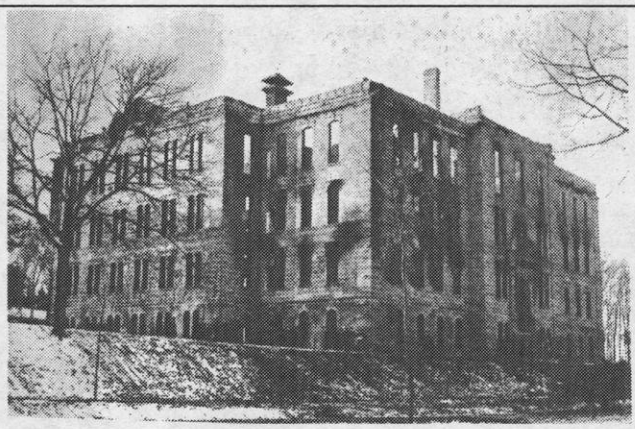


Fig. 2. Science Hall after fire 1884 (from S. E.). [series 9/1 Old Science Hall, x25-571]

The first Science Hall opened in 1877 in the same spot as the current Science Hall. Its cost was less than $100,000. It provided laboratory and faculty office space for all the science and engineering departments. A fire, probably begun in a forge room, completely destroyed the building in December 1884.

When John Bascom became president of the University in the fall of 1874, the crowding in Main Hall had become severe. Though the building had been open less than twenty years, the lecture rooms, halls, stairwells, and storage facilities were inadequate for the enrollment. This was especially true in the scientific fields, which had been generally disregarded in the early plans for the University. President Bascom and the regents immediately placed an expansion of the University's science facilities as the number one item on their priority list:

> A Hall of natural science. This, as it seems to us, is *just now the one great desideratum* of the University ... There is now no suitable room for the laboratory. It not only finds very poor accommodation in the basement of the University building, but from the nature of the work done there, it is a perpetual annoyance to those who are in the rooms above.[1]

In short it was crowded and it stank. The situation was evidently very bad, since the legislature, normally skeptical and slow moving when it came to the University's requests for funds, responded almost immediately with an appropriation of $80,000 "for the purpose of building an additional University edifice for scientific purposes."[2]

With the energy and forethought characteristic of President Bascom's early administration, plans, specifications and construction estimates had already been procured and approved by the regents in 1874.[3] Milwaukee architect H. C. Koch's design won over several competing architects'. His Italianate design of Madison sandstone and wood frame consisted of three floors over a raised basement.[4] On June 15, 1875, the regents opened eight contractors' bids for the project and selected David Stephens for the job. Stephens's bid of $69,975 was undoubtedly made possible by the fact that he owned the quarry that could supply the "Madison sandstone" specified by the architect. The contract required that Stephens have the building entirely completed by October 1, 1876. Heating apparatus was let under separate

contract. Due to problems in finding adequately seasoned wood, and a windstorm in September of 1876 which knocked down some walls, the fall '76 deadline came and went. It was not until June of 1877 that the University Building Committee could finally report to the regents: "The building entrusted to your committee is completed."[5] The grand total for the project was $96,932.

When Science Hall opened June21, 1877, it was the second purely instructional building on the campus. It was a 'U' shape, with the 136 by 60 foot base along Park Street, and two 78 by 42 foot wings pointing west up the hill. This shape corresponds closely to that of its replacement, the current Science Hall. The basement contained labs, shops and utilities. On the second floor were the departments of chemistry and physics, labs, lecture halls, and offices. The third floor was occupied by the civil engineers, and the geological department. The fourth floor contained the department of natural history, including the University cabinet, or collection. The front of the fourth floor was outfitted as an art gallery (open to the public for a few hours each week) for the University's embryonic collection of art.

Science Hall was the pride of the University. The legislature had been invited to visit it, and the University catalogues carried sketches of the floor plans. It was equipped with gas lights and flush toilets. Not all was well, however. In December of 1883, Professor Conover warned the executive committee that the floors would have to be shored up or they would collapse.[6] As it turned out, neither were the floors shored up nor did they collapse.

At 8 PM on December 1, 1884, fire alarms sounded on campus. "When the first spectators arrived the fire was confined to the forge room and with suitable conveniences might have been easily extinguished."[7] The executive committee later reported: "Owing to the fact that the appliances at the building for putting out fires could not be reached by those persons who were early at the fire, and the utterly useless help provided by the fire department of the city of Madison, nothing was done to stay the progress of the fire, and it simply burned out".[8] By 9:30 students were dragging what they could reach of the professor's collections from the flaming building. Parts of the collections of professors Daniels and Van Hise were saved.

The day after the fire the regents leased machine shop facilities from the Lake City Food Company located at the foot of Park Street. They evacuated all the students from the North Dormitory to provide classroom space.[9] Plans were also begun to arrange for the building of a new science hall. The University Press reported: "As the willing students responded to the alarm little did they realize that it was the trumpet of doom for the best of the seven buildings of the University, the destruction of hundreds of thousands of dollars worth of property, and the choicest products of the accumulated labor of years."[10] Old Science Hall remains to this day the only major building lost to a fire in the University's history.

1) *Report of the Regents of the University of Wisconsin,* 1874 p. 13.
2) *Laws of Wisconsin* 1875, Chapter 61. The date of the regents plea for the building was June 18, 1874. The law authorizing the appropriation for the building was passed February 25, 1875. For the legislature dealing with the University this is high speed indeed.
3) *Report of the Regents of the University of Wisconsin,* 1875 p. 14. The regents refer to actions taken the previous year.
4) *Regents Minutes*, April 8, 1875 p. 225. Other architects submitting plans were S. A. Schmidtner, E. F. Mix, D. R. Jones and J. S. Parkinson.
5) *Report of the Regents of the University of Wisconsin,* 1877 p. 32.
6) Curti and Carstensen, *The University of Wisconsin*, vol. 1 p. 320. The evidence is that the building was very cheaply built; see also Thwaites, The University of Wisconsin p. 108 note 2.
7) *University Press* December 6, 1884 p. 1.
8) Proceedings of the Board of Regents series 1/1/2 pp. 440-1.
9) This ended forever the use of North Hall as a dormitory.
10) *University Press* December 6, 1884 p. 1.

MACHINE SHOPS

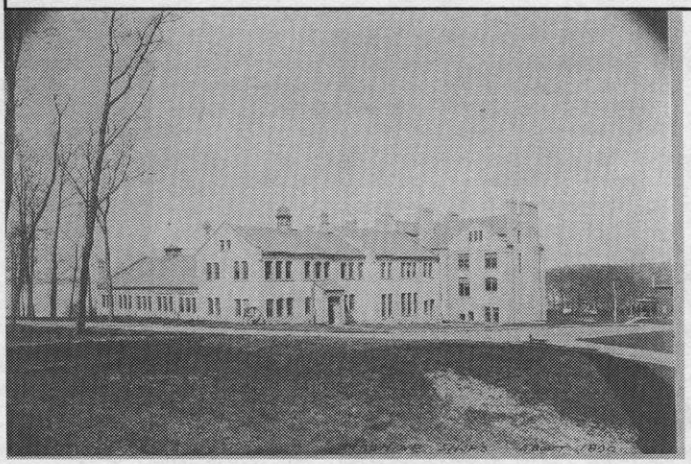


Fig. 1. Machine shops from SW c. 1890. [x25-2482]

Fig. 2. Machine shops, after addition c. 1895. [x25-2473]

The machine shops were one of the four buildings erected in 1885-1888 to replace the original Science Hall. It housed the equipment of the engineering departments, including lathes, saws, forges and foundries. It caught fire in 1900 and in 1965. Occupied after the 1900 exit of engineering mainly by art education and journalism, it was demolished in 1968 to make way for Helen C. White Hall.

Born in the uproar and scandal surrounding the construction of the new Science Hall group (see Appendix A), the machine shop building was erected as the first the home to the University's embryonic engineering department. The suspicion that a forge had started the fire that destroyed the original Science Hall in 1884 was the main reason that the machine shop, forge and foundry functions were isolated in a building of their own.

As if in despair of protecting from fire a building housing such departments, it was built in a method called slow-burn mill construction, rather than the completely fireproof method used in Science Hall. Slow burn mill construction was much cheaper too.

Begun on June 23, 1885 and finished March 26, 1886[1] the machine shop was located just to the west of the chemistry building at 600 North Park Street. It was a 'U' shape with the base side running north-south. The side wings containing the light machines (south wing) and the forges and foundry (north wing) pointed east toward the chemistry building. Within five years of its opening the machine shop building was out of space. Caught in the burgeoning enrollment in mechanical arts, the shop building was expanded in 1893-4 by Conover and Porter, by extending the west end of the south wing into the hill 75 feet, and 50 feet to the north[2] (see Fig. 2).

This arrangement was generally sufficient until seven years later, when in January 1900, a fire broke out in the south end of the main section. Due to the slow-burn construction (and prompt action by the fire department) the fire did not reach the carpenter shop, and damage to the building was limited to the axe and water damage of the fire department, mostly in the west wing.[3]

Later in 1900 the new engineering building (now old Education) on Bascom Hill opened and the machine shops, forge room, and most of the rest of the engineering departments moved. Only the laboratory part of electrical engineering stayed in the west section of the shop building leaving the

Fig. 3. August 11, 1965. Fire guts the west wing of Journalism Hall. [Journalism Hall folder ns-188]

east side empty until about 1920 when the east wing became the home of the art and art education departments. The building was known as the art building throughout the 1920s and 1930s. The art education department left the machine shop in 1954 when the engineers released the building on Bascom Hill (now old Education), into which art education moved.[4]

Beginning with the huge enrollment surges in the 1940s the building became a kind of catchall for various departments in need of temporary quarters or storage space. By 1965 in addition to engineering and the art department, it had housed the psychology department, the Daily Cardinal offices, and the foreign language laboratory. After a $171,000 remodelling by Weiler and Strang in 1951, the building welcomed its last long term tenant, the Journalism School, which moved into the remodelled building in 1953 and stayed until Spring of 1965 when it left for the old Wisconsin High School Building on Henry Mall.

The timing of journalism's departure was fortunate since on August 11, 1965 the building caught fire again (see Fig. 3). The origin of this fire was in the west wing where it gutted the offices of the alumni mailing and records and destroyed many works of art stored there by the Art Department. But as in the case of the 1900 fire, the slow-burn construction contained the fire and did not allow the fire to destroy the building.[5] Remarkably, despite the fears of its planners and several opportunities, fire never destroyed this building. It stood until it was demolished.

In 1965 the site at 600 N. Park Street which included the machine shop and the old chemical building was already being eyed by the University as a prime development location. Candidates were the Communication Arts Building, the Education Building, and the eventual winner the Undergraduate Library (Helen C. White Hall). Thus in 1968, the machine shop's wild ride came to an end at the hands of a wrecking ball.

1) *Badger Press*, March 26, 1886 p. 9.
2) The location of this addition is largely responsible for the odd and twisted shape of Observatory Drive behind Helen C. White Hall.
3) *Daily Cardinal*, January 11, 1900 p. 1.
4) *Wisconsin Alumni Magazine*, February, 1954 p. 24. The engineers moved to the new Engineering Hall at camp Randall.
5) *Wisconsin Alumni Magazine*, August 1965 p. 4.

CHEMICAL ENGINEERING

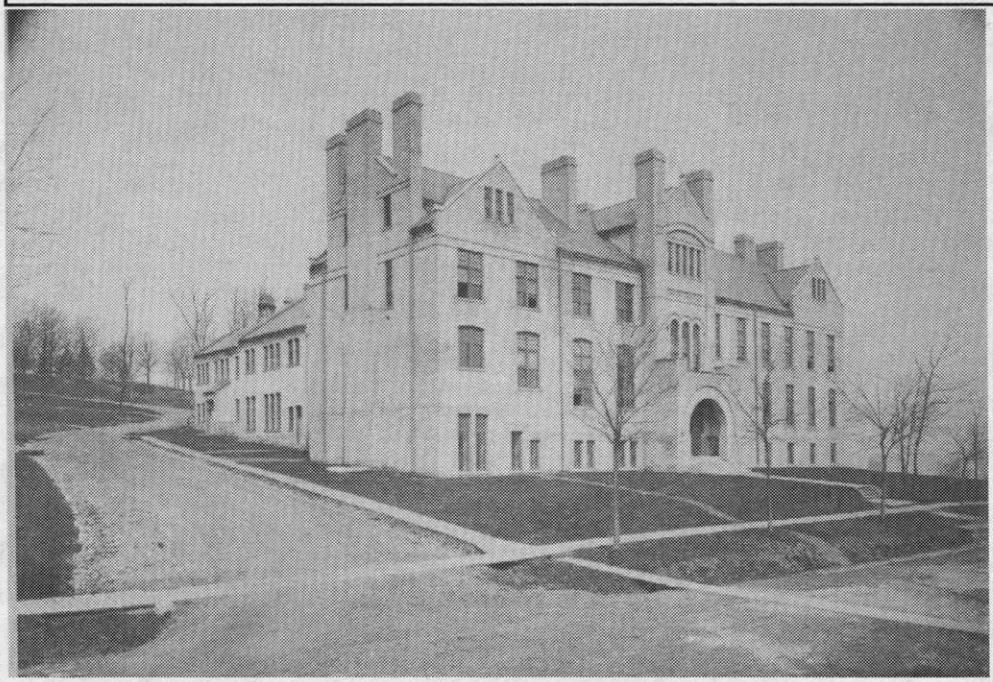


Fig. 1. Chemistry Hall in 1890 looking up Observatory Drive from Park Street. The machine shops are visible behind chemistry. [x25-836]

The first dedicated chemistry building was erected in 1885 at 600 North Park Street, and housed chemistry until 1905 when chemical engineering moved in. In 1968 it was demolished to make way for the undergraduate library, Helen C. White Hall.

The genesis of this, the University's first dedicated chemistry building (of at least three), was the miserable experience from the two previous homes of chemistry. In referring to Main Hall [later Bascom Hall] historian J. F. A. Pyre says of chemistry's first home: "... poorly heated, poorly ventilated ... dismally overcrowded, while the fumes of Irving's blast furnaces and the chlorine and sulfide gases always exuding from Daniells' laboratory mounted the staircases and mingled in every ... discussion."[1] The unpleasantness and discomfort caused by the presence of laboratories in Main Hall were the justifications used to build the original Science Hall in 1875, chemistry's second home. By the time that building was destroyed by fire in 1884, much had been learned about the requirements of buildings intended for instruction in the sciences, particularly regarding ventilation. When the new science group was planned and built in 1885 (see Appendix A for background), the heating plant included a separate system to provide high pressure steam to the chemistry building specifically to run the ventilation systems.

The chemistry building was a 48 X 148 foot rectangle, two stories above a basement (a 50 foot addition to the north end was built in 1894). The basement was of Madison sandstone and the rest of the building of white brick. The contractor was John Trumbull of Whitewater, who agreed to a completion date of December 31, 1885 (for $20,000); it was finally ready for use in November 1887. Like the machine shop behind it (also by Trumbull), the chemistry building was of 'slow-burn' construction, intended to slow and limit the spread of fire.[2] This technique was a cost compromise

Fig. 3. The first chemistry building comes down in 1965 to make way for Helen C. White Hall. The machine shops are on the left; they were demolished next. [Helen C. White folder ns-3110]

between flammable wood construction, and the safer but very expensive fireproof method used on Science Hall. There is no record of a serious fire at the chemistry building and since the building was deliberately destroyed after 90 years of use, the building style was apparently a good choice.[3] The labs were kept from polluting the lecture halls by placing them at opposite ends of the building. The assaying labs and ore crushers were in the basement to minimize noise and fumes.

In an article written for the Alumni Magazine in 1909, professor Kahlenberg recounts some difficulties of planner W. W. Daniells.[4] "There were earnest protestations from some of the regents of the university that the plans for the chemical laboratory called for altogether too large a building. It was represented that such a building could not be filled in a hundred years."[5] Within fifteen years the building was overflowing and a new one was on the drawing board. When that new chemistry building (now Chamberlin Hall) was finished in 1905 the old chemistry building was turned over to engineering for the department of chemical engineering.[6] This and parts of the medical school remained in the building until it was demolished in 1965 to make way for the construction of Helen C. White Hall.

1) *Wisconsin,* J. F. A. Pyre p. 210

2) *University of Wisconsin Catalogue* 1885-1886 p. 99

3) Two fires in the machine shop building of similar slow-burn construction were contained and extinguished with minimal spread.

4) William Willard Daniells came to the University in 1868 as head of agriculture, then of analytical chemistry. In 1880 he became professor of chemistry and occupied that chair until 1907 when succeeded by Kahlenberg. He is the Daniells referred to by Pyre above.

5) *Wisconsin Alumni Magazine,* November 1909 p. 105

6) There was considerable competition for this space (e.g. english, medicine and engineering). The head of chemical engineering, Charles Burgess, had made a few bronze letters, and in the dead of night boldly had the legend "Chemical Engineering" mounted on the building. For 50 years Burgess resisted losing that space to the medical department by pointing to the sign in imperishable bronze. Alexander McQueen, *A Romance in Research, The Life of Charles F. Burgess*, p. 126.

SCIENCE HALL

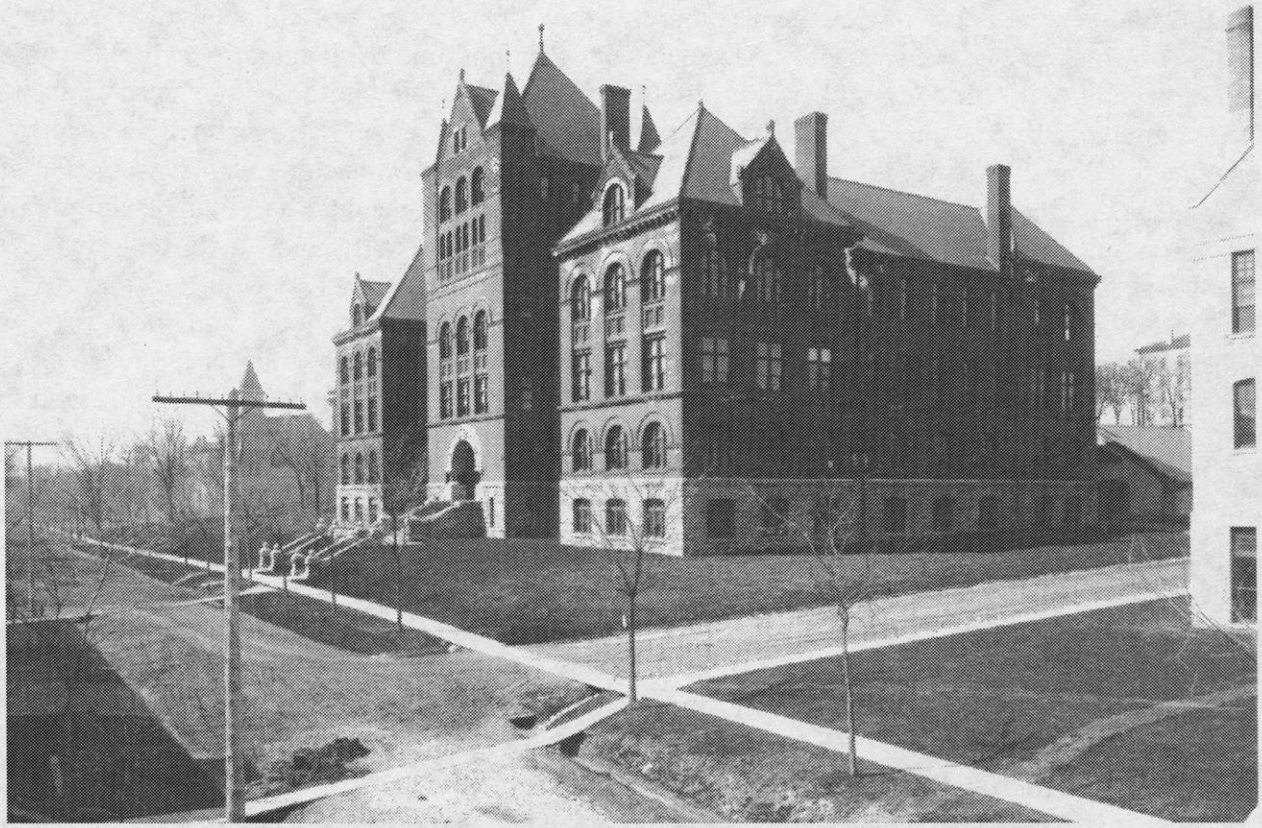


Fig. 1. Science Hall at Observatory Drive and Park Street 1890. Note the board sidewalks that extend clear across the unpaved streets, and the original window in the north wing where a door was later cut. [Series 9/1, Science Hall #1, x25-312]

Erected in 1887 at a cost of about $290,000, Science Hall replaced the original Science Hall, destroyed by fire at the same location. Science Hall was the first completely fireproof building at the University. Its cost and length of construction caused a scandal that was investigated by the state legislature. Science Hall was the original home of nearly every scientific discipline taught at the University. It was added to the National Register of Historic Places in 1974.

The begetting of Science Hall took place within weeks of the fire that destroyed the original Science Hall. The gestation and birth of the new Hall were difficult, slow, dangerous and painful. The regents' decisions to act as their own contractor, and to make the building fireproof to an extraordinary degree, caused cost and authority overruns that resulted in a state investigation and legal changes that resonate down to the present day.[1]

On April 7th, 1885 the legislature appropriated a total of $190,000, for a group of four buildings (a Machine Shop, a Heating Plant, a Chemistry Building and a Science Hall) intended to

replace the original Science Hall destroyed by fire.[2] When civil engineering Professor Allan Conover returned from an inspection tour of the science facilities of eastern colleges in May of 1885[3], the plans for the other, smaller buildings of the group were already done. Conover and Milwaukee architect H. C. Koch developed the plans for Science Hall. These original plans were evidently for a "slow-burn mill construction" building, the style of the smaller buildings.[4]

When the regents called for bids on Science Hall, they had already spent about $61,000 of the $190,000 total appropriation. When bids from contractors for Science Hall ranged from $179,000 to $229,000[5], the response of the regent's building committee was to reject all bids and to employ Professor Conover as contractor and superintendent of the building, with authority to hire the workers, direct their work, and make alterations to the plans. The decision of the regents to act as their own contractor made reasonable sense in light of the facts that Conover had been involved in planning the building, was a professional architect and now had a captive machine shop available to him.[6] As was made clear in the later investigations, no one believed that the building could be built for the appropriation. The building was erected during the next two and a half years, but the constant changes in planning, intended to increase the fire resistance, were so costly and difficult that the appropriation and other monies (the insurance from the old building, and loans from local banks) was exhausted long before Science Hall was completed or furnished. When the regents applied to the legislature for further funds, they were met with an outraged investigative committee who asked some difficult and revealing questions before the needed funds were forthcoming (See Appendix A). When finally completed Science Hall had cost an estimated $285,000.

The task of actually erecting the building was begun in the fall of 1885 and the foundation was finished up to the water table during that fall and winter.[7] All through 1886 the work was pushed with the greatest possible speed. There were labor difficulties and constant alterations to the plans as Conover and the regents increased their resolve to make the building as fireproof as possible. In October 1886 the *Aegis* reported: "The outside walls of Science Hall are completed except the tower", and in June 1887, they report: "They have commenced slating the Science Hall roof."[8] The work was finished late in 1887. The Aegis of January 6, 1888 says that "Professor Davies has removed from North Hall to his new rooms on the first floor of the north wing of Science Hall. So he is the first Professor to have the pleasure of occupying the new building."[9] In June of 1888 the board of visitors announced that all buildings in the science group were "living monuments to the wisdom and courage of the Board of Regents."[10]

The finished building has a 205 foot facade on Park Street and two 126 foot wings projecting west. The central tower is five stories high and the wings are three stories above a finished basement. The foundation is of Berlin, Wisconsin, rhyolite. The superstructure is of red brick, with rhyolite and terra-cotta decoration. The hipped roofs and gabled dormers were finished off with a slate roof (replaced with asphalt shingles in 1992).[11]

The large lecture room on the first floor seated a hundred students (total university enrollment in 1888 was about five hundred). Because of the small enrollment and the rise of scientific study, the building held an astonishing array of departments, almost all of which now (1993) have buildings of their own larger than the whole of Science Hall. These include engineering, physics, geology, psychology, zoology, anatomy, botany and biology. Most of the faculty offices were here too. It did not take long for some of the departments to run out of room. Engineering left in 1900. Botany left for Birge Hall in 1910. Geology was the longest tenant and the last to leave (1888-1974). Anatomy had a place from the beginning and as other tenants left, it expanded into the newly developed space in the upper floors, where it stayed until 1957. The major tenants of the building now are geography, cartography, The Institute for Environmental Studies, and Chicano Studies.

The efforts to produce a fireproof building were entirely successful. A contemporary descrip-

tion says: "The building is entirely fireproof. No wood is used except for the floors, doors and window frames. The floor beams are of steel, filled in with arches of hollow tile. The staircase is of iron with slate treads ... The walls are so made as to leave two air spaces between the room and the outer wall."[12] The fireproofing led to the use of steel beams in the framing. Science Hall is among the first buildings in the world to use structural steel in quantity.[13] It is said that the attic beams show the practice (in the days before the invention of the cutting torch) of cutting by drilling a row of holes, then bending until the beam fractured![14] Presumably, most beams were ordered to size.

Because of the highly engineered nature of the structure, with steel beams, and masonry load-bearing walls, the interior of the building has not been heavily modified. The building's upper spaces, including the tower's fourth and fifth floors and the attic areas of the two wings were finished off for use by the medical school about 1904. Subdivision of the original large spaces, and the construction of mezzanines above several of the twenty foot high floors accounts for most interior modifications. Two exceptions are the addition of an elevator around 1924 and the opening of a wall to extend the map library (rooms 384 and 380) on the north wing's third floor. The exterior of the building has been altered only by the addition on the back (west) facade, where two flat-roofed rooms (443 and 455) were added on the fourth floor sometime before 1924. Skylights were added in the south wing, and a window was converted to a door at first-floor level in the Park Street face of the north wing. The south rear tower originally held a spiral fire escape slide tube, which was entertainment for many students, town children, and the staff of the geography department who ceremonially sent each outgoing chairman down the slide with his successor. The north rear tower held the cadaver winch. Both towers now hold fire escape staircases, added around 1980.[15]

The legends about Science Hall being haunted appeared very early and persist even now. This is entirely understandable using almost any definition of haunted. A man was killed and several maimed during construction.[16] The presence of looming towers, huge creaking doors, long twisted hallways complete with flying bats, a morgue in the basement, tunnels under the building, dead bodies delivered by hearse at the back door and winched up to the attic lend a gloomy and mysterious air to the old building. A mystery novel, "Don't Look Behind You", by French professor Samuel Rogers was set in Science Hall.[17] As recently as 1974 geography students were still finding body parts in the attic.[18] Haunted it was, haunted it remains.

The men who designed and built Science Hall would be surprised at little if they returned today (except perhaps that the building was ever completed). The appearance of the building has always been a point of contention. For every one who views it as a beautiful example of the Richardson Romanesque style with its dramatic massing and use of masonry elements, there is another like historian J. F. A. Pyre who said: "The largest, most useful, most expensive, and easily the ugliest building ... Science Hall will doubtlessly stand indefinitely a monument to the prosperity, progressiveness, bad taste and good intentions of the late eighties."[19] Both the fact that the building is now on the National Register of Historic Places, and that it is so durable that it would cost nearly as much to tear it down as to replace it, should assure Science Hall of a safe place on campus for another 110 years.

1) Part of the legislation that followed the hearings regarding Science Hall created a requirement that all contracts entered into by the regents had to be signed by the governor. This sometimes caused costly delays, as in the case of Sterling Hall and the Wisconsin General Hospital, and other times simply annoyance, when donors were surprised to discover that the state had control over building projects that are entirely funded by the University itself, as in the Alumni House, and the Memorial Union.
2) *Laws of Wisconsin,* Chapter 332, 1885.
3) Conover visited Princeton, Columbia, Yale, Harvard, MIT, and others. He returned to Madison with plans of some of those buildings.
4) A copy of the original specifications are in the Science Hall subject file in the University Archives. Slow burn mill construction used heavy wooden beams and joists with brick walls, and included thick steel-sheathed fire doors to limit the spread of fire in a building. It was later brought out by Koch in the legislative hearings that slow burn mill construction was what was ordinarily meant by the words "substantially fireproof", as used in the act funding the construction.
5) Olmstead, Clarence W., *Science Hall, the First Century* p. 2. This pamphlet is a detailed history of the building and highly entertaining reading. Copies are available in the Memorial Archives (Science Hall subject folder), the Historical Society Library, and the Geography Library.
6) *University Press and Badger*, May 21, 1886 p. 9. The shop building was the first of the smaller buildings completed, in May 1886. .
7) *University Press and Badger*, October 9, 1885, October 30, 1885, December 11, 1885.
8) *Aegis*, June 10, 1887.
9) *Aegis,* January 6, 1888.
10) *Report of the Regents,* 1887-8 p. 59.
11) *National Register of Historic Places Registration Form,* State Historical Society Historic Preservation Office.
12) *University Catalogue* of 1887-1888 p. 161.
13) There is some confusion regarding this claim, due to the distinction necessary between iron and steel. The regents financial statements show checks written for iron girders and steel beams (*regents report* 1886 p. 32). Frank Lloyd Wright, who claimed to have worked on the building (*An Autobiography* p. 57), further confuses the issue by referring to iron beams and steel beams in the same paragraph. No independent evidence to support Wright's claim is known to exist. Structural authority Carl Condit of Northwestern agrees that Science Hall is among the first steel framed buildings (correspondence, Memorial Archives, Science Hall subject folder). A research project carried out by the author and student Shawn Rediske, obtained samples of the metal from the attic and floor joists and demonstrated conclusively that the material is steel. Science Hall is now (because of the destruction of earlier examples) the oldest building in the world to use significant amounts of steel in its frame. The vertical supports are entirely masonry. (A report of this project is in the Archives Science Hall subject file.) No original plans for the building as modified by Conover have survived, if they ever existed at all. The legislative committee concluded that the alterations were generally improvised.
14) Olmstead op. cit. (fn. 5) p. 41 note 83, the steel does indeed show those marks, but only in places where they needed trimming to fit together. This drilling was done by engineering students in the new machine shops.
15) Olmstead op. cit. (fn. 5) pp. 22-29; *Daily Cardinal*, December 17, 1895.
16) On November 11, 1885 local mason Henry Hoven was fatally injured by falling equipment in the basement. *The Wisconsin State Journal*, with the delicacy known to the press in all ages, headlines the story "Done by a Derrick". The regents settled in those days before workman's comp, with Henry's widow Wilhelmina for $1350 on April 18, 1887; according to the regents minutes (vol.C p. 488), they would have gone as high as $2000. Eight workman were injured (some losing fingers) when a lift fell from the third floor (Aegis June 17,1887).
17) Rogers, Samuel, *Don't Look Behind You* (Harper 1944). Memorial Library.
18) *Capital Times*, August 14, 1974.
19) Pyre, J. F. A., *Wisconsin*, p. 217

RADIO HALL

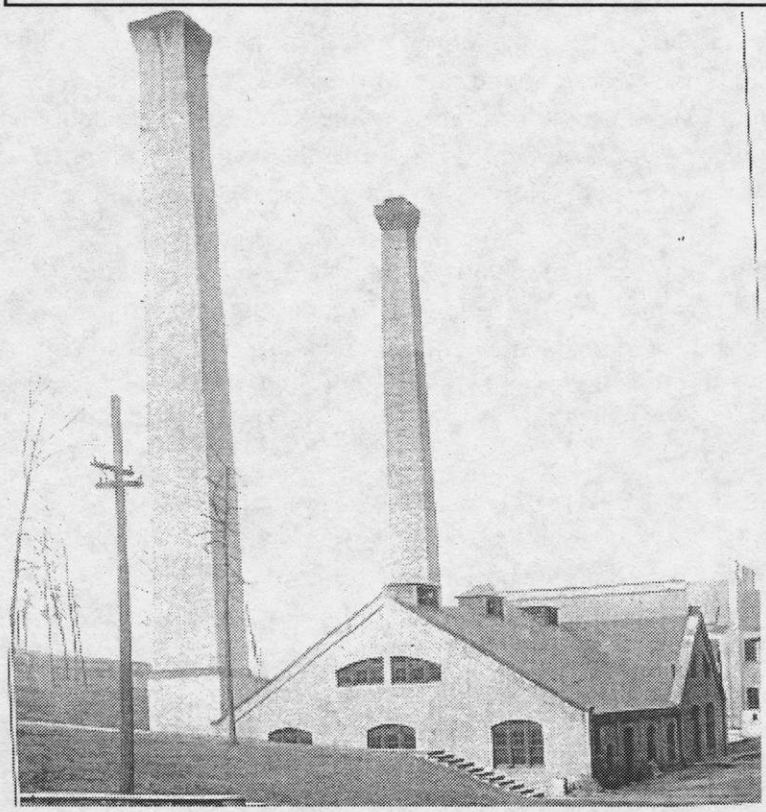


Fig. 1. Radio Hall, in its first incarnation as the Heating Plant, just after the 1893 addition. In the foreground is the south end of the addition. The section of the building running right to left toward the back of the picture is the original building. Visible in the background is the Machine Shop building across Observatory Drive. Radio Hall is located just west of Science Hall, on Observatory Drive. [Meure photo vol. 1 p.89]

Radio Hall was built in 1885 to provide steam power to Science Hall and its auxiliary buildings. It served as the campus heating plant from 1893 to 1908. In 1909 it became the mining and metallurgy laboratory. It received the name Radio Hall in 1935 when WHA moved in. In 1972 WHA removed to Vilas Hall and Radio Hall became the home of the Extension's teleconferencing and broadcast lectures. It is listed on the Nation Register of Historic Places as part of the Bascom Hill Historic District.

The squat shape of Radio Hall is tucked so far into the east side of Bascom Hill that its west eaves come within a foot or two of the ground. It was built to implement the great technological achievement of the 19th century, steam.

When the original Science Hall burned in 1884, it was the determination to prevent fire that led the regents, planning the replacement building, to split off the dangerous disciplines in smaller buildings of their own. These included the chemistry department with its special requirements for ventilation, the machine shops (the suspected culprit in the Science Hall fire), and later after a little reflection,[1] steam generation. Until that time, each building had separate hand stoked furnaces burning wood and/or coal. This arrangement was dangerous, inefficient, messy and expensive. By the time the regents approached the legislature for funds, a central heating plant was part of the plan. It was

intended to supply steam (both low pressure for heating and higher pressure for motive power) for the new group of buildings being built to replace Science Hall. The heating plant was contracted to John Trumbull of Whitewater in June of 1885, and finished in 1887.[2] As completed the 52 foot square, 26 ft. high limestone building was sufficient for supplying steam to the new Science Hall group. No clear photo exists of this original building.

The 1890s was a period of enormous growth for the University and the idea of a central power plant seemed like such a good one, that the University planners assumed that each new building could simply be hooked up to the plant. This was true in the case of the 1892 law building. The extreme of this attitude was reached when in 1894 during the building of the Red Gym the regents decided to connect it to the Heating Plant *after the purchase and delivery* of the originally planned on-site boilers. The regents decided that heating the gym, North, South and Main Halls would require expansion of the Heating Plant.[3]

The Professor of Steam Engineering, Storm Bull (nephew of violinist Ole Bull, and later mayor of Madison), was given the task of this expansion. Bull added a 70 foot long wing to the south, built a second chimney on the south end (see Fig. 1) and added six new boilers. He also converted the plant to burn the cheaper, cleaner and more accessible bituminous coal. In a highly detailed and technical paper he gave at The American Society of Mechanical Engineers, Bull says that the location of the Heating Plant was not a good one:

> But so much money had already been expended on the boiler house, it being a very substantial and somewhat ornamental building, together with the chimney, it was determined by the regents of the University, that the boiler house should be enlarged and remodelled so that all the buildings of the university--except those of the Agricultural department--could be heated from it.[4]

In the fifteen years following the expansion of the Heating Plant the University campus grew dramatically. Most of this expansion took place in the area of the agriculture campus in the area specifically not served by the central Heating Plant. Another smaller heating plant was built to serve the new agriculture buildings. Further campus growth and improved steam practice convinced the regents that a single plant with tunnels to all buildings, however distant, was a workable solution. Consequently in 1908 the University built a new Central Heating Plant on the south side of University Avenue.

With the completion of this new plant, the old building was heavily remodelled and expanded to serve its next technology: mining engineering. This department had been formed the previous year, and needed space for assaying laboratories and ore dressing rooms. University architect Arthur Peabody made these alterations and designed all the furniture and appointments in 1908-10. The mining and metallurgy department used this building from 1908 until 1931-2 when it moved to its present location in the old Forest Products Building on University Avenue. In April 1932 the regent's executive committee voted to allow the State Highway lab to use the building, but there is no evidence that the state ever moved in.[5]

After the departure of mining in 1931, the building's next occupant was radio. Radio had begun at the University in 1917 (the station was then called 9XM) with the nation's first scheduled broadcasts from a laboratory of hung blankets in Sterling Hall. Improvements in broadcast quality required more space, quiet, and freedom from vibration than were available in Sterling.[6] All these requirements could be met by the mining lab building which was then standing empty. In 1934 the regents voted a $4000 appropriation to convert the building to radio use and changed the name to Radio Hall. The labor was furnished by the Civil Works Administration and the Work Emergency Relief Administration . The attic spaces in both the original section and the addition were finished for office space, an inner building suspended on springs for vibration isolation was constructed, rooms

for studios were built and heavily insulated. The decorations, extant, were designed by art students and professors, using an American Indian motif.[7] They are considered a good example of New Deal Art. Wiring for remote broadcasts was run through the old steam tunnels, allowing the studio to monitor, record and broadcast lectures and performances from every building on the upper campus. Offices, control rooms and a library were also arranged in the building. However, when the Vilas Hall for Communication Arts opened in 1972, WHA radio and television moved into larger quarters there. The old building retained the name of "Radio Hall".

The current technology housed in the building is Instructional Communications System Extension, Interactive Instructional Programs. The old studios are used for teleconferencing, and lecture classes broadcast to remote areas of the state.

In the middle 1960s the building had a narrow miss with oblivion. As part of an ambitious plan to build pedestrian skywalks across the campus, Radio Hall was scheduled for demolition. Some temporary walkways were built and their low level of use and the cost of the project led to its abandonment. For the neglected and oft-abandoned stepchild of the new Science group, it has been an interesting career. Because Extension plans to move its broadcast facilities to new space in the Wisconsin Center about 1998, the future of the building is once again uncertain. One possibility under discussion is the development of a broadcast museum in Radio Hall.

1) In the original recommendation to the regents, President Bascom does not mention a heating plant when he enumerates the buildings needed to replace Science Hall. *Regents Minutes*, December 30th, 1884, Vol. B p. 442.

2) For details regarding the construction of the Science Hall group see Appendix A.

3) *Minutes of the Executive Committee*, July 3, 1893 vol. B p. 140. Exactly why the regents were suddenly so enthusiastic about expanding the reach of the heating plant at this time is unclear. It is possible that it stemmed from Professor Storm Bull.

4) Bull, Storm, *The Central Heating Plant of the University of Wisconsin at Madison Wisconsin*, May 1899 in Transactions of the American Society of Mechanical Engineers, Vol XX. Copy in the University Archives Radio Hall Subject folder.

5) *Minutes of the Executive Committee*, April 27, 1932. The failure of the State to take advantage of this offer may well be the reason that WHA found the building empty in 1934.

6) Wisconsin Alumni Magazine, February 1934 p. 131, and January 1935 p. 115.

7) A full description of the art work in Radio Hall is given in *Wisconsin Alumni Magazine*, June 1935, p. 272.

CAMPUS ASSISTANCE CENTER

Fig. 1. Campus Assistance Center c. 1980, Extension in background. [series 23/29, GC437]

The first recorded resident of 420 N. Lake Street is Angelina A. Hopkins, widow of James Hopkins, in 1888. She lived there until 1902 when the house became the home of the Elvin Wiswall family who ran a grocery store at 120 State Street. The Wiswalls stayed until 1914. In 1929 it became the home of its longest lasting tenant John A. Willison who developed the house as student housing. He lived there as resident manager of the Willison House until 1952. At this time [1951] the house was home to 18 women students as well as Willison and his wife. The city started to complain about lack of compliance with city fire codes. Shortly afterwards the house was sold to Rita Heiser and her husband Robert Scherrer who owned it throughout the 1950s. During this period a number of remodellings took place with the purpose of adding space for more tenants. By March 1957 the Scherrers were classic absentee landlords, living in Seattle and complaining about the unfairness of the city's demands to upgrade the quality of student housing, since, they argue, the house will only "last 2-3 years, as it is to be taken for university expansion." By this time there are 24 students in the house, the first floor apartment of two rooms, one bath, four students; second floor six rooms, one bath, fourteen students; third floor, six rooms, one bath, 10 students. The only kitchen was in the basement. In January 1960 the property was purchased by the university for about $32,000. The property remained student housing through 1969. In 1970 the university opened the newly created "Campus Assistance Center" (CAC) an information and referral service for students and faculty. The CAC is under the dean of students. The building also houses a number of student organizations. The future of the building is uncertain. Its life is threatened by a historic preservation project. The plans now [1993] being finalized to restore the old Red Gym include moving the CAC to the gym, and there is a possibility that the real estate owned by the university on Lake Street may be slated for demolition.

1) Sources: University and Madison City Directories; Madison building permit file; *Daily Cardinal,* November 7, 1970, *Capital Times*, August, 20, 1973.

FRANKLIN KING HOUSE

Fig. 1. King House in 1955, looking north. A corner of Babcock Hall is visible at far left. [9/3 F. H. King folder jf-12]

This house was built by Professor Hiram King and his wife Carrie in 1889. It stood at 426 Farm Place, a street behind the current Babcock Hall. It was purchased and demolished by the University in 1955.

In 1888 Franklin Hiram King was teaching natural science at the River Falls, Wisconsin normal school when he was invited by Dean of Agriculture William Henry to become the world's first professor of agricultural physics. In a letter to UW President Chamberlin, King says, " We have together considered the matter of coming to Madison ... and in view of the prospect of being able build on the University Farm, in case we should so desire have concluded to call the matter definitely settled and I have this day tendered my resignation to the Normal Regents."[1]

King arrived in Madison in August of 1888 and began looking for a place to build a house. In September he obtained from the university the "use of a tract of land at some point between the main road and the farm house ..."[2] Besides the land on which he built the house, King speculated on a small scale in land around the University farm.

The King house [see Fig. 1] was built in 1889, and incorporated some of Professor King's theories regarding ventilation for which he later became famous and held patents.[3] It was home to the King's and their five children, three of whom were born there. Franklin King died in 1911. Mrs. King sold the family land holdings to the university in 1946 for $16,000.[4] Mrs. King was allowed to stay in the house until December of 1954. After 65 years in the house Carrie King moved out. The house was demolished in 1955 to provide parking space for Babcock Hall. Mrs. King died at age 100 in May of 1957.[5]

1) *Regent Minutes,* July 2, 1888.
2) *Regents Minutes*, September 4, 1888.
3) *Milwaukee Journal*, December 12, 1954.
4) *Regent Minutes*, March 9, 1946.
5) *Regents Minutes*, June 16, 1955.

FIRST DAIRY BUILDING

Fig. 1. First Dairy Building at original location c. 1890. [series 9/3 First Dairy Building, x25-337]

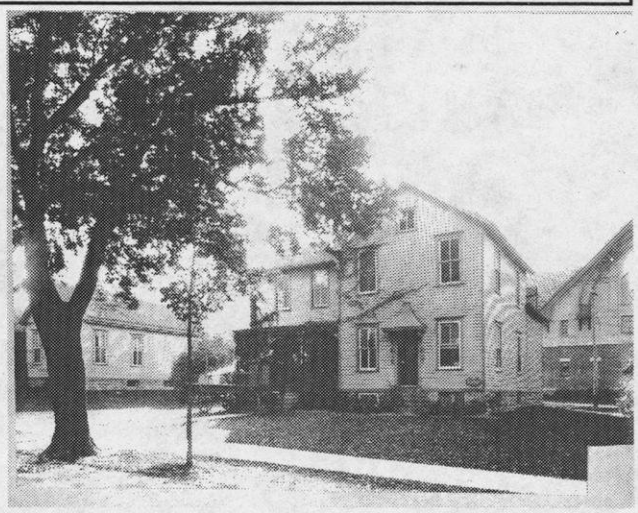


Fig. 2. First Dairy Building after 1909 move to location east of Stock Pavilion. [series 9/3 First Dairy Building, x25-6331]

Erected in 1890 by Stephen Babcock for $1000, this wood frame building served as the University's dairy building until Hiram Smith Hall opened in January 1892. It was later moved and used for storage until its demolition in 1949.

In 1889 the University of Wisconsin instituted a dairy short course, including instruction in the manufacture of butter and cheese, partly as a response to an English contention that there was nowhere in the United States which offered systematic instruction in dairy skills. This challenge as well as the pressure of Wisconsin farmer (and University regent) Hiram Smith, resulted in the short course.[1] Rudimentary dairy farming instruction on a casual basis had been carried on in a one room milk house on the farm campus. In connection with the new short course, Hiram Smith persuaded the regents to spend $1000 for a better building to encourage dairy students.

Professor Stephen Babcock later explained how that money was used: "Of course we knew that if we let that out on a contract that we wouldn't get much of a building: and so we just hired a carpenter, used a few of the farm laborers, and built it ourselves."[2] The material was scrounged from other old farm buildings by Babcock and farm superintendent Leslie Adams. The result of that effort was the building seen in Fig 1. The next regents report says: " Important additions have been made to the farm buildings, notably the construction of a dairy house for the accommodation of the new dairy school."[3] The first class in 1890 attracted only two students.[4]

But in June of 1890 Dr. Babcock developed the world famous butterfat content test for milk, thereby changing the future of dairying around the world, and at the University of Wisconsin.[5] As word of the simple reliable test spread around the state so did enthusiasm for the dairy short course. By January of 1891 enrollment at the $1000 do-it-yourself building had risen from two to seventy five. Dean of Agriculture William Henry, an accomplished lobbyist for the University, took to inviting legislators to see the dairy class in action, then inform them that due to crowding they had to stand up

Fig. 3. August 1949, the first dairy building is demolished to make way for Babcock Hall, named for the man who built this building. [9/3 First Dairy School folder jf-13]

to attend the proceedings.[6]

Henry's lobbying paid off in 1891 when the state appropriated $40,000 for a permanent dairy building. But in the two academic years before that building could be planned and constructed, the dairy course was held in this frame building. The location is given as behind Dean Henry's house.[7] Since Dean Henry first lived in the farm house by the horse barn, prior to the construction of his house at 10 North Babcock, the first dairy building evidently stood near the site of the horse barn.

In 1909 the agriculture department moved the old dairy building to a new site just east of the stock pavilion. The building was being used in the 1920s by the Dairy Records Office. Fig. 2 shows the building after the move to the stock pavilion location. The oval plaque on the front of the building reads: " The first Dairy School in America was held in this building during the Winter of 1890-91 as an educational outgrowth of the invention of the Babcock Milk Test."[8]

The old dairy building stood for about 60 years (remarkable for a cheap, heavily used and amateur built woodframe building). Finally in August of 1949 near the beginning of the massive postwar building boom it was demolished (see Fig. 3) to make way for Babcock Hall.[9] Hiram Smith Hall is often cited as the first Dairy School building in the country, or the world, but in fact was not even the first on the UW campus. That honor belongs to the now departed first dairy building pictured here.

1) Curti and Carstensen, *The University of Wisconsin A History,* vol. 2 p. 396.
2) *Wisconsin Country Magazine,* November 1919, p. 47.
3) *Regents Report*, 1889-1990 p. 46.
4) Glover, W. H., *Farm & College*, p. 137.
5) Glover, W. H., *Farm & College*, p. 119. Of this test governor William Dempster Hoard said "the Babcock test to the farmer was a more potent factor for righteousness than the bible, because it showed up the culprit quicker."
6) *Wisconsin Country Magazine,* November 1919 p. 47.
7) *Wisconsin Country Magazine,* November 1919 p. 47.
8) This inscription incorrectly implies that the building was erected after the Babcock test was developed. The Report of the Farm Committee of June 24, 1890 series 1/1/3 box 10, indicates that the building was already complete.
9) *Daily Cardinal,* August 5, 1949 p. 5, *Regent's Minutes*, July 14, 1949.

HIRAM SMITH HALL

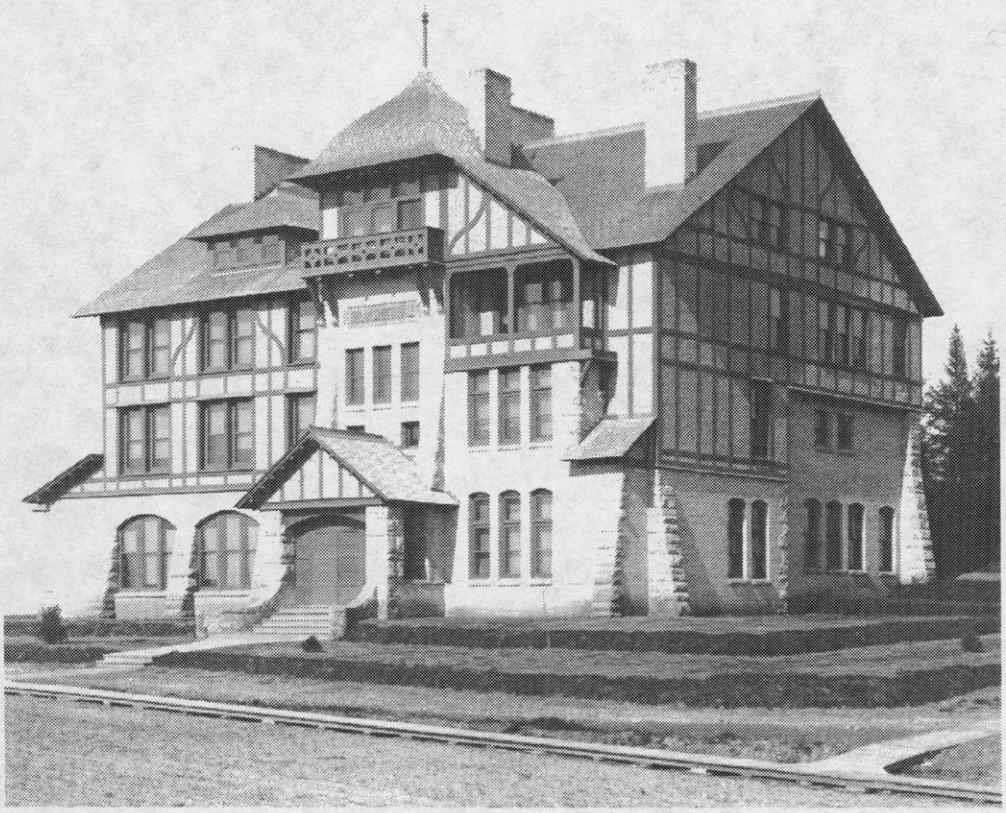


Fig. 1. Smith Hall in 1893. [9/3 Hiram Smith Hall folder jf-14]

Hiram Smith Hall was built in a record seven months in the winter of 1890-91, with a state appropriation of $32,000. It was the first permanent diary instruction building in the western hemisphere. Added to in 1901 and 1909, it served as the University dairy building until 1951 when Babcock Hall opened. It has since been used mainly as the home of Agricultural Journalism. Hiram Smith Hall was added to the National Register of Historic Places in 1985.

The building of Hiram Smith Hall was a triumph for the University in several respects. First it was the first building project funded by the state legislature since the debacle of Science Hall in 1888 (see appendix A). The legislature was persuaded partly by the lobbying skills of Dean William Henry, and partly by the arguments of state farmer, legislator and regent Hiram Smith. Second the building was planned and built with remarkable dispatch, staying within severely constrained budgets and time schedules. Thirdly it marked the beginning of a large and successful expansion of the physical plant of the school of agriculture under Dean Henry, which lasted fifteen years.

In June of 1890 Stephen Babcock developed in his lab at Agriculture Hall [South Hall], a simple and foolproof test for the butterfat content of milk. Throughout the 1890 word of the test spread through Wisconsin. By the time the dairy short course opened in January of 1891, enrollment had risen from two (in January of 1890) to seventy-five. The state's dairymen were convinced that the scientific education available at the university was of value to them. The crowding in the old dairy

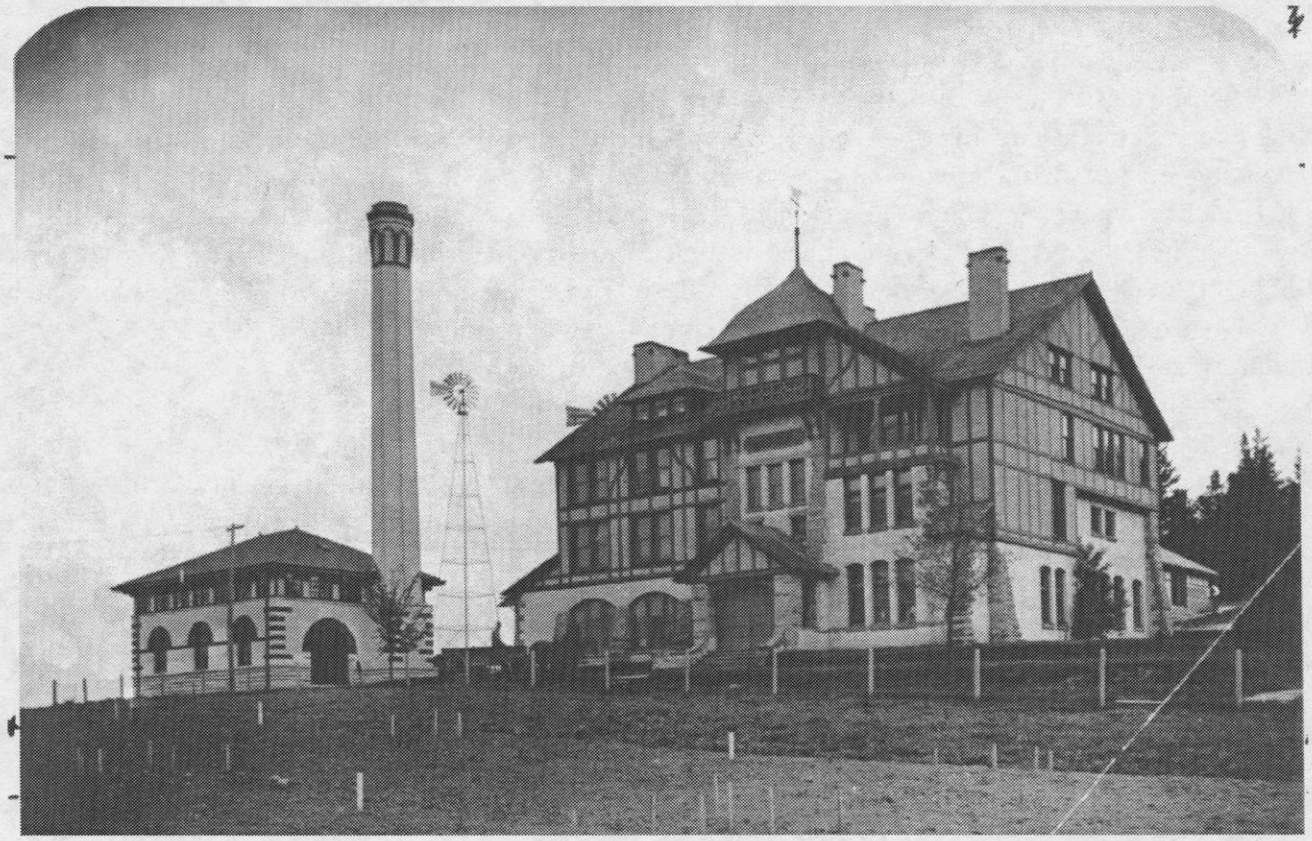


Fig. 2. Smith Hall on right, Agricultural Heating Plant on left, c. 1900. [series 9/3 Hiram Smith folder, x25-341]

building was severe and obvious to the legislators, especially after Dean Henry brought them to visit the class and made them stand for lack of room. With Henry and congressman Hiram Smith pushing the whole way the state legislature of 1891 enacted a one-tenth mill tax to go to the university's building fund, specifically for a dairy building, a school of law and a gymnasium and armory.[1]

Dean Henry and regent True (the chairman of the farm committee) had already been to visit other colleges to gather ideas for a new building in October of 1890.[2] When they returned they heard the news of the mill tax appropriation which would fund the new building, although the money would not be available until February of 1892. At the regents meetings in April and June of 1891[3], Henry and the architect George B. Ferry[4] presented plans for the dairy building, whose cost had been fixed by the regents at their April 9 meeting at "not to exceed $25,000".

In August 1891 the building committee received seven bids ranging from $23,600 to $29,500. The regents rejected all bids and entered into direct negotiations with one of the bidders T. C. McCarthy. The committee reported on September 29, 1891, that they had agreed with McCarthy for a reduction of $300 from his initial bid and that he need not receive more than $10,000 before February first and that he begin at once.[5] The contract called for the building to be begun by October 1, 1891, and usable to the first floor by January 1, 1892, leaving fourteen weeks of Wisconsin's most treacherous weather for the job.

On January 18, 1892 dean Henry reported to the Farm Committee:

> At its meeting in September when the Board of Regents directed that the construction of the dairy school building begin at once and that the first floor be made ready for pupils by January first, a heavy burden was laid upon both the contractor and those immediately interested in placing these rooms in condition for the reception of pupils. With an ordinary contractor I think the attempt would have been a failure, but Mr. McCarthy did everything possible ... to

the desired end. The school opened on the day advertised and at this date there are 97 students in attendance with three more to come.[6]

The classes begun by Henry and Stephen Babcock in 1890 in the wooden dairy building were the first systematic teaching of the principals of dairying in the country. Thus Smith Hall was the first *permanent* dairy instruction building in the United States. Henry says "Ours was the first dairy school in the world where students are given practical instruction in both butter and cheesemaking."[7]

The Queen Anne style building as designed by Ferry and Clas was three and a half stories high, 103 feet wide (north to south) by 56 feet deep. The foundation and ground floor are of cream brick, the upper floors are wood-framed with applied half-timber and a pebble finish. It is the only educational facility on the campus designed by Ferry and Clas.

Although the first classes were able to meet in Smith Hall in January of 1892, the building was not really completed until months later. In April 1892, the building committee asked the regents to appropriate an additional $3040 to finish the building, citing such items as finish painting, tiling floors, insulating the attic, and grading a road in front of the building. This time span of seven months, and in the winter too, stands as the speed record for the erection of a major University building. In the 1892 regents report the total cost of the building was $32,305.

No discussion appears regarding naming the building after the great farmer, regent and congressman who had been instrumental in the founding and development of the university's agriculture department. Hiram Smith died on May 15, 1890, just weeks before Babcock's milk test changed the Wisconsin farmer's lot forever.

Smith Hall was full the day it opened. Henry gives the attendance as limited to one hundred, and he had that many students that first year. In less than ten years, it would get its first expansion. In an 1898 letter to governor Scofield, Henry says it is not surprising that, since they had no model in America for a dairy building, the one they built should be crowded and have some undesirable features.[8] As a result a two store brick north wing with red tile roof , containing cheese and butter rooms, was designed by architect J. T. W. Jennings in 1901. Also at this time the agricultural heating plant was built and much equipment was removed from Smith Hall. Again in 1909 a smaller single story north wing was added for more modern milk bottling equipment. When these additions were complete, Smith Hall reached its maximum capacity of 170 dairy students in 1915.

The department made do with this space throughout the first half of the century, but in 1945 the Daily Cardinal ran a photo of the building captioned: "This is the antiquated, obsolete, inadequate dairy building of the state university of the greatest dairy state of the country." [8]

In 1951 the dairy department moved across Babcock Drive into the newly completed Babcock Hall. Most of Smith Hall was taken over by agricultural journalism and poultry science. Its current occupants include agricultural journalism, cooperative extension and Wisplan computer services.

Smith Hall was nominated for the National Register of Historic Places in 1985. It stands into its second century as a living link to Henry, Babcock and Smith, giants among the early history of agricultural instruction at the University.

1) Thwaites, Reuben Gold, *The University of Wisconsin Its History and Alumni,* p. 200.
2) *Aegis,* October 10, 1890, p. 71.
3) *Regents Minutes*, June 16, 1891, volume D p. 104, and July 9, 1891 volume D p. 118.
4) Ferry had recently formed a partnership with Alfred Clas after leaving his job as draughtsman with H. C. Koch's architecture office.
5) *Report of Dairy Building Committee*, September 16, 1891, Reports Vol. C. pp. 365-366.
6) W. A. Henry to John True Chairman of Farm Committee January 18, 1892, memorial archives series 1/1/3 box 10, January 19, 1892 folder.
7) Ibid.
8) W. A. Henry to Eward Scofield, November 30, 1898 series 1/10/4-2 box 1.
9) *Daily Cardinal*, January 11, 1945 p. 1.

OLD LAW BUILDING

Fig. 1. Law Building from the east c. 1894. [series 9/ 1 Law School (Old), x25-1309]

Erected in 1891, the first law building became unsuited to teaching the law in 1903 when the case method of teaching was introduced. Beginning in the 1930s the building became the nucleus of a series of additions that after the 1963 removal of the original structure make up the current law complex.

In 1890 the law department of the University of Wisconsin had led a precarious life. It was first established as a paper entity in 1857, but budget constraints and lack of qualified personnel prevented the actual creation of the school until 1868, when twelve students were enrolled. The course was one year long with no entrance requirement except character references.

The facilities available to the new law school were extremely variable. A small room near the rotunda in Main Hall proved unsuitable, since the faculty of local lawyers and judges all had offices a mile away in downtown Madison. The school then began to meet in rooms in the unfinished capitol building, then moved to two rooms above a saloon. For twenty years the school continued a kind of Flying Dutchman's existence. In the 1880s the requirements for the now three semester course, had become age of 21, a common school education, and "good moral character". By 1889 112 students met these standards. At their June 1876 meeting the University regents began to actively consider a permanent home for the College of Law: they directed a committee to locate a suitable lot for the law school not to cost more than a thousand dollars. Nothing came of this attempt. For the next fifteen years, no formal discussion on the law school appears in the regents minutes.

Then in the spring of 1891 the regents took an informal ballot on the location of the law building whether on the university grounds or "upon lands to be purchased." The initial vote was split

Fig. 2. Law Building after library addition complete c. 1940. [series 9/1, Law School (Old), x25-767]

between a university location and a downtown one, then after discussion the vote was unanimous in favor of the university grounds location specified as west of the library hall building and between the library hall and the agriculture building [South Hall].[1]

Things now started moving briskly. By August, 1891 the regents had screened several architects (H. C. Koch, Holbrook, Ferry and Clas, Conover and Porter) and selected Charles S. Frost of Chicago. They had approved, discussed and modified Frost's plan[2], and called for contractors bids[3]. This choice fell on local contractor T. C. McCarthy who was also building Hiram Smith Hall at the other end of campus.

The foundation was laid in the fall of 1891 with the intention of occupying the building in September of 1892. Due to bad weather and McCarthy's overextension this deadline passed; the next target set by the regents was January of 1893. But in August of 1893 the regents were still discussing details of finish like choice of seats and lighting fixtures.[4] The final statement from architect Frost for $72938.73 is dated October 28, 1893. Classes were held in the new building in the fall of 1893.

The ground plan was rectangular with a semicircular rotunda at the back. The first floor was devoted to the school of Economics.[5] On the first and second floor were offices of the president and dean of the university driven out of Main Hall by overcrowding. The Daily Cardinal says: "The Superior sandstone of which it is built give it a substantial and legal air."[6] (see Fig. 1) The Victorian brownstone was certainly a distinct departure from the staid plain architectural styles that typified the rest of campus buildings (except Assembly Hall). The hexagonal tower was occupied by the president's consultation room and part of the law library. The buildings location with its substantial presence on the hill (see Fig. 2) was important to the law school because it was a clear signal from

Fig. 3. The 1893 brownstone Law Building makes way for the new glass and steel building. The cornerstone and a gargoyle from over the door of this building are set near the entrance of the new one. Taken from Birge Hall in 1963. [series 9/1, Law School (Old), jf-22]

the University that the law school was an integral part of the university The regents report : "The College for the first time in its history seems fully incorporated as an integral part of the University. The building although none too large even for the present accommodations of the College, is in most respects admirably adapted to the purpose for which it is designed."[7]

The old brownstone was satisfactory to the law department for about fifteen years. The reasons for discontent go beyond the simple need for more space suffered by most old buildings on campus. In 1903 Harry S. Richards became dean of the Law School. Richards introduced the case method of teaching law which uses informal discussion of cases and legal problems, instead of mass lectures to the entire class. This teaching style requires a large number of moderate size rooms with large desks for each student. The old building could not meet these new requirements. The second serious problem with the law building was the burgeoning library collection which numbered about 4,000 volumes in 1893 but had grown to 40,000 by 1929. Libraries with their enormous floor loads are notoriously hard for old buildings to accomodate.[8] For the wood frame old brownstone, structural engineers forbade expansion of the library.

With these intractable problems to overcome in 1939 the University began an addition to the Law Building of yellow sandstone (see Fig. 2) attached to the east side of the old building. One of the few projects at the University to utilize depression-era federal funding, the addition housed the library, and was the first of a series of additions that would culminate in the removal of the old brownstone. This was finally accomplished in 1963 (see Fig. 3).

1) *Regent's Minutes*, April 8, 1891. When the student paper *Aegis* reported the choice of location on June 12, 1891, they said: "The Law Building is to be placed between Assembly Hall and Ladies Hall. How nice for the lawyers."
2) They omitted a cupola, flagstaff, and the name from the outside of the building. Most significantly they changed the exterior stone from Frost's unspecified choice to Superior sandstone, and in a remarkable display of hands-on administration University President Chamberlin (a geologist) went on an 1892 tour of stone quarries to select the most suitable stone. His report (archives series 1/1/3/ box 10), discusses quarries at Houghton Point, Bass Island, Wilson Island, Presque Island, all near Bayfield, and the winner, the Arcadia quarry near Superior.
3) *Regent's Minutes,* July 9, 1891, and August 6, 1891.
4) *Regent's Minutes*, August 9, 1893.
5) *Daily Cardinal*, December 21, 1892.
6) Ibid.
7) *Regent's Report,* 1894, p. 51.
8) Much of the 1990s remodelling of the state capitol was necessitated by the need to remove or accommodate the large legal libraries in the 90 year old building.

BABCOCK HOUSE

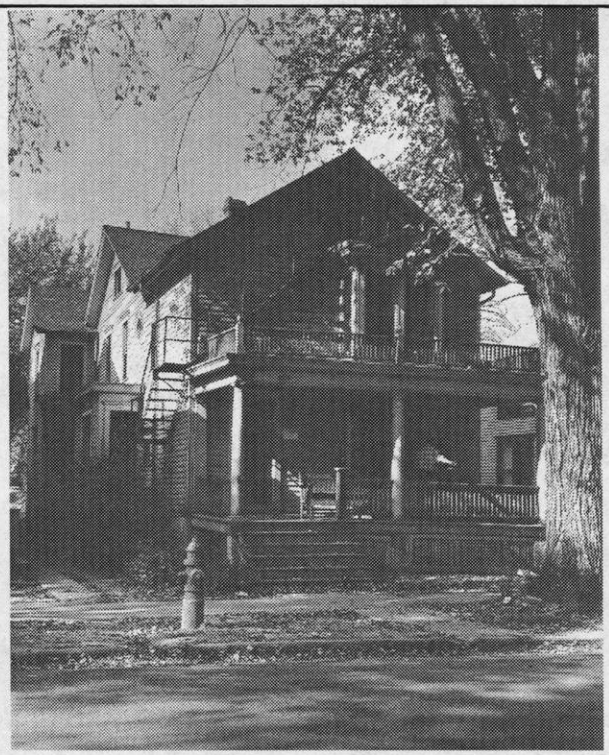


Fig. 1. The Babcock house at 432 N. Lake Street just before demolition in 1955.

The Babcock house was erected in 1892 as a private home by Dr. Stephen Babcock. On Babcock's death in 1931, the house became the property of the University. It was used as a student housing cooperative until its demolition in 1955.

When Stephen Moulton Babcock died on July 1, 1931, his will left the bulk of his estate to the University. This estate included his private home at 432 North Lake Street, which he had built in 1892. Both he and his wife, May Crandall, lived from their 1896 marriage until their deaths in the house.[1]

At the time of Babcock's death, the depression was cutting deeply into enrollment in the college of Agriculture. In recognition of the fact that room and board were the main factors keeping farm boys from attending the University, a committee (Drss. E. R. Jones, I. L. Baldwin, J. A. James, V. E. Kivlin and A. J. Haas) was appointed to look for suitable quarters for a cooperative house for agricultural students. Professor W. A. Sumner suggested the Babcock home to the committee. This suggestion solved the problem of a building, but the house was unfurnished. Thus it was that Madison was treated to the sight of a group of distinguished professors in overalls, hauling used furniture out of Barnard and Chadbourne Halls. This and faculty donations provided the coop house with furnishings. The first group of agriculture students took up residence in the fall of 1932. Babcock was the first student cooperative house on campus. The boys paid actual cost; in the first year this came out to about $97 per boy per year. The coop was a success from the first. There were normally about fifteen resident students, and another 15 "chompers", or students who took their meals there.[2] The unfortunate result of charging no maintenance fee can be seen in Fig. 1.

In October 1955 the house had deteriorated to a degree that the University had no compunction about demolishing it to make way for a parking lot.[3] At that time the Babcock cooperative was moved to new quarters on Clymer Place, and later still to its current ones on University Avenue. The original site later became the site of the University Extension building.

1) Will of Stephen Babcock, University Archives, Madison city directories, and records of Madison register of deeds.
2) *Wisconsin Country Magazine*, October 1949, May 1938, May 1955.
3) *Regents Minutes*, October 16, 1954.

KING HALL

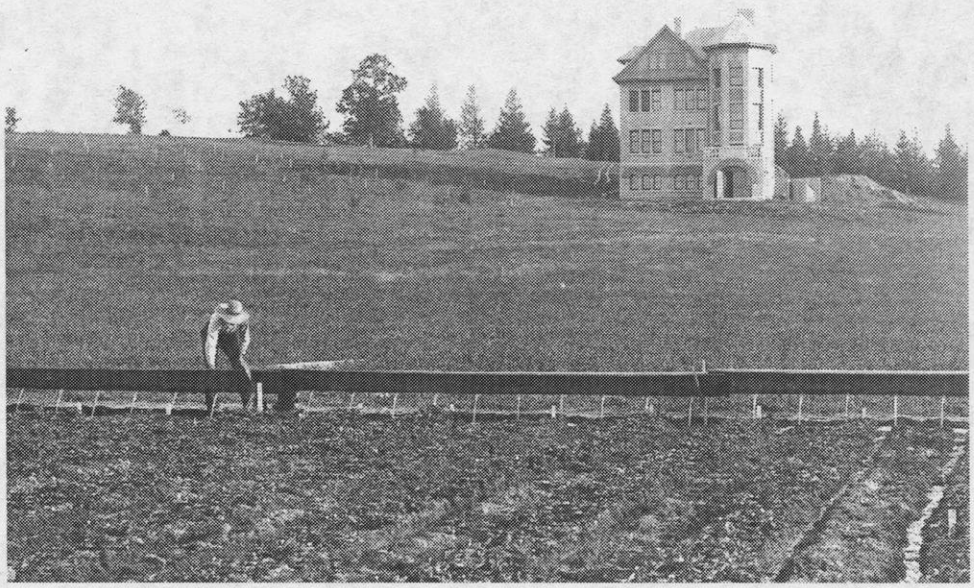


Fig. 1. A rare 1894 photo showing the Horticulture half (the east half) of King Hall from the north, before the Agricultural physics half was built. Note that the first greenhouses just show in this picture. The picture was taken from about where Tripp Hall now stands. The man in the foreground in working on the irrigation troughs for a part of the experimental farm. [9/3 King Hall folder jf-16]

Erected in two sections in 1894 and 1896 King Hall originally housed horticulture and agricultural physics. It was named in 1934 for Professor Franklin Hiram King, the first professor of agricultural physics, and the developer of the round silo and modern windmill design. King Hall was heavily remodelled in 1980, and placed on the National Register of Historic Places in 1981.

By 1893 the agricultural college under dean William Henry was on the way to enormous success. The state's farmers had been convinced, in large part by the Babcock milk test, that the university was an appropriate place for themselves and their sons to learn about farming. The legislature was convinced, by the rising enrollments, that Henry and his staff (including professor Franklin Hiram King) knew what they were doing. The legislature of 1891-1892 had appropriated $14,200 for the purpose of erecting a horticulture building, but after dean Henry examined other such buildings and got estimates and plans, the regents brought the total to $20,000 by voting to add $5,800 to the appropriation from the funds of the agricultural college[1]. A site had been selected the previous year "north of the dairy school building, skirting Fourth Lake".[2]

By June of 1893, the building's design, by Chicago's John Thompson Wilson Jennings, was done. Because the total money available was only about half of what the department believed necessary the building was designed to be built in two sections. A contractor (Lenicheck and Thwaites of Milwaukee) was engaged, and the work got on the first section began. By January of 1894 the first section was done. It came in about at the estimate of $23,000. This was the first expandable design at the university. The central tower and east wing of King Hall was erected first (see Fig. 1.) to house the horticulture department. Within a year, as new facilities attracted more students the second section was needed.[3]

Fig. 2. King Hall with both wings built, showing greenhouses at back, about 1900. [9/3 King Hall folder jf-17]

The university catalog of 1893-1894 describes the new building: "It is of white select brick with trimmings of pressed brick and Wauwatosa limestone, and covers an area 46 feet by 60 feet, being three [later four, see Fig. 3] full stories in height."[4] This first section also included the first of a set of greenhouses at the rear of the building. The structure was of slow-burn mill construction. Stylistically King Hall is Richardson Romanesque, typified by semicircular arches and polychromatic brick work. Considering the beauty of this building to the 20th century eye, it is disconcerting to read the words of the buildings planning committee: "The plans submitted by the architect give a building with no costly ornamentation. We do not believe your Board will be satisfied to construct a plainer looking building on the University grounds than this will be."[5]

The agricultural college enrollment continued to rise, as did the star of Franklin Hiram King, the world's first professor of agricultural physics. As the work of professor King and his department became more widely known, his department needed more and more space. In 1896 the regents rehired J. T. W. Jennings to finish and submit plans for the west wing of the building.

The legislature of 1894-1895 appropriated $20,000 to finish the building by adding the agricultural physics wing to the west side. This side is remarkable for a beautiful octagonal tower on the west hip roof that was included to provide a base for King's windmill experiments (see Fig. 2). The second section was built by contractor T. C. McCarthy, and was opened in January of 1896.

Over the years the agriculture college grew up around King Hall, and a large, ungainly addition was added to the west side in 1915 to house the Soils department. The "Old Soils building" was renamed King Hall in March 1934. King Hall got a thorough interior remodelling in 1980. Although the agriculture campus was deliberately designed with less expensive materials than the eastern part of campus, we see that style and skill with materials produced works of enduring beauty and utility.

1) Minutes of the Board of Regents of the University of Wisconsin April 28, 1893 volume 'D' p. 204-205.
2) Regents reports June 14, 1892 Reports vol. 'C' p. 34.
3) The nomination papers for the National Register of Historic Places say that the west wing was built first. This error is probably due to Henry's description in Thwaite's history in which Henry refers to the building first of the "right" section, followed by the "left". (Thwaites p. 200); *Daily Cardinal*, October 28, 1896.
4) University of Wisconsin Catalog 1893-1894 p. 157. The building was not raised, but the attic story was later finished.
5) Report of the Agricultural Committee, July 20, 1893, regents meeting papers. They could not have foreseen the look of "plain" to come.

GYMNASIUM AND ARMORY

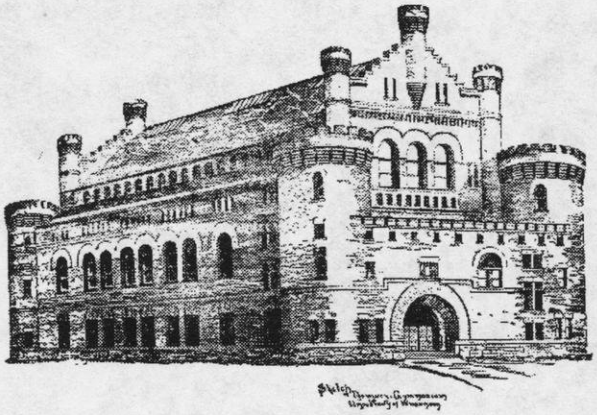


Fig. 1. Porter and Conover's 1891 design drawing from the Aegis. Armory/Gym folder #2 jf-19]

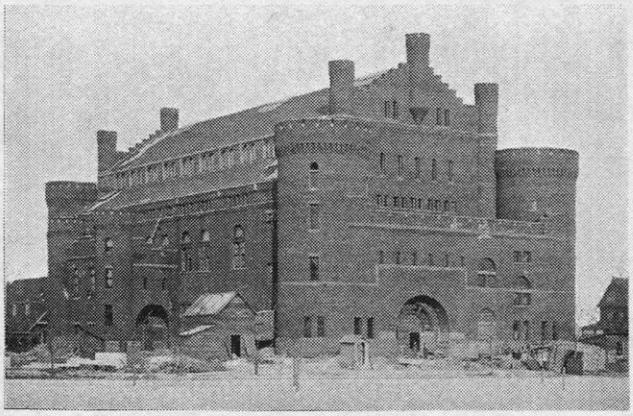


Fig. 2. Gym during construction 1894. Sheds in foreground held temporary boiler and tools. [Armory/gym folder #1 jf-21]

The Red Gym was built in 1892 as a combination gymnasium and armory. It quickly became too small and obsolete. In the middle 1960s it's gymnasium function was superseded by a new gym on the west end of campus. Under maintained and under-utilized for 60 years, it was added to the National Register of Historic Places in 1974, and will be renovated for use as a campus visitors center in the late 1990s.

In 1894 the Daily Cardinal reports a student showing his parents around the campus for the first time was heard to say: "Yes dad, the science hall is a nice building, but our gymnasium!" The building still has that effect on people, the shock of seeing a red brick castle with its sense of stupendous mass, solidity and permanence in its beautiful setting by the lake, here in the late 20th century. The arguments about its looks being inappropriate to a campus, its lack of modern facilities and cost of upkeep tend to pale when faced with the colossal visual impact it makes from Langdon Street or from Lake Mendota. As much as any building on the campus the old red gym reflects the time and values of its builders.

Gymnastics began to gather popularity in U. S. colleges in the 1850s. By the 1880s Harvard, Yale and other prestigious schools were spending large sums to build elaborate gymnasiums. In northern climates where the weather renders exercise dangerous for months of the year, buildings designed for exercise take on additional importance. The University of Wisconsin had no gym after 1891 when the old wooden gym on Bascom Hill burned. During the efforts to fund the new science buildings in 1885, the regents had attempted without success to get an appropriation for a new gym. Then in 1891 the legislature passed a 1/10 mill tax for the purposes of building several buildings, a dairy building, a college of law and an armory.[1] When planning was begun for the armory, the dairy and law buildings were well under way. In May 1891, president Chamberlin and some of the regents travelled east to examine some college structures and gather ideas for the UW building. In several instances they saw that the same building served for a gymnasium and armory.[2]

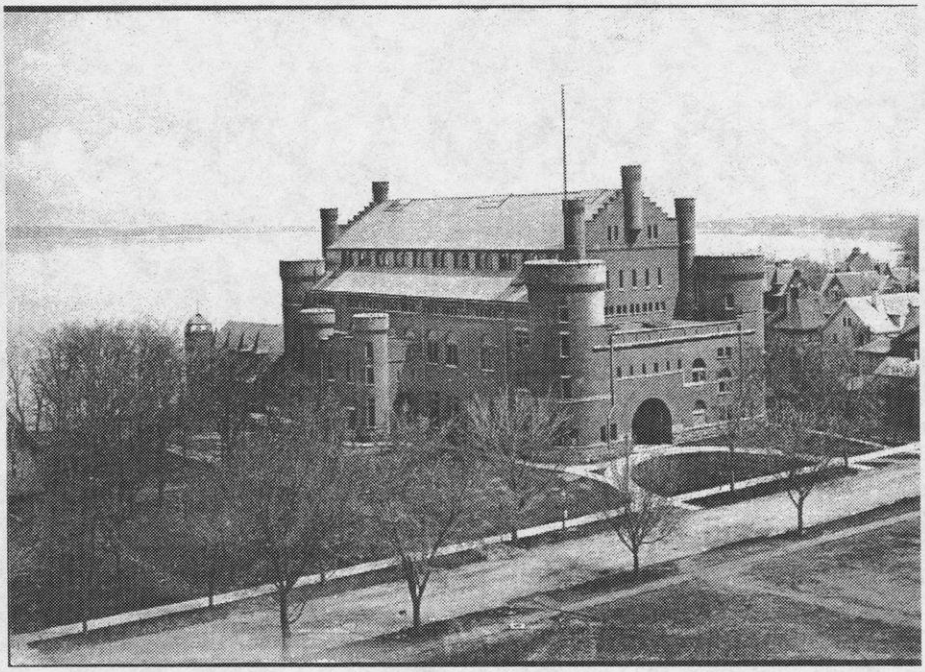


Fig. 3. The gym in its 1899 setting. The houses on the right were removed 1910 for the gym annex and 1956 for the construction of the Wisconsin Center, the old boat house is seen behind the gym at the left. [9/2 armory/gym folder #1 jf-18]

In the late 19th century there was a series of serious civil disorders caused by the rising resentment of workers and thinkers against the excesses of capitalism. Among the worst of these were the Haymarket riot in Chicago in 1886, the Homestead Pennsylvania war in 1892, while the Wisconsin building was under construction. There was a belief by authorities that armories should be constructed in urban areas in case of uprisings of this kind. They would serve as assembly areas for troops and storage for arms. In fact in the 1880s the Wisconsin National Guard was called out to break strikes and put down insurrections in Milwaukee and in Superior. The nature of the building intended by the legislature was clearly military. A contemporary writer's description of the First Regimental Armory in Chicago applies well to the red gym: " the design is to the last degree military, and cannot fail to impress the passer-by with the full extent of its purpose and the ability to carry it out."[3]

The plans by local architects Conover and Porter needed to reflect this double purpose of the building: armory and college gymnasium. They examined many other buildings and plans, and by December of 1891 had progressed to the point shown in Fig. 1. The design is very similar both in appearance and function to the Eighth Regimental Armory in New York, which had been featured in architectural trade papers and in Harpers Weekly.[4] The architects argued that because of the size of the proposed building it could not be built of stone as planned and stay within the budget. With the agreement of the regents red brick trimmed with sandstone was substituted. By May 14, 1892 Conover and Porter had working drawings ready. The regents building committee opened contractor's bids on May 31, 1892, but rejected them all. The regents agreed to raise the appropriation for the building from $75,000 to $100,000. On July 25, 1892, the new bids were opened and the contract awarded to T. C. McCarthy for $97,373. McCarthy was a university favorite who was already working on Smith Hall and the law building.

Ground was broken the fall of 1892 and by December 2, 1892 the foundation was complete. In January of 1893 university president Chamberlin was replaced by Charles K. Adams. The new president insisted on altering the plans for the gym to accommodate large assemblies on the second floor, which needed to be unbroken by stairwells due to it's intended use as a military drill space. Adams worked with Conover and Porter to design a 24 X 44 foot annex on the west side of the building containing stairways. This change added about $7000 to the design, and was approved in

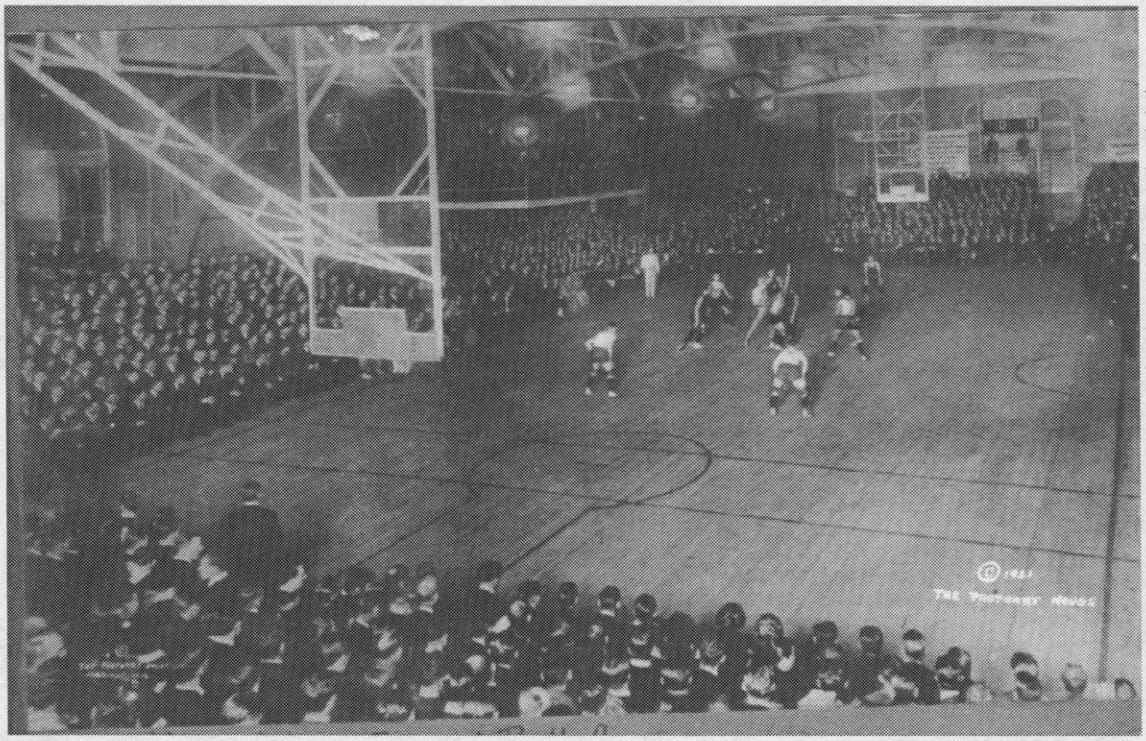


Fig. 4. The Wisconsin-Minnesota Game March 5, 1921. Note the uniformity of the spectators dress. This is in the second floor gymnasium. [Meure photo vol 17 p. 59, M83]

May 1893.

The cornerstone ceremony was held June 30, 1893. Building proceeded quickly throughout the summer and fall; by early October McCarthy had completed just under half his contract for construction. A few late changes were made. The most important was the decision to heat the gym from the main steam plant, behind science hall. When this decision was made (September 1893), the boilers originally intended for placement in the gym had already been ordered and delivered! Other minor changes involved preparing for the large assemblies anticipated for the second floor room. The men of the university had waited so long to have a gymnasium that they had to be restrained from using it until the contractor gave permission. Finally on September 17, 1894 the gym was officially opened for use.[5] A petition by a women's group (in 1894) did not obtain permission for women to use the new gym, but gymnasium equipment and facilities were added to the plans for the Ladies Hall addition in 1895.

The opening ceremony for the gymnasium was held in early May of 1894. Classes were cancelled, the governor, the mayor of Madison and all residents of Wisconsin were invited. President Adams remarked "there is no reason why honest workmanship should not produce [buildings] that will last for the ages."[6]

The gym building was 196 feet by 106 feet and 101 feet high. The first floor held the office of the commandant, the artillery drill room, the bowling alleys, a locker room and a 20 X 80 foot swimming tank. The second floor was taken up almost completely by a 93 X 160 foot drill hall, with a 43 foot ceiling and main stairs wide enough to permit a battalion in columns of four. The third floor was used completely by the gymnasium proper. The gym was 160 X 65 feet, containing a baseball cage, gymnastic apparatus, and rowing machines. Two 160 foot rifle ranges and a 440 yard running track were placed in a level a few steps lower than the gym. Everyone was very impressed with the new facility which Adams described as " not only larger but also more perfectly adapted to the wants of physical culture than any other institution of the kind in the country." The building was formally accepted as completed by the building committee on January 31, 1895. The total cost excluding equipment was $122,058.48.

Among the changes made to the gym in the earliest days were several attempts to solve a ventilation problem under the floor at ground level, where joists were rotting from dampness and heat. The building was ventilated according to a highly innovative system designed by the architects and engineering professor Storm Bull; it utilized a huge floor fan on the first floor and a series of ducts and air shafts in the towers of the building. The system was not especially successful, and is now mostly removed. Other difficulties involved adding electrical lighting which had been generally an afterthought in the original design. In 1905 buttresses were added to the rear (north) wall to help avoid the kind of collapse which occurred at the New York armory after which the gym was modelled. The foundation and windows were modified at this time also.

The use of the second floor as a public assembly hall as envisioned by Charles Adams included speeches by William McKinley (1894), William Jennings Bryan (1912), Eugene Debs (1923), Upton Sinclair, (who, in 1922 had to promise not to refer to any controversy), and of course the famous Republican state conventions of 1902 and 1904 where UW alumnus Robert M. La Follette was nominated for governor.[7]

By 1911 the gym was already too small. When it opened in 1894 the enrollment was about 700, by 1910 it was almost 2000. The new president Charles Van Hise believed that the uses of the building, gymnasium, armory and assembly hall were "quite inconsistent with one another." One heavy user of gym space was the university basketball program. In the 1920s the Big Ten games were very popular in Madison. [See Fig. 4] Until the construction of the field house in 1930, these games packed the red gym. The regents decided to expand the space by building an annex onto the east side of the gym. This annex stood until the mid 1960s.

After the first world war (during which the gym was a dormitory for 900 men from the war department) the gym was hopelessly undersized, now trying to accommodate 5000 students. An antimilitary sentiment became strong in Wisconsin and it became the first state to eliminate the compulsory military training at a land grant university. After the Memorial union (1928) and the field house were completed, the gym was little needed for mass meetings and was used only for student registration. During the depression some athletes were allowed to live rent free on cots set up in the turrets. With this great decline in use, the gym was modified very little during the 30s and 40s. By 1953, the bowling alleys and rifle ranges were gone and offices created by partitioning the running track. Maintenance of the building also declined.

Shortly after WW II, plans to demolish the outmoded facility were made but sentiment and discussion delayed all demolition except for the annex which was torn down in July 1956. In the late 1950s plans were made for a new gym at a new location and in the fall of 1963 gym 1A located on the west end of Observatory Drive was opened. The old gym was supposed to come down then too, but in 1965 demolition was delayed until gym Unit II was built on the west end site. The building then remained in use as a gym and ROTC headquarters throughout the 1960s. A firebomb on January 2, 1970, aimed at but missing the ROTC offices, started a fire which burned for seven hours (helped by the ducts and air passages in the old towers). Substantial but nonfatal damage was suffered by the gym.

Now [1993] after decades of neglect and underutilization, plans are being made to find new uses for a building that has stood as a Madison and University landmark for 100 years. A committee headed by dean Mary Rouse has developed an extensive plan for the buildings reuse contained in a published report "Armory and Gymnasium Historic Structure Report". After restoration of the basic structure, including cleaning, repair, and reroofing of the exterior, the three main interior spaces will be reversibly converted to a University Visitors Center (first floor), multipurpose assembly space (second floor), and offices (third floor). In addition a tunnel connecting the building to the union will be built and a new addition on the east side of the building containing stairs to the second floor

space.[8] These plans carry an estimate cost of about $10 million, or approximately one hundred times the original cost of construction. When these plans are carried out the gym will once again bring amazement and wonder to campus visitors, as it did when it was new.

1) Laws of Wisconsin 1891 chapter 29
2) *Armory and Gymnasium Historic Structure Report,* p. 11
3) Ibid. pp. 8-9
4) Ibid. p. 9-10
5) *The Daily Cardinal,* September 18, 1894 p. 1.
6) *Armory and Gymnasium Historic Structure Report,* pp. 14-17
7) Ibid pp. 22-23
8) Ibid p. 173-189

AGRICULTURAL DEAN'S HOUSE

Fig. 1. 10 North Babcock c. 1974. [series 9/3 Dean's House, jf-19]

Built as the private residence of dean of agriculture William Henry in 1896, the house served as housing for the ag dean until 1945, then for president emeritus Fred until 1980 when it became Agricultural Research Offices. It was added to the National Register of Historic Places in 1984.

William Arnon Henry came to the University of Wisconsin in 1880, when the Agricultural department existed almost entirely on paper. Within ten years he had attracted enough attention outside the state to have received lucrative job offers from Iowa State College and Stanford University and for Wisconsin to try to keep him. When UW President Thomas Chamberlin asked dean Henry what terms would induce him to stay , Henry asked for a salary of $3500 per year and a house costing between $4000 and $5000 to be constructed prior to 1893. He also asked for a raise for Stephen Babcock.[1] The regents agreed and met his salary requests. However, nothing was done about the house until in 1895 Henry was offered a job at the New York Experiment Station and the regents suddenly remembered that they had promised him a house. The regents upped Henry's salary to $4500 and the house appropriation to $6,500.[2] They advertised for construction bids on January 21, 1896. On April 21, 1896, they accepted the bid of T. C. McCarthy at $8,510 and added $2000 to the appropriation.[3] The site had been moved (at the suggestion of Dean Henry) from the lake shore (the present site of Adams and Tripp Halls) to the edge of the experimental farm. The plans were developed and drawn by architects Conover and Porter with considerable input from Mrs. Henry (who called the house "Lake Dormer"). Funds were to come from the surplus of the Agricultural Department. Construction took place in the summer of 1896. The house has two stories and an attic over a full basement. The walls are brick, the foundation stone. It is about 285 by 160 feet in plan.

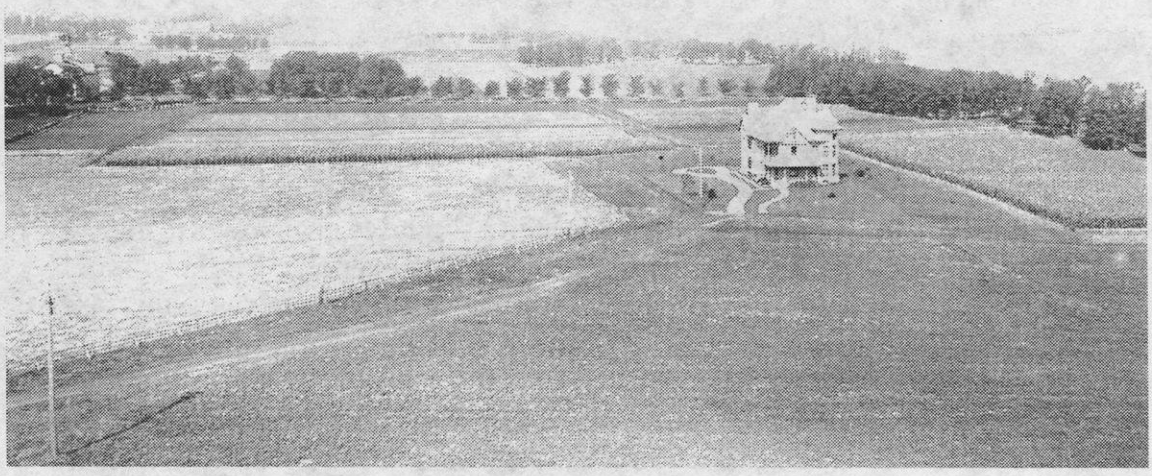
On December 3, 1896, professor Henry told the board the house was done, and that he would take over responsibility. However, after the Henry's moved in, a steady stream of receipts signed by both Dean Henry and Mrs. Sara Henry, for decoration items as well as repairs to the furnace and other expenses were all paid by the regents. Mrs. Henry died at the house in 1904. Dean Henry's son Arnon and his family received permission from the regents to live with Henry in 1905. Dean Henry's health failed in 1907, and he retired to California.

The new dean of Agriculture, H. L. Russell, lived in the house from 1907 until 1931, when he resigned to become head of WARF. His successor as dean of agriculture, and in the house, was Dean C. L. Christenson from 1931 until 1943.[4] The house then passed into the hands of its longest resident, Edwin Broun Fred. E. B. Fred became dean of agriculture in 1943 and held that post until 1945, when he resigned to become president of the university. The Fred's wished to stay at the house, and as Fred reports, "They [the regents] understood the situation. I explained it to them."[5] Fred lived at 10 North Babcock throughout his career and his emeritus years until his death in 1980. The house was then assigned its 1993 use as Agricultural Research Offices. In the late 1980s the very beautiful and public Van Allen Gardens were constructed next to the house.

The interior of the house was only slightly rearranged over the years and is still very much like the Queen Anne Gothic home that Sara and William Henry planned in 1896. In 1993 to conform to the new buildings along the street, the address was changed to 620 Babcock. Its beautiful leaded glass windows and carved wood trim alone make it worth a visit. It makes an interesting comparison to examine its original cost in today's [1993] dollars. The $10,000 cost in 1897 was 2.2 times the Dean's salary. That amount today would be roughly $220,000 and even considering that the lot was not included in the original cost, such a beautiful house could hardly be built on that budget.

1) W. A. Henry to T. C. Chamberlin June 10, 1891, series 1/1/3 box 10. Henry was not a ferocious bargainer, he also politely asked if he could make use of surplus produce from the experimental farm.
2) Regent's Minutes, October 8, 1895.
3) Regent's Minutes, April 21, 1896.
4) Nomination Form, National Register of Historic Places, 10/31/1984, State Historical Society, Historic Preservation Office.
5) *Oral History,* E. B. Fred p. 105

Fig. 2. What "out in the middle of nowhere" used to mean! Agricultural Dean's house, looking west c. 1898. [folder 7/7 #1 jf-23]



HISTORICAL SOCIETY

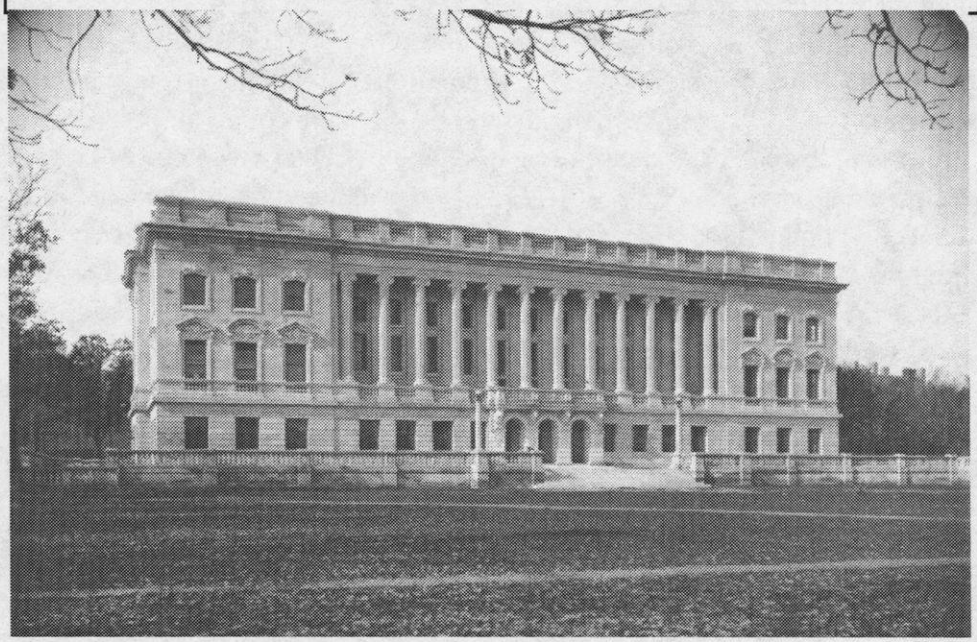


Fig. 1. The State Historical Society Building in 1900. Four stories of steel and Bedford limestone, the windowless fourth floor is hidden by the entablature. [9/2 Historical Society folder jf-24]

This building was constructed for use by both the University Library and the State Historical Library, and opened in 1900. The north stack wing was added in 1914. The University left the building in 1950 for Memorial Library. The last large modification was the west addition in 1965.

By the middle 1890s both the library of the university and the collections of the Wisconsin State Historical Society had gone from pillar to post for years. The University library had variously occupied parts of North Hall, South Hall, Bascom Hall, and finally together with basements all over campus the 1878 Library Hall. The Historical Society collection's course was even more tortuous. Starting with a single bookcase in 1849 in the state capitol[1], it moved successively to the basement of the home of society chairman Lyman Draper, the basement of a local church, back to enlarged rooms in the capitol, and back to the church. The legislature from time to time considered the matter of funding a separate building for the collections, but there were always delays, objections, and failure.[2]

The state of the University library in Library Hall was very bad. The reading room was so crowded that some students were forced to stand while studying. They were sharing the building with the military drill classes. Book purchases were well below the levels of all other schools of its class.

While the contents of the historical society collection was already notable and a pride to the state (especially to the university students who had access to it in the capitol) it was in large part inaccessible due to inadequate space. It was also hideously vulnerable to fire, to which the capitol building was demonstrably not immune. A much larger and fireproof building was needed. Society director Lyman Draper began a "vigorous campaign" for a new building.

In late 1891 university president T. C. Chamberlin as a member of the Historical Society executive committee suggested that the committee ask the legislature for a building near the univer-

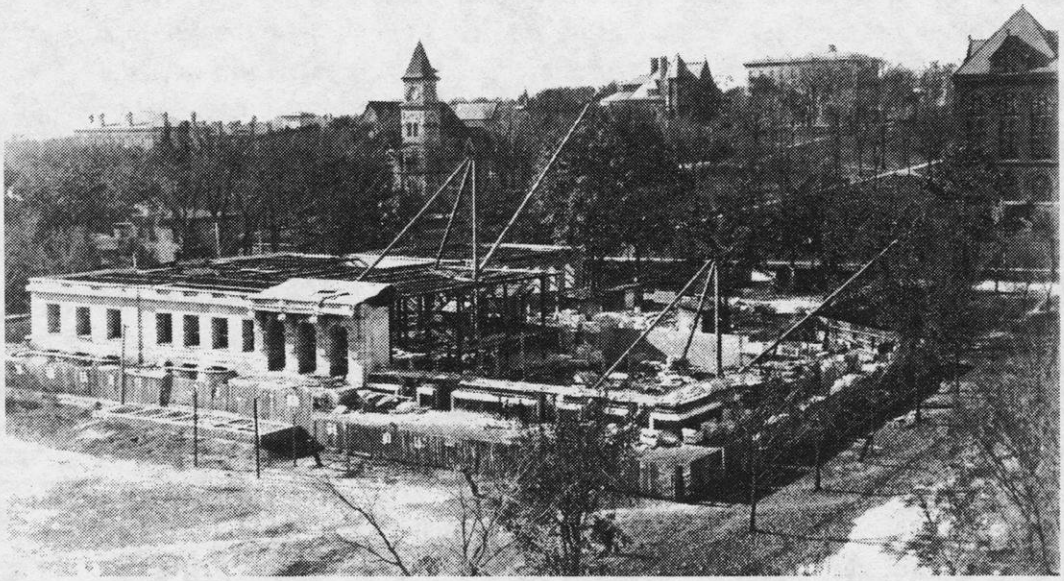


Fig. 2. March 1897, the Historical Society Library under construction. At the completion point of the first contract, the first floor is nearly done. This photo was probably taken from the roof of the Red Gym. [SHSW WHi(x3) 35007 lot 136]

sity campus which would house both the university library and the Historical Society collections and library. Then in 1895 a measure was passed granting $180,000 for the project and specifying that the university deed to the state eight lots of land on the lower campus to provide a site for the building. Subsequent legislatures added to the appropriation (1897-$240,000; 1899-$200,000) leading to a total of about $580,000 usable construction funds.[3]

The commission to oversee the erection of the building organized an architectural competition which included most regionally and a few nationally significant firms.[4] In November of 1895, the submitted plans were examined and critiqued by the commission. They asked two of the architectural firms, Ferry and Clas, and Van Brunt & Howe to redesign and resubmit plans. Most of the criticisms involved the amount of light in the stacks and reading rooms, though Ferry and Clas's original domed design is referred to as having "exceptionally massive features of doubtful value." Van Brunt & Howe's design gets similar remarks: "It is a matter of regret that a plan ... should exhibit ... so little judgement and good taste." In December 1895 the commission settled on the design of Ferry and Clas, who had removed the dome, added skylights and reproportioned the reading room.

Construction began early in 1896. What with the vagaries of state funding, the difficulties in procuring materials and the normal ups and downs of contractor operations it was not finished until 1900. The building was opened with an elaborate ceremony on October 19, 1900.[5] The money available to the commission did not cover the northwest stack wing, so only the stack on the south end was built initially. As built with the single stack wing, the capacity of the new library was estimated at 415,000 volumes. The two libraries agreed to share the stack space until the other stack could be added.

In keeping with the intent to house two distinct libraries, separate except for reading rooms and book handling facilities, the building was U-shaped in design with the bottom of the 'U' facing east toward the lower campus and the city. The University library was in the north end, and the state collection in the south end. The arms of the 'U' were the stack wings, only the southern of which was built originally. The stacks are six (shorter) stories high. The main entrance is on the east side but smaller entrances admit from State and Langdon Streets. Originally a fourth entrance existed on the Park Street side for the convenience of users from "the hill". A beautiful two-story reading room on

the second floor has enormous windows out onto the east facade. The level of trim and appointments in the building are a constant reminder that the state did not pinch pennies on its monument.

The remarkable circumstance of two distinct state entities cooperating to the degree that they could build and share this magnificent structure will be appreciated by anyone who works in the highly competitive atmospheres of the state government, the university or large business. The people most responsible for this amazing feat seem to be university president Charles K. Adams, historical society director Reuben Gold Thwaites, and a succession of visionary governors and legislators.

The joint libraries began to have space problems very early, the second stack wing being required in 1914 when the building was less than two decades old. This raised the theoretical capacity of the library to 675,000 volumes and it proved adequate until the 1940s, when the situation became critical. At that time during the post WW II student boom books and newspapers were stacked on window sills and piled on the floor. Storage was so tight that thousands of items were labelled inaccessible in the card catalog. The ventilation system had not worked for years because of the books piled in the ventilation stacks! [6] Quonset huts were set up on the library mall after the WW II, for study space and storage.

Then in 1949 at the height of the space crunch the state legislature approved funding for a new university library, and three years later the university moved out of the Historical library building. The historic society breathed a huge sigh of relief and began to repair the damage done by a half century of heavy dual use. This first major renovation cost $471,739 (nearly as much as the original construction). Some floors were divided into two levels, large spaces were subdivided for more office space. Worn stonework and trim were replaced, using casts from the original parts. The second floor reading room was reconditioned, including the installation of fluorescent lighting and covering of the skylights. It was at this time that the original windows on the first floor were filled in. At this time the legend "State Historical Society" was engraved in stone over the East facade, removing all doubt about whether it was the university library or not.[7] All this work took about a year and a half, during which time the building remained open.[8]

It is a measure of how crowded the building must have been in the 1940s, that even with the university library gone, the building was cramped for space. The Historical Society is a collection and collections grow. The museum on the fourth floor was a particular problem. Its removal to a separate building on the square at Carroll and State Streets, solved the problem. In 1965 a large T-shaped addition was built which filled in the space between the stack wings and extended the west side toward Park Street. This addition used limestone from the same Bedford Indiana quarry as the original structure and added 103,000 square feet of space, and produced the current configuration of the building. A second major interior renovation took place at this time also.

1) This bookcase still stands in the second floor hall of the library building.
2) These began as early as 1882, when a bill proposing a $100,000 building on the capitol square was introduced by Assemblyman Ostrander.
3) Wisconsin State Historical Library Building Memorial Volume 1901 p. 103.
4) These included Ferry and Clas (Milwaukee), Van Brunt & Howe (Kansas City), Charles Frost (Chicago), Peabody and Stearns (Boston), H. C. Koch (Milwaukee) and others.
5) Lord, Clifford, *Clio's Servant*, p. 124-125.
6) *Wisconsin Alumni Magazine*, December 1957, p. 18
7) Many students called it the university library, leading to a fable that the building had accidently been built backwards, with its back to the university. See Daily Cardinal December 7, 1951.
8) *Wisconsin Alumni Magazine*, December 1957, p. 18-20.

DAIRY BARN

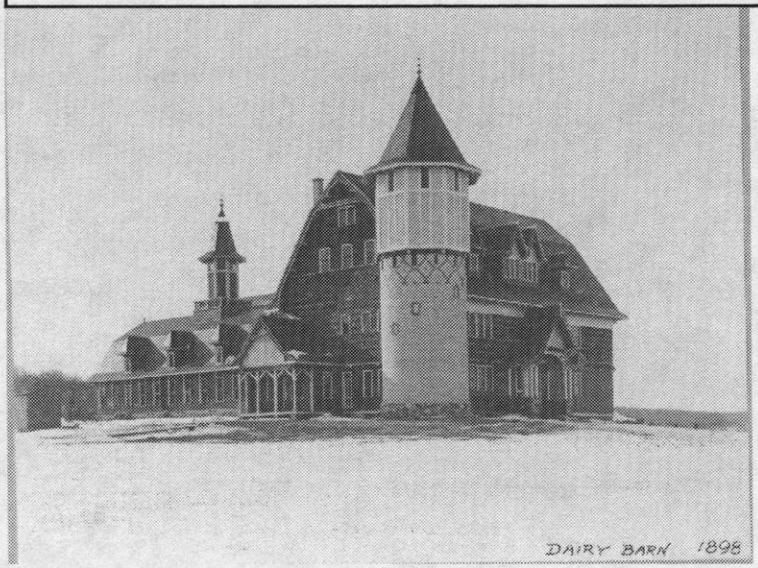


Fig. 1. The Dairy Barn shortly after completion in 1898. Much detail, including cupolas, silo windows, the north side window pattern, and assorted trim, has been lost over the decades. [series 9/3 Dairy Barn, jf-24]

The Dairy Barn was built in 1897 with $19,000 in state funds obtained by Dean Henry. The silo was an early experiment in round silo design. The building has lost some detail and been added to over the years, but is still sound, and is now in limited use for animal experimentation.

In 1895 as a result of lobbying on the part of dean of agriculture William Henry, the state legislature appropriated $5,000 for the construction of a dairy barn for the university experimental station. Dean Henry felt based on his examination of barns at other colleges, that this amount would not build a barn suitable to the kind of instruction and research envisioned for the university. Henry decided to hold off on construction, and in 1897 a further appropriation was made and Henry began to plan the new barn.

Henry employed J. T. W. Jennings, a Chicago architect, who had already designed King Hall and the Agricultural Heating Station. The interior layout of the barn was done by members of the faculty and staff, particularly by Franklin Hiram King, whose developments of farm building ventilation and the use of the tower silo have become standard practice throughout the world. Construction was begun in 1897, the building was finished in time for classes in the fall of 1898 at a total cost of about $19,000. The contractor was J. H. Stark.

Jennings designed the building's exterior to emulate the style of barns in Normandy. The main building was 50 X 96 feet, three stories high above a high basement. Two 40 by 70 foot one and a half story cattle stable barns projected toward the south from the east and west ends of the main barn. Between the two stables and connected to the main barn was a two story stock judging barn. The fact that the barn was lighted with electricity in that long ago day caused amazed comment.[1] Other features of the building were an office and apartment for the director, and a long steel ramp on the west

Fig. 2. The Dairy Barn about 1905 showing spiral ramp in rear (west) of barn. A team of horses pulling a loaded wagon could enter the third level hay loft directly by climbing this ramp. [x25-336]

side, navigable by teams of horses from the ground to the hay loft on the third floor. (See Fig. 2.).[2] These features have been mostly lost in the last 100 years. Much other detail has been lost. The original slate roof has been replaced with asphalt shingles.

The silo on the northeast corner is one of professor King's first tower silos, was cylindrical brick, plastered on the inside, 18 feet in diameter and 30 feet tall, and was surmounted by a large water tank which supplied water to all the farm buildings. In those days of experimentation and suspicion on the part of farmers toward their work, Henry and King would no doubt be amazed and delighted to hear the present caretaker of the building refer casually to it as the "little silo". The little silo is no longer in use. The silo in 1898 was an experiment, in which cut corn was matured in the silo then fed as ensilage to the stock. The success of the experiment is obvious to anyone travelling in Wisconsin or any other farming area, the biggest difference is that modern silos are very much larger.

The silo is only one way in which the UW dairy barn served as a model to farmers across the country. In 1907 a series of single plant feeding experiments on cattle by Elmer McCollum which led to the discovery of vitamin A in 1913, and revolutionized agricultural nutrition. Testing of early models of milking machines were carried out here on a special herd.

The walls of the upper levels are noticeably bulged outwards as the result of a century of loading and unloading sixty ton crops of hay. Two flanking barns were added to the barn complex some time between 1908 and 1942. A building report to the regents in 1946 recommended that the barn be torn down and replaced. The Dairy barn is still in use for cattle and goat raising and experimentation, but those functions are gradually being shifted to more modern facilities on campus. It is hoped that this handsome and significant piece of Wisconsin history can be returned to and maintained in good condition and stand for another hundred years, a monument to men who believed that farming could benefit from research and instruction.

1) Wisconsin State Historical Society Historic Preservation Office site file. This and other features led to the derisive nickname "cow palace", a nickname later attached to the stock pavilion.
2) *Daily Cardinal,* December 15, 1897.
3) Other sources include: Daily Cardinal October 15, 1898, December 15, 1897; and The Capital Times, Aug 8, 1969.

OLD BOAT HOUSE

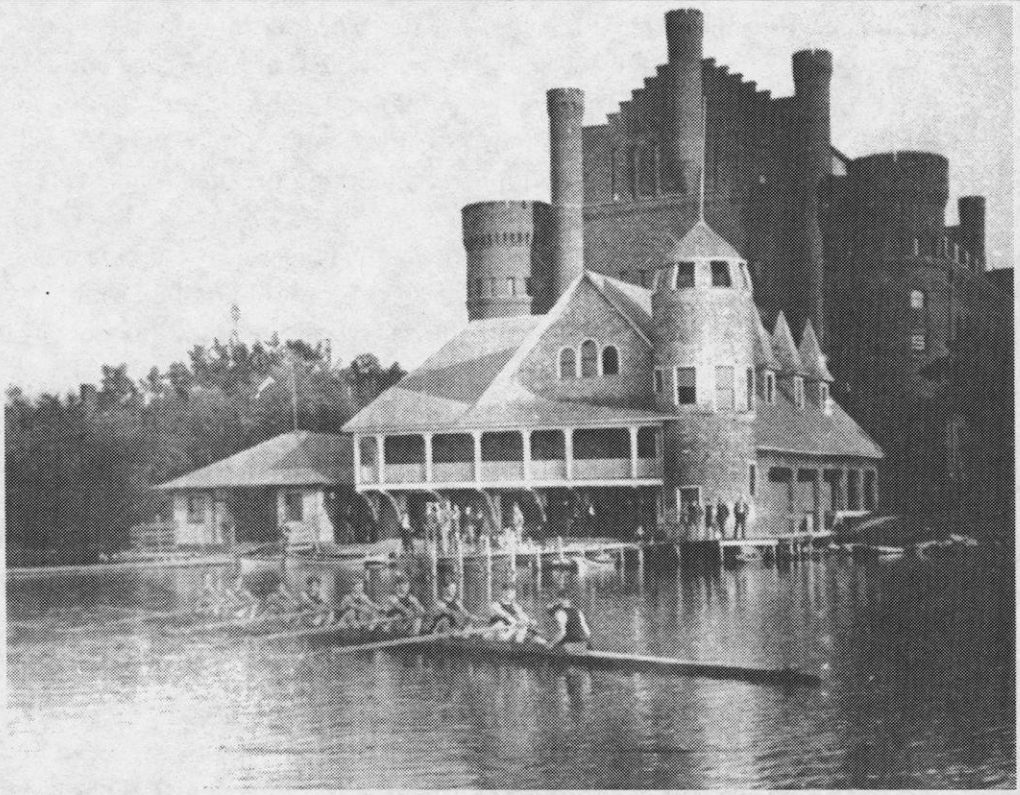


Fig. 1. The Boat House and rowing tank house (far left) as viewed from Lake Mendota , with an 8-oared gig practicing in foreground, about 1900. [x25-1158]

The first University boat house was built with student subscriptions in 1893. It housed student and faculty boats, a commercial boat launch, and lifesaving equipment. It was demolished in 1968 when new facilities for crew and lifesaving were erected.

The story of the university boathouse is one of the oddest of all University buildings. It stood on university land but was built not by the university but by the students. It was used by university organizations, students and by Madison residents and businesses, eventually came to be owned by the university and was demolished after serving for nearly eighty years.

As early as 1874 rowing was organized on an intramural basis. In 1886 an editorial in the University Press said: "Students from other colleges visiting the University have often expressed surprise on learning that we possessed no boat club. With unrivalled facilities and an abundance of talent in this line, when we stop and think of the matter it must seem rather unaccountable even to ourselves."[1] In 1889 several students transferred into the UW who had experience of competitive rowing elsewhere, and brought with them a double shell which became a big attraction. Among these students was W. T. Saucerman who became instrumental in the new boat club which was established in the winter of 1891. This club had a mainly proselytizing function, though they did manage to buy a pair of eight oared gigs and stage a regatta in spring 1892, and began planning a boathouse.[2]

In the spring of 1892 the Cardinal shouted "Hurrah for the Boat Club", reporting that the club had obtained plans from architects Conover and Porter, for a boat house that surpasses any such

structure in the United States. The club had permission from the regents to build on the north end of the three lots occupied by the new armory, with a long term lease.[3] During the summer of 1892 construction was begun. Before completion the boat house ran into difficulties. Mr. Saucerman, the organizer of the club, was apparently at the end either of his funds or patience. The corporation agreed to buy him out with two $500 mortgages and $415 worth of stock.[4]

Then in December of 1892 the Cardinal trumpeted " The Greatest College Meeting In the History of the University." At this meeting chaired by president Adams, a new corporation was formed which proposed to take over the project and raise $4500 to finish the building.[5] The collection of subscriptions dragged through the winter of 1893, with contractors Longfield and Co. threatening to sell the building if not paid promptly. Finally in March 1893 the contractors received $1730 for "completing the boat house." After further settlement with Mr. Saucerman the boat house was opened for business in May 1893.

Boats were rented to the public for 15 cents per hour, students boats were stored, bait was sold, and plans were made to arrange a steam boat landing. The 72 X 80 foot building had room with overhead storage for 80 small boats and several racing shells, there was a large second floor space suitable for club and social gatherings. Three channels connected Lake Mendota to the lower floor. The new and handsome boat house (see Fig. 1) was a real success, with nearly every class organizing a crew, the tower was used as a lifeguard lookout, and a foghorn was installed for safety. In 1896 Mr. Saucerman successfully applied to the regents to have his law school tuition waived, pleading poverty due to the boat house endeavor. In 1897 a rowing tank was built (by the university) east of the boat house. Then in April of 1908 the regents notified the University Boathouse Company that the (apparently 15 year) lease of the ground had expired. The lease was not renewed and in 1908 by an unknown arrangement the building became university property.[6] On March 2, 1908 the shareholders voted 501 to 0 to disband the corporation. As use by the Athletic department grew, the public and student use was restricted, over the protests of students, faculty and Madison residents. The regents remodelled the boat house extensively to plans by Arthur Peabody in 1916.[7] The building served until in April 1963 the regents gave permission to begin demolition of the east section of the boat house to make way for the alumni house.[8] Not until 1968, after the completion of the new crew house, and the Gilman lifesaving station, was the remaining west section demolished.

1) *University Press and Badger,* May 14, 1886 p. 6, *Daily Cardinal,* May 13, 1897 p. 3.
2) The older club had organized and begun the planning for a boat house five years earlier: University Press and Badger, May 7, 1886, University Press, September 24, 1886.
3) *Daily Cardinal* April 11, 1892 p. 1, May 18, 1892, April 24, 1894, November 28, 1893, April 17, 1894; *The Aegis*, January 20, 1893; .
4) *Daily Cardinal,* June 1, 1892 p. 1, *University Badger*, 1894, p. 131.
5) *Daily Cardinal,* December 14, 1892 p. 1
6) *Regent's Minutes*, February 18, 1908, *Wisconsin Alumni Magazine*, February-March, 1908; Papers of the Executive Committee, February 24, 1908 and March 30, 1908, series 1/2/2 box 11; *Daily Cardinal*, December 4, 1896, January 8, 1897.
7) *Regent's Report*, 1916 p. 248.
8) *Regent's Minutes*, April 5, 1963.

H. L. RUSSELL HOUSE

Fig. 1. The H. L. Russell house at 424 Farm Place, c. 1954, a corner of the home of Professor King, from whom Russell bought the land, can be seen at the far right. [Muere photo M51-7]

Harry Luman Russell graduated from the UW in 1888, returned to Madison as an assistant professor in bacteriology in 1893, and embarked on a career at the university during which he was dean of the College of Agriculture, director of the state hygiene lab, and director of WARF (Wisconsin Alumni Research Foundation). Russell died in 1954, age 88.

In 1895 Russell bought a small parcel of land in the area now [1993] occupied by Babcock Hall, from colleague professor F. H. King, who had built a house in that area in 1889. The deed requires that Russell build a $2500 house by January 1, 1898 or forfeit title back to King.[1]

Russell lived in the house on Farm Place until 1907 when Dean Henry vacated the dean's house at 10 North Babcock Drive. Russell became the new dean and moved down the street into the dean's house, where he stayed until he resigned to become president of WARF in 1931[2]. The university rented the old house from dean Russell for $85 per month and used it for space for the department of economic entomology. After the university purchased the property in August 1928 for $15,500, Aldo Leopold's department of Forestry and Wildlife had offices in the house during this period [3]. In the middle 1960s the railroad tracks between the house and University Avenue were moved to the north to make way for the construction of Campus Drive and in the fall of 1964 the house was demolished.

1) Farm Place runs west just north of University Avenue, behind the current location of Babcock Hall, turns north just east of the Stock Pavilion and connected with Linden Drive. Russell to Bumpus, July 26, 1911, series 24/1/1 (Russell folder).

2) *The Capital Times,* September 9, 1964.

3) Regent's Minutes, August 1, 1928 p. 42. The story is that Leopold's students moved his belongings from cramped basement quarters in horticulture into the abandoned house at night and that they were never evicted. [Meine, Curt, *Aldo Leopold,* p. 381.] .

OLD EDUCATION

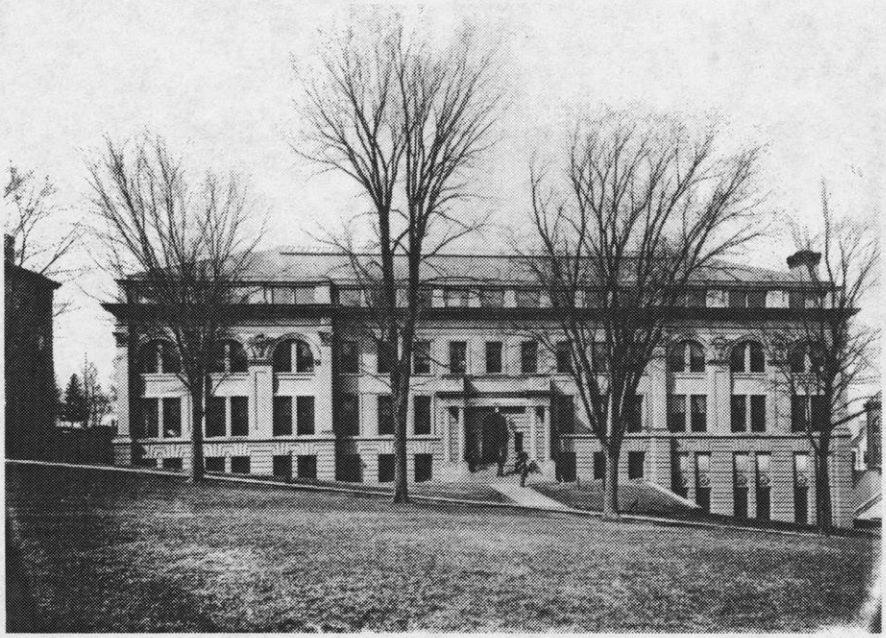


Fig. 1. The Engineering Building looking north after completion in fall 1900. [series 9/1, Education, x25-352]

Erected in 1900 this building served as the original home of the Engineering Department. When Engineering moved to the west campus in the 1930s, the building was occupied by art education and in the 1950s by the education department.

When the University of Wisconsin was founded in 1848, no substantial provision was made for an engineering department. For more than forty years after the first embryonic engineering classes were begun in 1857, the engineering classes saw a steady rise in enrollment and faculty, but no facilities devoted to it. Engineering was first taught in the basement of Main Hall [Bascom Hall], then in 1876 in the old Science Hall, the new Science Hall, and the machine shops [1888]. All these locations demonstrated that there was enough interest in the student body to fill all space assigned to the department, and that the space requirements of engineering were different and more demanding than at first realized. As the machine shop buildings began to bulge with students in the 1890s calls were heard to put aside the traditional university distaste for practical or applied education and build suitable housing for the engineering department.

In April of 1899 the legislature responded to the requests of the regents and appropriated $100,000 for the construction of a "suitable building for the College of Engineering."[1] Within a month the university supervising architect, J. T. W. Jennings announced by mail to fifteen architectural firms a competition to design a new Engineering Building. With each invitation he sent plans, drawings and specifications and a $95,000 limit.[2] During May 1899, many firms on the list sent refusals, ranging from polite claims of lack of time, to frosty claims that the $400 first prize for the competition was less than the normal fee charged for such plans. The results were so unsatisfactory that a second competition was held in the fall, ending in September 1899. When the plans received (apparently from four firms) were opened in late 1899 they were examined by Jennings and members of the

regent's building committee. Although they awarded the prizes, they believed that none of the plans were suitable for the building they had in mind.

At the November meeting the regents asked Mr. Jennings and the new dean of engineering J. B. Johnson, to comment on the problem, they replied that suitable plans could be prepared by the following month and that furthermore the building could be complete by October fifteenth of 1900. Thus began what must stand (except for Hiram Smith Hall) as a university record for the speed of design and construction of a major building. With the help of a committee of engineering faculty (Storm Bull, F. E. Turneaure, D. C. Jackson, and J. G. D. Mack) Jennings and Johnson did get plans ready for the executive committee meeting of December 1899. The regents approved them at that meeting. Detailed drawings and specifications were finished by January 1, 1900, and advertisements were published for contractors. The main contractor was N. Frederickson of Madison in the amount of $75,470, with the stipulation that the building must be completed by October 1, 1900. Other subcontracts went to P. F. Harlow (electrical), and Mueller Furnace Co. (ventilation). The contracts were awarded February 1,1900. The race was on.[3]

On March 1, 1900, excavation for the building was begun. Because the foundations would be quite deep on the up-hill end of the site and because the ground was still hard frozen, the excavation was done with dynamite. The very large quantity of fill removed from the site was used to raise the playing fields east of the new library building on the lower campus by about two feet. By May 16 the walls were completed to the level of the main floor. All through the late spring and summer of 1900 the construction was pushed as rapidly as possible. There were some delays due to delivery from factories, but the building (except for the basement labs) was sufficiently completed in October to allow moving the engineering facilities from their old quarters in Science Hall into the new building. The move took place in August September and October.[4]

As built the building was a 170 X 70 foot rectangle of three full stories and an attic above a full basement level, the attic level being lit with skylights along the ridge and used for drafting rooms. The sloping site gives a full basement and as the ground drops away toward the east a sub basement below the eastern end.

The building was intended to be added to on three sides to produce a square building around an interior court.[5] Only the west wing of the projected structure was ever built, although the basement story for the east wing was included as part of the original structure. The two story steam laboratory occupied the court.

The Beaux Art classical revival exterior is of grey pressed brick with pink mortar joints and is decorated with Bedford limestone and terra cotta trim. Doric on the basement level, the style changes to Corinthian above the basement sill course. By shortening the windows on the third floor, room was made for the wide cornice "which adds so greatly to the appearance of the building."[6] In the spandrels between the window arches are ornamental cartouches of terra cotta bearing the names of some of the greatest engineers in history. Except for the use of the ornamental tablets suggested by president Adams, Jennings was entirely responsible for the exterior design.[7]. It bears a striking resemblance to the United States Mint Building in Denver Colorado.

The interior of the building was designed by the committee of engineering faculty. The entire basement was occupied by labs. A large (350 seats) lecture hall, the ornate entry way, reading rooms and classrooms filled the first floor. The second floor was taken up by offices and lecture rooms. The third floor and attic provided ten large drawing rooms.

The Engineering building was very successful. It provided an expansive new home for the growing engineering department, and did it for the appropriation made by the legislature ($100,000). After the tragic death of dean Johnson from a horse and wagon accident (1902), attempts were made

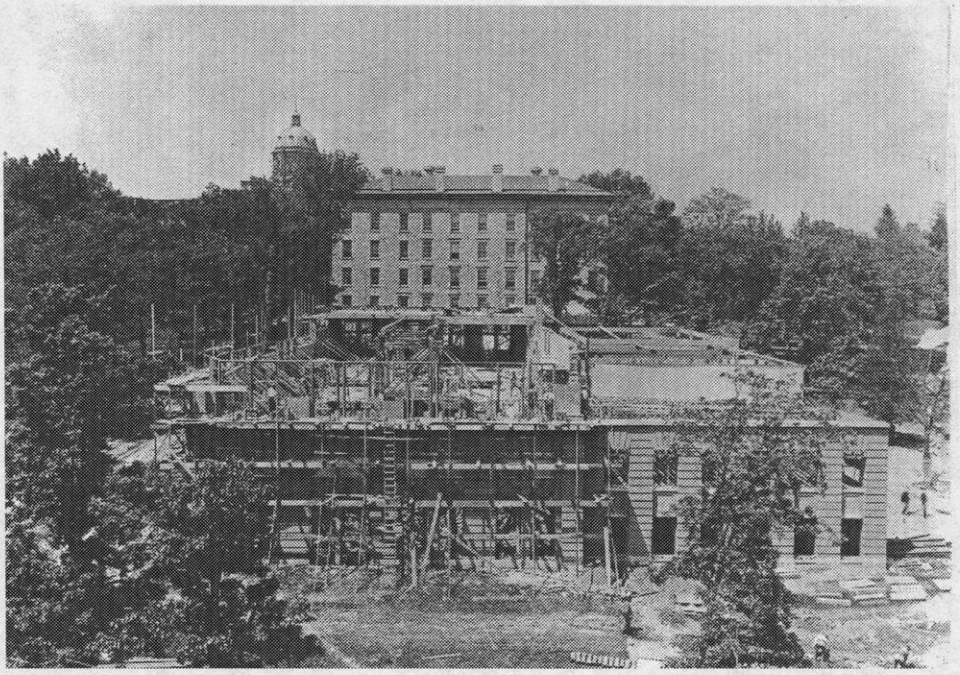


Fig. 2. Summer of 1900, probably taken from the roof of Science Hall. North Hall and the Bascom Hall dome appear in the background. [series 9/1, Education, x25-351]

to name the building after him, but no official action was ever taken. Much needed room in Science Hall was opened up after engineering left in 1900. A new standard for speed and efficiency of construction was set, and possibly never exceeded. But the rise of engineering as a university pursuit was too swift even for the new building. By 1910 the building was too small. For some unknown reason, possibly the replacement of Jennings by Arthur Peabody as architect, the first addition was built on the west side rather than the east side[8], with its already begun basement level. While this five-level addition alleviated crowding for a while, it was decided that in the future engineering would be given a large group of buildings on the western end of the campus. In 1933 the first of those buildings (Mechanical Engineering) was completed and the engineers began to move out of the Bascom Hill site. Almost immediately interior modifications were made to suit the needs of the incoming Education department. In 1951 the last of the engineers left the building and in the next three years substantial remodelling was done to accommodate the Education department.[9] This included the construction of some small one-level workshops in the back of the building, used as workshops for some craft classes of Art Education. It is an interesting detail that Art Education was following the engineering department a second time, having inherited the old machine shop buildings from engineering when the Bascom Hill site opened in 1900.

1) Laws of Wisconsin 1899 chapter 239
2) The list included Ferry and Clas (Milwaukee), Henry Koch (Milwaukee), A. D. Conover (Madison), Charles Frost (Chicago), Van Brundt & Howe (Kansas City), and many others. Executive Committee papers May 20, 1899, *Regents Report,* 1900 p. 22.
3) *Daily Cardinal*, February 1, 1900 p. 1.
4) *Wisconsin Alumni Magazine*, December 1900 p. 110-111
5) *Regent's Report*, 1900 p. 8;
6) *The Wisconsin Engineer* J. B. Johnson, June 1900 pp. 119-131; *Wisconsin Alumni Magazine*, March 1900.
7) They are: Bessemer, Reynolds and Gramme on the east; Ericson, Kelvin, Rankine and Siemens on the south; Henry Corliss and Telford on the west. Only Reynolds, a Wisconsin man at the Allis works in Milwaukee was a living engineer at the time.
8) *Wisconsin Alumni Magazine*, October 1909; *The Wisconsin Engineer*, 1909-1910 vol. 14, p. 43..
9) *Regent's Minutes*, February 9, 1952. p. 12.

AGRICULTURAL BULLETIN

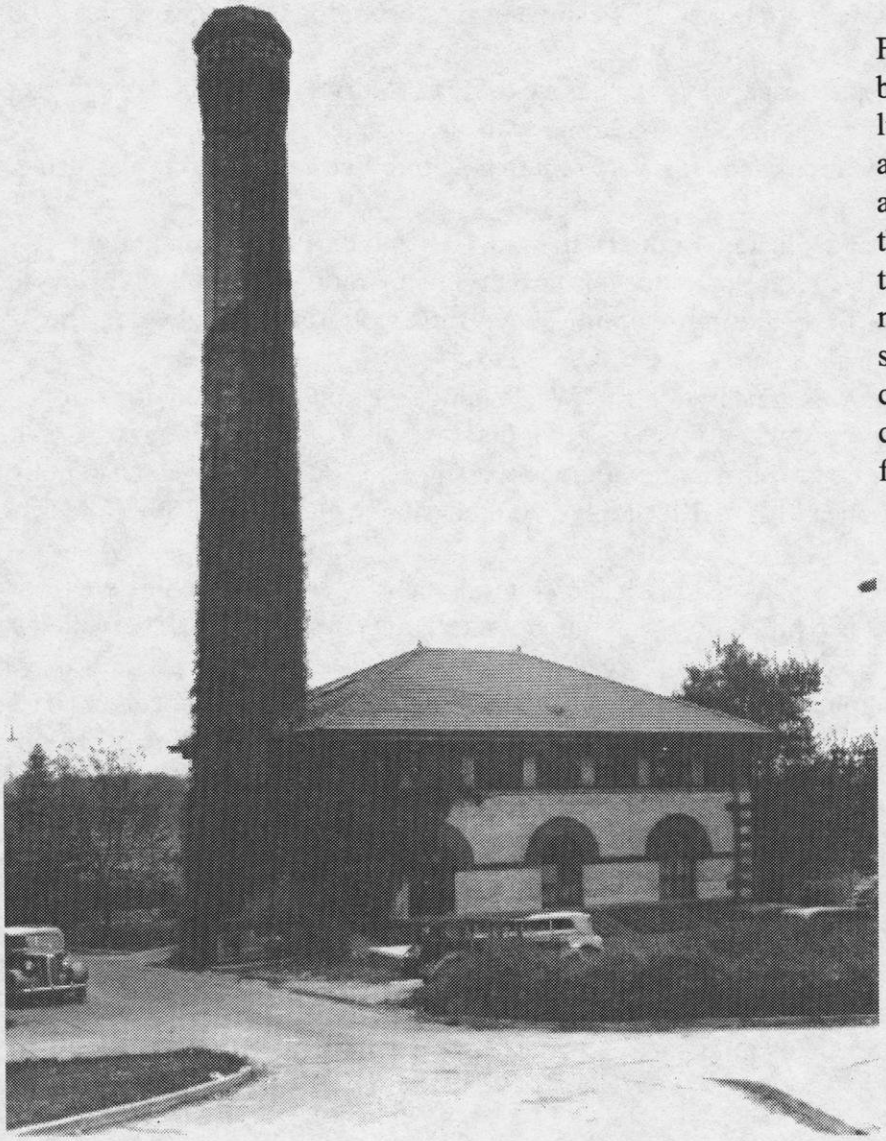


Fig. 1. Agricultural Bulletin building, c. 1930. The biggest little building on campus. The appearance of great size is an architectural illusion, fostered by the heavy brickwork and two toned color scheme. This chimney is one of the few —and surely the most beautiful— 19th century chimnies left on campus.[series 9/3 Smith Hall folder]

Built in 1899 as the heating plant for the growing agriculture campus, this building became the home of the agricultural bulletin in 1937. It was added to the National Register of Historic Places in 1985.

The construction of the agricultural heating plant is a typical example of the way the college of agriculture facilities were developed under Dean William Henry. Beginning in 1894 Henry began to talk about the need for a separate heating plant for the buildings on the agricultural campus: "It would certainly be advantageous to get the boiler and coal out of the Dairy building."[1]

We then hear little about it for a few years. Then in his report to president Adams in 1898, the project has gained central importance. Besides the improvement a central power plant would make to the dairy building, Henry adds the needs of the newly constructed horticulture-agricultural physics building [King Hall]. "There should be constructed a central heating plant located midway between the Dairy and Horticultural buildings. The boiler room can be sunk deep into the ground and a two story structure placed upon its walls." Henry optimistically estimates the cost of the project, complete with equipment at about $12,000.[2]

The 1899 state legislature, almost always responsive to Dean Henry's wishes, in April appropriated $35,000 for the "enlargement of the dairy building, with changes in heating apparatus..." Within five months plans, specifications and bids were sent to governor Scofield for approval, estimates totalled $16,284.[3]

The power plant would supply heat to Smith Hall, King Hall and the proposed but unbuilt Agricultural College building and cooling apparatus for the dairying operations in Smith Hall, and the upper floors would contain shops to provide agricultural students instruction in steam engine operation, pipe cutting and other practical skills.

The design of the building was done by John T. W. Jennings the university's supervising architect, who had been hired by the university as a result of his work with dean Henry on King Hall. The contractor was another favorite of Henry's and of the university, T. C. McCarthy who had built Smith Hall, the law building and the red gym. McCarthy's contract signed October 9, 1899 calls for completion by January 1, 1899.[4]

Jennings designed the heating plant in the Richardson Romanesque style, the same general style he had used on King Hall. It is typified by semicircular arches, polychromatic brick work and a sense of great mass in spite of the relatively small size of the building (35 X 50 feet). This building is an almost completely intact example of the Richardson Romanesque style. There have been no external modifications at all and internal ones consist of machinery removal and the installation of temporary partitions of the internal space and dropped ceilings.[5]

The building served as the agricultural heating plant and machinery shop until 1937, when it became storage and mailing facilities for the Agricultural Bulletin, a large volume of publications generated by the College of Agriculture and Life Sciences.[6]

In 1987 when the new stores building was finished the Agricultural Bulletin moved to new quarters there. After a major interior remodelling in 1990, the building became home to the Wisconsin Nutrition and Pest Management Program, the Center for Integrated Agricultural Systems, and Agriculture Technology and Family Farm Institute.

1) Report of the Regents of the University of Wisconsin 1894-95 p. 15
2) Henry to C. K. Adams September 14, 1898, series 1/1/3 box 16
3) Secretary of the regents to governor Scofield September 3, 1899 series 1/10/3 box 1
4) Contract between the Regents of the University and T. C. McCarthy series 1/10/3/ box 1
5) National Register of Historic Places Nomination Form Wisconsin State Historical Society Historic Preservation Office March 14, 1985
6) Ibid.

PRACTICE COTTAGE

Fig. 1. This 1931 photo was taken from the steps of Ag Hall and shows the Orthopedic Hospital at the top, and the practice cottage which was moved to make way for the hospital, in its new location at the right. The house's address before the move was 444 Warren Street, and after the move was 1501 Linden Drive. [series 9/3 Home Ec Practice Cottage, jf-42]

Originally private this house was purchased by the University in 1911 and used as a home economics practice house until 1940. It was moved west in 1930 and demolished in 1951.

In 1911 the University purchased the Schmelzer property at Linden (then Morris) and Randall (then Warren) Streets for $8900. It was built about 1900.[1]

Director of home economics Abby Marlatt persuaded the regents to allow her department to use the house for homemaking practice. With about $1200 for remodelling purposes, the department began using the seven room house as the "practice cottage". A home economics staff member, Mary Bunnell and her mother, lived in the house as supervisors. Every senior in the program was required to spend two weeks in the cottage, purchasing, planning, cooking and serving meals to other students. Another function of the practice cottage was the testing of labor saving devices. The reports by the department on inventions like the gasoline engine applied to washing machines and well pumps were written for Wisconsin publication to be read by the state's farmers and their wives.[2]

As the years passed the cottage became more and more unsuitable, because of deterioration under hard use and limited size. The new home economics building was too crowded to do homemaking practice there. So the old cottage was still in use in 1930 when the site at Linden and Randall was chosen for the new orthopedic hospital. The old practice cottage was moved west about a block (see Fig. 1). In this new location it served as the department practice cottage for another ten years, until in 1940 a new, permanent and much larger home management house was built. The old house stood, and was used for miscellaneous storage, and expansion space until 1951. At that time the lot was needed for the site of the state hygiene laboratory and the cottage was demolished.

1) *Minutes of the Executive Committee*, May 27, 1911; Madison city directories.
2) *Wisconsin Country Magazine*, October 1911, p. 365, March 1913, p. 4, June 1913, p. 13, June 1914; *Regent's Report*, 1913-1914, p. 136; *Wisconsin Alumni Magazine*, January 1931 p. 137, May 1978 pp. 5-6., For the Bunnells, see *Regent's Minutes*, May 31, 1912.

AGRICULTURE HALL

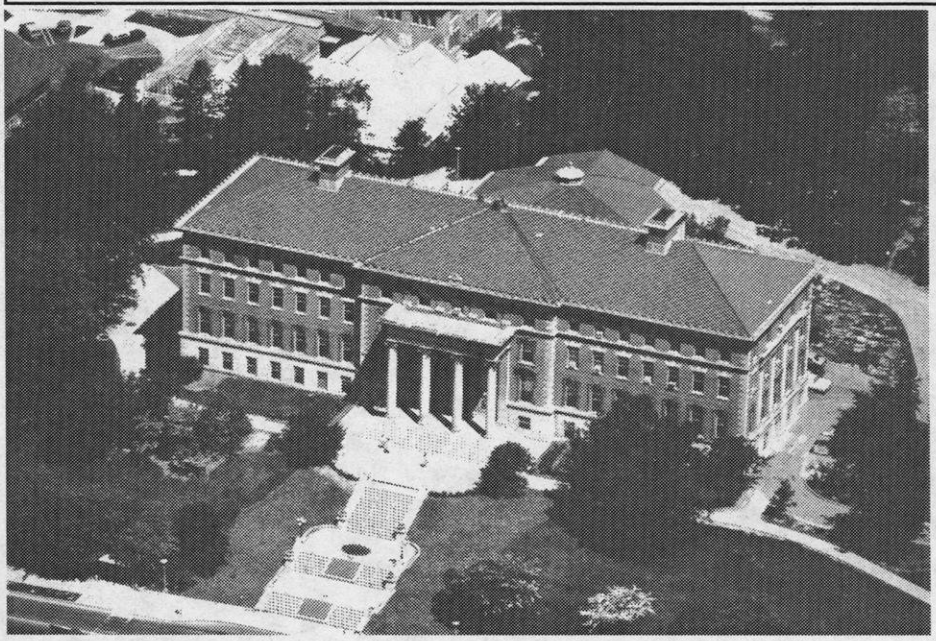


Fig. 1. Agriculture Hall, c. 1963. The octagonal library can be seen protruding from the rear of the building. Visible in the upper left are the King Hall greenhouses. [series 8/5, GC 554]

Agriculture Hall was designed as the administrative and research home of the College of Agriculture. It was the birthplace of nearly all current disciplines of the College, except dairying, horticulture, and agricultural physics. Begun in 1902, it was occupied in the winter of 1903. The building is almost entirely unmodified, and was added to the National Register of Historic Places in 1985.

At the turn of the century the college of agriculture was contained in only three buildings, Agriculture Hall [now South Hall], Smith Hall , and King Hall. All the offices and most of the laboratories were in South Hall. The attendance of the agricultural short course had risen from 19 students in 1886 to 196 in 1901. The crowding was intense, and the faculty had given up all space except the bare minimum for offices. Dean William Henry, an experienced and skilled lobbyist began the campaign for a building for the college of agriculture. Mention had been made of such a "projected building" as early as 1898, during the planning of the agricultural heating station. In the summer of 1901 Henry and university architect J. T. W. Jennings began to make plans for the necessary building, they visited similar facilities at a number of colleges in the east. Acting president Birge placed the need for it " first among the neccessities of the university."[1] The need was so obvious that the battle was short. The legislature of 1901 acting on a request from Henry for $175,000 granted an appropriation of $150,000 for the construction of a central building for the college of agriculture. It was understood at that time, that a later legislature would have to appropriate more money to furnish the building; that is that the $150,000 was intended for the structure itself.

Jennings modified the plans to account for the drop in appropriation[2], and the building contract was let to T. C. McCarthy in October 1901, for $143,179. Construction began immediately, the

excavation was completed in the fall of 1901, strikes delayed work in the spring of 1902, but the structure was erected, roofed in and heated by December 1902. A second appropriation for $25,000 to furnish the building was passed in May 1903, and the completion of the building took until December 1903 when the building first went into service with the 1903 short course students.[3]

The building was a 200 foot by 64 foot rectangle with its long dimension set along Linden Drive. It was three stories high over a full height basement. A two-story octagonal wing protrudes off the north side of the main building. This octagon housed on its bottom level the agricultural library and reading rooms. The second level held a 750-seat auditorium including a balcony suspended from iron rods from the ceiling. Construction style was slow burn mill construction, a masonry and wood combination intended to catch fire with difficulty and spread not at all. The material was brick, with trimmings of Bedford limestone and terra cotta, the roof was of red tile, and the outside metalwork of copper.[4]

Stylistically, Jennings used his favored Beaux Arts classical revival style. In terms of material and general style the agricultural college was very similar to the engineering building on Bascom Hill completed only a year earlier. It has several features that separate it dramatically from the considerably more budget conscious engineering building, namely the grand and imposing Linden Street entrance, with its four Ionic columns, the north entrance, a classical wall that is if possible even more dramatic than the front entrance. A huge raised letter stone plaque "Auditorium and Library Hall of Agriculture" is surrounded by swags and cartouches and all manner of classical ornamentation.

The agricultural library, which had been growing steadily since William Henry became dean, became too large, too heavily used, and too vulnerable to fire to remain in the lower octagon level. In 1928 a pair of concrete and brick wings were added to the back of the octagon to house the library. In 1910, with typical chutzpah, University architect Arthur Peabody convinced the regents that the work of his predecessor Jennings on the building was laughably ugly and hired a contractor to chip off a black finish on the headers of the building. It is no longer possible to determine where this alteration was done, or what the original looked like.[5]

The agricultural college building was the first home of a large number of disciplines which now have departments and buildings of their own. Among these are: veterinary science, poultry science, agricultural economics, agricultural chemistry, home economics, bacteriology, agronomy, agricultural engineering and genetics. This function of Agriculture Hall is similar to the role that Science Hall played in the development of the sciences in the college of L & S.

Except for the library wings, remodelled for Landscape Architecture for $194,000 in 1969, and the installation of some tile floors and dropped ceilings, the Agricultural College Building has been almost completely unaltered through its ninety years of service to the university, recalling president E. A. Birge's 1902 words " In our new Agricultural Hall we have a structure which should stand for ages as in some fair measure representative of the intelligence, earnestness, and ambition of the agricultural people of Wisconsin at the beginning of the twentieth century."[6]

1) *Regent's Report*,1900 p. 26

2) Some extant artists sketches indicate that the building might have been originally expandable into a quadrangle which would have engulfed the octagonal auditorium.

3) *Wisconsin Alumni Magazine*, November 1901 p. 63; *Daily Cardinal,* March 12, 1902, September 25, 1902, October 1, 1902, December 10, 1902, May 14, 1903, September 30, 1903, December 7, 1903.

4) *Nomination Papers National Register of Historic Places,* State Historical Society, Historic Preservation Office.

5) *Minutes of the Executive Committee*, August 31, 1928, *Minutes of the Board of Regents*, December 7, 1910.

6) *Report of the Board of Regents,* Presidents report 1902 p. 17, Regents Minutes, February 14, 1969 Exhibit K.

CHAMBERLIN HALL

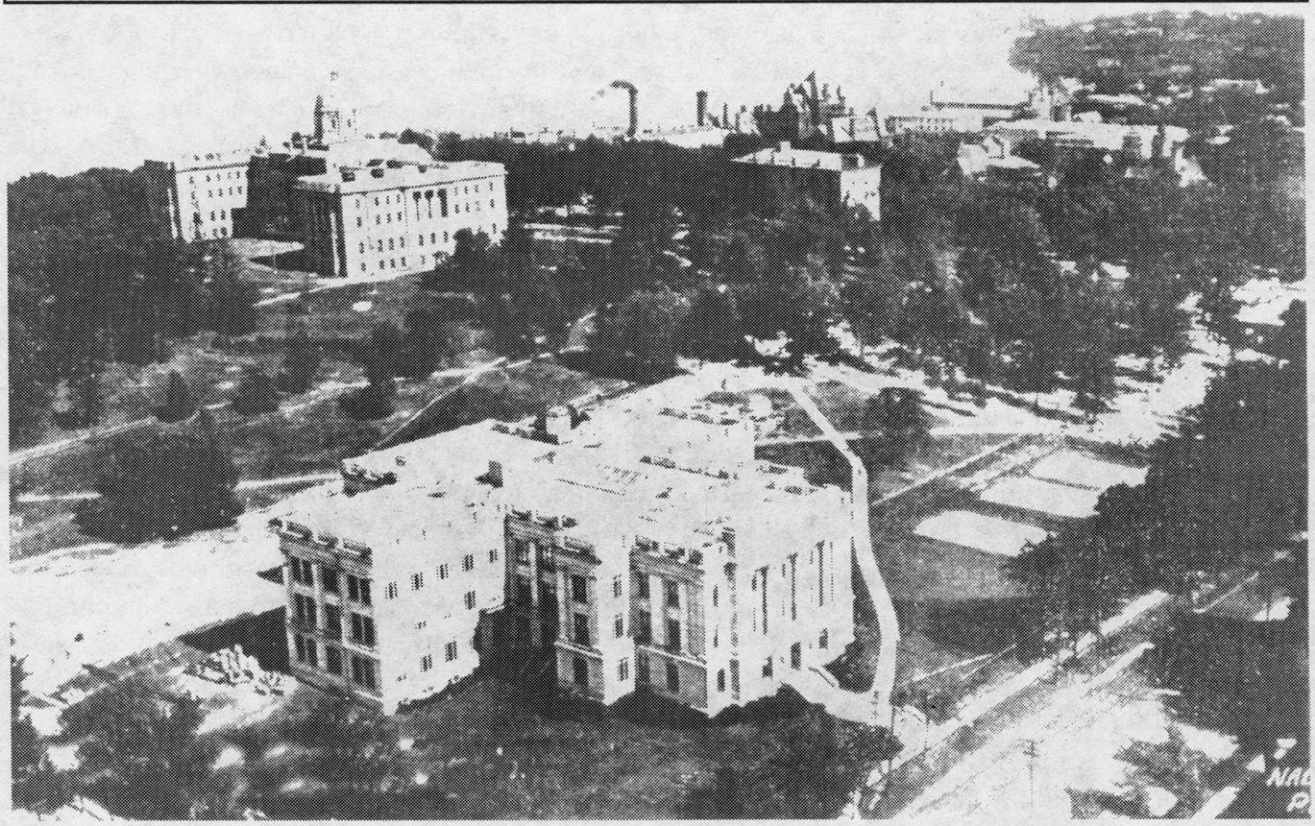


Fig. 1. The chemistry building in 1908 taken from the chimney of the heating plant; visible in the background are Bascom Hall, North Hall, the red gym, mining and metallurgy (with smokestacks), taken before construction of Sterling, Lathrop, Barnard Halls, any of the later additions to chemistry, or the construction of Charter Street. [series 9/1 Chamberlin Hall, x25-299]

Built in 1905 as a home for chemistry, this building was added to in 1912, 1939, 1956 and 1973. Chemistry was renamed Chamberlin Hall in 1975. It now houses Pharmacy and some physics.

When the first chemistry building was built in 1885, following the fire at the original science hall, there were complaints that the building would be so large (designed for about 150 students) it could not be filled in a hundred years. It was bulging within twenty.

As the plans for a new chemistry building began to take shape in 1902-03, the lessons learned by the regents were applied. They knew that good facilities attracted more students, and that chemistry was increasing in importance as a general science requirement. The older parts of the campus were crowded by the lake shore and city development. These considerations led the regents, after

considering a Bascom Hill site, to select a location on the south western edge of Bascom Hill, and to plan a building that could take advantage of that sprawling site. The regents directed university architect J. T. W. Jennings consult with noted architect Warren Laird to prepare plans for presentation to the board by September 1, 1903. The planning was assisted by the new president of the university, Charles Van Hise.[1]

The legislature of 1903 had been asked for $150,000 but appropriated only $100,000,[2] which was insufficient for the envisioned building. The architects therefore decided to erect a fairly small building, but one which was capable of very great expansion. The form of the finished building (after all considered additions) would be a large square with the center divided in four by a cross. The first building erected would be this cross, and additions would connect the points of the cross until the square was completed. Since the $100,000 would barely finish the structure, an additional appropriation was passed by the legislature of 1905 to equip the new building.

The plans were approved by the regents in January 1904.[3] They called for a building in the shape of a three story cross with attic over a full basement, the north south arm 80 X 184 feet, and the two cross arms 50 x 60 feet. It would contain a two story auditorium seating 500 in the center, labs, offices, and classrooms capable of providing instructions for about 600 students.

On April 19, 1904 the regents opened bids for construction, and selected as the lowest the bid of T. C. McCarthy, a Madison contractor who had done many previous university buildings. The contract (signed May 15, 1904) was for $99,965 and stipulated that the construction was to be finished by May 1, 1905. To get the bids under the appropriation Jennings had removed certain items (iron stairs, toilets, washbowls etc.) from the specifications, but the contract specified that those items could be required of the contractor at a fixed price for one year after completion. McCarthy ran into unspecified problems; in October 1905 the regents began to discuss withholding payment to McCarthy for failure to meet the time clause.[4] But in November 1905 the regents accepted the chemistry building as completed and classes were first held in the building on November 9, 1905.[5]

The building contained lecture halls, laboratories, and offices to provide for about six hundred students. It also contained the pharmacy department and the state dairy and food commission chemist. It was first occupied in January of 1906. Within two years it was being asked to provide space for 1200 chemistry students, it had desks and equipment in the halls and students without lockers. The regents pleaded with the legislature for an expansion, which could not be ready before the 1912-13 school year. They estimated the cost at $90,000-$150,000.[6]

In November of 1911, the governor approved a $69,000 contract with C. B. and A. K. Fritz for the construction of the west wing of the chemistry building to be finished by August 1912. It consisted of a 110 X 51 foot four story extension along University Avenue, and a single story wing with basement north 92 feet along Charter Street. The brick exterior and limited limestone facing used made clear what the finished building would look like. The interior was of concrete and tile to make the new part of the building fireproof, a feature that the 1905 section did not have. This wing was entirely occupied by laboratories.[7]

This (1912) 30,000 square foot expansion proved generally adequate for the chemistry department for about fifteen years. The east wing, another fireproof L-shaped addition was begun in July 1927 and was occupied by January 1929. It extended 110 to the east along University Avenue and then back to the north for 192 feet. This addition added 60,000 square feet to the building. It contained more large laboratories, classrooms, departmental offices, and in the basement, new equipment for ventilation, glassblowing rooms and darkrooms.

In 1939 the single story Charter Street wing was raised to the full four stories of the rest of the building. This construction obliterated from view (except from the main entrance and the back)

Fig. 2. Chamberlin Hall, February 1997. Eighty nine years later, all additions are complete. The intersection in the picture is University Avenue and Charter Street. The link to Sterling Hall at the back of the building is visible in this picture. [Del Brown Photo, AP-63]

the original 1905 structure.

The pharmacy department, perpetually out of space, built the north wing in 1956 at a cost of $390,000. This was a six story addition on the north end of the west wing. The Pharmacy wing, with its separate entrance on Charter Street was opened October 22, 1955, although construction continued for most of the following year.[8]

In November of 1951 four graduate students were doing a routine experiment in the east wing when the lab exploded. None were seriously hurt by the accident but the damage amounted to several thousand dollars.[9] This was not the last time the chemistry building would hear an explosion. In August of 1970 a huge bomb was detonated in the alley between Sterling Hall and the chemistry building's west wing. Although the blast was aimed for the Army Math Research Center in Sterling Hall next door, nearly a quarter million dollars in damage was done to the chemistry building.

Plans to rebuild and remodel the building after the Sterling Hall bombing were approved by the regents in January 1970 at a cost of $330,000. The architect was Fitzhugh Scott, and the contractor was Vogel Brothers. It was three years before these plans were finished. In 1973 after seventy years, the last steps of the structure were taken. The original cross-shaped structure was removed from inside the now enclosing brick additions; only the classical revival entrance facade on the Uni-

versity Avenue side remains. By 1980 real estate on campus was too valuable to leave an empty court in the center of the building, and the old space had been developed as a two story entrance hall, a large physics library and computer rooms; added to the back were a large auditorium and offices. A 1989 phase added the connecting link to Sterling Hall on the north. In December 1975 the regents voted to name the building "Thomas C. Chamberlin Hall".

By the time of this last construction phase, not even the enormous expansion envisioned by Jennings, Cret, and Van Hise could accommodate the chemistry department. That department was long gone (c. 1965) into new high-rise buildings occupying a whole block on the south side of University Avenue. Most of the old chemistry building is now occupied by pharmacy, except for the newly rebuilt center section which is mostly physics. There are currently plans in the works to build a new building for Pharmacy near the clinical sciences complex. The future use of Chamberlin Hall is not decided.

1) *Regent's Minutes*, January 19th, 1904, the regents approved the payment of $524 to "Professor Warren Laird for consultation and expenses respecting the location and design of the new Chemical Building." Also on the new site a very old brick tenement house obtained in the 1850s when the land was purchased known as the Hobbie house after the original owner (it appears on an 1878 map as a "student club house". *Minutes of the Board of Regents* of the University of Wisconsin June 16, 1903.
2) *Laws of Wisconsin,* 1903 Chapter 344 section 3.
3) *Regent's Minutes*, January 19, 1904.
4) *Regent's Minutes*, October 10, 1905.
5) *Regent's Minutes*, November 27, 1905; *Daily Cardinal*, November 9, 1905 p. 1.
6) *Regent's Report*, 1909 p. 37.
7) *Regent's Report*, 1913-14 p. 340.
8) *Daily Cardinal,* September 22, 1955, p. 4. The contracts were awarded by the regents at their March 6, 1954 meeting; series 24/9/2 boxes 5, 6, 7, and 8, Pharmacy folders.
9) *The Daily Cardinal*, November 16, 1951 p. 1.

OLD Y. M. C. A.

Fig. 1. Old YMCA on Langdon Street, east wing of memorial union at left, c. 1955. After the union went up in 1926, the YMCA became more of a rooming house as the two-room suites were converted to singles. It housed as many as 135 men in the 1940s. [folder 27/4 jf-26]

Built in 1905 by the YMCA on the current site of the union parking lot, this building acted as a precursor to the Memorial Union. After the YMCA erected a new building in 1953, the old one was obtained by the University and demolished in 1956.

The earliest mention of a Young Men's Christian Association on the UW Madison campus appears in the postscript of a letter from John Muir to his sister Sarah, June 1, 1863, in which Muir says he was elected president of the Y. M. C. A.[1] In 1884 at the state convention of the YMCA in LaCrosse it was decided that young women should be excluded from the association.[2] In 1887 the association which had been husbanding its building fund from the Muir years bought for $10,000 the west of the armory at what became 740 Langdon Street. In 1889, the student newspaper, the Aegis complains that the YMCA's proposed building site will interfere with the use of the lower campus for athletics. [3] There would be no reason for alarm for years.

The first notice of an actual plan to build comes in 1892 when it is reported that the YMCA intends to "put up a building that will surpass considerably any similar structure at any college or University in the United States." In 1899, the YMCA reached an agreement with the YWCA, with whom the lot had been purchased, that the YMCA will proceed with the building plans, which will include quarters for the women's group. In 1900 the association publishes plans of their building. It has grown to five floors with dormitory housing on the upper floors.[4]

By 1902 the cost is estimated at $75,000, The association was insistent that the building will be primarily for the use of the student body. "The general utility of the building is contemplated to be for the university, particularly the student body, and the students and faculty are invited to contribute in a variety of ways to its erection."[5] Several faculty members are quoted regarding the favor in which they regard the YMCA project. In 1904 the association reports that they have raised $52,000 from

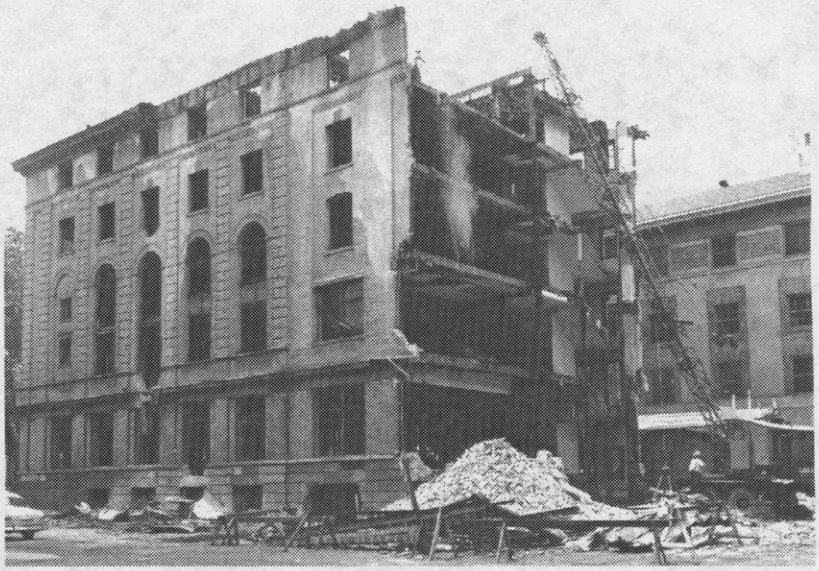


Fig. 2. May, 1956, the old YMCA, worn out and dangerous after twice its intended life-span, is demolished. The Memorial Union is partly visible at the right. Since the demolition the old YMCA lot has served as a parking lot for the union. [Old YMCA folder ns-1704]

subscriptions in Madison and Milwaukee.

In October 1904, after more than ten years of planning, a construction contract was signed between the association and local Madison contractor T. C. McCarthy for $60,000.[6] The architect was given as E. J. Colton of the N. Y. Association, but the published drawings are signed by Leenmouts and Guthrie of Milwaukee. The foundation was dug in the fall of 1904. Completion was intended for October of 1905, but was delayed until April 25, 1906. It had cost nearly $100,000 with furnishings. It had room for 66 students, a number of meeting rooms, and an auditorium holding about 600, and facilities on the first floor dedicated to the YWCA. It was built of brick with Bedford limestone trim.

By late 1907 the building became the student union for all intents and purposes, with student activities in the lower levels, and student housing in the upper. It was the only cafeteria or men's dormitory on the UW campus. Student handbooks were printed and distributed free.

Some complained that the union smelled faintly of piety, but until the university union was built it was tolerable (some felt that the 'Y' delayed and obstructed the development of the university union).

In 1946 the association decided to erect a new building. The 'Y' explained that the old building was overcrowded and that it had been built as a temporary building (with 'sand bricks' and non-fireproof stairwells) and had been meant to last twenty years, had already lasted forty and was worn out and unsafe. Finally in 1953 the YMCA erected a new building at Brooks and Johnson Streets. The old YMCA was sold to the University of Wisconsin Foundation who presented it as a gift to the university on April 8, 1955, with the stipulation that nothing could be built on the site which would obstruct the view of Lake Mendota. In May 1956, it was razed. [see Fig. 2]

1) *Wisconsin Alumni Magazine*, October, 1953 p. 22.
2) University Press, November 1, 1884, p. 4-5. An editorial decried the decision, and solicited similar opinions from a number of respected faculty members. Notable responses included: J. C. Freeman: "...a relic of barbarism."; D. B. Frankenburger: "...too stupid to be discussed."; and Edward Birge: "unintelligent, unchristian and opposed to true religious success."
3) *The Aegis*, January 11, 1889, p. 4. "If the association remains determined to build on a lot it has fairly bought, it will surely incur animosity towards itself, and the building will stand between the Regents and the association, as a monument to their obstinacy."
4) *The Daily Cardinal*, May 22, 1900, p. 1.
5) *The Daily Cardinal*, May 16, 1902.
6) *The Daily Cardinal*, October 5, 1904 p.1.

HYDRAULICS LABORATORY

Fig. 1. Hydraulics lab from Lake Mendota c. 1940. The sections from left to right are: the c. 1890 pump house, the 1929 tank house, and the 1905 hydraulics lab. A 1970s addition added outdoor stair cases to the exterior of the lab section. [series 9/2 Pumping Station, jf-27]

The hydraulics building is a combination of three separate buildings, the pump house that dates from at least 1890, the hydraulics laboratory erected in 1905, and the tank house that connects them from 1928. The building now houses hydraulic and environmental engineering.

As early as 1890 there was a pumping station on the shore of Lake Mendota to supply water to the university. Very early on this pump was also required to supply the state capitol building with water delivered through a line running up State Street.

When engineering professor Daniel Mead came to the university in 1904 he had a strong inclination to do research, and began a campaign to remove the study of hydraulics from its cramped quarters in the engineering building on Bascom Hill. He consulted with the university's supervising architect J. T. W. Jennings on the design and placement of a suitable building for hydraulics research, but for financial reasons the building was put off until 1905. By the time work commenced in the fall of 1905 architect Jennings had been replaced by Arthur Peabody, who judging from extant drawings left the interior arrangement and layout of the building alone and made alterations to the design of the exterior. Construction was begun too late in 1905 to finish before winter came. The regents report of 1904-1905 says that "the building was temporarily enclosed for instructional use during 1905-6 ... and has by its removal relieved to a slight extent the congestion in the main engineering building."[2] The new building stood by itself on the lakeshore about 80 feet west of the old university pumping station.

The new hydraulics lab comprised three stories above a basement, forty eight by ninety eight feet. In a feature magazine article about the new building, professor Mead describes the layout in detail.[1] The basement contained the main pump to draw in lake-water and supply it to the various

channels, weirs, racks and models in the labs, which required large volumes of water (30,000 gallons per minute) at low head. Also in the basement were large measuring tanks (10,000 cubic feet total), a laboratory for special work. The first (ground level) floor, intended mainly for advanced research, contained the large head race and channel, more pumps and filters, and a mezzanine around the main pump in the basement. On the second floor were the offices, classrooms, and a lecture hall. It was intended that the lab eventually be connected to the pump house by an addition (called the tank house) to the east of the lab The illustrations that accompany Dr. Mead's article show the tank house connection already built, but he states in the article that it will be built "soon."

In Dr. Mead's article he refers to a plan to construct a reservoir on the bluff above the lab, to provide a source of water at a constant head. In 1914 this reservoir was constructed, designed by Peabody and built by contractor J. Roherty. It holds 220,000 gallons of lake water, and was filled through a ten-inch pipe from the lab. Water flowed back to the lab down the 50 vertical foot drop through a sixteen inch pipe and a series of control valves and gauges. The reservoir is fifty feet in diameter and sixteen feet deep. The reinforced concrete top was designed for use as a student gathering spot, with a short parapet wall, and steps down to it from Observatory drive, behind Muir Knoll. The use of this reservoir was discontinued in the 1950s after the development of constant pressure pumps made it unnecessary. It still provides a beautiful view of Lake Mendota over the bluff.[3]

Just after a 1915 state appropriation for upgrading the pump house and its equipment for fire protection but before the work could be done, the dome on Bascom Hall caught fire and was destroyed. Ironically the only thing that saved the rest of the old building was the long forgotten water tank in the base of the dome, the burning dome collapsed into the tank and was quenched. That tank had been the original holding tank for the first university pump. After the Bascom fire, the pump house project was completed, at a cost of about $16,000 a large two-story building with no second floor, giving an open room clear to the roof. Plumbing hookups enabled the hydraulics lab to exchange water and pumping power with the pump house. The hydraulics and pump house buildings were still otherwise separate although 1923 drawings indicate that the space between the two was occupied by large tanks and sheds.[4]

In 1928 contractor J. P. Cullen finally built the addition to the hydraulic lab that connected the lab with the pumping station, at a cost of $60,000. This section of the building held large settling tanks and pumps to process lake water for use by the university. This addition brought the hydraulics building to its current configuration. A series of major remodelling projects in the 1970s and 1980s removed much of the old interior of the building but left the exterior intact except for the addition of stair wells on the west and south sides. Also in the 1980s with gradual shifts of program emphasis the building was renamed "The Water Science and Engineering Laboratory." The pumping station section now has a second floor, and is still a few feet shorter than the tank house and hydraulics lab sections. The complete structure [see Fig. 1.] is now about 230 feet in length. Much significant work in hydraulic study and investigation has been done in this complex, by Dr. Mead and his successors. Plans are now being discussed to add further to the building to connect it on the west to the limnology building.

1) *The Wisconsin Engineer*, March, 1906, p. 149.
2) *Regents Report*, 1904-1905 p. 12
3) *The Wisconsin Engineer*, October 1916 p. 30.
4) *The Wisconsin Engineer*, February 1923, p. 85, April 1908.

OLD AGRONOMY

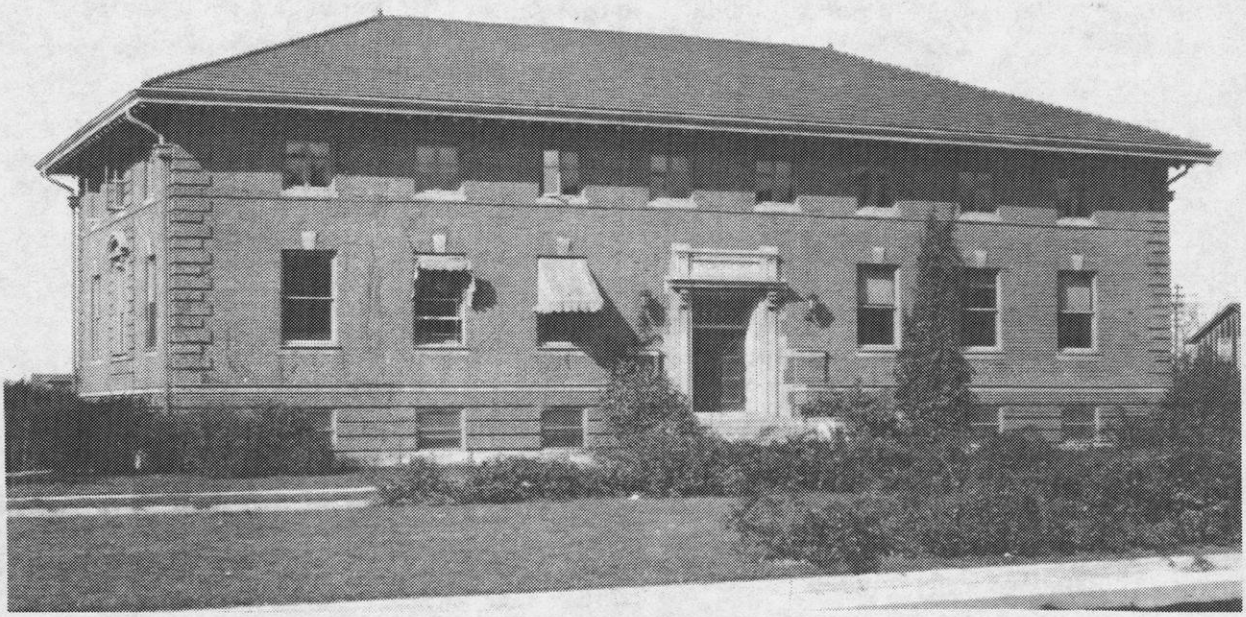


Fig. 1. Old Agronomy c. 1910. [series 9/3, Agronomy, ns-310]

Old Agronomy was built in 1906, the first reinforced concrete structure on campus. Agronomy moved out in 1930 and the building has since housed genetics, dairy science and its current occupant Agricultural Journalism.

The agronomy department was founded almost solely by the efforts of the un-degreed Ransom Asa Moore in 1895 (under dean William Henry) when he began the practice of selecting strains of grain on a one acre experimental plot on the current site of the stock pavilion in an attempt to produce a seed crop with superior yield and blight resistance. Moore was also extremely active in the recruitment of students for the agricultural short courses, scouring the state on his bicycle convincing farm youths to enroll.[1] By the first years of the 20th century the study of agronomy had produced so many successes and attracted so many students that it had outgrown its quarters in agriculture hall.

As early as 1904 the regents planned for an agronomy building, but did not follow through. In 1905 as part of the enormous building program driven by new president Charles Van Hise, plans were drawn by new supervising architect Arthur Peabody for two relatively small buildings for the agriculture campus, Agronomy and Agricultural Engineering. These were Peabody's first solo design projects and were done in the Beaux Arts Style favored by the university's planning consultants Laird and Cret. These buildings were the first to occupy the proposed mall linking Agriculture Hall with University Avenue. Because the Agricultural College was physically a rather independent unit of the university, the architecture did not require the classical and sandstone treatment given to the buildings on the central campus. Peabody chose instead of cut stone a dark brown brick (which became standard for later buildings associated with the college of agriculture), and in order to meet the modern requirements of fire protection the buildings were constructed with concrete floors and tile partition walls. They were the first buildings on campus so constructed.[2]

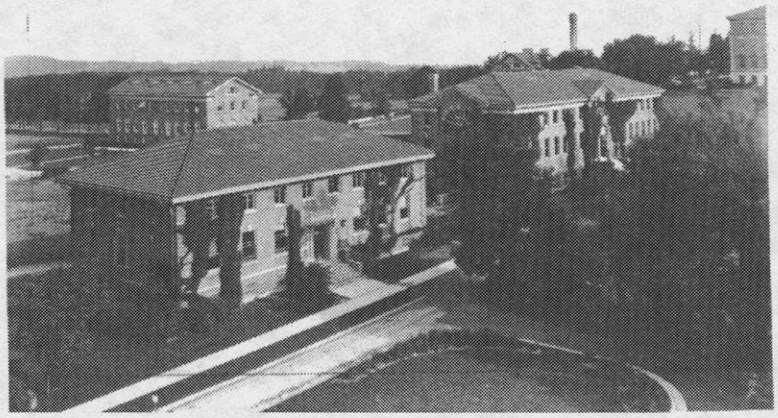


Fig. 2. c. 1910 Agronomy building in foreground, agricultural engineering in center background, Horticulture left background, Agriculture Hall right background. Agronomy and agricultural engineering were built together, but agronomy seems to have been finished first, making it the first reinforced concrete framed building on campus. [series 9/3, Agronomy, jf-29]

The regents opened bids for construction of the agronomy and agricultural engineering buildings in May of 1906 and selected from the six bidders T. C. McCarthy, a local builder. The contract was for $68,400 for construction of both buildings.[3] Construction was slower than anticipated and agronomy was not opened until the fall of 1907.[4]

The agronomy building is 46 feet X 96 feet, two stories above a full basement. It had a red tile roof and was built of reinforced concrete and a hard dark brown brick that became standard for later agricultural buildings. The basement held rooms for curing storage and display of grain. The first floor contained lecture halls, classrooms and offices. The entire second floor was a single room given over to the seed judging department.[5]

The new agronomy building was a great success, giving Professor Moore and his students (more than 600 took agronomy in 1906) ample room and facilities. However as plant genetics and plant pathology were given an increasing amount of space in the little building, there was a loss of lab and instructional space. By the late 1920s the crowding was becoming intolerable. The solution was to construct a three story wing on the east end of the Horticulture building. In 1930 this addition to Horticulture was built and named Moore Hall in honor of R. A. Moore.

The agronomy and plant pathology departments moved into Moore Hall, leaving the old agronomy building to the genetics department. Genetics remained there (producing Nobel prize-winning Joshua Lederberg) until space limitations drove them to a new building across the Mall in 1963. The old building passed into the hands of Dairy Science who used it until 1972, when the animal science building was built. The Agricultural Journalism department was the next user arriving in 1972. The building name was then officially changed to Agricultural Journalism.[6] Agricultural Journalism remains the occupant of the little brick building in the center of the west side of Henry Mall. The ninety years since its construction has seen the erection of banks of huge agriculture buildings in this area (biochemistry with its endless additions, molecular biology on Linden Drive, the building and demolition of the Wisconsin High School, leaving the old agronomy building a kind of survivor through insignificance. It remains a useful and attractive contrast to the monster buildings favored by a later vision.

1) R. A. Moore Biographical file University Archives.
2) *Memoires*, Arthur Peabody Archives biographical file, p. 4-5.
3) *Regents Minutes*, May 31, 1906.
4) *Daily Cardinal*, September 25, 1907, May 6, 1907, January 4, 1907.
5) *Wisconsin Alumni Magazine,* June-July, 1906, pp. 440-44
6) *Minutes of the Regents*, August 3, 1973

AGRICULTURAL ENGINEERING

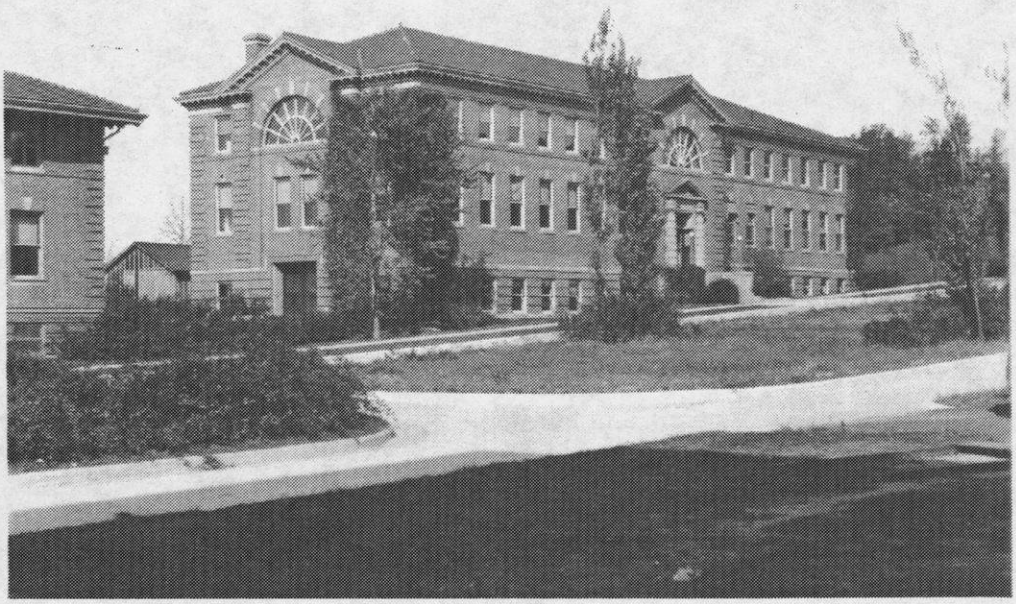


Fig. 1. Agricultural Engineering from the south east, a corner of old agronomy roof at left, c. 1930. [series 9/3 Agricultural Engineering, jf-31]

Built in 1905 to house the department of agricultural engineering, this building still houses its original discipline, and has been the site of a number of significant developments in the field. It was added to the National Register of Historic Places in 1985.

Arthur Peabody's first new buildings as the university's supervising architect were the old agronomy building and the agricultural engineering building. The agricultural engineering building had been on the drawing board since around 1904 when the department was instituted. But the plans of Peabody's predecessor, J. T. W. Jennings (approved June 1, 1905), had not been built. After Peabody's arrival in 1905, he developed new plans following the guidance of the university's consulting planners, Laird and Cret. The two buildings went out for bid together and local builder T. C. McCarthy was selected as contractor in May of 1905.[1]

Probably because of the great amount of work Mr. McCarthy had undertaken in addition to the two agriculture buildings (e.g. the central heating plant) the construction of the agricultural buildings lagged behind schedule. Both buildings were finished in the fall of 1907. Some of this delay may have been due to the unfamiliar nature of the materials, these two buildings were the first on campus to be built of reinforced concrete. It appears that the agronomy building was probably finished first.

The agricultural engineering building is two stories over a full height basement 50 X 150 feet with the long axis running north and south at the corner of Henry Mall and Linden Drive. It has a poured concrete foundation and floors, walls of the same dark reddish-brown paving brick used on

the agronomy building, and a red tile roof. The style is Georgian Revival with a pedimented architrave and dentilated cornice and the large semicircular fanlights which make the building highly recognizable in aerial photos.[2]

When the building opened the ground level was entirely occupied by the power and cement laboratories. On the main floor were faculty offices lecture rooms, tool rooms, and shop and machinery labs. The entire top floor was a single room, used for machinery display and study.[3] Dean Russell gave the cost of the building complete with equipment as nearly $50,000.[4]

The department of agricultural engineering was and is intended to teach students a general knowledge of farm machinery, operation of farm implements and power plants, the planning and construction of farm buildings, and research in the fields related to these subjects. The department had already outgrown its early home in Agriculture Hall. In order to provide room for the inevitable growth in this field of study, the building was made with expansion in mind, but because the growth of the size of farm machinery was so great and because the room to the west was taken up in 1910 by the new Horticulture building, the planned expansions never took place. The department stayed in this building almost entirely until the 1960s when a new lab building was constructed on Elm Drive. The decision (based on budgetary considerations) to scale back the new lab building leaves the department split between the old and new buildings. Many historic events in the field took place here in the original building, such as E. R. Jones' soil erosion and drainage studies, F. W. Duffee's 1927 development of the first forage harvester, the Duffee dryer, used in seed corn production, and several significant developments in concrete construction. In December 1907 the American Association of Agricultural Engineers was founded in the building, an event commemorated by a brass plaque in the vestibule of the building. For a period of about two years, the building was home to the newly created department of Wildlife Management, under Aldo Leopold.[5]

In 1968, after the Agricultural Engineering laboratory building was erected the old building was remodelled to provide faculty, and departmental offices at a cost of $183,000. The exterior of the building is largely unaltered, and unusual (if not unique) among university buildings, it is still the home of the department for which it was built. It has never been known by any name other than the original "Agricultural Engineering" still in stone over the main entrance. Though visually overpowered by the huge high-rise biochemistry addition and molecular biology buildings, it still anchors the beautiful and graceful group of buildings on the west side of Henry Mall.[6]

1) *Regents Papers*, June 1, 1905, *Regents Minutes*, May 31, 1906.
2) Nomination papers for the National Register of Historic Places, Wisconsin State Historical Society Historic Preservation Office.
3) *The Wisconsin Engineer*, May 1913, p. 387.
4) *Report of the Regents*, 1908 p. 113.
5) Nomination papers for the National Register of Historic Places, Wisconsin State Historical Society Historic Preservation Office.
6) Agency Request for State Building Commission Action October 9, 1967, series 40/1/3-2 box 1, *Regent's Minutes*, October 4, 1968 exhibit J.

OLD HEATING PLANT

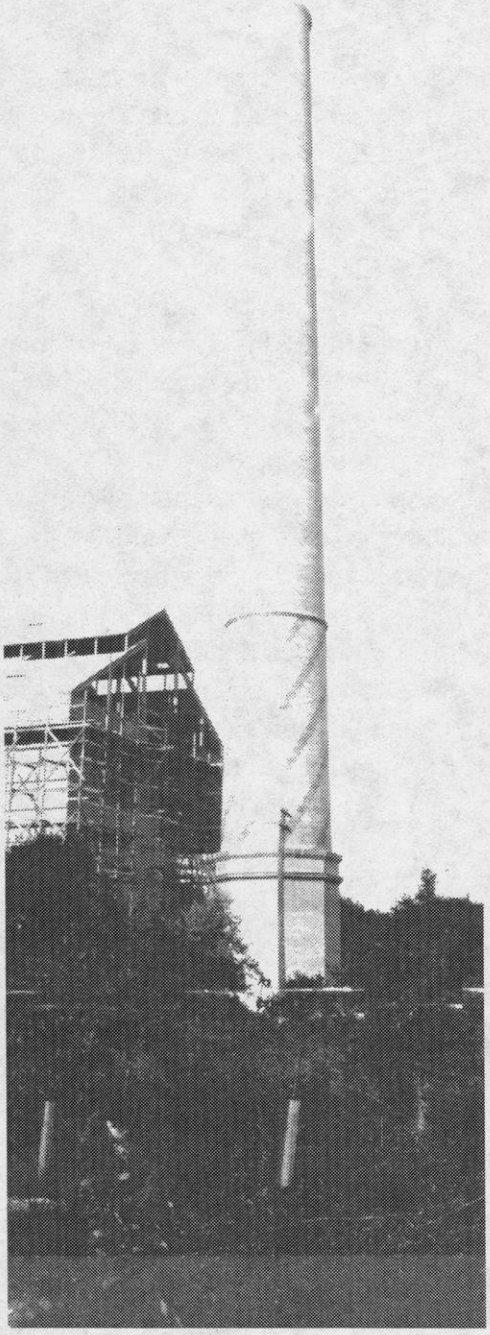


Fig. 1. 1907, the heating plant during construction, after the chimney is finished, but before the main building is done, taken from the south west. [9/5 Heating Plant, jf-31]

The third of the university's central heating plants, this plant went into service in 1909. It provided heat to the whole University until 1959 when the Charter Street plant came on line. It is now used as shops for the University physical plant.

In the years before 1888, the university had no central heating plant. The few buildings were heated by wood or coal furnaces and stoves. In 1888 as part of the science hall group (see Appendix A) a central heating station (now Radio Hall) was built for the buildings on Bascom hill. A decade later a second plant (now Agricultural Bulletin) was built to heat and power the agricultural campus buildings. These heating plants served the university well throughout most of the nineteenth century, although the main central plant required expansion several times. However by 1905 a number of factors had arisen which made those old plants insufficient.

The most significant of these was the ballooning size of the campus. When the old plant was built, in 1888, some of the regents drew laughter when they opined that there might someday be an enrollment of 1,000 students at the university. By 1905 the enrollment was over 3000. This enrollment was necessarily served by more buildings. Many of the new buildings were on the agriculture campus (Smith, King, and Agriculture Halls), but the gymnasium, the enlarged Chadbourne Hall, and the new chemistry building increased the size of the central campus needing heat and power. A further spur to the need for a new central power plant was the planning input from consulting architects Laird and Cret who argued that expansion would necessarily take place westward for the agricultural campus and to the south (across university Avenue, where no university buildings had yet been built), further decentralizing the existing 'central' heating plant.

Not all buildings were heated from the central plants. Heating South Hall from the central plant only became a topic of discussion after completion of Agricul-

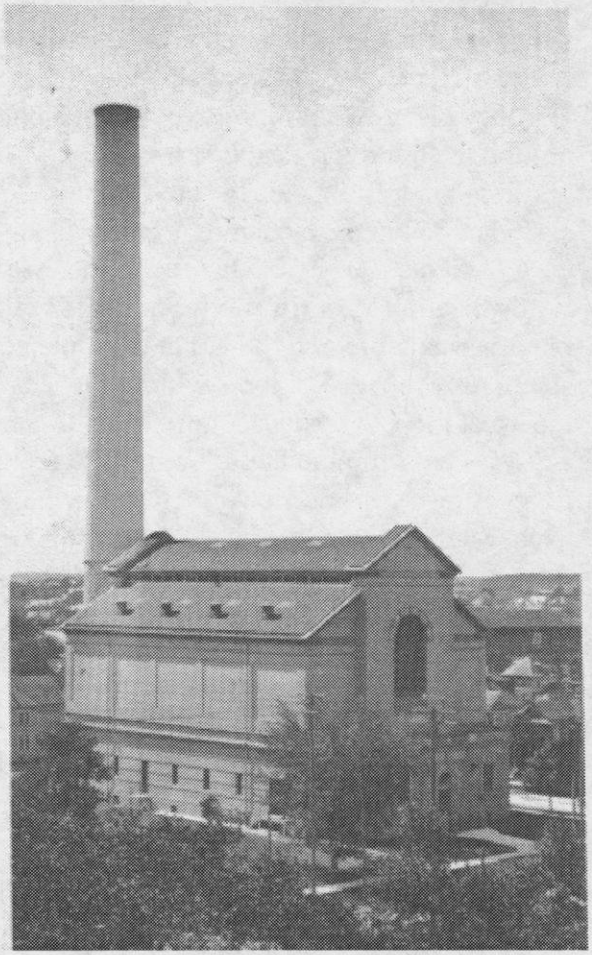


Fig. 2. The new university heating plant in 1908, University Avenue in foreground, looking south west, possibly from the roof of the chemistry building at University and Charter. [9/5 Heating Plant, jf-32]

ture Hall freed it up for the home economics department. The Washburn observatory and its offices and the solar and student observatories, were still heated by on site stoves and furnaces. The director of the observatories (George Comstock) discovered that the thermal effects from the agricultural heating plant stack and his own chimneys were adversely affecting his observations, and began to agitate for connections of the buildings to the central plant. Also the old heating plants were beginning to age badly. Engineering professor and steam plant superintendent, Storm Bull, had a litany of failures and obsolete equipment for the regents, with harsh observations about the increasing loads being applied to those old facilities.

Professor Bull and university architect Arthur Peabody (who consulted with Philadelphia architects Laird and Cret) began to work on plans for a new central plant, which would incorporate as many of the new developments in central heating as the university could afford. By November 1905 the regents had decided on a site (block 5 of the Brooks Addition, corner of University and Bruen [later Orchard] Streets], they resolved to purchase or condemn the property required to build at that site. Financial problems led them to delay the project until 1907.

Then in the spring of 1907 president Van Hise submitted to the board of regents the plans of "Architect Peabody and professor Bull respecting the new heating plant."[1] The regents adopt the plans and reiterate the previous choice of site and plans to condemn land needed to lay railroad tracks to the site. The resulting condemnation proceeding eventually came down to lawyers, guns and money as the owner A. W. Gratz presented armed resistance to the construction of the rail spur.[2] They also opened bids for the structural steel for the building at the afternoon meeting, selecting the Worden Allen Co. Authorization for bids on the building's construction was also passed.[3]

On June 25, 1907 the construction contract was signed by T. C. McCarthy, an old favorite of the regents, calling for construction of the entire building, except for the chimney and the erection of the structural steel, for $55,000. The job was to be completed by April 1, 1908. The chimney construction contract went to the Alphonsis Custodis Co. The foundations were ready for the steel erectors by August 27. The slow progress on the heating plant became a concern which architect Peabody voiced in a letter to president Van Hise in December 1907, "the limit of time on the contract is April 15th, 1908 but I believe it will be impossible now to complete the work within that time." He was right. The construction dragged on throughout 1908, Peabody and Bull allowed the chimney contractors an extension on their contract until June 15, 1908. The delays were not all McCarthy's fault. It was a huge project, involving several different contractors, using several relatively unfamiliar technologies (including structural steel framework, reinforced concrete, and a 250 foot chimney, at that time the tallest structure in Madison), and all oversight being handled by Peabody, a newcomer to

the position. Delays were inevitable. Peabody's reports to Van Hise reflect the progress through 1908. In September the coal conveyors were installed, the boilers were in place and connected to the chimney. Mainly piping was yet to be completed. Another incomplete item was grading and leveling around the building. Peabody had counted on using the earth from the tunnel excavation to do this grading, but as if on cue, the coal vaults at the old heating plant behind science hall collapsed and the earth had to be used to shore up those areas.

At last Mr. Peabody says "Steam was turned on in full on Friday night, January 1, 1909 and is now heating the University Buildings."[4] Except for minor finish work, and grading the heating plant was complete. It did not at that time heat any of the agricultural campus buildings, but fed steam only to the 'east loop' which reached as far east as the gymnasium. Not until late in 1909 was the 'west loop' to the agriculture campus completed and additional boilers for that load installed.

The completed building was 86 feet wide and 130 feet long. It was built with concrete foundations, steel framework covered with a new brick which matched very closely the color of the usual Madison sandstone used for previous university buildings.

Of the design, architect Peabody says: " The operation of the building with a central firing deck, a row of boilers on each side, coal bins overhead, and ash pits below lent itself naturally to a central portion, higher than the rest, with a roof of low pitch over this part and lower roofs on either side. This in fact follows the outlines and mass of a Basilica ...This was so simple to do that I surprised myself by finishing very rapidly." Mr. Peabody had apparently forgotten that consulting architect Paul Cret had executed a pair of drawings marked February 1907, now in the university archives, which show the basilica-like design clearly worked out by him. Indeed Mr. Peabody could have finished very rapidly, since only minor alterations were made to Mr. Cret's design.[5]
The 250 foot smokestack was designed for enough capacity to double the 4000 horsepower initially installed. A second heating plant was planned for the area south of the building to be connected to the stack. Because of technological advances (mainly forced draught techniques), the single building was eventually able to drive the stack to its capacity without the addition. The economies of scale, projected by professor Bull, were immediately realized. Comparing 1910 and 1906 showed that heated space went up 20%, enrollment went up 38%, outlay for heating rose only 2.5%.[6] The total cost of the project including tunnels was $267,523. This consumed a large portion of the university building budget for the period, although Van Hise and the regents were able to replenish the building fund, without much difficulty. The heating plant served the university well, not a single day of school was lost due to the construction or malfunction of the plant. Alterations were made to expand and extend the life of the facility. The red tile roof, skylights and other features were lost along the way. It finally became hopelessly obsolete after the explosion of enrollment after WW II, and was replaced in 1959. It now functions as a sheet metal and janitorial shop for the physical plant. The chimney was removed in 1990 as a precaution against collapse. The top four feet of the chimney were so deteriorated that they were pushed in by hand by the workmen.

1) *Regents Minutes,* April 17, 1907.
2) *Papers of the Executive Committee,*, October 7, 1907.
3) *Regents Minutes,* April 17, 1907. *Papers of the Executive Committee,* June 25, 1907.
4) *Architects report* for December 1908, papers of the Executive Committee December 1908.
5) *Peabody, Arthur*, Short Resume of University Buildings, pp. 11-12.
6) Report of the Regents 1909-1910, p. 12, *Wisconsin Engineer*, May 1923, November 1946; *Wisconsin Country Magazine*, January 1939, *Wisconsin Alumni Magazine*, February, 1948.

OLD FOREST PRODUCTS LABORATORY

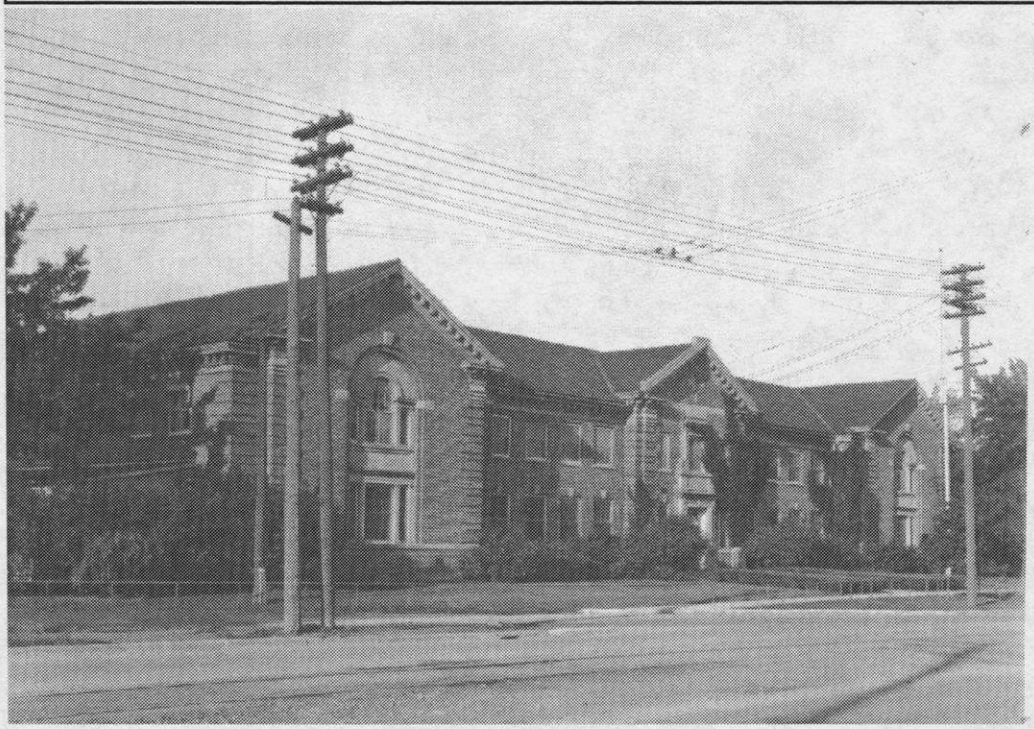


Fig. 1. The Forest Products lab shortly after completion c. 1910. [series 9/5 Mining and Metallurgy, jf-34]

Constructed in 1909, this building originally housed the Forest Product Laboratory. When Forest Products built a new lab in 1931 the building was taken over by Engineering's department of Mining and Metallurgy. That name has been changed to Material Science which is still in residence. The building was added to the National Register of Historic Places in 1985.

In 1908 the U. S. Department of Agriculture's Forest Service laboratories were scattered in various facilities in the eastern part of the country. The decision was made to establish a central facility to encompass all their investigations into wood products. Letters were sent (in October 1908) to major universities asking if they would consider hosting such a facility. A competition ensued in which the schools made continually escalating offers in an effort to obtain the federal facility. Wisconsin decided to offer a site with a building costing $30,000 in addition to the costs of heat, light and power.[1] The competition was narrowed to three: Wisconsin, Michigan and Minnesota, all schools with access to the forested areas of the upper Midwest and with strong engineering programs. In January of 1909 the U. S. Forest Service announced that Wisconsin had been chosen. Michigan congressman McGlaughlin then raised the argument that Michigan had not properly understood what was wanted and was now willing to make a larger appropriation for the laboratory than the Wisconsin offer.[2] In April the chief of the Forestry Service Gifford Pinchot, explained why Wisconsin had been chosen:

> The propositions of the three universities as to buildings were substantially equal ... I add that among the factors considered, the following were necessarily given special weight: building site, and equipment of power heat and light; courses in instruction in forestry, agriculture,

engineering and science generally; general accessibility to the forest regions of the east central valley and south...[3]

Among the reasons that Wisconsin wanted the forest lab were: the addition of about $30,000 worth of salaried jobs added to the city and state, the promise of assistance to the state's important lumber industry, and northern immigrant farmers.

In late April 1909, the regents settled on the University Avenue site, after considering a location on Linden Drive west of Agriculture Hall. Plans had already been accepted by the regents from the office of architect Arthur Peabody.[4] The actual designer of the building was Albert F. Gallistell, a draftsman employed in the architect's office.[5]

The regents advertised for contractor's bids on May 8, 1909. The lowest bid was T. C. McCarthy's for $44,424.[6] This was for a building whose entire cost had been estimated and appropriated at $30,000. The regents rejected all the bids. They raised the appropriation to $50,000. They requested Peabody to alter the design to obtain a bid within the appropriation. In order to do this Peabody consulted with McCarthy; they reduced the thickness of the foundations and walls of the upper levels, and omitted some decorative work at the front entrance. The altered building went back out for bids (June 28, 1909) and came back with an acceptable offer. Ironically it was not McCarthy who now had the lowest bid, but Kirkman Construction of Chicago. Ground was broken July 12, 1909. The contract called for the contractor to have the building finished by October first 1909. Peabody's report of August says that the building is progressing well, the foundations finished, the first floor walls nearly complete. On June 1910 the Daily Cardinal announces the grand opening and dedication of the forestry lab. The ceremony was held on June 4, 1910. Speakers at the dedication included governor Davidson, president Van Hise, and prominent lumbermen.[7]

The finished building was a handsome two story C-shaped Georgian Revival building of red brick 182 X 90 feet. It features a red tile hipped roof, a modillioned cornice and brick quoins. It was intended to harmonize with the agriculture buildings on the other side of University Avenue.

Little was heard about the forestry lab until the first world war broke out. Then there was a burst of activity and publicity. The government did an enormous amount of research on the new field of aviation at the forestry lab and other university buildings. In 1917 airplanes were made of wood and fabric. The lab made tests on various woods, laminating processes, glues, and production techniques. The work force swelled to sixty. By the end of the war the work and significance of the forestry lab had been permanently expanded. In 1931 a new and much larger forest products lab was built on the western edge of Madison. The old building was taken over by the Engineering department of Mining and Metallurgy, housed until then in the old heating plant behind science hall. A 1975 addition to the east end provided better access to the upper floors. In 1996 a $4.4 million two story addition (designed by HNTB architects of Milwaukee) was built on the south side of the building, which filled in the area between the wings and provided an access link to the ERB building. This addition was faithful to the original architecture of the building. [8]

1) *Regent's Minutes,* December 16, 1908. They were the University of Michigan, the University of Minnesota, the University of Illinois, Purdue University, Cornell University, Yale University, and the University of Wisconsin.
2) *Wisconsin Alumni Magazine*, February, 1909 p. 218.
3) *Wisconsin Alumni Magazine*, April, 1909 pp. 293-294.
4) Papers of the Executive Committee, April 6, 1909.
5) *A Tabular History of the Buildings of the University of Wisconsin*, Alden Aust, June 4, 1937, and the National Historic Preservation Nomination Papers, in the State Historical Society Historic Preservation Office.
6) Papers of the Executive Committee, May 24, 1909.
7) *Daily Cardinal*, June 2, 1910. The ceremony was delayed until 2 PM to allow visitors to watch the Washington-Wisconsin crew race.
8) Request for State Building Commission Action, May 23, 1973, series 83/35 box 16.

STOCK PAVILION

Fig. 1. Stack Pavilion shortly after completion c. 1915. series 9/3 Stock Pavilion, jf-35]

The Stock Pavilion was built in 1909 to provide a home for the University horses, and for state-wide livestock shows. Because it had more seating than any building in Madison until 1930 it was a common host to large public performances. It was added to the National Register of Historic Places in 1985.

In 1905 agriculture in Wisconsin was carried on by horse power. The development of the tractor was a few years in the future and the breeders and sellers of horses were a powerful elite in the state. Among them was Wisconsin's Secretary of State Walter Houser. Beginning in 1903, a horse show and auction was held on the university campus in February for the states farmers. Because of the importance of the horse to the farmers, these shows were heavily attended. Finally in 1905, the show (featuring the famous six horse team of Pabst Percherons), became too large for the existing facilities at the Dairy Barn pavilion, and Agriculture Hall. Dean of agriculture William Henry proposed to president Van Hise (who never saw a building proposal he didn't like) that a committee be appointed to investigate the building of a large pavilion for the campus. This committee included Pabst, and other well known horse breeders. They recommended to the governor in 1906 that the legislature appropriate $80,000 for such a pavilion. This was accomplished, and in the following year, university supervising architect Arthur Peabody, and animal husbandry professor George Humphrey, toured other facilities around the country for ideas on the new building.[1]

In January 1908, Van Hise offered Laird and Cret, the universities architectural planning consultants the job of designing the pavilion. The design was done principally by Laird and Cret with

input from Peabody, Van Hise and the university faculty. The size of the building was unusually large for a stock pavilion and was decided by the university horse foreman, careening around the proposed site in a fast gig, for the architects.[2] The final plans were approved by the regents on April 29, 1908. The estimated cost was $83,000 including steam tunnels to the site from the new central heating plant. It was desired that the pavilion be ready for the Farmer's Course in February 1909.[3] The building contract was let June 18, 1908 for $69,464 to local and regular contractor T. C. McCarthy, and the steam tunnel contract to the Mueller Co. of Milwaukee for $24,472. The contracts specified a completion date for the building of June 15, 1909, a few months later than the regents had hoped.

The monthly reports of supervising architect Peabody show that by January 1909 the shell of the building was almost entirely enclosed, and that by February the agricultural department was using the building and interfering with the work. One dramatic use of the building before its completion was the famous slaughter of the University dairy herd to prove the accuracy of the new bovine tuberculosis test. The keys to the completed building were turned over to the dean of agriculture in July 1909, only a month over schedule. By the time of the completion of the stock pavilion, Dean Henry had retired and his place taken by Dean Russell, who is often given credit for the genesis of the building.

The completed building was 115 X 212 feet, two stories and an attic in height, though the irregular massing of the structure makes it seem much larger. It was mainly occupied by the amphitheater, a two story, sawdust floored, 66 X 164 foot elliptical arena with fixed seating for 2,000 people, expandable with chairs to about 3500. Curtains enabled the space to be partitioned into smaller areas for classes. Under the amphitheater seats were about 40 horse stalls, including veterinary stalls. Offices, tack rooms, and operating rooms filled out the first floor. The second floor plan had more offices and storage space, some of which was intended to become living quarters. The amphitheater was large and convenient enough to be used as indoor recreational space for the agriculture students, and was used for that purpose, including football games, with "shower baths and other conveniences on the upper level."[4] The building is designed in a United States indigenous style using elements from Medieval English and Tudor Revival styles. The foundation and first floor are red brick with concrete trim. The upper stories are of yellow brick with applied concrete beams for a half-timbered effect. The roof is covered with green tile, unusual on a UW building.

At the time of its completion, the stock pavilion was the largest gathering place in Madison, and remained so until 1930 when the field house was built. The stock pavilion also had unexpectedly fine acoustics. As such it quickly became the site of much more than animal shows and animal husbandry classes. University president Glenn Frank once referred to the building as the "cowlesium". Various sources list performances in the stock pavilion by: The U. S. Navy Band, Paderewski, Galli-Curci, Sergei Rachmaninoff, Marion Anderson, Nelson Eddy, the Chicago and London Symphonies, and speaking appearances by William Jennings Bryan, Theodore Roosevelt, Harry Truman, and William Howard Taft.[5]

The structure of the stock pavilion is almost completely intact. The only alterations to the building have been minor changes to the interior rooms. The draft horse built the Stock Pavilion and it remains a useful part of the university even now when the words 'draft horse' conjure up a picture of an era long gone.

1) *Wisconsin Country Magazine*, February 1954 p. 5, February 1937, p. 8, February 1949, p. 6; Nomination Papers National Register of Historic Places, State Historical Society Historic Preservation Office; Communication from Secretary of State Walter Houser to the Regents, Papers of the Regents, April 17, 1906.
2) *Early History of Animal Husbandry and Related Departments*, Gustav Bohstedt, 1973, p. 35.
3) *Minutes of the Regents of the University of Wisconsin,* February 18, 1908.
4) Report of the Director of the Wisconsin Experimental Station #25-26, p. 3. The showers and lockers were added in 1910.
5) *Wisconsin Country Magazine*, February, 1951, p. 8.

LATHROP HALL

Fig. 1. Lathrop Hall from the south west c. 1926. [series 9/1, Lathrop Hall, x25-1300]

Lathrop Hall was built as the gymnasium and social center for University women in 1910. The social functions were transferred to the Memorial Union in 1927. Many significant events affecting women's physical education took place at Lathrop. A major restoration is currently planned.

When Charles Van Hise became president of the university in 1903 he brought a determination to extend the benefits of a university education to all students who wanted it. This especially included women students who had first been admitted in the 1860s. The women had no university facilities outside of Chadbourne Hall, originally called the "Ladies College". Van Hise meant to end this situation. He succeeded to such an extent that by the late 1920s the men's facilities at the university were distinctly inferior to the women's. The women had on-campus dormitories, a modern gymnasium, and a social center, all of which the men lacked. The first project which helped bring this about was the construction of Lathrop Hall.

The regents with Van Hise's urging had appointed an architectural commission, consisting of University of Pennsylvania architectural professors Warren Laird and Paul Cret, and the university supervising architect Arthur Peabody. The work of this commission was to produce a cohesive plan for the orderly expansion of the university. The very rapid expansion and disorganized growth of the buildings of the university made clear the need for such a master plan. While the resulting plan was

delivered to the regents in 1908, it was never formally adopted or rigidly followed. Still it influenced the thinking of the university planners for decades to come. The commission was committed to a plan that would gracefully absorb the best of the old buildings on campus, notably North, South and Bascom Halls; since they were regarded as particularly good restrained classically influenced designs executed in local material (Madison sandstone). The general plan called for a group of buildings for women students, to be located near the corner of University Avenue and Park Street, the existing site of Chadbourne Hall. The commission was responsible not only for the general plan but for the design of specific buildings for which there was immediate need.

The opening of the armory and gymnasium (the red gym) in 1894 had given the men a suitable physical education facility, but despite petitions the women were not allowed to use it. The 1895 remodelling of Chadbourne Hall added a women's gymnasium was added, but it was quickly outmoded. In his first report to the regents, Van Hise stressed this problem: "Last year there were in the university five hundred thirty five young women. ... There is an immediate need for a commodious and modern building, which will serve as a gymnasium and social center for the women of the University."[1]

In this context the commission designed Lathrop Hall. Preliminary studies were underway in late 1906. It was intended by the commission that the building serve the dual purpose of gymnasium and social center until a separate women's union was built, at which time the building would revert to housing only a gymnasium. The commission had preliminary drawings of the proposed "Women's Building" ready for Van Hise to show the legislature by February 1, 1907. They specified that the building would be faced with Madison sandstone and would form part of a quadrangle of women's buildings. The legislature promptly approved the appropriation for the building. The plans were then presented by Peabody to various faculty members who would have the most to do with using the new building.[2] By October 15, 1907, the revised plans were complete and ready for bids. There were further changes made after this date and the regents did not advertise for bids until January 1908. When the bids were opened March 16, 1908, the lowest bidder was T. C. McCarthy with a bid of $175,574.

The contract with McCarthy was signed April 14, 1908. The contract specified that the building should be enclosed by December 1, 1908, and "the entire building in all its parts shall be completed on or before September first, 1909".

Ground was broken May 1, 1908. By the end of the summer, all the walls were up to the level of the second floor. The work continued smoothly into the late fall and winter. By February 1909, the walls were all erected, the roof completed and finish stonework was begun. The heating and plumbing systems were completed by April, 1909. In May 1909, a fire at the planing mill of J. H. Findorff destroyed all but a small portion of the finish wood trim for the building. In June 1909, the regents approved some changes to the interior layout of the fourth floor to include administration offices. The regents building committee on equipping the Women's Building met October 5, 1909 estimated the cost of equipment at $36,282. About this time Abbey Mayhew complained that only 500 lockers would be available in the gym. She estimated that they would need at least 800. This would not be the last time that the people who had helped plan the facility would revise upward their estimates.[3]

In late 1909 the question had arisen of what to name the building, a suggestion was received from the students that it be named Adams Hall apparently after Mary Adams the popular and recently deceased wife of ex-president Charles K. Adams. Some regents objected to the foolishness of calling the women's building "Adams Hall", proposing that "Eve's Hall" was more appropriate![4] President Van Hise offered Lathrop Hall as a compromise and it was accepted.

The grand opening was held on April 1, 1910. As described by the Wisconsin Alumni magazine: "Lathrop hall, the new women's clubhouse and gymnasium, was dedicated with appropriate

exercises in the presence of a large audience of alumni, students, faculty, and citizens of the state..." President Van Hise presided, and the guest of honor was Gardiner Lathrop, the son of John H. Lathrop for whom the building was named.[5]

The finished building was an elongated H-shape, with a four story center section and two five story wings on the east and west ends. The style is a highly refined Renaissance Revival design mainly executed by Paul Cret of the commission who was near the beginning of a long and award winning architectural career. The building had a red tile roof with skylights on the south slope. It is one of nine campus buildings that were designed and built with the aid of the Architectural Commission of Laird, Cret, and Peabody. The Lathrop Hall Historic Structure Report says of the design "Lathrop Hall is an especially skillful and impressive design that shows great respect for the Roman and Florentine models on which it is based."[6] The imposing aspect of the building up on its hill overlooking University Avenue has undoubtedly been diminished by later development (Barnard to the east, Chamberlin to the west, and Birge and Law to the north). Architectural Historian Timothy Heggland says that except for the Stock Pavilion Lathrop is the most original and best preserved of the commission's buildings.[7]

The new building with its huge second floor gymnasium, concert hall, stage, swimming pool with lockers, a running track, kitchen and social rooms, bowling alleys, a laundry, and a theatre was immediately popular with the women of the university. The only serious flaw in the building was the increasingly common one at the university, that improved facilities attract more enrollment, which swamps the size of the initial plan. By 1914 lockers and dressing rooms were being added to Lathrop. During the first world war Lathrop and the men's gymnasium were used as barracks for the Student Army Training Corps. The crowding problems were generally addressed by further building (as predicted by the commission) when Barnard Hall (1912) freed up the dining and kitchen spaces in Lathrop; but especially by the construction of the Memorial Union (1927) which allowed all the social spaces in Lathrop to revert to the physical education department. Lathrop Hall became nationally significant due to the work of two faculty members, Blanche Trilling and Margaret H'Doubler. Trilling, hired as director of the Women's Gymnasium in 1912, founded the Athletic Conference of American College Women (ACACW) in 1917, a nationally important organization now known as College Women in Sports (CWS). Trilling also hired and encouraged H'Doubler. H'Doubler founded at the U.W. the nation's first dance curriculum, which in 1926 offered a major in dance, another national first. A large number of dance departments at American Universities were later founded by students of H'Doubler, who retired from the university in 1954.[8] Also of historic significance is the work at Lathrop Hall in kinesiology (the study of body movement) by professor Ruth Glassow.

A major restoration project for Lathrop will begin in 1996. The projected use is for the dance department to occupy the lions share of the restored building with the Department of Continuing and Vocational Education (CAVE), moving from the Teachers Education Building to the basement of the restored Lathrop Hall. The projected cost of the restoration is approximately $7.2 million. The remodelled performance areas will be named the H'Doubler Performance Space.

1) Report of the Regents of the University of Wisconsin, 1902-3 and 1903-04. pp. 39-40.
2) These included Cora Woodward (adviser of Women), Dr. George Elson (director of the Department of Physical Education), Florence Buckstaff (a university regent), and Abbey Mayhew (Director of the Department of Physical Education for Women).
3) A. S. Mayhew to Van Hise, November 28, 1909.
4) Wisconsin Alumni Magazine, February 1909 p. 209.
5) *Wisconsin Alumni Magazine*, May, 1910 p. 329. *Wisconsin State Journal*, April 1, 1910, p. 6.
6) *Historic Structure Report Lathrop Hall*, University of Wisconsin June 1993 Vol. 2, p. 25
7) ibid. p. 26
8) ibid. vol. 2 p. 1 (program uses)

BIRGE HALL

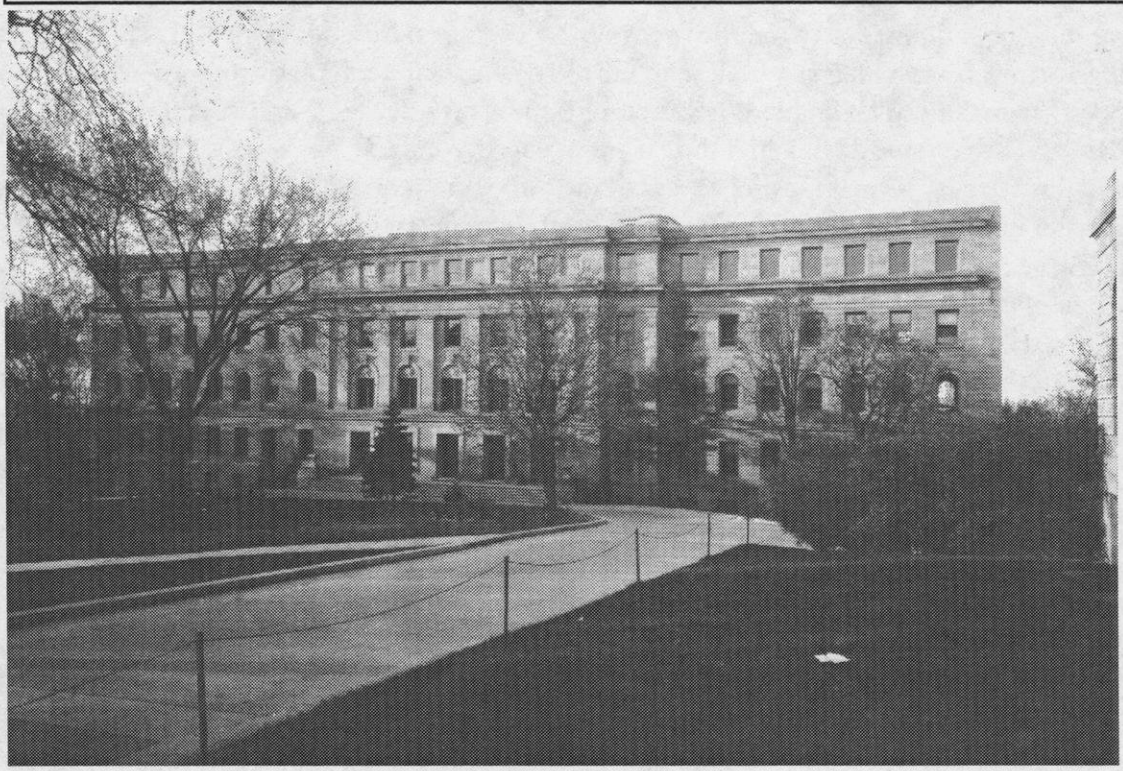


Fig. 1. Front (north) entrance of Birge Hall, c. 1950. [series 9/1 Birge Hall,]

Designed to alleviate the crowding of Science Hall, Birge Hall (then known as the Botany building), opened in August of 1912. A ten story wing was added on the west side in 1956, and the library section on the east in 1980. The building was renamed Birge Hall in 1950.

When Science Hall was designed in the 1880s it was believed to be large enough to house all known science departments for the indefinite future. By 1900 some of these departments (i.e. engineering, physics and chemistry) had already outgrown their space in science hall. The life sciences were close behind. In 1905 Dean of Letters and Sciences Edward Birge recommended to president Van Hise that he ask the legislature for an appropriation for a Biology Building to alleviate the crowding. The building was envisioned by dean Birge as housing the departments of zoology and botany, leaving science hall to physics, geography, and anatomy.

However, with both the central heating plant and Lathrop Hall underway by 1907, the biology building did not percolate to the head of the priority list until 1908.[1] Plans were in flux: "Preliminary drawings for this building are begun, and conferences with the departments of Botany, Zoology and Medical Science are being held almost daily."[2] The first discussions of the design of the building hinged upon the work of Peabody, Laird and Cret, the consulting architectural commission, and followed the general layout of the general plan of 1908 for the grand "court of honor" atop Bascom Hill. This court was intended to be a large open courtyard flanked by Bascom Hall on the west, open to the east, and flanked to the north and south by museum buildings for the college of letters and science. Except for Lathrop Hall, the Biology building would be the first application of the general

plan to a particular building. Some drawbacks of the plan became immediately evident. The proposed placement of the buildings for the "court of honor" were not especially precise. When the time came to place the building, because of the proximity of South Hall, the needs of the observatory, the requirements of the plan for women's dorms, and the extreme steepness of the grade, no one exactly agreed on exactly where the general plan meant for the building to go. This issue was taken up by the architectural commission and Van Hise. Late in 1909 the issue was finally decided by placing the building as far as possible to the north (up the hill) as possible. The decision was also made to build only the center section of the U-shaped building first and leave the two wings, intended to project south (down the hill) until later. The regents also decided, for unknown reasons, but perhaps to regain lost time, to bring in another architect to work on the project, Jarvis Hunt of Chicago. Hunt and Peabody exchange letters, data, and ideas throughout early 1910. On March 3, 1910 the regents approved Jarvis's preliminary outlines and elevations, with suggestions to reduce the height of the building to reduce costs.[3] The plans also are reviewed by the heads of the departments who will occupy the building. In what must stand as a record for early complaint about crowding in a university building, the regents report of 1909-1910 page 37, a year before the building was begun, called for an addition to be made to alleviate crowding in the college of letters and science. In January of 1910 the regents approved the plans and in June of 1910 specifications are finally ready for bids. The specifications called for construction to begin by July 1, 1910, and be finished by October first 1911. The contract was let to T. C. McCarthy for $201,941 about June 21, 1910. The excavation for the biology building was begun on July 13, 1910.

In December 1910 the architect was instructed to omit the windows and trim from the west end of the building, in anticipation of building a wing on that side in the near future. This would result in about $3000 savings on the contractor's bill. That end of the building would be finished with buff brick in an attempt to present a finished appearance. Throughout the winter of 1910-1911 the building progressed, slowly because of a scarcity of stone cutters. The first floor concrete was finished in February of 1911. In March the Madison Brick Yard ran out, which halted work for a week while brick was shipped from Chicago. During the summer of 1911, the architect complained to the contractor that there were still not enough stonemasons on the work. On March 13, 1912 the regents called contractor McCarthy before the board to explain the delays, and he promised to have the building done by August 12, 1912. A metal workers strike in Milwaukee slowed up progress of the building. By November 1911 the building was nearly enclosed. By August of 1912 the building was complete except for clean up and some details. The contract for furnishing and equipping the building had been let to J. H. Findorff in March of 1912 for $26,975. In November 1912, Peabody and the heads of the departments held a conference that damned the building with faint praise: " the requirements of the Departments have been pretty thoroughly carried out."[4] Engineering professor Turneaure recommended withholding final payment to McCarthy pending a report on the cracking of the stone veneer. The building was more than a year late, and had cost $200,000. Except for the difficult and technical central heating plant, this was by far the most expensive building yet erected by the university.

In his report to the regents of 1912, Peabody says:

> The Biology Building was occupied in August, 1912. This building comprises a main portion 49 feet wide by 240 feet long, including basement, ground floor and four stories; together with an auditorium portion 74 feet by 50 feet in size, containing a subbasement, basement, first and second floors. The floor area of the entire building exclusive of the greenhouses is 80,000 square feet ... The building is faced with Madison sandstone and the construction is fireproof in character. The building while in the same general style as University Hall [Bascom Hall], has a rather more severe architectural treatment.[5]

On entering the building from the face on Bascom Hill one sees:

> Biological specimens of general interest which fills most of the ground floor of the main building. Passing straight through the museum doors on both sides open into the auditorium, which seats about four hundred. There are two floors below this, the basement, which contained the department of plant physiology, and the sub-basement containing labs and work rooms which opened directly into the greenhouses to the south of the auditorium. Staircases from the museum give access to the upper floors, which housed research labs, chart and dark rooms, a herbarium, offices, lecture rooms, a library and Prof. Owen's butterfly collection.[6]

The new biology building provided a great deal of immediate relief not only to the departments moving into the new building but to those, particularly physics and geography who remained behind in science hall. The new space caused by the removal of botany and zoology would remain ample for only a short time, until in 1916 a separate physics building would become necessary. The growth of the university was beginning to outstrip the resources, and the foresight of even visionaries like Van Hise, and the architectural commission (which planned for a maximum of 20,000 students).

The building of the anticipated wing to the biology building did not quickly take place. Starting in the 1930s the crowding in the biology departments began to reach crisis proportions. In a letter to president Glenn Frank, the head of zoology M. F. Guyer says: "The staff of the department of Zoology is at its wits end ... No more internal compression is possible." He complains that the department is turning away good grad students and researchers. He points out that "whole colleges have fewer students in their entire college than Zoology has in a single class, yet they rattle around in numerous buildings like peas in a pod."[7] It would not be until 1955 that ground was broken on a 10-level 54 X 138 foot wing to the west side, projecting back down the hill to the south. The cost was $1.4 million, and its design was debated on esthetic ground by several regents. After delays caused by labor unrest in 1956, the wing was finished. In 1980 a new addition, replacing the vivarium with a two story library wing, brought the building to its current [1993] configuration. On June 9, 1950, a week after the death of Edward A. Birge, the university formally renamed the biology building Birge Hall.

1) Some speculate that because of Birge's disinclination to push for his own department, in an effort to remain impartial, the building may have been delayed more than necessary.
2) Report of the Supervising Architect, September 1908, in the Executive Committee Papers, September 1908.
3) Peabody to Hunt, March 7, 1910. There is also in the archives a water color elevation by Hunt of a grand domed biology building clearly placed on the North side of the court, with steps down to the lake, it is undated and probably represents a very early design iteration.
4) Report of the Supervising Architect, November 1912, in the Executive Committee Papers, November, 1908.
5) *Regents Report*, 1912-1914, p. 339.
6) *Wisconsin Alumni Magazine*, October 1912, p. 18.
7) Guyer to Frank, January 29, 1936.

433 N. MURRAY STREET

Fig. 1. Spring 1994: 433 N. Murray Street, was built about 1910 as a replacement for an older family house; the third floor was added in 1914. The building was used as University offices, starting in 1966, and was demolished in 1994. [Author Photo AP-2]

Built as apartments about 1910 and occupied, among others, by William Ellery Leonard and Helen C. White, this building was purchased by the University in 1966, and used as offices until its demolition in 1994.

As early as 1902 there was a home at 433 N. Murray Street. After its reconstruction into flats in 1914, the building came to be occupied mainly by University staff and faculty and other public figures. These professional people included W. D. Stovall, an attorney general, aldermen, and a manager at the forest products lab. The buildings most famous tenant, William Ellery Leonard, appeared at the Murray Street address in 1925. He lived there on the third floor with his wife Charlotte until his death in 1946. Leonard had developed a well publicized phobia about crossing train tracks, and the Murray street house gave him excellent access to the University and city without that exigency. In 1958 Professor Helen C. White moved into the first floor apartment. Professor White lived there until 1967. Her flower gardens became a striking feature of the house.[1]

In July of 1964 the University needed parking space for the new Peterson building. Mrs. Miles Robinson, who had owned the house since the early 1930s and lived there since 1950, agreed to sell the property to the University for $65,000. This money came from money for the Peterson building project and the University parking fund account. Mrs. Robinson and Helen White were allowed to live in the building rent free until June 30, 1966. When this agreement expired, the University paved most of the lot for parking and moved offices into the building. These included the housing Bureau, minority applications, international admissions, and the campus tour office. In the summer of 1994 due to parking pressure, the declining condition of the structure, and the difficulty in meeting state handicapped access codes, the building was demolished.

1) Madison City Directories, and City of Madison building permits.

CARROT AND BEET LAB

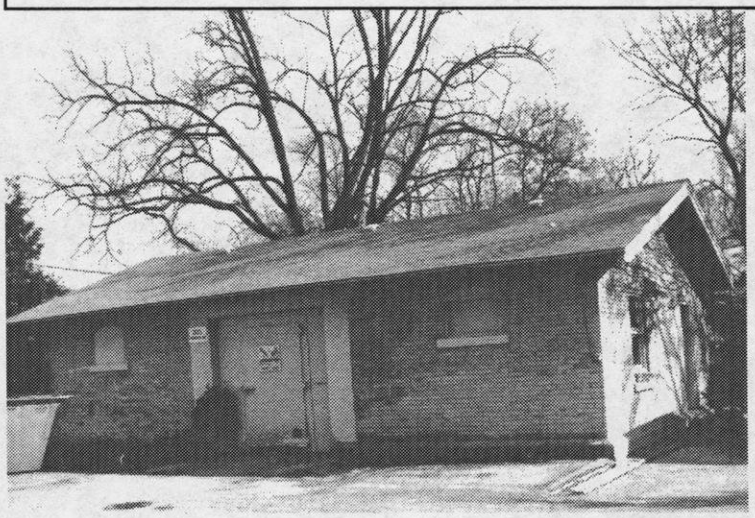


Fig. 1. The carrot and beet lab 1994. The building was constructed in the fall of 1910 as an animal isolation facility. Not visible in this picture is the 12 by 15 foot protrusion on the back of the building, originally a crematorium. [Author Photo AP-3]

In 1912, Dean of the Agricultural College Harry Russell notes that a "one story brick building equipped with a crematory furnace has been constructed at an expense of $1500, west of the farm buildings." He further says that the building was designed as a quarantine establishment and is in constant use for the production of hog cholera anti-serum.[1]

Hog cholera was a highly contagious viral disease widespread at the turn of the century. Dr. Burr Beach of the University of Minnesota, who came to Wisconsin in 1911, applied modern sanitation and refinement to a Minnesota breeder's inoculation technique to produce hog cholera serum. He was in charge of the University's manufacture of serum.[2]

According to the monthly reports of campus architect Arthur Peabody, the building was planned and specified in September 1910. Construction began October 1, 1910, and in the December 1910 report Peabody says the building could be used when required. Unusual among permanent University buildings, there was no contractor hired. Mr. Peabody oversaw the construction, which was performed by University laborers, and paid for with funds requisitioned by Peabody.[3]

The inclusion of a crematory furnace as part of the building was due to an outbreak of anthrax in the University dairy herd in the summer of 1909. A single animal was infected from waste discarded by the state lab of hygiene, and before a correct diagnosis was made, infected the barns and stalls, and the land where it was buried. During the fall and winter of 1909 losses in the cow and swine herds were considerable. The need for quarantine and disposal facilities was the impetus behind the construction of this building.[4]

A second serum plant was erected in 1914. After the control of hog cholera in the state in the 1930s, the building was turned over to other uses. In 1960 the building was repaired and modified by the installation of a cold room, and the change of the crematorium to a utility room. The building has every since been in use as the carrot and beet lab.[5]

1) *Regent's Report,* 1911-1912, p. 100; *Report of the Agricultural Experiment Station*, 1913.
2) *The Capital Times*, January 4, 1953.
3) Architect's Reports, Executive Committee Papers, September-December, 1910.
4) Report of the Director, Agricultural Experiment Station, 1909-1910, pp. 7-10.
5) Planning and Construction hanging file 7/3.

SERVICE BUILDING

Fig. 1. The Service Building after additions c. 1926. [series 9/5, Heating Plant and Service Building, x25-2923]

Built in 1910 for shops and the storage of bulk material, the service building was added to in 1921. It now contains shops and offices of the University physical plant.

The need for storage space for the university physical plant became clear to supervising architect Arthur Peabody, when in 1907 during the construction of the Stock Pavilion, the central heating plant, and Lathrop Hall, work was slowed and sometimes halted because of a shortage of concrete. These problems were caused by strikes in manufacture, transportation, but partly because of lack of storage. He proposed to the regents that the university build at some central location, a facility which would supply storage for goods which could be bulk purchased at good rates and stored until needed.[1] As time passed and the plan matured, Peabody decided that the building should also provide a space in which the various trade shops (metalworking, carpenters, plumbers, etc.) could be removed from their various and scattered locations across campus and housed under one roof. In April of 1910 the regents agreed to build a shop building "to be located near the central heating plant, at an estimated cost of $20,000.[2]

The regents opened bids for the shop building on May 20, 1910 and selected T. C. McCarthy. McCarthy's contract is dated May 20, 1910, for $23,323, and agrees to have the "shop and storehouse building completed on or before October 1, 1910."

Fig. 2. The original service building, before addition, four stories of concrete with a flat composition roof c. 1910, the central heating plant looms next door. [series 9/5, Heating Plant and Service Building, x25-2924]

Mr. Peabody's monthly reports show the building rising smoothly, throughout the summer and fall of 1910. By November some bulk material was being stored in the building. In December, steam was turned on, and the job of moving the carpenter's and electrician's shops was underway. In February of 1911, Peabody reports that "all physical departments have finally been installed in the Shop Building. The first floor has been filled with cement to the amount of about 20 [rail] cars." The large doors at ground level were sized so that a team of draft horses could drive directly into the building. It is now trucks which use these entrances. Peabody in his memoir deprecates the appearance of this building as being ungainly and strictly functional.[3] (See Fig. 2.). The original building was 63 by 75 feet, four stories high with a flat roof.

By 1920, after a prolonged expansion of the university, the shop building was too small and it was decided to enlarge the building. The regents first request plans for the expansion in March 1919. Plans were approved in the summer of 1921. Peabody's plans for this expansion call for a second four story section to the east of the old building. They also include a two-story extension on the front of the building for an electrical substation. The construction contracts were let to J. H. Findorff for $66,000 in the fall of 1921. As Peabody remembers it he massages the plans of the expanded building to include a tile gable roof, skylights (since removed) and a number of small details which combined to make a far more attractive building by reflecting the architecture of the Central Heating Plant next door. (See Fig. 1.)[4] This addition slightly more than doubled the size of the original building.

This construction brought the building to its current [1993] configuration. The growth of the campus has made this sturdy and centrally located building a valuable commodity which is again too small for the shops. Many of the physical plant shops have been moved to other locations, and much of the service building is taken up by physical plant offices.

1) Statement, Arthur Peabody, series 24/8/10 box 5, undated but apparently 1909.
2) Regents Minutes, April 20, 1910.
3) Memoire, Arthur Peabody, Archives Peabody biographical file. Architects reports in the Executive Committee Papers, June-December 1910.
4) Regent's Minutes, March 6, 1919, June 24, 1919, June 21, 1921; Executive Committee Minutes, September 30, 1921,

SEA GRANT BUILDING

Fig. 1. 1969, The poultry building (on the far right) with associated chicken coops or "long houses" before its reincarnation as a rehabilitation facility and sea grant administration offices. [series 9/3 Poultry Houses, jf-36]

Built in 1910 as the home for poultry husbandry, this building has provided temporary quarters for a broad range of academic and support programs. It is now occupied by the administrative offices of the sea grant institute, a federal research program.

In the early years of his tenure as dean of agriculture, H. L. Russell created an enormous number of new departments in the college of agriculture. One of these was Poultry Husbandry in 1909. Dean Russell hired, to head this new department, James Halpin of Michigan. Since the department was brand new it had neither facilities nor stock. The stock was provided by donors from the Wisconsin Poultry Association. The regents opened bids for the building on December 30, 1909, and later that winter the foundations were built by university labor, apparently including Halpin's. The building was not finished that winter, and the work of the new department was carried out in the basement of the stock pavilion. In January of 1910 the regents signed a contract for the construction of the superstructure of the frame poultry building with C. B. Fritz of Madison for $3427. The contract specified that the building be finished within ninety days of the contract date. While that might seem like an unreasonably short time for the work, it was not. In the job specifications for the poultry house, architect Peabody says: "The University has already excavated for the foundation walls, piers and other work below the first story level and has placed the concrete foundations and walls, piers and window frames and first story floor which is constructed of concrete in such a manner that the wood superstructure can be erected upon it."[1] The following summer Halpin and his students built the "long houses" for the chickens in the space to the west of the poultry building proper [see Fig. 1.] [2]

In the 1910 regents report dean Russell says: "The buildings for the newly organized poultry department, consisting of a two-story and basement general utility house, costing about $4000, three permanent laying houses, and twelve moveable colony houses, have been built this last year."[3] Under

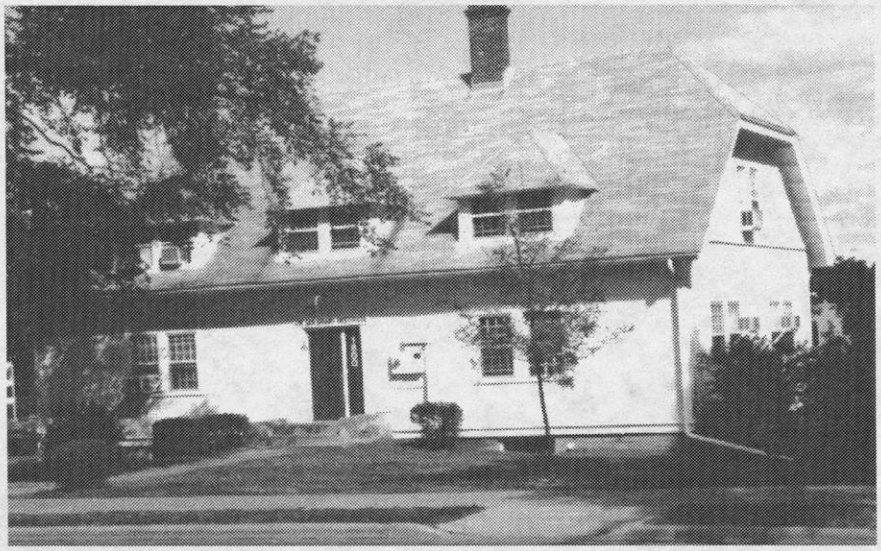


Fig. 2. The Seagrant building from the south side of University Avenue in 1993. [Author Photo AP-4]

Halpin and his successor Professor Bird, the poultry husbandry department had enormous success, which eventually reduced the utility of the little building on the western edge of campus. By the middle 1950s a few of the departments members still had offices in the "poultry building", but much of the department had moved to Hiram Smith Hall, recently vacated by the dairy department. The poultry department stayed in Smith Hall until the move to animal science building in 1972, at which time the dean of the college of Agriculture Dean Pound was referring to this building as "the shack across the tracks".

Meanwhile the house on University Avenue had an astonishing array of occupants: in 1959 the last of the poultry department left and the building was occupied by the Wisconsin Stock Breeder's Association, in 1960 the Stock Breeders were joined by the UW entomology department; a year later the U. S. D. A. arrived to carry out the study of bee culture; in 1963 the U.S. D. A. Entomology Research was the sole tenant. 1964 saw the arrival of the UW Computing Center, which remained until 1968. The Computing Center moved to the new Computer Science building in 1969, when the old poultry building was occupied by the Rehabilitation Counselling Center. The RCC stayed only until 1975 when they moved to the new hospital and clinics complex on Highland Avenue.[3]

Their place at the old poultry building was taken in 1975 by the Sea Grant Institute. Sea Grant is a federally and state funded research institute which oversees grants for research in fields relating to the development of maritime resources, this charter was later expanded to cover research in the great lakes as well as the oceans. There are a number of sea grant colleges around the country. Only the administration offices of Sea Grant are at the old poultry house; Sea Grant does no research itself. They fund related facilities on campus such as the hydraulics lab, limnology etc.

Though surely never intended to be a long lived structure, its regular upkeep and fundamentally sound construction have kept it in good enough condition to be an ongoing and useful part of the University physical plant.

1) Specifications for the Poultry House, Arthur Peabody, series 24/8/10 box 5.
2) Early Days of the University of Wisconsin Poultry Department, J. G. Halpin, 1959. Poultry Science departmental files: series 9/20.
3) Report of the regents of the University of Wisconsin, October 1910 p. 155.
3) University and City Directories.

HIRAM SMITH ANNEX

Fig. 1. Hiram Smith Hall on the right, Smith Annex on the left, from the north 1993. [Author Photo, AP-5]

Built in 1909 as expansion space for the dairy school, the Smith Hall annex has since been home to veterinary science, the poultry department and is now laboratories for the soils department.

In 1908 the regents, with the encouragement of the new dean of agriculture H. L. Russell, decided that the best way to alleviate the crowding in the agriculture long courses was to erect three new buildings, one of which was an annex to the dairy building to be built in the rear of the dairy building.[1] This building was initially planned to be a basement and one or two stories at an estimated cost of $9000. The plans for the dairy annex were drawn up by the office of Arthur Peabody, the university's supervising architect in December 1908. By the summer of 1909 the building plans were ready for bids and were put out for bids at the same time as the plans for the west wing addition to the engineering building on Bascom Hill. Bids were sought in June of 1909 and opened on July 19, 1909, when the regents selected T. C. McCarthy who bid $57,683 for the construction of both projects, the dairy annex and the engineering wing. McCarthy's bid is not broken down between the two projects, but judging from the University's bookkeeping, the part of the bid for the dairy annex was probably about $11,000.

The specifications for the job specify that there was a frame structure (of which no other record is found) on the site of the annex, which to be removed as part of the contract. The old building was to be demolished, but the basement under it would be used as part of the basement for the annex. Construction on the dairy annex was begun immediately after the contract was signed, about

July 21, 1909, and the earth removed from the excavation was moved to the site of the horticulture potting house and greenhouses then on the drawing boards.

By December of 1909, the building was ready for the pouring of the second floor concrete. By March 1910 the walls were complete and roof trusses were in place. Through the summer of 1910, despite short delays due to labor difficulties, supply problems, and the overextension of the contractor, the building went steadily ahead. In September 1910, architect Peabody reports: "The building was practically completed during the month of September a few minor details still needing attention."[2]

In Dean Russell's report to the regents in October 1910, the dean describes the new building:

> The facilities of the dairy department have been increased by the erection of a two-story and basement building, 46 X 84 feet, immediately in the rear of the old dairy building. The basement will be used for additional working space for creamery machinery and foreign cheese work, the first floor for a dairy laboratory for long course students, and for milk supply work, while the upper floor includes lecture and locker space.[3]

The finished building cost $13,275.35 and was built with concrete foundation and floors. The exterior walls are of hydraulic pressed brick, the sills, courses and other cut stone work are of Bedford limestone. The second floor has applied decoration reflecting the style of the earlier Hiram Smith Hall to the west and the later soils annex to the north. The roof is red tile.

This building is in such an obscure location that few people on campus even know of its existence, and in fact the current occupants [1993] do not get direct mail delivery, but have their mail delivered to the soils building and transferred from there.

The dairy department did not find permanent relief in the annex. Some old-timers in Madison remember getting free buttermilk from the dairy labs in the annex during the 1930s. The department continued to expand and moved into other quarters around the agriculture campus including Agriculture Hall and the old agronomy building at 440 Henry Mall. In 1953 the department moved into Babcock Hall, and the role of the annex became that of temporary "surge space" for new or overcrowded departments.

After the dairy department left for good in 1953 the annex was remodelled and became the home of veterinary medicine. In a classic case of a little room going a very long way, the veterinary science building held in its 12,000 square feet bacteriology, immunology, virology and pathology (some of which now have large buildings of their own). This went on until 1962 when the veterinary science building went up on Linden Drive. After veterinary medicine the next occupant of the dairy annex was the poultry department who had outgrown their little frame house on University Avenue and moved into Smith Hall in the late 1950s and from there into the annex in the 1960s.[4]

Around 1969 the last of the poultry and food science offices left for the new animal science building, making way for the ever-expanding soils department. Previous expansions by the soils had required the construction of a separate horticulture building (1910), and the addition of the soils annex to King Hall (1916). A major ($1.5 million) interior remodelling of the old dairy annex was done in 1993 to provide modern laboratory facilities for soils. The soils department remains the sole occupant of the old dairy annex.

1) *Regents Minutes*, December 16, 1908, vol. G p. 230. The other two buildings planned at that time were the addition to the soils building, which was not completed until 1916, and the head house and potting shed eventually erected behind the horticulture building.

2) *Minutes of the Executive Committee*, July 19, 1909. Monthly architect's reports are in the papers of the Executive Committee.

3) *Regents Report*, 1910 p. 155.

4) *University Directories*; and *Gordon Orr*, Perspectives of a University. At the regents meeting of November 1950, the building was renamed the Veterinary Science Building.

HORTICULTURE GREEN-HOUSES

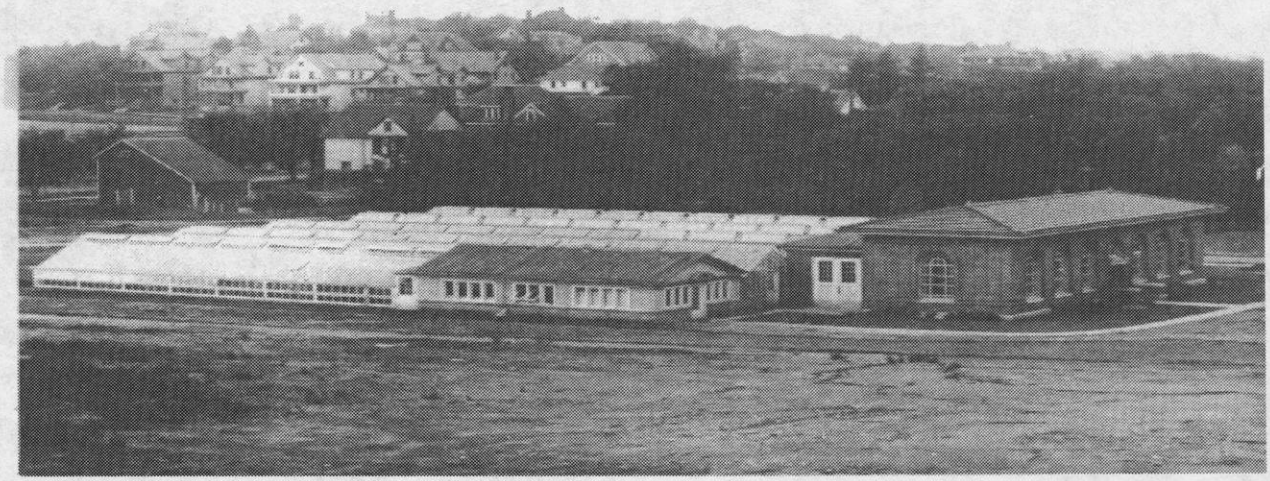


Fig. 1. C. 1911: Horticulture greenhouses from the northeast, farm buildings and the University Heights neighborhood in background. The red-roofed building at the right of the picture is the head house. The little building to the left of the head house is the lab for plant pathology. [Series 9/3, Greenhouses, jf-14]

The Horticulture greenhouses and head house were built in 1909 to provide additional space for the expanding horticulture department being crowded out of King Hall by the soils department. The head house and first green houses were built just prior to the horticulture building itself. More green houses were added to the site over the following 60 years. All were removed in 1996 to make way for an addition to the biochemistry building.

The soils department, originally housed in the second (west) half of King Hall, grew at a very fast pace during the first decade of the 20th century under Franklin King. Eventually soils became so large that horticulture, the other occupant of King Hall was being severely squeezed. The two departments shared the University's only greenhouses, located behind King Hall. President Van Hise in his 1908 report to the regents says: " The greenhouses for the horticultural department are entirely inadequate, and it will be necessary to construct additional greenhouses so placed that they will join on the new horticulture building which will be required in the near future."[1] As a first step the regents selected a site for the horticulture building, and approved the construction of new greenhouses "on the new site for horticulture grounds in the rear of the agricultural engineering building. Estimated cost about $6000-$8000."[2] The plans were drawn by university supervising architect Arthur Peabody's office and shown to the regents in January 1909, but Peabody was asked to revise the plans to include laboratory space for plant pathology, without adding more than $2000 to the cost, the new plans were drawn and were approved by the regents in February 1909.[3]

Due to the large amount of construction going on during the year of 1909 (especially Lathrop Hall and the Central Heating Plant), almost no work, except planning, was done on this project during the summer of 1909. In October of 1909 the regents advertised for bids on the greenhouse plans, specifying that the project is to be completed by February 1910. At the meeting of the executive committee on October 11, 1909, the regents open the bids for the project. There are only two bids, a result of the University's building program absorbing most of Madison's construction industry at that time. The lowest of the two bids is $16,800, more than double the estimates of the architect's office. The regents reject the bids and vote that the architect is to build the greenhouses with the University force. This was almost certainly an idea of Peabody's, who argued that considerable money could be saved if the University built small projects without a contractor by using the architect's plans and supervision over the craftsmen and laborers already on the payroll. At that same meeting the committee approved requisitions for $5750 for Peabody to build the greenhouses.

The architect's monthly reports recount the progress of the project. In November 1909, "Concrete work has been carried up to three feet above grade level and is practically ready for the wood and glass of the superstructure ... It is intended to have the greenhouse in shape by the second semester." December sees the completion of the concrete work, but the weather is so bad that work ceases, orders for glass and steel are placed. In February of 1910, Peabody reports changes in the project due to conferences with professor Jones of plant pathology. Work is resumed in March and by May 1910, the greenhouses are complete except for glass and the excavation for the potting house is done. The work is slow because the force of the university is busy with several buildings, especially Lathrop Hall. Progress on the potting house is reported throughout the summer and fall. In November 1910, Peabody reports that the greenhouses are in use, and that the building is ready for plastering and the roof lacks only the tile for completion. Then on November twenty first, a fire started on the roof between the potting house and the greenhouses, which damaged both the greenhouses and the roof of the potting house. Insurance was in place and the damage was not extensive. The fire damage was repaired by December, and "The use of the greenhouse was but little interrupted by the fire." December 1910 is the last time Peabody mentions this project in his reports, indicating that it was finished and occupied by January 1911 nearly a year after the original contract deadline.

As seen in Fig. 1, the first set of five greenhouses was only about a third of what was eventually built there. As Horticulture, plant pathology, and related fields gained students and researchers, the greenhouses became more and more crowded. Some greenhouses were added in 1912. In 1924, the legislature made a $15,000 appropriation for greenhouses for experimental work. In 1925, the regents planned and built two additional groups of greenhouses, one group to the west of the original ones, and the second group to the south, with a service road between them.[4]

The horticulture greenhouses and the red-tile roofed potting shed, were physically connected to the horticulture building in the 1980s during the construction of the plant science wing, and are still in heavy use by a number of various departments in the college of agriculture. However they occupy a substantial piece of prime real estate in what has become, unlikely as it must have seemed to the planners and regents of 1910, the center of the agriculture campus. Because of their large footprint and central location, they were demolished in 1996 for another addition to the biochemistry building which lies just to the east of the greenhouses. The potting shed and greenhouses lasted 85 years, a testament to a day when even buildings as insignificant as these were planned and constructed to last a very long time.

1) Report to the regents of the University of Wisconsin, 1906-1908, p. 35.
2) Minutes of the Regents of the University of Wisconsin, December 16, 1908.
3) Minutes of the Regents of the University of Wisconsin, February 17, 1909.
4) Minutes of the Regents of the University of Wisconsin, August 5, 1925.

HORTICULTURE

Fig. 1. The original horticulture building from the Linden Street face, c. 1911. [series 9/ 3 Horticulture, jf-37]

The horticulture building was built in 1910 to alleviate the crowding of the horticulture department in King Hall. The east wing, called Moore Hall, was erected in 1930, and the plant science addition to the west and south was built in 1980.

Horticulture was one of the earliest disciplines in the college of agriculture. In 1893 dean Henry had convinced the legislature to fund the construction of King Hall, constructed for the study of horticulture and agricultural physics. Over the last years of the nineteenth century and the first decade of the twentieth, the ground-breaking work of professor Franklin King and his colleagues in the soils department needed an increasing amount of space, both in King Hall and in the attached greenhouses. This expansion by soils put more and more pressure on the horticulture department. In his report to the regents of 1908, president Van Hise says: "As soon as practicable an entirely new horticulture building should be constructed to accommodate the department, and the quarters now occupied by horticulture should be turned over to the soils department."[1]

Pursuant to this goal the board of regents instructed the university's supervising architect, Arthur Peabody, to prepare plans for the "horticulture building to be located on the south side of Linden Drive immediately south of the drive to the dairy building at a cost of approximately $50,000..."[2] On August 22, 1910, Mr. Peabody informed the regents that plans would be ready for bids on September first. The executive Committee of the Board of Regents opened bids for the horticulture building on September 26, 1910, and awarded the contract to the lowest bidder George Keachie of Madison for the sum of $47,295. The contract called for the building to be begun by October 3, 1910 and complete on or before October 15, 1911.

Following the monthly reports of supervising architect Peabody we see that by November eighth, 1910, the foundations and basement were poured. In that same month a large shipment of brick arrived on site but was so different from the sample given the maker that the brick was rejected. By March 1911, the brick walls were up to the second floor, but work was halted for a week when the Madison Brick yard ran out of brick. Roof construction began during June, 1911. But in August

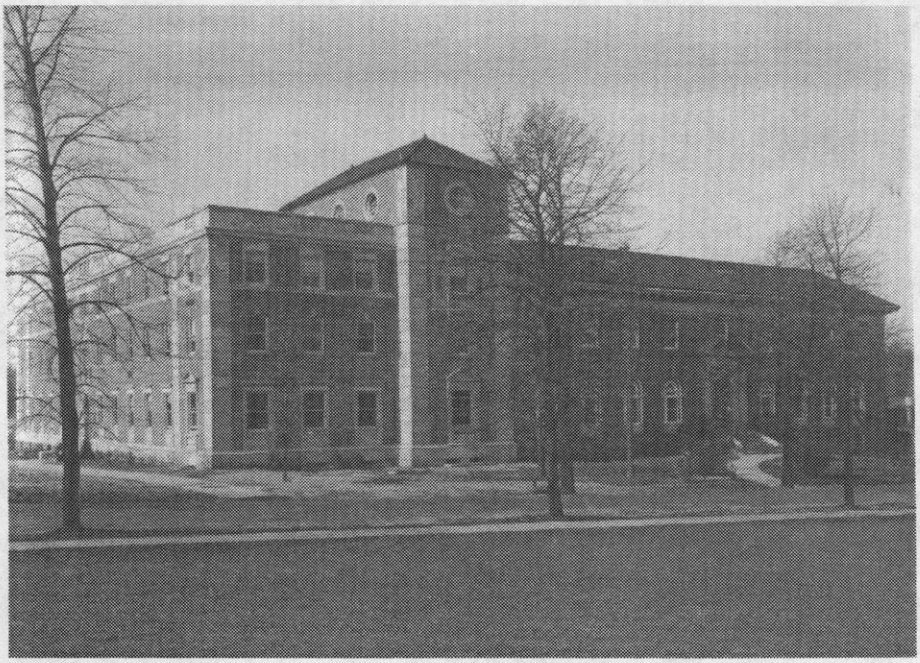


Fig. 2. Horticulture after the addition of the Agronomy wing (Moore Hall), on the left. c. 1932. The tower at the junction of the old building and the addition, disguises the fact that a three story addition had been put on a two story building. [series 9/3 Horticulture, jf-38]

1911, the project was delayed by a metal worker's strike. In late August the strike was settled and work resumed. Final trim work in the horticulture building was started during October, 1911, and equipment for the departments was ordered, as were furniture and electrical fixtures. Peabody's November 1911 report says that the building is "rapidly approaching completion. Varnishing and painting have been going on steadily during the month." The lowest bid for equipping the laboratories was awarded to J. H. Findorff. The bid requires that the basement laboratory be complete by December 1, 1911. The date of completion was about December 1, 1911.[3]

The completed building was two full stories and an attic in height, 48 feet X 128 feet, built of brick, trimmed with Bedford limestone, and a brown glazed tile roof. [see Fig. 1]. Interior trim was of blue-veined Italian white marble. Floors were of concrete with linoleum covering. Total cost with furnishings was about $60,000. Alden Aust credits the design of the building to James Law, an employee of Mr. Peabody's office, calling it a copy of the Russell Sage Foundation Hall in New York City.[4]

As often happened when planning facilities for new departments, particularly in the college of agriculture, the new building was too small for its purpose. Dean of agriculture Russell's first report to the regents after the completion of the horticulture building says: "The extremely rapid development of the plant pathology work has already made it necessary to proceed with the finishing off of the attic for student use, and add another greenhouse for the existing needs of the department."[5] The pent-up demand for the study of horticulture and plant pathology quickly swamped the new facility; also the space vacated in King Hall was insufficient for the soils department which also needed a larger facility within a few years.

The planning for further expansion began almost immediately after the new horticulture building was opened. In his 1913 report to the regents dean Russell explains: "The work of this department [horticulture] has been of inestimable value to the upbuilding of the agriculture of the state. Its importance is such and the need for adequate quarters so imperative that the consideration of this problem should receive the attention of the coming legislature." Russell describes the extent of the crowding, "The total student registrations have increased from 23 [in 1909-1910] to 211 in 1913-1914 ... The situation with reference to greenhouse space is as badly congested as is laboratory and class room space." As a solution dean Russell proposes to build a wing on the horticulture building to

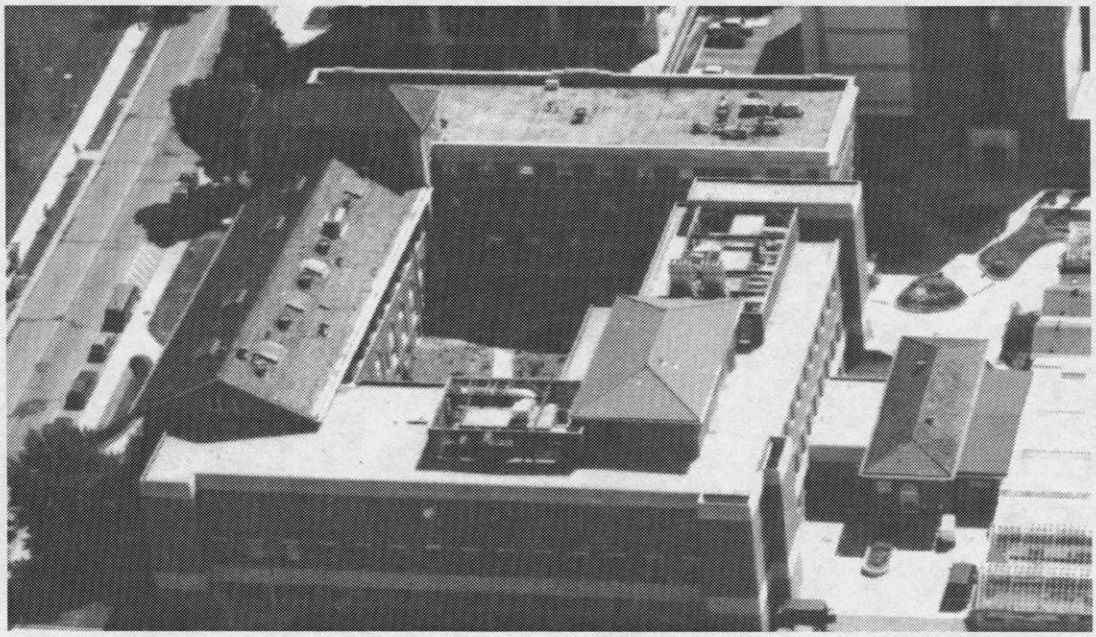


Fig 3. Horticulture after the 1983 addition.

"concentrate most of the plant industry operations of the college under one roof ... in this way the three departments of Horticulture, Plant Pathology, and Agronomy could use the larger lecture rooms in common, thus materially increasing the utilization of such space. Such a structure should be three stories in height, including the basement and will permit the utilization of the attic... For the purposes of these two departments would require $85,000 for the building."[6] Not for seventeen years would this excellent plan be carried out.

Horticulture and plant pathology stayed in the horticulture building, constantly subdividing the available space. Agronomy even shared its very limited space with genetics and some work in plant pathology. Finally in 1929 the crowding in these departments became so severe that action was finally taken. In a memorandum to the legislature, probably written by Glenn Frank, the suggestion is made: "The most feasible plan to meet the needs of these departments would be to construct a wing on the east side of the present Horticulture Building as here requested. Making this wing follow the structure of the present Horticulture Building, in which both the attic and the basement are utilized for regular use, the advantages of a four story building can be secured with only a two story and basement cost."[7] This is substantially the suggestion made by Russell in 1913. Architect Peabody designs the wing including a tower on the front facade to disguise the fact that a three story wing has been added to a two story building. [see Fig. 2] Aust credits an employee of Peabody named Sheldon.[8] The addition was built in 1930-1931 and in 1932 the regents voted to install a plaque in the new Agronomy wing and that "this wing of the building be named Ransom A. Moore Hall."[9] Moore was the founding father of the Agronomy department, and long-time director of the short course program. The work of Moore, E. S. Goff, R. H. Roberts, and others made the university's horticulture and agronomy departments among the best in the country throughout the century. The new Moore Hall wing and the relocation of most of the plant study departments alleviated the crowding for a long time.

As early as 1960 a Plant Science addition was proposed. Not until 1978 did the University requested funding from the state. This was for a $7.8 million addition to and remodelling of the old building. The addition took the form of a west wing. This "Plant Science" wing was built by the Anthony Grignano Co. with a contract of $2.4 million (awarded April 10, 1980) and was dedicated on April 8, 1983. The work was not satisfactorily completed until late 1984. This wing brought the

horticulture building into its present form [see Fig. 3].[10]

1) *Report of the Regents*, 1906-1908, p. 35.
2) *Regent's Minutes*, June 21, 1910 vol. G, p. 580; *Minutes of the Executive Committee*, September 26, 1910.
3) Architect's Reports in the Executive Committee's papers, November 1910 through December 1911.
4) Alden Aust, *A Tabular History of the Buildings of the University of Wisconsin*, 1932
5) Regent's Report, 1910-1911, p. 120.
6) Regent's Report, 1913-1914 p. 117-118.
7) Legislative Memorandum, Agronomy Wing to Horticulture Building, series 4/0/1 box 3.
8) Alden Aust op cit. fn. 3.
9) Regent's Minutes, December 12, 1932.
10) Regent's Minutes, January 9, 1960, April 10, 1980. A commemorative plaque is mounted in the building.

CHANCELLOR'S RESIDENCE

Fig. 1. The chancellor's residence, 1970. [series 9/1, Chancellor's Residence, jf-11]

Built in 1911 as the private home of John and Helen Olin, the house became the property of the University on Nolen's death in 1924. It has since been used as the official home of the University chancellor, in accordance with Nolen's wishes.

John Meyers Olin was a Madison attorney and civic leader, and is often referred to as the "father of Madison's park system". He sold his family's house on Langdon Street to the university in 1910 for $55,000, after which it was added to and used as a medical clinic, and in the 1920s demolished to make way for the Memorial Union. That $55,000 was as we shall see a considerable sum for a house in pre-WW I Madison. Olin first bought eight lots in the new University Heights subdivision (lots 8-15 of block 18). for $24,355.65. He and his wife Helen Remington Olin then began to plan the mansion they would build on the site.

The Olins hired the best help money could buy. To design the house Olin retained the noted Milwaukee firm of Ferry and Clas, the designers of the Wisconsin State Historical Society Library.

Ferry and Clas not only designed the 43-room, 10,000 square foot three story brick and concrete house but most of the furnishings (electrical fixtures, fireplaces, andirons etc.) of the house as well. The general contractor was T. C. McCarthy, who made an entire career of contracting for the University. Other contractors, all known for their work on university buildings, were Fritz Bros. (carpentry), William Owens (plumbing), R. J. Nickles (electrical) and Mueller (heating) . All construction contracts were let on or before April 1, 1911.

The basement is of poured concrete, and all walls above grade are 12 inch thick solid brick, insulated with seaweed and mineral wool. The roof is covered with thirty inch hand-split cypress shingles. All floors and trim in the main parts of the house (including the huge basement billiard room) are quarter sawed red oak, except for the long front hall way, and the large living room on the west, which are marble (since covered with carpet). The house was steam heated. A series of cisterns and electric pumps provided soft water for the house. In order to prevent the erection of utility poles, which were considered particularly ugly in Madison at that time, the electrical and telephone wires were brought to the house in an underground conduit from the south side of the street. The Olins moved into the house May 8, 1912. The total cost as reported by Mr. Olin was $68,892.15, exclusive of landscaping costs (by Simonds of Chicago, Misch of Portland, and John Nolan of Cambridge, Mass).[1]

In 1922, after the death of his wife Mrs. Helen Remington Olin, John Olin made out his will. In it Olin left the house and property to the university on the conditions that the house be used by them as a residence "of such person as from time to time may hold the title of the office of the academic head of the University of Wisconsin ... and for no other purpose ... provided": 1) that if the property should become unsuitable for the purpose above specified the property may be sold ... and the proceeds may be used to provide for the president a residence in some other location." 2) In case the gift is declined or in case of any non-observance of any condition thereof, the property shall revert to my estate and be sold by my trustees and the proceeds shall become part of 'the Olin Park Fund'."

John Olin died December 7, 1924 and the will was probated January 6, 1925. The regents accepted the property with the conditions January 21, 1925. During 1925 the house was occupied by Olin's brother-in law university professor Arthur G. Laird. President Birge never lived there since he had a house of his own at 2011 Van Hise. When Glenn Frank was chosen president in 1925, he moved into 130 Prospect and lived there until 1937 when he was replaced by Clarence Dykestra. Except for president E. B. Fred who was allowed to spend his tenure (1945-1959) in the old agricultural dean's residence at 10 N. Babcock (during which time the Olin house was used as the "president's guest house"), all university presidents since 1925 have lived in the Olin house. These presidents included: C. A. Elvehjem, F. H. Harrington, John Weaver, Donna Shalala and David Ward.[2]

By 1945 the house was in need of extensive repairs. The regents spent about $56,000 on a complete remodelling job. These repairs included: replacement of the hand-fired coal furnace with a gas furnace, rebuilding of the west porch, installation of a modern kitchen, and the replacement of all plumbing, a new fence and a parking lot. This parking area was later replaced by a three-stall garage. In regard to the idea of a garage on the property Olin wrote " I do not make it an absolute condition of the gift that no garage building would ever be erected upon any part of there grounds, but I do express it as a strong wish that this may not be done, because I do not see how such a building can be erected on any part of these grounds without very much disfiguring the same."[3]

1) Homestead Property as a Residence of the President of the University, John Olin, Archives Olin House Subject Folder.

2) Madison City Directories.

3) Fred, E. B. Memorandum to Regents, July 9, 1952; Archives Olin House Subject Folder.

JOHNSON STREET HOUSE

Fig. 1. 1120 W. Johnson Street, 1994. [Author Photo, AP-6]

This old house first appears in the city directories in 1916, as the home of two families. It remained a boarding house until 1960 when it was purchased by the Wisconsin University Building Corporation (WUBC). From 1960 to 1964 the University leased it from the WUBC for use as the home of the University of Wisconsin Education Research Service. In June 1962 the WUBC conveyed the title to the property to the University. Since that time the house has hosted the physical education department, statistics, computer science, the Afro-American and Race Relations Center, several medical programs, and its final occupant International Studies and Programs, which moved out in 1994 in preparation for the demolition of the house to make way for Chemistry Unit Five.[1]

1) City directories in the state historical; society's collection; Regent's business records in regent's vault; University directories in the University Archives.

WOMEN'S STUDIES

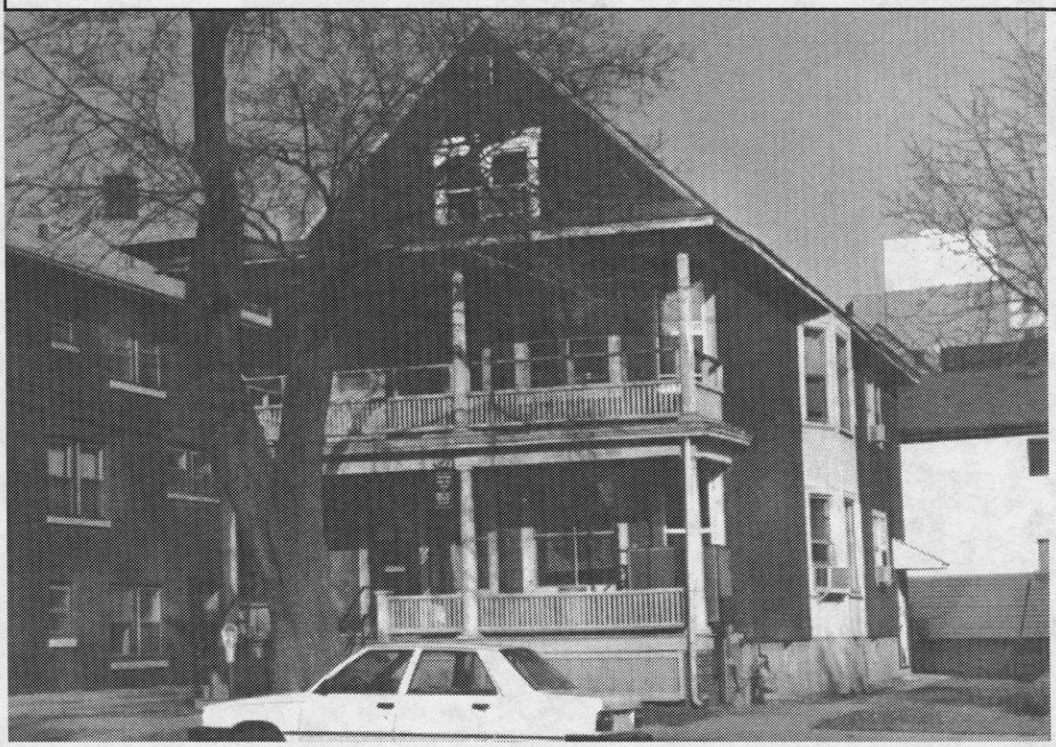


Fig. 1. The Women's Studies building, 1995. [Author Photo AP-7]

This three-flat house was built in 1902 as a home and income property by a carpenter and contractor named James C. Bitney and his wife Rosa. Due to location and the quality of the house it was nearly always rented. Bitney lived in the house until his death in 1947. The house was purchased from the Bitney estate by the Wisconsin University Building Corporation in January 1947. The WUBC rented the house to students and faculty through out the 1950s. In 1962 the WUBC transferred title to the University. The University began to use parts of the house for academic space in 1965, and by 1973 the entire house was in use by the English, art and medical departments.[1]

When the Women's Studies Department was formed under the American History Department in 1975, the new department was installed in the house, and has remained there until the present time (1995). The departmental administrative offices are the main users of the house, since all professors in the department have dual appointments, and therefore have offices in other buildings, principally Helen C. White Hall, and the Social Science building. Besides administrative offices, the house holds offices for the department's teaching assistants. The attic is used for departmental research space.[2]

The building is a 23 by 56 foot three story wood framed house with basement and attic. It has been greatly remodelled for offices, and handicapped accessibilty.[3]

Due to the growth of the department the house has become too small, and unsuitable for its use. Plans are being made to move the departmental offices to Mark Ingraham Hall (the old Commerce building), in the near future. The future uses of the house is unknown.

1) City directories.
2) University directories, University Archives.
3) University department of planning and construction, flat files.

CHEMISTRY HOUSE

Fig. 1. Chemistry Tutoring House, 1993. [Author Photo AP-8]

The first recorded resident of this house was Mrs. Ella Armstrong, who appears at this address in 1902. Mrs. Armstrong, who probably built the house, lived there alone until 1921 at which time she began to take roomers. The house remained a rooming house for forty years in the hands of an assortment of resident owners. In 1955 the house was purchased by Ellen Gilder, who owned it and lived in it with her roomers until 1964, when it was appraised and purchased by the University for $35,000.[1]

At that time the house held ten rental rooms, with two bathrooms, and a first floor two bedroom caretaker's apartment on the first floor. In the early 1960s the address of the house was 307 North Charter Street because the front porch steps had been relocated to the side of the house. The house stood empty until 1969 when it began to be used by the computer science department and offices of Administration. After that time it has been in turn the home of Opthalmology, preventive medicine, clinical Oncology, Biometrics, and in 1982 became part of the chemistry department, who used it as a home for the special student chemistry tutoring center. In 1985 the address of the house was officially changed to 1124 W. Johnson Street. The house will be demolished in 1997 to make way for Chemistry Unit 5.[2]

1) City directories, state historical library collection; regent's business records, in regent's vault.
2) University directories, University Archives.

ATHLETIC ANNEX

Fig. 1. The athletic annex from Langdon Street, c. 1920. [Meure photo M243]

The athletic annex was built on the east side of the red gym in 1911. It provided space for a running track and a baseball cage, allowing the gym's fourth floor to become a gymnasium. The annex stood until the completion of the Camp Randall memorial Shell made it obsolete. In 1956 it was demolished.

In his 1910 report to the regents, George W. Ehler, director of the department of Physical Training tells the regents that the facilities for athletics are very bad. Many of the problems with the facilities were the result of the continued presence in the 'red gym' of the military department. Among other complaints Ehler says that when ball games are played on the lower campus "the danger to the passerby is very great, and even more so to the spectator." He recommends that the university build an annex on the east side of the gym for offices and lockers. As the enrollment at the university continued its upward spiral, the thinking about the proposed annex turned more and more toward providing expanded gym space instead of just offices and storage. The Athletic Council, which was responsible for funding athletic facilities, from the income of the events, borrowed $15,000 from the regents to be paid back in $3,000 installments.[1]

The design for the Annex was done by the office of university supervising architect Arthur Peabody. The specifications for the building are dated August 11, 1911, only a month after university approval for the project. The bids (received September 27) were all rejected as too high and modifications were made to the plans. The construction contracts were awarded on August 21, 1911, the structural steel contract to the Milwaukee Bridge Company for $4524 . The construction contract for the remainder of the building went to the Copps Brothers of Madison for $8966 on October 2. The whole building was supposed to be finished by February 1, 1912.

As detailed in the architect's monthly reports, foundations were completed October 24, the same day that steel members began to arrive from Milwaukee. The mason work began immediately, and in its materials included "a quantity of old brick which had been taken out of the main gymnasium was used".[2] Presumably this brick came from the opening of the east wall of the gym to make a doorway to the annex. In the November report (the last monthly report that mentions the annex) the steel work is erected and ready for paint.

Architect Peabody says: "The Athletic Annex was occupied in January 1912 ... This building located north [sic] of the Men's Gymnasium, consists of a single room for athletic practice, 82 feet wide by 190 feet long, and has total area of 17,000 square feet including entrances. The building is faced with red brick and is supported with steel trusses. The earth floor is arranged for a running track and ball field. The cost of construction was $15,000, about 5 cents per cubic foot."[3]

Director Ehler has good things to say about the annex: "The erection of the Athletic Annex, 84 ft. X 235 ft. on the site of the outdoor handball courts has made possible certain changes in the main building that have more than doubled its capacity and at the same time has provided a place that has been found suitable for numerous purposes not originally contemplated." These included Prom and Alumni dinners, and Engineering Exhibits. "The Annex provides an indoor track fourteen feet wide and twelve laps to the mile, quite the equal of that possessed by any other university ... the baseball cage is fifty eight feet by one hundred and eight in length and twenty feet under the trusses". The changes in the red gym mentioned by Ehler were: "With the removal of baseball, track and rowing from the fourth floor of the main building, that floor has been converted into the gymnasium 65 ft. X 165 ft."[4]

It is clear from the university records of the time is that the burgeoning interest in collegiate sports was requiring a drastic rethinking of the kind of physical education facilities needed for the university. Talks about the development of athletic facilities at Camp Randall were constantly bogged down in questions of size, appropriateness, and finance. In this context, the gym annex was clearly a stopgap measure which bought the university some time in the physical education debates. The university would later claim that this building was the first university field house (indoor facilities for outdoor sports) in the country.[5] The annex seems to have performed this function very well. Shortly after completion, complaints about the quality of the lighting in the annex (an item which had suffered in the cost reduction efforts in the first design) led to the installation of "proper and sufficient sky-lights".[6] Other than this no complaints about the annex are heard.

The Annex served the athletic department in its role until the completion of the Camp Randall Memorial Shell in 1956, when the annex space became needed for the erection of the Wisconsin Center building. In the summer of 1956, the gym annex (and the old YMCA building) were razed by the Madison Moving and Wrecking Company for $4000.

As far as its looks go [see Fig. 1] Mr. Peabody says in his memoir: "...my burden was to design something sufficiently mediocre to harmonize with the existing building. In this I believe I succeeded, the Annex looking perhaps more mediocre than the Armory itself. The building is so inconspicuous that nobody knows it is in existence."[7]

1) *Regent's Minutes*, July 11, 1911
2) Report of the Supervising Architect for the month of October, 1911 Arthur Peabody, papers of the executive committee, October, 1911.
3) *Regent's Report*, 1913-1914, p. 339.
4) *Regent's Report*, 1911-1912, p 233.
5) *Wisconsin Alumni Magazine, March,* 1933, p. 169.
6) *Regent's Minutes*, January 17, 1912
7) Peabody, Arthur, *A Short Resume of University Buildings*, p. 16. University Archives Biographical files, Peabody file.

UNIVERSITY CLUB

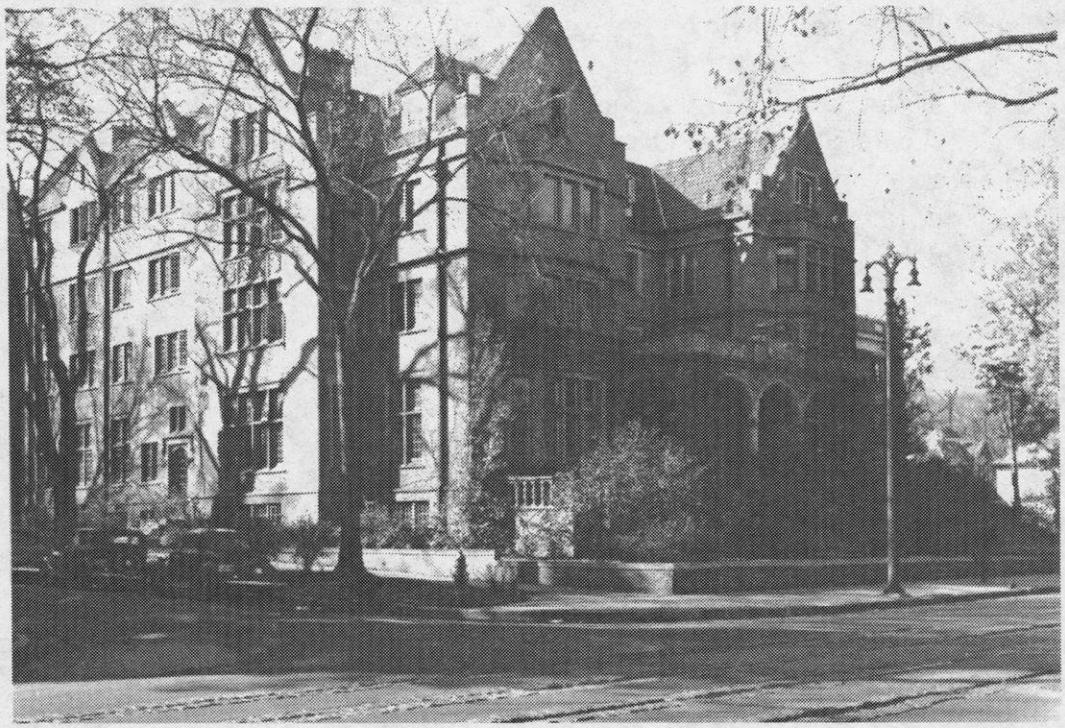


Fig. 1. The university club looking south-west at the corner of State and Murray Streets. c. 1940. [series 9/2 University Club, x25-822]

The University Club began in an old house in 1906. The current building was built as a series of additions to the house in 1908, 1912 and 1924. Ownership of the club-house passed to the University in 1933. It now houses the University Club and University offices.

The University Club was begun by a small group of faculty and university men in early 1906. Principal organizers included President Charles Van Hise, Burr Jones, C. S. Slichter, T. E. Brittingham, Reuben Gold Thwaites, W. F. Vilas, and Edward Birge. By early 1906 considerable organization had taken place: $40,000 had been raised, a site had been purchased and most of the work done in starting the club. In an introductory article founder H. L. Smith refers to: "establishment of the University club which occupied its new house about February 1..."[1]

Articles of incorporation were filed February 20, 1907. This project did not make the amateur mistake of under-capitalization. The amount raised by the club from sale of stock and bonds ($40,000) was enough to buy and remodel a clubhouse, build and furnish an addition, pay the first year's taxes and expenses, and maintain a modest emergency fund.[2]

The clubhouse they bought was the old family home of John Barber Parkinson at the corner of State and Murray Streets. Parkinson was a member of the university class of 1860, a regent and faculty member. As Parkinson rose to the post of vice-president he purchased, in 1886, a substantial brick house at State and Murray which was large enough for Parkinson, his wife and their eight children. The house had originally been built and owned by John Sterling, the "Father of the University". In 1905 a fire damaged the house badly enough that the Parkinsons decided to move. The

Fig. 2. The University Club between 1912 and 1924. The old Parkinson House center, with the first two additions: the west, 1912 section at the right, and the 1924 dormitory wing to the south, behind the house on the left. [Meuer Photo, M205]

availability of this property was a strong incentive in the formation of the university club. As early as March 1906 plans had been made to take an option on the Parkinson house by the organization. The title to the property did not change hands until April 1907 (for $18,000) but the club was already in physical possession when they incorporated in February 1907. The club listed the cost of repairs and remodelling of the fire-damaged house as $6,000. As remodelled the old house contained the reception hall, club room, dining room, card and writing rooms, and the third floor and attic bedrooms and servants quarters. The club planned additions almost immediately. A sketch published in February 1906 shows a large three story brick building very much like the one eventually constructed on the site. Though unsigned it is possible that this initial design was done by university supervising architect Arthur Peabody. Peabody was a member of the club and applied in April of 1907 for the permission of the regents to do architectural work for the club without compensation. The regents granted permission.[3] The earliest blueprints are unsigned. The 1912 and 1924 additions are the work of local architects, Law, Law and Potter, and they are commonly given credit for the original design.[4] From the beginning the plan was to establish the club in the old Parkinson house and expand as needed. Part of the appeal of the Parkinson property was the size of the lot (86 x 132 feet), which provided room for such expansion.

The first addition to the clubhouse was finished by February 1908 [see Fig. 2]. It was a wing of dark brick with concrete floors and a red tile roof (later lost) on the west side of the old house and connected to it. The new three story wing contained a first floor billiard room, a dining room, which extended through from the old house; the second and third floors were laid out for sleeping quarters and studies, and were connected to the old house through fireproof doors. Each floor had a general toilet and shower room. Nineteen sleeping rooms were provided. In the basement there was a "Conversation Room in Medieval style, with brick paved floor, brick fireplace and arched ceiling, stained glass casement windows, where good cheer as well as good will may be enjoyed."[5] Because the old house still presented a fire hazard, the new part had a fire escape that was accessible from both parts

of the club. After the house was removed, this double entry fire escape remained, and is still present in a little opening in the center of the building. The club's first annual statement shows about 340 members, with 15 members living in the rooms at $3.50 per week.

The club's lodging facility was doing so well in those early years that in 1912 the club purchased Parkinson's remaining lot to the south of the clubhouse and built a dormitory wing on the south end of the west wing. This addition extended the west wing slightly to the south, then turned east and extended behind the old house all the way east to a new entrance at 438 Murray. It was opened in December of 1912, adding 49 dormitory rooms, arranged so that they could be rented singly or as suites of rooms several of which were equipped with private bathrooms. There was a ladies' parlor on the first floor, two dining rooms, and in the basement a "first class barber shop"[6] Preference would be given to club members, but "all persons connected with the university, as instructors, assistants, graduate students, or members of the legislature who have been at any time students at the University will be welcomed as tenants; but tenants who are not club members will be expected to use the independent entrance on Murray Street."[7]

Few records remain from the next twenty years. In 1911 "The directors have decided to open the restaurant to ladies, when accompanied by a member of the Club, for all meals. Special accommodations [including a lounge with separate entrance and maid, and a ladies' reading room] are provided for ladies, and they are not expected to make use of the Club rooms." In 1913 three nonsmoking rooms are reserved and the club reports that about eighty people per week are using the restaurant for luncheon, and that special dinner parties are served almost every evening. This may have been a harbinger of falling membership, as the university grew larger and more impersonal, and the founders died, became emeritus, or lost interest. An interesting note is that during the influenza epidemic of 1918, because the student infirmary was not finished, the University club was used as an infirmary.[8]

In 1924 the club took out a second mortgage for $25,000 at 6.5% and used the money to build the last section of the proposed clubhouse. This project removed the old Parkinson house, and built the east section which connected to the north side of the 1912 dormitory section of the club and included the front entrance and parlor sections. This construction brought the clubhouse to the current [1993] configuration. But the heyday of the club was over. As the depression deepened, membership fell and the directors had to take extraordinary steps.

Madison, like all cities based on government and/or universities, was slightly insulated from the national catastrophe of the great depression. The records show that in the years from 1927 through 1931 the club ran in the black in all operations. The club made a profit of about 27% per year on income. Then in 1932 the depression arrived. The club lost about 21% on income. All indications were that this was a serious trend. So on April 17, 1933 the club's directors called a special meeting of the University Clubhouse Association at which were represented 328 out of 458 outstanding shares (42%). The stockholders passed by unanimous vote the resolution to transfer title of the university clubhouse property to the university, subject to the indebtedness of the Association.

Of course it was not quite as simple as this. The club wanted several things from the university in return for the gift. Tax-exempt status for the property was worth about $3,000 per year. The clubhouse would be connected to the heating and utilities of the university. But in order to prevent a recurrence of the declining membership that had made life so precarious for the club, they proposed to president Glenn Frank that the university *could* (if needed) make faculty membership in the club mandatory. Frank appointed a committee of nineteen to investigate the advisability of accepting the club's offer. This committee included W. H. Kiekhofer, Lelia Bascom, Helen C. White and E. B. Fred.

The committee, on April 21, 1933, presented their findings and recommendations to a faculty meeting. They reported that the club property is estimated in value at about $300,000; that because of membership shrinkage due to the depression, receipts were down to a point that jeopardizes the

life of the club. They go on to argue that the club is worth saving on several grounds and that the only way known to accomplish that is by University ownership.

The recommendations of the committee are first that the university accept title to the university club and that voluntary membership dues be set at 3/4 of 1% of salary per year, and second that if voluntary membership fails to adequately support the club the regents have the permission of the faculty to make membership mandatory under substantially the same terms. With only minor alterations, the resolutions as presented by the committee were adopted by a vote of 162 to 46. The minority sent a petition to the regents asking them to reject the recommendation of the faculty.

When the board of regents met on April 27, 1933 to consider the matter, they moved to accept the arrangement on the terms of the faculty action, but the vote was nine to four against and the motion was lost. The regents then called professor Kiekhofer to speak, and after further discussion another vote was taken and carried. The new arrangement worked well. The removal of the tax and utility burdens and maintenance costs from club membership made financial solvency possible. Membership was reported at 500 with 70 residents in 1935. All barriers against the use or membership in the club by women were eliminated (Helen C. White became club president in 1933). The difficulties remained with the attempts to run a profitable hotel and restaurant. There is no record that the mandatory membership threat was ever carried out.

A sordid affair took place during the war when an English instructor applied for and got, by mail, membership to live at the club. What was not evident until Arthur Burke showed up at the club in October of 1944, was that Arthur Burke was black. The clubhouse committee refused to let Burke complete paperwork for membership. After cries of outrage from campus groups, some national notice from Time Magazine, and a formal vote by club members, Burke was allowed to reapply and the color barrier was eliminated.[9] The 1950s passed without much incident.

In the 1960s talk began to be heard about anachronisms, efficiency and quiet interment. Sentiment and the continuance of useful function continued to protect the club from fans of efficiency, and from those who looked covetously upon the prime real estate occupied by the club. Then in early 1967 the club directors met with the chancellor and proposed another arrangement that would help both sides. The club would receive $25,000 for needed remodelling (this is probably the point at which the original leaded glass was removed) and the dining rooms would be catered by the Memorial Union kitchens. The University would take over as badly needed office space all the residence rooms in the south wing of the clubhouse and all of the upper floors. The club was allowed to keep all the space on the two lowest levels, the basement and ground floor. The club also obtained permission to serve liquor. Today [1993] the club is running in the black again with about 850 members, with considerably relaxed admission requirements. The club again has its own kitchen and cooks. The old building is still in decent repair, and the old dormitory wing houses student financial aid offices and other university offices.[10]

1) *Wisconsin Alumni Magazine*, February/March 1908 p. 197, March 1906, p. 249.
2) *Daily Cardinal*, February 21, 1907
3) *Regent's Minutes*, April 17, 1907; *Wisconsin Alumni Magazine*, February/March 1908.
4) *Perspectives of A University*, Gordon Orr, et al.
5) Wisconsin State Historical Society Pamphlet collection, Pam 56-4815, Arthur Peabody.
6) Wisconsin State Historical Society Pamphlet collection, Pam 56-4816.
7) Wisconsin State Historical Society Pamphlet collection, Pam 56-4816.
8) Wisconsin State Historical Society Pamphlet collection, F902/8UN.
9) *Cronon and Jenkins: The University of Wisconsin, A History, pp. 679-80; The Daily Cardinal*, November 1, 1944, October 24, 1944.
10) Sites to State Building Commission, October 29, 1969, University Club Criteria for Office Use, July 24, 1969, series 24/9/2-1 box 18.

HOG SERUM PLANT

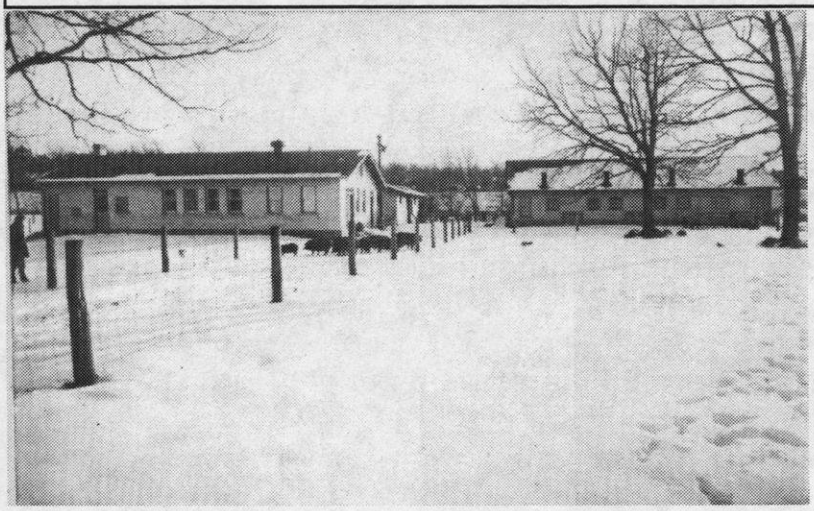


Fig 1. 1915. The hog cholera serum plant on the left, a swine barn (since demolished) on the right. Herrick Drive now passes between the serum plant and the site of the barn, about where the fence line runs.. Just visible beyond the serum plant is the lab now used as the carrot and beet lab. [series 9/3 Serum Plant, jf-39]

This building was originally a laboratory for the production of hog cholera serum. It has since become storage for the forestry department.

In his 1911 report to the regents, dean of agriculture H. L. Russell states that hog cholera is prevalent throughout the state, and that the manufacture of cholera anti-serum was begun 'last spring'. The report of the following year shows that the problem has gotten worse. "The continued spread of hog cholera in the state and the inability of the college to meet the extraordinary demands made upon it for hog cholera serum led the last legislature to make special provision for this work." The university was authorized to sell the serum at one cent per cubic centimeter, which was its cost of production. The appropriation was for $2,500. Since the first facilities for serum production were inadequate (the building that is now the Carrot and Beet lab), it was decided to erect a new building for production of serum.[1]

The plans for this building are dated October eighth, 1915, drawn by Arthur Peabody or his staff. The building is one story with no basement or attic, made of brick, 32 ft. X 64 ft. The regents awarded the construction contract for the serum plant to the lowest bidder T. C. McCarthy for $3273.2 Little is known of how long the serum production in the building lasted. By 1940, a University building inventory refers to it as the "old serum plant". Since that time it has been assigned as part of the forestry department and is used as laboratories and storage.[2]

1) *Regent's Report*, 1913-1914, p. 104; *Regent's Report*, 1911-1912, p. 117.
2) *Regent's Minutes*, February 29, 1915.

OLD SHEEP BARN

Fig. 1. The sheep barn c. 1920. [series 9/3, Sheep Stalls, jf-40]

The date and circumstance of the construction of the sheep barn has not been determined. Its later years were spent as a makeshift dormitory for short course students. It was demolished in 1952.

Almost nothing is known of the early history of this building. No mention of it before 1911 has been found. In his 1911 report to the regents Agriculture Dean Russell says: "Last year the front section of the sheep barn, which was one of the oldest structures on the farm, was rebuilt."[1] This rebuilding was designed by the office of supervising architect Arthur Peabody, who in the fall of 1911 had contractor C. B. Fritz jack up the roof and insert additional framing to add space for storage of fodder, and for the animals. No more is found regarding the sheep barn until the 1930s.

In 1930 due to the constant and rapid rise in enrollment in the agricultural short courses, which were attended by state farm boys during the winter months, agriculture dean Christenson began to agitate for dormitories for the short course students, which would make attendance at the short courses easier and a more integrated part of the university. First in 1932, a WWI Student Army Training Corps (SATC) wooden dormitory that had been moved from Camp Randall for use by the Forest Products Lab was moved again and remodelled for use as a short course dorm. Two years later in 1934, the university remodelled the sheep barn as another dormitory and named it Kleinheinz Hall in honor of Frank Kleinheinz, a recently deceased member of the agriculture staff who had begun as a shepherd and became known as a world authority on sheep breeding.[2] The sheep barn lived the rest of its life as a short course dormitory. It was not a dignified one. Historian Glover reports that "Wartime found the faculty embarrassed by the problem of persuading students that such quarters

Fig. 2. The sheep barn in 1935, with the stock pavilion in the background. [series 13/12, Voss Collection]

were to be dignified by gracious deportment."[3] Indeed in 1942 due to the fire danger in the very old wooden buildings, they were condemned. This had the result of restricting the enrollment (370 just before WWII) in the short courses, exactly what dean Christenson had feared.

In 1947 the university petitioned the state legislature for funding for short course dorms. This financing was not immediately forthcoming, and in the absence of any alternative, students continued to be housed in the old condemned buildings. Extra students had to find housing in town, and since short course students did not arrive in Madison until November, city housing was often very hard to find.

Even after the new short course dorms were funded and built in 1949, Kleinheiz Hall continued to be used as housing for overflow short course enrollment. It was widely recognized that this was a bad idea since its susceptibility to fire was obvious. But the money for the new dorms was sufficient for only 230 students and there was space nowhere else. Then on March 11, 1950 a small fire broke out in Kleinheiz, in the room of two men who were not there at the time. Other lodgers doused the blaze, and prevented it from spreading to the rest of the building.[4] It was a near miss. For two years the old barn was used as miscellaneous storage. And in 1952 when the Dairy Cattle Center was built on that site the old sheep barn was demolished.

1) *Regent's Report*, 1911-1912 p. 120.
2) *The Wisconsin Magazine*, March, 1929, p. 13.
3) *Farm and College*, Glover, p. 267.
4) *Daily Cardinal*, March 11, 1950 p. 1.

BIOCHEMISTRY

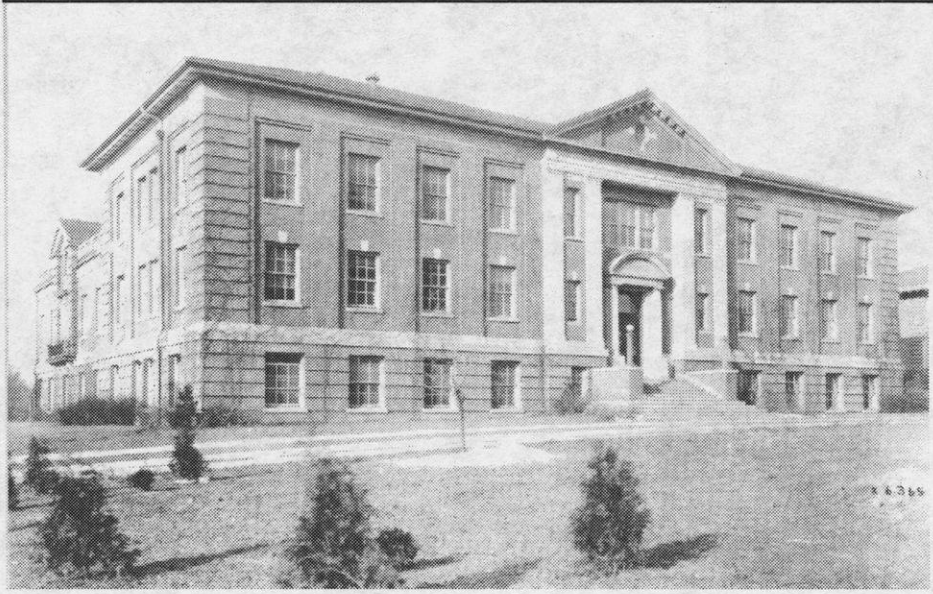


Fig. 1. Agricultural Chemistry Building from the southeast, just visible at the left of the picture is the 1939 addition. [series 9/3 Biochemistry, x25-6365]

Biochemistry was built to alleviate the severe crowding in agriculture hall in 1912. It was added to in 1939, 1957 and 1984. A further addition is planned for 1996. The building is significant for a number of brilliant scientists (including Babcock, Elvehjem, Steenbock, Link and De Luca) who worked there. The building was placed on the National Register of Historic Places in 1985.

By 1910 agriculture hall was on the path previously followed by science hall, that of spawning myriad disciplines and departments needing space and special accommodations outside the parent building. Agricultural engineering, horticulture, plant pathology and agronomy, had already left their cradles in Agriculture Hall and moved into specialized facilities nearby. In his report to the regents in 1909-1910, president Van Hise says: "A consideration of the laboratory space in the central agriculture hall leads Dean Russell to conclude that agricultural chemistry and bacteriology cannot possibly be accommodated for three years longer."[1]

Dean Russell's report (written in October 1910) shows the magnitude of the space problem. In Agriculture Hall for agricultural chemistry and bacteriology there was lab space for 30 students and locker space for 83 for courses which the sophomore class was required to take. Advanced work had facilities for only four or five. Russell proposed the construction of a fireproof central unit for agricultural chemistry, to contain offices, classrooms, a large (350-400 seat) auditorium, and a laboratory wing with space for at least 150 students at a time, and including space for special work and research labs. Russell proposed that the building be planned for additions in later years as conditions demanded. He argued that the space released in Agriculture Hall could be remodelled and used for bacteriology. Russell estimated that the new building would cost about $60,000- $75,000, and the remodelling in Agriculture Hall for bacteriology about $2,500.[2]

The college of agriculture under Russell had considerable clout both in the university and legislature, so it is not surprising that by April 6, 1911, the regents include on their wants list of new educational buildings, an Agricultural Chemistry Building at an estimated cost of $90,000. Most of

Fig. 2. July 5, 1931, the funeral procession of Stephen M. Babcock passes his old emeritus offices, in Agricultural Chemistry. Note the flags at half-mast, [X25-3077]

the rest of 1911 is taken up with developing suitable plans. These plans were developed by the members of the 1908 architectural commission of Warren Laird, Paul Cret and Arthur Peabody. In August the regents approved plans as drawn and presented by Peabody[3], then changed their mind and selected a design by Laird and Cret that better harmonized with the existing building on Henry Mall. [4] By December, 1911, the regents decide on a final design.[5]

By this time the foundation of the building was complete, having been let to the Madison Engineering and Construction Co. (in October 1911) for $2410. Work was begun November 7, 1911. Mr. Peabody says that the horses have trouble with the digging because of the sudden rain and hard freeze. On May 31, of 1912 the regents award the contract for construction of the building to the W. H. Grady and Company of St. Paul, for $65,025. The contractor Grady, flew the coop (with $77,000 of the university's and subcontractor's money), defaulting on both his (biochemistry and home economics) contracts, and landed in Los Angeles. The regents held a special meeting on May 21, 1913, in which the failures of the Grady contract are set down, and the contracts terminated, and the regents take possession of the premises for the purpose of finishing the work.[6] The university finished the building itself, with Mr. Peabody acting as general contractor.

By October 1913, a year after the project was supposed to be occupied, mason and concrete work were completed; plaster and trim work were underway, equipment and fixtures were ordered and arriving. The building was finished in December 1913 at a cost of about $83,000. Mr. Peabody describes it:

> It consists of a central portion 108 feet by 65 feet fronting on University Avenue with a wing 134 feet by 52 feet facing on the Lesser [Henry] Mall. The building is basement and two stories high and has a floor area of 30,000 square feet ... The architectural treatment correspond with the Agronomy and Agricultural Engineering Buildings immediately north ... It is of fireproof construction with concrete floors and tile partition walls. The roof is covered with red tile. The building contains a lecture room with a capacity of 350 ... This completes the group on the west side of the Lesser [Henry] Mall and forms the eastern limit of the College of Agriculture.[7]

The agricultural chemistry building (the department name changed to biochemistry in 1938) has become the site of more significance than any other building in the college of agriculture, with the

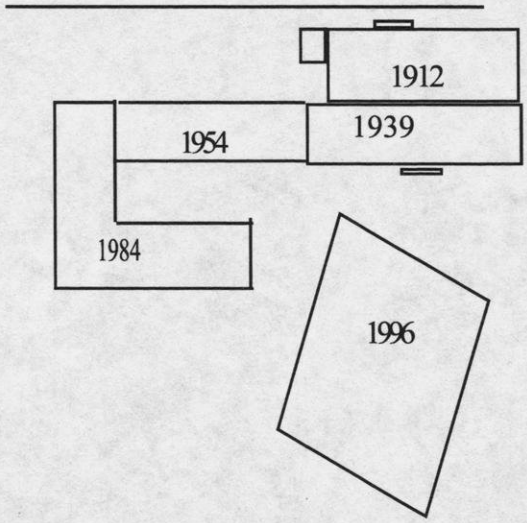


Fig. 3. Outline of Biochemistry and its additions, through 1996.

exception of Agriculture Hall, which was the birthplace of so many departments. From the earliest days scientific giants had facilities here: Stephen Babcock, Harry Steenbock, E. B. Hart, Conrad Elvehjem, Karl Paul Link, E. V. McCallum and Hector DeLuca. The work of Babcock, McCallum and Steenbock discovered vitamins A and B and their purification and importance in nutrition (1913-1920). E. B. Hart invented iodized salt as a goiter preventative. Steenbock discovered (1923) irradiation of food to increase vitamin D levels, leading to the world famous Steenbock process for eliminating rickets (an early source of income for the WARF organization). Elvehjem in 1937 discovered a cure for pellagra by isolating nictonic acid (vitamin B2). Karl Paul Link discovered the anticoagulant blood factor Dicumeral (1948) and developed the pesticide Warfarin (another major source of funds for WARF). Hector DeLuca isolated and synthesized the hormones derived from vitamin D.[8]

As the reputation of the department grew it attracted more and more students and researchers and the building became insufficient for the department's needs. The first addition was made in 1939-1941, when local architects Law, Law and Potter designed the matching wing on the west end [see Fig. 3] of the original block. This $285,000 wing was funded by Public Works Administration and the Wisconsin Alumni Research Foundation (WARF). This building project represented the first time that WARF ever used their resources to fund University construction.[9] The general contractor was George Nelson and Son. This first addition is decorated with murals in stairwells and laboratories by the great John Steuart Curry.

In 1953-1957 a modern section to the north was designed by Foeller, Schober, Bernard, Safford and Jahn of Green Bay, and built by Findorff, for $1.3 million, also with WARF funding.

The six-story section to the north (by Bowen, Williamson and Zimmermann of Madison) was completed in 1984.The 1996 NMR facility designed and built by Flad and Associates will be built to the west and take over the grounds now occupied by the horticulture greenhouses.[see Fig. 3.]

1) *Regent's Report*, 1909-1910, p. 40.
2) *Regent's Report*, 1909-1910, pp. 172-173.
3) *Regent's Minutes*, August 30, 1911.
4) *Regent's Minutes*, October 11, 1911.
5) *Regent's Minutes*, December 13, 1911.
6) *Regent's Minutes*, May 21, 1913.
7) *Regent's Report*, 1913-1914 p. 341.
8) *Wisconsin Alumni Magazine*, July/August, 1982 p. 7. Nomination Papers for the National Register of Historic Places, State Historical Society Library, Historic Preservation Office.
9) *Wisconsin Country Magazine*, November 1938 p. 6; February, 1940 p. 10.

BARNARD HALL

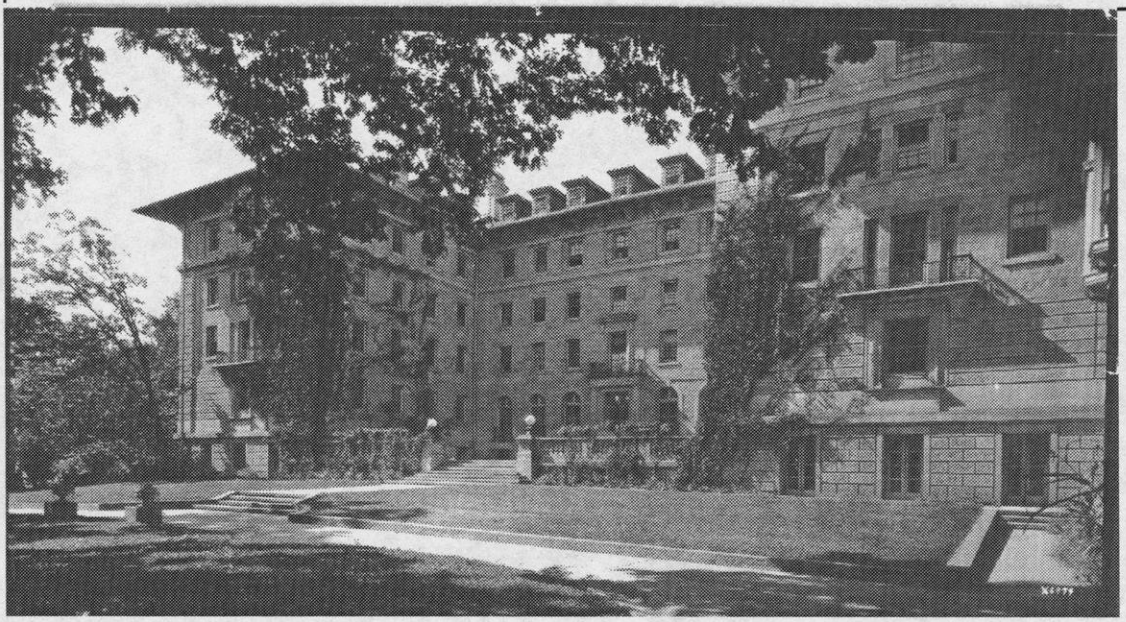


Fig. 1. Barnard Hall from Chadbourne Hall shortly after completion, c. 1915. [series 26/1 Barnard Hall, x25-1894]

Barnard Hall was erected in 1912 as an undergraduate women's dormitory. It has served that purpose ever since. It was the last University building faced entirely with Madison sandstone.

In 1906 President Charles Van Hise told the regents: "the parents of the state are desirous of sending their daughters to quarters under some university supervision ...This is not possible at the present time for more than a part of the young women, nor does it seem likely that it will become possible until additional women's dormitories are provided."[1] Van Hise was determined to raise the level of opportunity for women students as much as possible. He began by providing the Athletic and social center at Lathrop Hall in 1909. Soon after the completion of Lathrop Hall in 1910 agitation began for the construction of new dormitory space.

The first and most enduring issue regarding the new dorm was where to locate it. There were two distinct views. The first was promoted by the consulting architects Laird and Cret, who proposed in the general plan of 1908 that the women's dorm group should be located on the Lake Mendota shore at the approximate site of Elizabeth Waters Hall. President Van Hise supported this location, even though it was intended for a large group of dorms and only one would be built at this time. Another faction (led by Florence Buckstaff of the Committee of Women's Affairs) contended that the site was too remote, and argued for a site on Park Street, to utilize the property at Park and Langdon occupied at that time by the President's House, and currently by the Union theatre. These opinions were so far from agreement that they had plans drawn by various architects showing the utilization of the disputed sites.[2] The disagreement smoldered on through early 1911. Then in June 1911 Laird and Cret were re-consulted, with the understanding that their original proposal was unacceptable. On July 11, 1911 it was definitely decided to locate the dorm on University Avenue between Chadbourne and Lathrop Halls.[3] This decision was partly a compromise, but the idea of a connecting kitchen building for Barnard and Chadbourne made the site appealing.

By October the plans were completed. The contract for the excavation and foundation was let on November 6, 1911 (for $3469) to the Muskegon Engineering and Construction Co. who began work immediately in November 1911 and finished that winter. The contract for the superstructure was signed March 18, 1912 with the Wisconsin Construction Company of Chippewa Falls for $109,073. This contract stipulates that the entire building excepting the kitchen building be completed by February 1, 1913. According to the monthly reports of supervising architect Peabody, work was slightly delayed in the summer of 1912 because of a shortage of masons and high quality stone (Barnard was the last University building faced entirely with Madison stone). The kitchen building, a connecting link between Barnard and Chadbourne, was intended to consolidate the dining facilities for the women's dorms. It ran into some difficulties in the fall and winter of 1912 which not only delayed progress on the project but cost Mr. Peabody his position as supervisor of buildings, and earned him the censure of the regents.[5] The building [Barnard and the kitchen] was not finished until June 1913.[6] The grand opening was held at the gymnasium at Lathrop Hall on October 11, 1913, and featured regents Florence Buckstaff and Elizabeth Waters, ending with a reception on the Barnard terrace and a tour of Barnard and Chadbourne Halls.[7]

The building consists of a 150 ft. X 85 ft. central wing running north-south, with two 42 ft. wings extending to the east on both ends enclosing a courtyard on the east side. The two level kitchen building connects Barnard to Chadbourne Hall from the east end of the north wing. The dorm is four stories high above a raised basement, built of Madison sandstone with concrete floors, tile partition walls and a tile roof. There was initially accommodation for 136 students, with rooms in the attic reserved for 22 servants (later turned into student rooms). The basement and ground floor dining rooms have a total capacity of 240. The total cost of the dorm was $123,500. The somewhat informal application of the campus' Italian Renaissance style makes Barnard Hall one of the most attractive of the buildings on the campus from the Van Hise period, although the site and landscaping, as well as the location of new Chadbourne Hall, keep its good looks hidden from most angles.[8]

The news that the university had built a new women's dormitory brought new students from all over the state (state residents, and Madison city residents were given first priority) and the facilities were soon filled again. It would be another thirty years before the construction of Elizabeth Waters Hall would add to women's dormitory space.

Barnard Hall is named for Henry Barnard, noted educator and University president (1858-1861).[9] Barnard Hall became for a time in the late 1950s a graduate women's dorm, set up to emulate the Knapp graduate center for male grad students.[10] It has now reverted to an undergraduate women's dorm. With the demolition of old Chadbourne Hall, Barnard has become the oldest continuously used dormitory on the university campus.

1) *A History of University Housing*, Teicher and Jenkins, p. 20.

2) Among these were Jarvis Hunt of Chicago, the consulting architect on Birge Hall, and Chicago's Shepley, Rutan and Coolidge. There were later recrimination and lawsuits over the fees for both these firms. The designs are surprisingly similar to the ones finally used, indicating that the regents knew pretty clearly what they wanted, if not where they wanted it.

3) *Regent's Minutes*, July 11, 1911.

4) *Regent's Report*, 1913-1914 p. 340.

5) Mr. Peabody omitted a grade line from the drawings for the kitchen excavation and when the mistake was discovered, authorized the contractor to finish the excavation without getting an official order, from Peabody's memoire, *Short Resume of University Buildings* p. 20. University Archives Peabody biographical folder.

6) *Regent's Report*, 1913-1914 p. 340.

7) *The Daily Cardinal*, October 11, 1913.

8) *Regent's Report*, 1913-1914, p. 340.

9) It is ironic that the building honoring Dr. Barnard should be a dormitory since he was expressly opposed to them. See Thwaites p. 73 fn1.

10) *Daily Cardinal*, April 17, 1959, p. 3.

HOME ECONOMICS

Fig. 1. Home Economics and Extension before construction of west wing; c. 1940. Looking north east. [series 9/3 Home Economics, jf-44]

Erected in 1912 as the home for both home economics and the University extension, this building was first built without its west wing. The west wing was added in 1951. The extension moved out in the early 1960s, and home economics has been renamed Family Resources and Consumer Sciences.

Although instruction of home economics was initially begun in 1903 (as Domestic Science) under the school of Letters and Sciences, the limited facilities in South Hall, and evident lack of student interest, showed little promise. Then in 1909 the department was transferred to the College of Agriculture under the impetus of the Nelson Act which provided funding for home economics programs geared to agricultural education and problems. Agriculture dean Russell was given a year to reorganize the department. It was housed for a semester in the basement of Agriculture Hall, then moved in 1909 to the attic of Lathrop Hall. During this period the department was in the hands of Abbey Mayhew and Carolyn Hunt.

Dean Russell says in his report to the regents in 1910: "A casual examination of ... facilities in Lathrop hall will reveal the utter impossibility of handling this work permanently in these quarters. A new building devoted entirely to this work should be planned at once." In the same report, president Van Hise agrees, saying that "It appears that there is to be a very large demand for the work of this department." [1] With Van Hise and Russell both pushing the project there was quick activity. The architectural committee of Laird Cret and Peabody, originally proposed to locate the home economics building as part of the "women's group" around Lathrop Hall. They knew that the home economics

Fig. 2. The Home Economics building c. 1960 after the west wing was built. Looking toward the northwest. [series 9/3 Home Economics, jf-43]

department would at first share quarters with the extension department, and suggested putting the building between Lathrop and the chemistry building [now Chamberlin Hall] on University Avenue. The logic was that if extension, which could be located anywhere, got its own building elsewhere, home economics would expand into the extension's vacated space.

The extension department was also undergoing tremendous expansion. Although announced in the catalogs for years, only the agriculture extension amounted to anything but sporadic lectures held when called for by citizens. President Van Hise appointed Dr. Charles McCarthy to investigate the situation, who found an enormous pent-up demand for quality correspondence work. As a result of this investigation the regents and then the legislature in 1906-1907 began to allocate small sums to support the extension. The success of the effort to energize the extension led the legislature to appropriate funds for an extension building. In the spring of 1911 the regents allocated $75,000 each for home economics and extension buildings.[2]

After some thought and consultation, they decided to use the idea of Laird and Cret and combine the needs of the two departments in one building. The regents then resolved "that the departments of home economics and University Extension be housed in a building to cost approximately $115,000 and to be located east of Agriculture Hall and north of the Mall [Henry Mall]; same to be constructed immediately; this estimate is for brick construction and includes equipment for both departments."[3] The plans generated by Laird and Cret, were for a central section running east-west, with a north-south wing on each end. Budget constraints forced the regents to reduce the initial construction to the center section and the east wing; leaving the construction of the west wing for a later date [see Fig. 1]. They had the architects provide a separate entrance for the Extension division.

The construction of the building turned out to be a star-crossed project. The contract for the excavation and foundation was let to Madison Engineering and Construction Company on October 23, 1911 for $2114. In less than a month they defaulted on the contract. The regents turned to the second lowest bidder, George Nelson of Madison, who signed the contract on November 24, 1911, for $3350. Nelson began the job on November 27, 1911. In March of 1912, the regents awarded the contract for the superstructure of the building to the lowest bidder, W. H. Grady and Co. for $100,879, "provided it is found that these are responsible companies..."[4] Someone didn't look very hard. The regents declared Grady in default on the contract in May, 1913. In a statement dated February 18, 1914 the university lists $102,191 in payments to Grady before he disappeared with the

money and leaving a trail of unpaid subcontractors. The university finished the building itself and settled up the outstanding liens and debts.

The building was completed in March 1914. It consisted of a five-story central portion, 100 ft. X 58 ft., with a four story east wing, 49 ft. X 92 ft. with a total of 50,000 square feet of floor area. It was a steel and concrete structure faced with buff vitreous brick with Bedford limestone trimming, and a red tile roof. The Extension was housed in the lower floors of the center section. The Home Economics department occupied the east wing and the upper floors of the center section. The spaces vacated by Home Economics in South Hall and Lathrop were immediately filled by bacteriology and women's physical education, respectively. Future expansion was provided for by the addition of the missing wing on the west side of the central section which had a rather blank look (fig. 1) due to its relative lack of ornamentation.[5]

This building was successful and filled its dual purpose well for many years. But starting in the 1920s the enrollment in home economics began to squeeze the departmental space. The department was gradually spread around the campus in Babcock Hall, and several temporary buildings, besides the Home Economics building and practice cottage. It was not until 1951 that the regents decided to complete the building by adding the west wing (18 feet longer than the original east wing). The construction contract was let to the lowest bidder, George Nelson and Son, for $393,793. In the spring of 1953 the west wing was finally completed. The laboratories were now up-to-date, conference rooms, lecture rooms and office space were now available.[6]

In 1962 the new university extension building at 632 Lake Street opened and left Home Economics (which had become a school in 1951) in sole possession of the building (fulfilling the last detail of the vision of the builders in 1913). In 1968 the school was renamed "Family Resources and Consumer Sciences". It now is involved with child psychology, and consumer goods study. The building remains a handsome and imposing presence on the Linden Drive hill.

1) *Regent's Report*, 1909-1910 p. 173.
2) *Regent's Minutes*, April 6, 1911.
3) *Regent's Minutes*, July 11, 1911.
4) *Regent's Minutes*, March 13, 1912.
5) *Regent's Report*, 1913-1914, p. 341; *Regent's Report*, 1908 p. 102, this entry details the movement of the departments at the time of their reassignment to the college of agriculture.
6) *Wisconsin State Journal*, June 7, 1953; Regent's Minutes, January 13, 1951, p. 12.

WISCONSIN HIGH SCHOOL

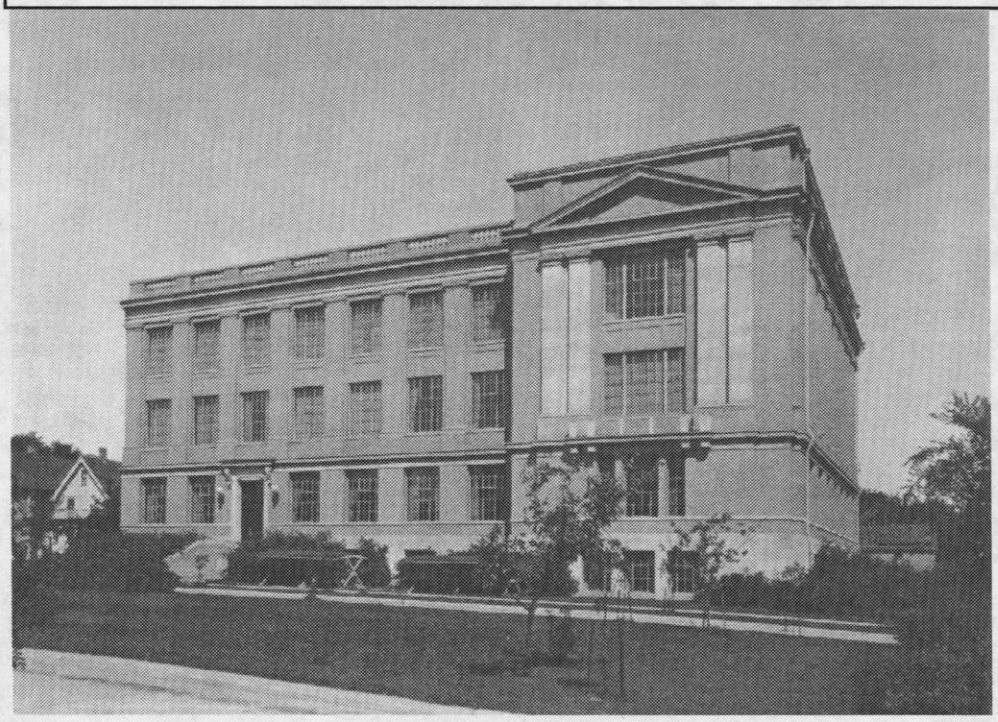


Fig. 1. Wisconsin High School c. 1915. Evident in this photo is the off-center entrance due to a reduction in size from the original plan, without relocating the entrance. [series 9/3, Wisconsin High School, x25-748]

Built in 1913 as a practice school for teachers, the Wisconsin High School was closed in 1964. It then served journalism, social work and some women's education, and was demolished in 1993.

In the period between 1875 and 1910, a series of efforts were made to provide and ensure a steady supply of good teachers for the high schools of the state of Wisconsin. Although one of the aims of the 1848 law which founded the University was "the department of the theory and practice of elementary instruction," this goal was not actively pursued until much later. A normal department was founded in the 1860s but was disbanded shortly after. In 1878 a law provided that any University graduate (in any subject), with 16 months experience at teaching was allowed an unlimited state teaching certificate. Around the turn of the century the state and University agreed that there was a need for a program devoted to the training of teachers. President C. K. Adams said in 1897 "one of the weakest points in this University up to the present time, has been its failure to give the requisite amount of theoretical and practical training in the art of imparting instruction."[1] As part of the attempts to rectify this situation, the University developed a curriculum in pedagogy for graduates who intended to teach. The state laws governing teacher certification were altered in 1907 to reflect the availability of specialized education for teachers.

It became clear that needed as part of the new curriculum was a way to give the students practical experience in teaching, while at the University, and, as a corollary consideration, a way for the department of education to test new means of teaching in a controlled environment. The 1906

Fig. 2. August 12, 1993, the Wisconsin High School is demolished to make way for the Biotechnology Center. [Author Photo, AP-9]

Board of Visitors urged the University to establish a demonstration school. President Van Hise also declared that year that a model school was needed. As a first attempt to meet this goal, the regents made arrangements with Madison area high schools to accommodate student observers.

In 1910 Charlotte Richmond the owner and operator of a private school called the Wisconsin Academy, at Gilman and State streets donated it to the University who reopened it in September 1911 as the Wisconsin High School. This temporary measure gave the University an opportunity to begin the kind of teacher instruction it envisioned. The University hired as principal Harry L. Miller, who answered to Edward Elliot, director of the course for training teachers. The Wisconsin High School was a private school, with tuition initially set at $8 per quarter. The school was organized as a six-year school (grades seven, eight, and the four years of high school), making it a very early example of a combined junior and senior high school, reflecting some of the most progressive thinking in the field of education at the time.

The regents report of 1909-1910 contains an estimate by Van Hise of about $150,000 to build and equip a University secondary school. In 1911 the legislature appropriated $62,500 for the Wisconsin High School Building, about one-third the projected cost of the building at that time. In 1913 the legislature added $45,000 to the appropriation. The University had discussed the project at length with consulting architects Laird and Cret and with University supervising architect Peabody and had plans for the building in hand shortly after the legislature acted.[2] The site for the building was a prominent spot on Henry Mall selected by Laird and Cret in their 1908 general plan.

The contract for the foundation was awarded to the Muskegon Construction Company for $2783.50 on December 21, 1912. The regents accepted the bid of construction contractors The Wisconsin Construction Company for $108,000 in April 1913.[3] Construction began in July 1913. Because the appropriation for the building was not sufficient for the whole project, the regents decided to build only two-thirds of the building designed by Laird and Cret. At the same time, believing that the remaining portion of the building would be added soon, they did not redesign the section that they intended to build. The original design was a center section running north-south, nine bays (window sections) wide, with an east-west wing at each end. The reduced plan eliminated the wing on the north end, and shortened the center section from nine to seven bays (see Fig.1). The main entrance,

from Henry Mall, was centrally located on the original design, and was not relocated to the new center on the reduced plan, since when the planned completion took place, the entrance would then become centralized as planned. The planned expansion never took place, and the entrance remained offset for the life of the building.

The construction did not go entirely smoothly. The contractor suggested to architect Arthur Peabody that some money could be saved by replacing certain iron girders with concrete. Peabody agreed, made the changes on the drawings and presented them to the business manager H. C. Bumpus, who signed them without close examination. The following afternoon the concrete beams were poured, and that night the scaffolding gave way, collapsing the beams, and dumping the concrete into the basement. According to Peabody, Mr. Bumpus told him "You put one over on me. I did not know that honest steel girders had been changed to concrete." The volatile Peabody offered to quit but Van Hise talked to Bumpus and smoothed the episode over.[4]

The high school as built was a main section facing west, 44 feet by 90 feet three stories above a raised basement. On the back of the main section was the auditorium and gymnasium portion. On the south end of the main section was a wing 44 feet X 90 feet, three stories and an attic above a raised basement. The construction was a steel framework and reinforced concrete floors, skinned with buff vitreous brick (intended to harmonize with the color of the stone used in the old part of campus to the east). The visible parts of the roof were covered with red tiles. The building was occupied in September 1914, with a formal grand opening on April 1, 1915. The building contained classrooms and offices, manual arts laboratories, shower rooms and gymnasium in the basement; in the first and second stories were lecture rooms for the department of education. These lecture rooms overlooked rooms to the right and left, enabling students to witness the actual work of teaching.[5]

The Wisconsin High School was very successful in nearly every respect. The enrollment in 1915 was 250, and generally stayed at high levels. This was due to several factors, chief among which was the quality of education. The presence of University-level teachers and student teachers, coupled with some forward-thinking experiments in education, provided a high school experience that is remembered with pleasure by many graduates. The opportunity for local students (including the children of many faculty members) to attend the same school for six years provided continuity for the students and school alike.

As other methods were developed for student teaching, the importance of the Wisconsin High School to the School of Education waned. Finally in 1962, in the midst of severe space shortages, the instructional activities were merged with the old Madison Central High School, and the high school was closed and remodelled (by Law, Law, Potter and Nystrom) for use as the University's School of Journalism and the Library School.[6] In 1972 it became the home of the School of Social Work and parts of the Women's Physical Education Department.

Its incomplete state as an architectural design and the subdivision and repeated remodelling of its interior as well as added space on campus (especially in Vilas Hall) made the building expendable and its site was selected for the new Biotechnology Center, and the old Wisconsin High School became the first of the Laird and Cret designed buildings on campus to be razed. It was demolished in August of 1993 (see Fig. 2).

1) *Regents Minutes*, January 19, 1897.
2) *Regent's Minutes*, June 18, 1912.
3) *Regents Minutes*, April 16, 1913.
4) Peabody, Arthur: *Short Resume of University Buildings*, 1934, p. 22.
5) *Regent's Report*, 1913-1914, p. 342.
6) *Regent's Minutes*, December 7, 1962.

MEIKLEJOHN HOUSE

228 North Charter Street c. 1965. [series 9/1, Meiklejohn House, x25-2118]

Originally a private duplex, the Meiklejohn house became university property in 1928. It was the home of the Anderson house women's cooperative until 1968 when it was converted to academic use. It is now the home of the ILS program (Integrated Liberal Studies), a descendant of Alexander Meilkejohn's experimental college.

In 1914, after years of living in rental housing on West Johnson Street, mason contractor Samuel Oakey and his wife Ida built a three story craftsman style duplex on four lots of land on north Charter Street a few blocks from the university campus. The Oakeys and their children lived in the south half of the duplex at 228. The 230 side was occupied by a series of short term tenants. Samuel died about 1920.[1]

In the spring of 1928 after years of living in the house with her children as they attended the university and taking in boarders, Ida May Oakey was approached by Miss Mary D. Andersen and Miss Nardin of the YWCA advisory board, and asked if she was interested in selling the house. She said that she was, and the women from the YWCA had university officers Gallistel and McCaffrey look over the property as a location for a women's cooperative house. They gave their approval and the women put down $500, and took on a $220/month mortgage for the $19,000 purchase price and the Anderson cooperative house was started. The owner of the property was the University Women's Building Corp, under the supervision of the dean of women. The direct antecedents of this co-op were the Tabard Inn, the Mortar Board, and the Blue Dragon. In the same year, 1928, superintendent

of buildings Gallistel drew up and executed plans which modified the old duplex into a single dwelling.

There was room for 17 women, whose idea was to lower their living costs as much as possible by doing the work themselves, thereby doing away with the need for servants. The only employees were a housemother, a cook and a houseboy. Most inhabitants of the Anderson house worked part time to get through school. Rent was typically about $200 per semester. They rotated a work schedule for the chores involved in running the house.[2]

In 1940 the co-op hired as a housemother Mrs. Grace Lord. She was destined to stay for more than twenty years. Mrs. Lord appears to have been something of a Tartar. In 1950 the women of Anderson house write a list of complaints to dean of women Louise Troxell. They say that Mrs. Lord is peremptory with them, that she doesn't allow the girls to know anything about the running of the house, that she 'makes a martyr of herself over the keys', and that she listens at their meetings from a vantage point near the stairs. In a memo regarding these complaints dean Troxell writes, "I do not know what will or can come of this as Mrs. L. is quite inflexible and operates best in an atmosphere of complete authority, I believe." A considerable amount of this conflict appears to have been caused by Mrs. Lord's stringent measures in keeping costs very low (e.g. only very small wash loads to preserve the washer). This was part of what made the Andersen House a success.

Mrs. Lord remained at her post at the Andersen house until 1964. At that time the name was changed to the Rosemound Residence under the control of Mary Tyrney. By that time most of the functions of the women's cooperatives had been taken over by the 'official co-ops' of Zoe Bayliss and Susan Davis houses. In 1969 the building was taken over by the university (the university held title to the properties controlled by the University Women's Building Corp) for use as the university history annex. The building was taken over the following year by the Integrated Liberal Studies program (ILS). In September 1969 the regents approved the naming of the building "Meiklejohn House". The ILS is a descendant of the Experimental College begun in 1927 by Alexander Meiklejohn. The ILS is the current resident of the old Oakey house.[3]

1) Madison city directories.

2) *Wisconsin Alumni Magazine*, May, 1950; *Daily Cardinal*, April 13, 1951.

3) *Regent's Minutes*, August 14, 1964, Exhibit A, September 19, 1969; Badger Herald, January 26, 1972; Madison city directories.

B. A. V. I.

Fig. 1. Schlimgen building 1993. Designed by Claude and Starck and built in 1913 as Schlimgen Monuments, the building was purchased by the University in 1946, and used as a home for various extension departments. It became the home of the Bureau of Audio Visual Instruction in 1964, and now houses art studios. [Author Photo, AP-10]

As early as 1902 there was a commercial building at 1327 University Avenue. Then in 1913 a new one-story building (designed by local architects Claude and Starck) was built on that site by Fred M. Schlimgen. Schlimgen opened Schlimgen Monuments. The building was built with careful consideration of its intended purpose; support columns and beams are very massive, to carry the weight of the chunks of granite and marble. The front is decorated with slabs of Wisconsin red granite, and originally had large picture windows with "prism lights" above the windows (covered in the 1960s). Schlimgen operated the monument shop until his death in September 1931. The property passed into the hands of Fred's wife and children. It was rented to the Rundle-Spence Manufacturing Company, a maker of plumbing supplies.[1]

They were the occupants as of August 7, 1946 when the regents purchased the land and building for $75,000. The regents approved not only the $75,000 purchase price, but a further $25,000 for remodelling the building. The plans for the remodelling were carried out immediately after purchase and by the fall semester of 1947 the building was occupied by the university extension division. A shed built as a stable and storage shed by Schlimgen on the west side of the property used for years by the extension, was demolished during the rebuilding of Johnson Street in the 1960s, and it was discovered that the footings and foundations of the shed had been built from discarded tombstones, cracked, flawed, or misspelled. The 1947-48 catalogue lists debating and public discussion and Wisconsin idea theatre as having faculty and offices at the building. This was in the period which saw the Extension trying to lose its 'just agriculture' image, and the new building helped house services for the general, non-farming citizen.[2]

Throughout the 1950s and early 1960s these community service programs came and went in the old Schlimgen building. Then in 1964 the building became the home of the Bureau of Audio Visual Instruction (B. A. V. I.) who stayed until 1994 when the art department moved in.

1) Madison city directories; Dane County Register of deeds.
2) University directories, University Archives.

STERLING HALL

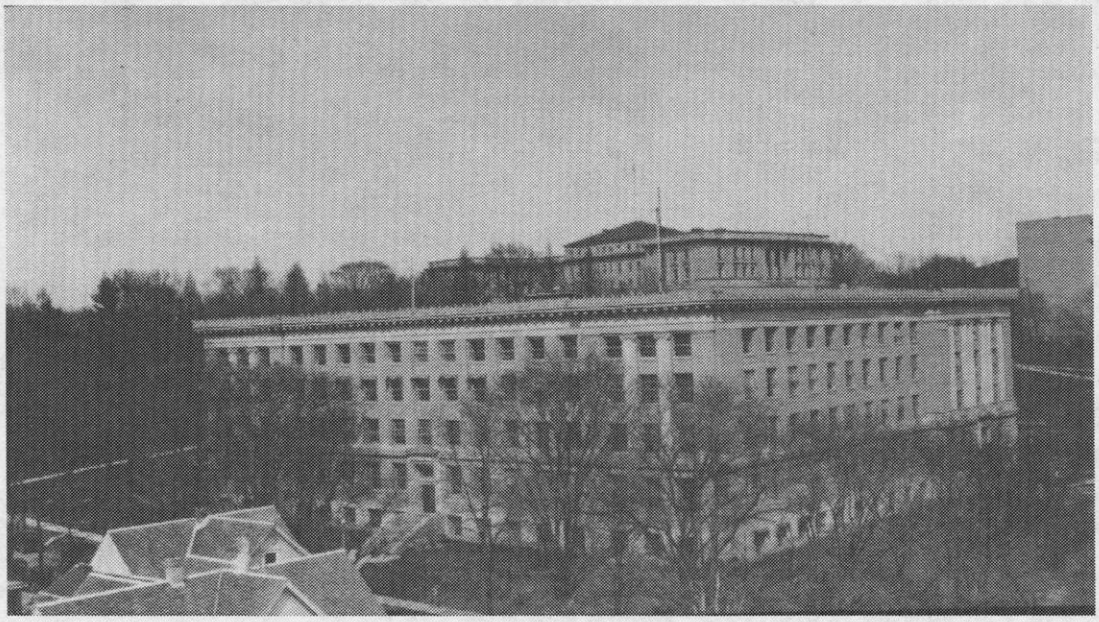


Fig. 1. C. 1917 Sterling Hall. In the background: Bascom and the unfinished west end of Birge. In the foreground, the neighborhood later replaced by the Service Memorial Institute. [g1002]

Sterling Hall was built in 1915 to house physics, political economy and commerce. In 1958 a wing was added on the south side to house the army math research center. This center was the target of a bombing in August 1970. The building is now the home of physics and astronomy.

In 1913, the College of Letters and Sciences was shoehorned into three buildings (Main, North and South Halls). Not for more than a decade had building space been erected for L&S, despite the fact that enrollment had risen more sharply in that college than any other, including some who had been provided with several new buildings. Both president Van Hise and Dean of Letters and Sciences Birge were determined to change this circumstance. Their approach was to plan for the construction of two structures, a liberal arts building and a physics building. In the spring of 1913, conferences began with department heads to plan the new facilities. The plan for the liberal arts building gradually became a large addition to University Hall, and the physics building took shape as the regents debated the best location for it. In October 1913 the regents decided on the site proposed by the consulting architects Laird and Cret: the north side of the 'court of honor' formed by University Hall, Birge Hall and the new building. It was to be a four story building, with physics in the lower two floors. Then during the winter of 1913, estimates were obtained and the thinking began to change. The Committee on Constructional Development recommended that the decision to locate the physics building on the court of honor be rescinded in favor of a site north of the Chemistry building and east of Charter Street.[1] President Van Hise explained that the adoption of this plan eliminated the need for a very costly "Madison stone" building required for a building in such a conspicuous location as the top of Bascom Hill, and that considering the likely appropriation, the available space in a building on Charter Street would be one third larger than the space on the Hill site. Professor Snow, the head of the physics department voiced unspecified concerns about electrical disturbances, but decides that the

additional space more than made up for the disadvantage.[2]

In this plan the lower two floors were to be given to Physics, who were concerned about vibration in a tall building, and the upper two floors were unassigned. On January 21, 1914, the regents approved Laird and Cret's plan for the physics building. The office of Arthur Peabody the university's supervising architect proceeded to generate detailed drawings for the building and advertising for bids. On December 17, 1914, the regents opened bids and awarded the contract to the lowest bidder, the Wisconsin Construction Company for $180,775.

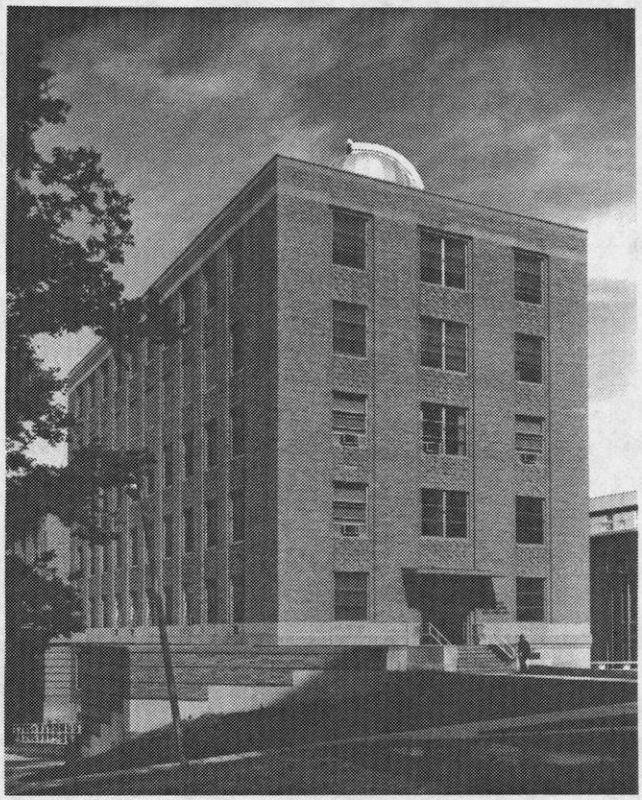


Fig. 2. Sterling Addition c. 1960. [series 9/1 Sterling Hall, x25-2885]

But it was not until seven months later, in August 1915, the regents reported that the legislatures of 1915-16 and 1916-17 had appropriated $190,000 for "the construction of a Medical or Physics Building."[3] This delay caused serious trouble for the project. Because all building contracts had to be signed by the governor, the go-ahead to start construction was delayed until August 21, 1915, a full eight months after the bids had been calculated by the contractor. In this interval prices of material and labor had risen substantially, and the contractor argued that he could no longer agree to put up the building for the contract price. This argument was taken by the regents to the state attorney general. After conferences among the principals, the order to begin work was given, with no relief given to the contractor[4]. The contract stipulated that the whole building be completed within eighteen months of the work order, i.e. by April 1917.

Due to these legal problems with the contractor, as well as labor and material shortages, the completion of the physics building was delayed by eight months. The public inspection and dedication of the building took place on January 15, 1918. Total cost was $190,000. A rededication of the building took place in the summer of 1921, after the regents voted that "the Physics-Economics Building be named Sterling Hall."[5]

"The building has four stories and a basement, of which the basement, first and second stories are occupied by the Department of Physics, the third story by the Department of Political Economy and the fourth story by the Course in Commerce. The space beneath the Auditorium floor will be utilized for the University Telephone Exchange."[6] This arrangement of the building had taken considerable diplomacy on Van Hise's part. The department of history had wanted the space but after the building site was moved to the less prestigious Charter Street location, they opted to wait for a different building; the next neediest department was the medical department under dean Bardeen, who agreed that when physics moved out of Science Hall the medical department would have ample room in that building (and that his school would move to the top of the priority list).[7] Political Science and Commerce appear to have been chosen to free up the most space in existing buildings. Political Economy stayed only until 1919; Commerce until 1956.

Throughout the twentieth century the physics department with men like Mendenhall and

Fig. 3. The aftermath of the August 24, 1974 bombing. [x25-2622]

Benjamin Snow, (who made physics "less unpopular than at other universities"), developed a world-wide reputation in teaching and research. By 1955 this reputation was such that the federal government after consideration of all U. S. universities selected Wisconsin as the site for the Army Mathematics Research Center (AMRC). In December 1955, the regents accepted the governments offer of the AMRC, and a gift of $400,000 from WARF for a four story addition to the east side of Sterling Hall to house the center and the university computing service. Due to bureaucratic, financial and construction delays the new addition was not dedicated until April 1959, although it had apparently already been in use for some time. The new $800,000 six-floor south wing (see Fig. 2) housed the AMRC on floors two, three and four, physics on the first floor and basement, including high energy physics and in an attached one-story building to the north an atom-smasher. The Numerical Analysis laboratory moved from the basement of Bascom Hall to the fifth floor of the Sterling addition. The department of astronomy moved to the sixth floor, as the beginning of its escape from the obsolete facilities at the Washburn Observatory.[8]

The beginning and use of the Army Math Research Center is strikingly similar to that of the Federal Forest Laboratory, which was similarly funded and utilized before and during WW I. For various reasons, the AMRC became increasingly the focal point of the movement in the late 1960s to limit the role of the university in military research pertaining to the war in Southeast Asia. This resistance culminated in the August 24, 1970 bombing of Sterling Hall. A truck sized bomb was detonated in the alleyway just to the south of the building. In the ensuing explosion a physics researcher (Robert Fassnacht) was killed, and about 2 million dollars worth of damage occurred to campus building (principally Sterling, Chamberlin, the new chemistry building, and Birge Hall). The bomb which was slightly west of the wing containing the target, (see Fig. 3) did little damage to the AMRC (principally a paper and pencil operation). The addition after repairs were made now [1993] houses mainly the astronomy department and some physics facilities.

1) *Regent's Minutes*, December 3, 1913.
2) Van Hise to the Regents, November 28, 1913, in Regent's papers for December 13, 1913.
3) *Regent's Minutes*, August 19, 1915.
4) *Regent's Minutes*, October 13, 1915.
5) *Regent's Minutes*, June 21, 1921.
6) Program of Reception, January 15, 1918. Archives Sterling Hall subject file.
7) Parts of the negotiations for space appear in telegrams from Van Hise to business manager Bumpus in series 24/1/1 box 3 folder "V". The liberal arts building was dropped entirely since the history department could be accommodated in Bascom and South Halls, after commerce and political science left.
8) *The Daily Cardinal*, April 16, 1959, *Wisconsin Alumni Magazine*, December 1959 p. 10.

CAMP RANDALL STADIUM

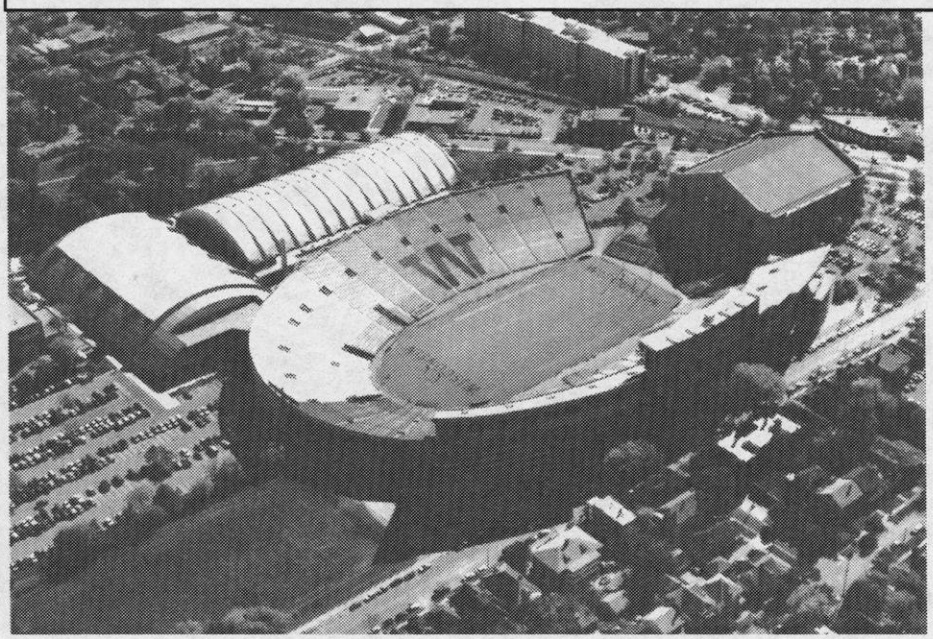


Fig. 1. The modern configuration c. 1990. Shown are the 77,000 seat stadium with new upper west deck, the 1930s field house, the 1954 memorial shell, and the 1988 McClain facility. The street in the foreground is Breese Terrace. [series 9/10, Camp Randall, jf-45]

The first field at camp Randall was in the northeast corner, and was used from about 1893 to 1914. The current stadium was built sections at a time beginning in 1915, with major additions in 1924, 1940, 1950, 1957, and 1964.

In the earliest days of the State of Wisconsin the 50 acre site bounded by University Avenue, Breese Terrace, Monroe and North Randall Streets, was owned by the State Agricultural Society. The early state fairs were held there with the race track and fairgrounds in the approximate location of the modern stadium's football field. With the outbreak of the Civil War the Agricultural Society offered the property to the state as a training center for troops. By May 1, 1861 soldiers began to move in. The camp was named for Alexander W. Randall, the state's first wartime governor. The first winter saw 9,000 troops quartered at Camp Randall, and eventually 70,000 of the state's 91,327 troops trained there at one time or another. In 1862, 1400 sick and wounded Confederate troops captured at Island 10 in the Mississippi and at Shiloh were held at Camp Randall. Many of these southern soldiers died of their wounds and are buried in a cemetery on Madison's west side in an area known as "soldier's rest", the northernmost confederate cemetery in the United States. There was then a plan made for the land to be platted and sold for building lots, but the outrage of the war veterans against this "sordid sacrilege" led the state legislature to purchase the property from the owners, a group of Madison businessmen led by R. M. Bashford, for $25,000 on April 29, 1893. In his testimony before the legislative committee regarding the property General Lucius Fairchild is reported to have said: " Gentlemen there is the property; the university needs it; the price is cheap; if you don't buy it, I will." The legislature then presented the property to the university. In 1913 the memorial park was defined by the legislature to include the 6.5 acre parcel at the east entrance of the camp. The memorial park section is still under the control of the university. The memorial arch was built by the state in 1911 at a cost of about $25,000 and the cannons were mounted in 1913. Soldiers were again quartered and trained at Camp Randall during WW I, and the WAVES in WW II trained

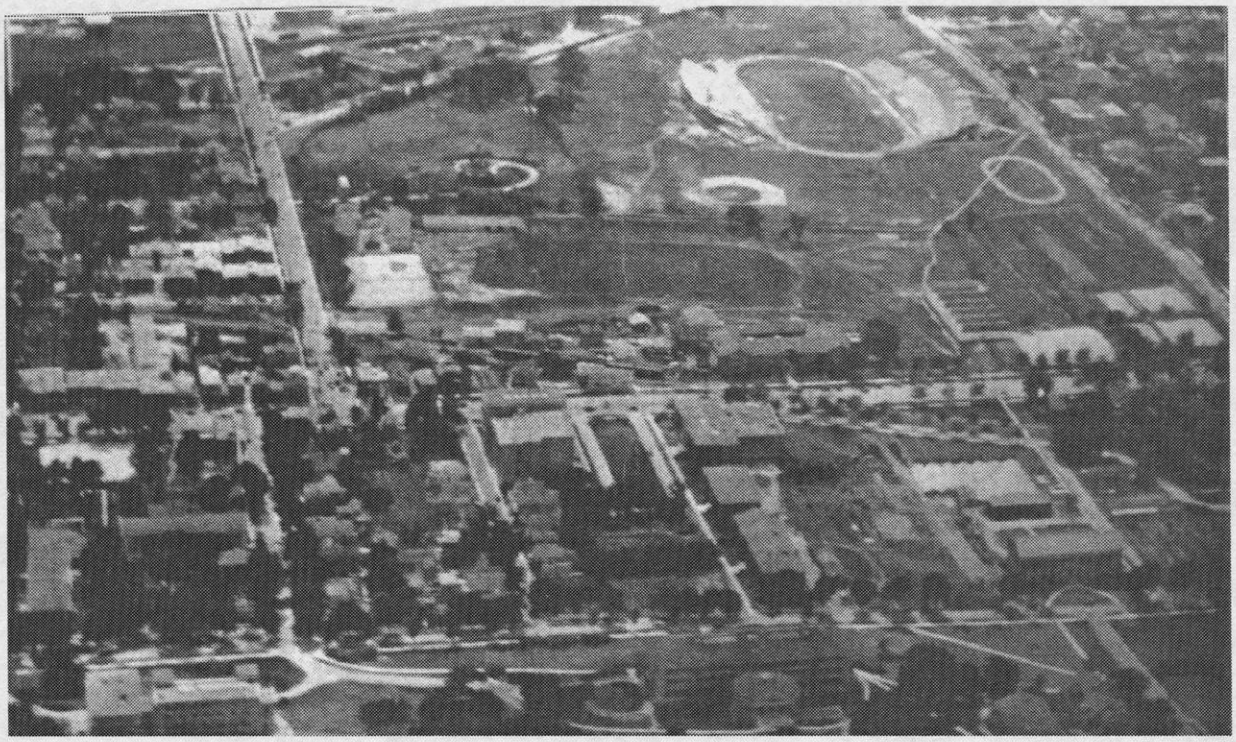


Fig. 2. c. 1924 aerial photo of Camp Randall from the north. The Camp Randall polygon is bounded by Randall Street on the left, Monroe Street (diagonal at upper left), Breese Terrace on the right and University on the bottom. The horizontal street nearest the bottom of the picture is Linden Drive. The new stadium is under construction at the upper right, the oval from the old field is still visible near the intersection of Randall and Dayton Streets. [photo album series 0/6 vol. 18, p.108]

there.[1]

Shortly after it was acquired by the university Camp Randall was put to use for athletics, at first only for track and field events, since baseball and football games were still being played on the lower campus between State and Langdon Streets. Even some Big 9 (later Big 10) games were held on the lower campus, with spectators lining up in buggies on Langdon Street. The increasing attendance and the associated dangers (there were reports of baseballs entering street cars) at these athletic events caused the university to build a stadium at the northeast corner of Camp Randall the site of the old fairgrounds (see Fig. 3.) A soldier's veteran groups wrote a petition to the regents that the name always remain Camp Randall, complaining that no-one would consider renaming Bunker Hill "Bunker Field". Their request was granted and only the occasional visiting sportscaster refers to 'Randall Field' and is quickly corrected. This stadium was first used in 1895 when the Badgers defeated the Gophers of Minnesota 6-0. The bleachers were wooden and with the heavy use (capacity was about 3000) were difficult to maintain. The grandstand section had rooms underneath it for lockers, toilets and showers. In the fall of 1914 the entire bleacher section on the north side of the field was condemned as unsafe for use. They were torn down and the practice began of renting temporary bleacher seating for the east, west and north sides of the field. Although the total seating capacity of the stadium was about 3,000 the Daily Cardinal reports that as many as 15,000 attended games, standing in crowds surrounding the field. Peabody, athletic director George W. Ehler and the regents began planning the stadium in 1908 about the time the old stadium was becoming unsafe. Petitions to the legislature for funds were not answered until 1915 when the state granted $20,000 of a $40,000 request for a new stadium. The work of preparing the site for the new stadium was begun in mid-1915. Work was slow due to hard weather, and war related material problems. The hope that

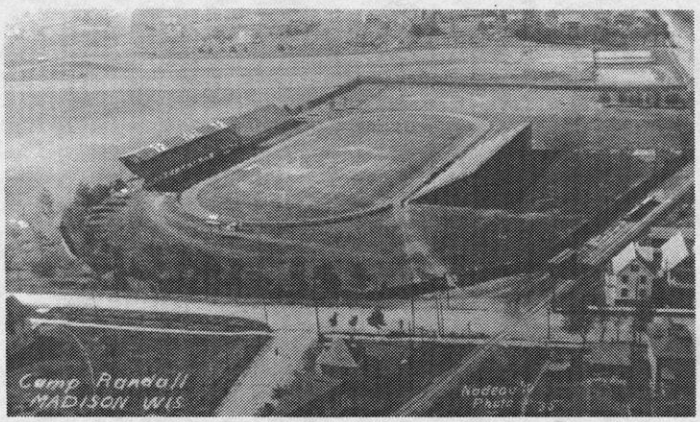


Fig. 3. 1910 The original stadium at Camp Randall. The intersection in the foreground is Randall (left to right) and Johnson Streets. University Avenue is in the extreme upper right. The camera is looking west toward Breese Terrace. The grandstand is at the left. The bleachers on the right were condemned. [series 9/10 Camp Randall, x25-1872]

Fig. 4. The stadium dorms on the east side of the stadium c. 1950. [series 9/10 Camp Randall, jf-46]

the new stadium would be available in the 1916 season slipped away. Then something happened.[2]

The homecoming game against Minnesota on November 20, 1915 was attended by a reported 15,000 spectators. A large percentage of these fans were crowded into the rented and recently erected temporary bleachers. About a minute into the second quarter of the game, a loud cracking sound was heard from the vicinity of the west bleachers and three one-hundred foot sections of bleachers containing 1,800 people collapsed. Surprisingly there were almost no serious injuries, although there were a quantity of minor ones, and rumors of students near death. The game was only interrupted for about fifteen minutes, after which the Badgers were beaten 21-0. Famed sportswriter Ring Lardner was at the game and wrote a typically breathless article for the Cardinal in which he reported: "They was about 1,000 or maybe five thousand people in one of the cheering stands and all of a sudden it caved in somewhere and all the people was thrown on the ground. Some of 'em was hurt pretty bad too..." An inquiry into the accident by the state and university architects and engineers exonerated almost everybody, placing the bulk of the blame on ground recently saturated by rain and subjected to a freeze- thaw cycle. The stakes at the front of the bleachers began to move forward under their load until some rear supports pulled out and gave way, thus allowing the structure to collapse. President Van Hise told the Cardinal "We have been afraid something like this might happen ever since a stand gave way in Chicago ... we have been for years urging a concrete stadium at Camp Randall, but it was just cut out of the bill offered on the floor of the senate. Today's accident shows how imperative is the need." The 1915 legislature's $20,000 appropriation, the accident, and $2300 in donations from alumni and students accelerated the construction of the new stadium.[3]

The plan placed the new field just east of a forty foot hill that sloped away from Breese Terrace near Monroe Street. The new concrete bleachers would be built directly into the east side of that hill. Since there would be no space under the west stands it was assumed that locker rooms and facilities would wait until the construction of an east grandstand which was not an explicit part of the original plan. It was estimated that the hillside capacity was 10,000 seats, not all that were needed but all that could be afforded. The new stadium was ready for use in time for the opening home game of 1917. The top row (of 40) was twenty feet below Breese Terrace. The seats stretched 400 feet

along the hill.

The first game played at the new field was October 6, 1917 against Beloit, with the Badgers winning 34-0, attendance was reported at 2000. The stadium was not officially dedicated until November 3, 1917 at homecoming against Minnesota. The Badgers won in front of 10,000 fans at the new stadium. The legislature of 1917 had appropriated another $10,000. Because only 7500 of the hillside seats were finished in time for the start of the season, and partly to provide dressing facilities, the grandstand section was moved from the south side of the old field (the section on the left in fig. 3) to the east side of the new field, adding another 3000 seats. The ground on the east side of the field was fill and several years were thought to be needed for it to stabilize before it would be safe to build concrete seats upon. This configuration of 7500 concrete hillside seats and 3000 old wooden seats from the old field was used and added to piecemeal (in 1921 4000 concrete seats were added for $24,872) for about seven years.[4]

On June 8, 1922 after an rain-soaked fraternity game at the field, a student living on Breese Terrace called the fire department and reported seeing flames at Camp Randall. By the time the fire department arrived the old wood grandstand was engulfed in flames, and far beyond saving. No certain cause of the blaze was ever determined, it was variously blamed on arson, a cigarette, town kids, et. al. Ironically the building had been sold the previous day to a salvage man. Thus passed the last remnants of the old stadium where played the earliest greats of the Badger football program, fabled "kangaroo" kicker Pat O'Dea[5], J. F. A. "Sunny" Pyre, "Norsky" Larsen and other members of the conference champion teams of 1901 and 1912.[6]

In July of 1923 work was under way on concrete bleachers for the east side of the field that would add 5000 more seats to the stadium (Arthur Peabody's design). The temporary north bleachers were replaced with concrete in 1923 also. By 1924 the capacity of the stadium was listed as 33,000. For the next fifteen years the bowl-shaped stadium grew bit by bit as money became available from the legislature or from gate receipts. In 1940 an addition was built that completed the original bowl. It now wrapped around the field on three sides, with the field house filling in the south end, which had originally been left open to alleviate the ventilation problems that early stadia of this type exhibited. It had a capacity of 45,000 and utilized some temporary bleachers on the northwest and southwest corners.

An interesting aspect of the Camp Randall stadium was the inclusion of the stadium dormitories. In the period around 1940 housing for students and military personnel was a distinct problem in Madison, and the regents sought innovative ways to alleviate the problem. The '1940' addition (designed by the state Bureau of Engineering) which was actually begun November 1938, added 7500 seats on the east side and built the dormitory under the east side seats. The outside wall was sheathed with Madison sandstone (for which a local quarry had to be temporarily reopened), and in addition to the dormitory for 150 men, there were boxing and wrestling quarters, and a rifle range. The work on the 1940 addition to the stadium was done by the WPA (Works Progress Administration) a depression era federal program. The dormitories were named the Schreiner and Baumann houses after two UW students who were killed at Okinawa. These dorms were occupied initially by naval trainees. After the war the dorms were home to 157 student veterans. The stadium dorms did not have kitchen facilities and so were cheaper than the regular dorms ($145-160/year in 1950). As dormitories they always operated at a loss because of various factors mostly regarding scale and poor utilization of space. In 1951 the regents announced their decision to close the stadium dorms, and suggested that the next dorms built on campus should be named for Schreiner and Baumann. In 1954 the rooms were converted to offices for the extension department. Later they became offices for the athletic and military departments.[7]

In 1950 plans (by Ebling, Plunkett & Keyman of Milwaukee) were announced to expand the

stadium to hold 50,000 using revenue from athletic events. The expansion was done by raising the bleachers in the north end to the same height as the main east and west sections, and by replacing the temporary seats with permanent ones. The C. B. Fritz Co. was awarded the contract, and began work in May 1950. The total cost of this expansion was $568,000. Complaints had been made about spectators getting splinters from the old wood seats. The work was delayed because of postwar material shortages and a severe winter in 1950. The job was not completed until September of 1951. Even with the expansion Camp Randall stadium was one of the smallest in the Big 10.[8]

Attendance at the newly enlarged stadium averaged over 50,000 during the seasons of 1952 and 1953. Calls for further expansion were immediately raised. In 1954 the regents authorized a study of methods for adding seats. Three methods were investigated: building more rows on top of the existing seats, filling in the south end of bowl behind the field house, and lowering the field; that is going up, going out or going down. In 1957 the regents announced that they would lower the field by ten feet, thereby adding 10,000 new seats and many of them between the goal lines. This would eliminate the running track which had always surrounded the field, but the newly built Memorial practice building and plans for a new gymnasium eliminated this drawback. The work was begun in mid November of 1957, with a projected cost of $482,000. By July 1958 the expansion was in the finishing stages. The capacity had risen to 63710. The area between the bleachers and the field was blacktopped during this expansion.[9]

The stadium proved adequate through the late 1950s and early 1960s, but a few successful seasons boosted attendance again and in 1964 the regents decided to expand again. This time they decided to go up. The plan (by Osborne Engineering of Cleveland OH) was to add a second deck on the west side of the stadium, and to include a two story press box, which would free up more seats in the bleachers. This addition was completed in time for the 1965 season and brought the stadium to its current [1993] capacity of 75,935. The promise of the Barry Alvarez era, the 1993 Rose Bowl season, and the stampede in the overcrowded student sections at the Michigan game of that year, raised questions about the size and safety of the stadium. There may be additional enlargements in the future, probably by adding seats at the south end near the field house, or building an upper deck on the east side.[10]

1) *The Story of Camp Randall*, 1953, Taylor, Archives Subject folder (Camp Randall #1); *Wisconsin Engineer*, February 1960, p. 47; *Nomination Papers for National Register of Historic Places*, Historic Preservation Offices, State Historical Society Library; *Daily Cardinal*, December 16, 1914, p. 1

2) *Daily Cardinal*, November 15, 1894, October 30, 1894, December 16, 1914; *Regent's Report*, 1911-1912, p. 239, 1910-1911, p. 280; *Wisconsin Alumni Magazine*, December 1914;

3) *Daily Cardinal*, November 22, 1915, p. 1&5;

4) *Daily Cardinal*, December 16, 1914, p. 1; September 26, 1917, November 20, 1915; *Regent's Reports* 1914-1916, p. 24,250, 1918-1920, p. 215, 1916-1917, p. 273; *Wisconsin Alumni Magazine*, December 1914. Badger, 1917, p. 202.

5) O'Dea was from Australia and his phenomenal drop-kicking ability made him the toast of the university for four years (1896-1899). He disappeared and was presumed to have been killed in WW I. In 1934, He reappeared living under an assumed name on the west coast, explaining that the publicity of his football hero days had made his attempts at a normal life as a lawyer unbearable. He returned to Madison for a brief visit in the 1934.

6) *Capital Times*, June 9, 1922 p. 1, *The Badger*, 1924, p. 392; *Daily Cardinal*, November 20, 1915;

7) *Wisconsin Alumni Magazine*, March 1950 p. 24, July 1940, p. 354; Lee Burns to Don Halverson, series 24/1/1 box 158, folder 10; *Daily Cardinal*, September 27, 1940, June 22, 1951; *University Catalog*, 1950-1952 p. 18.

8) *The Wisconsin Alumni Magazine*, March 1950, p. 24, July 1951; *Daily Cardinal*, October 7, 1950, October 28, 1950, April 28, 1951, July 26, 1951.

9) *Regent's Minutes*, May 11, 1957; *Daily Cardinal*, November 9, 1954, November 15, 1957, July 22, 1958; *Wisconsin Alumni Magazine*, October 1957, p. 28, June 1954, p. 10, September 1958 p. 7;

10) *Wisconsin Alumni Magazine*, May 1964, p. 25; *Daily Cardinal*, December 10, 1964.

SOILS ANNEX

Fig. 1. Looking north: soils annex in center, King Hall and greenhouses at right, dairy annex roof at left. c. 1920. The half-timber decorative scheme harmonizes with Smith Hall and the Smith Hall annex, more than with King Hall, the building it was added to. [series 9/3, Soils, x25-2520]

Designed by architects Laird and Cret, the soils building was added to King Hall in 1915, to provide laboratory space.

King Hall was built in 1894 as the horticulture building, and also housed the soils department under Professor F. H. King. The soils department gradually usurped the space of horticulture and in 1910 a separate horticulture building was erected, leaving King Hall to soils. The eventual addition of a wing to the west of King Hall was approved by the regents in December of 1908. In 1910 agriculture dean Russell says: "It seems imperative that this wing should now be constructed ... Even with the complete removal of the horticulture department from this building, sufficient laboratories cannot be secured."[1] The cost was estimate at about $60,000. The legislatures of 1915-1917 finally appropriated money for the soils addition. In 1915 the regents selected contractors for the project, N. Quinn received the contract for excavations and foundations for $2410, and T. C. McCarthy in his last major construction project for the university won the superstructure contract for $49,249.[2]

The size, layout, and price of the Laird and Cret designed annex was apparently agreeable to all concerned. It was designed to create a court between King and Smith Halls. The architects, following the habits of most architects, in discounting the efforts of their immediate predecessors to nothing, had no good to say of the old building. It is clear from looking at the 'modern' steel and concrete annex that they didn't worry too much about how well it matched; seldom has less sympathy been applied in grafting one building onto another. Regardless of aesthetics, the annex was a success, the soils department had enough room at least temporarily, and is still housed in King Hall its west wing, and the adjacent annex to Smith Hall.

1) *Regent's Report*, 1909-1910 p. 174, p. 41, 1906-1908, p. 35.

2) *Regent's Minutes*, Aug 19, 1915, January 20, 1915, December 2, 1914

PRESIDENT'S HOUSE

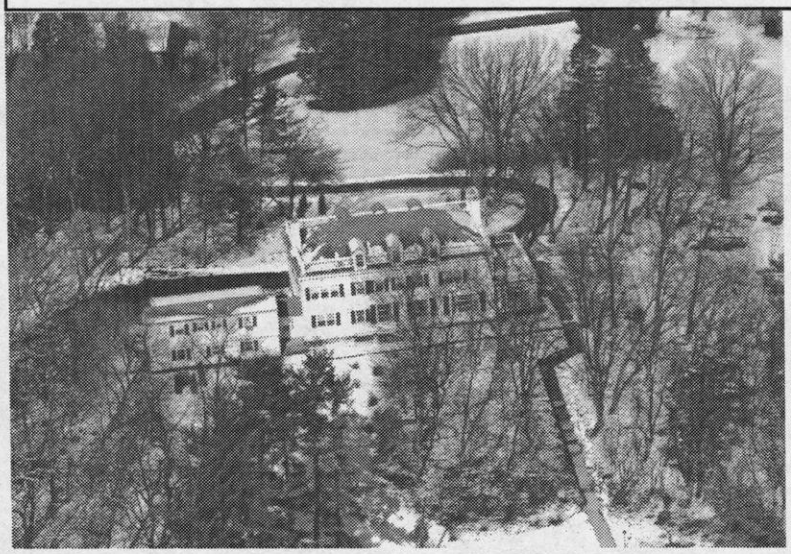


Fig. 1. 1997. The President's house, with new garage at left. The 1968 remodelling not only brought the house up to modern building codes, but added a garage with living quarters and sun room. [Del Brown photo, AP-79]

Built by the Brittingham family in 1916 as a summer home, this house was given to the University in 1955. It was renovated in 1968-1972, and became the official home of the president of the University system.

Lumber baron and longtime benefactor of the University Thomas E. Brittingham Sr. built this house, designed by Frank Riley, as a summer home for his family in 1916. Brittingham Sr. died in 1925, leaving most of his estate in trusts to benefit the city and University. His family continued to use the house on the west side into the middle 1930s.[1]

In 1955 the family donated the house and property to the University. On October 1, 1955 the regents accepted the house and the fifteen acres on which it sat. At first the house was unused. From 1960 until 1968 the house was used as office space by the UW Geophysical & Polar Research Center. In the late 1960s during visits to Madison from their east coast homes, the Brittingham family asked that it's gift be restored to a reasonable condition, and used as the University president's house. They agreed that the Brittingham foundation would donate the money for the renovation. The estimate for the renovation was $160,000. The state building commission in February 1968, gave permission to remodel the house for the $160,000 estimate. The contracts were let and the work begun in 1968. The general contractor was John Dahl of Madison. It was clear at an early date that the estimates had been too low.

The Brittingham foundation promised another $40,000. For political reasons, the work came to a halt and the house stood empty through 1970 and 1971. The Brittingham foundation finished the work itself. In April 1973, the first official function was held at the Brittingham house, hosted by Mrs. Edwin Young. The Brittingham estate has been the home of the UW system president since that time. The fifteen acre estate includes the main house, the new garage, a squash building, a carriage house and swimming pool.[2]

1) Milwaukee Sentinel September 27, 1967; *Capital Times*, July 10, 1967;
2) *Wisconsin State Journal*, April 14, 1970, January 16, 1971, January 13, 1957, February 16, 1972; *Capital Times*, April 23, 1973; *Wisconsin Alumni Magazine*, November 1955; *Regent's Statement*, May 8, 1970; *Regent's Minutes* January 15, 1971;

WOMEN'S FIELD HOUSE

Fig. 1. Women's field house 1924. [Meuer photo, vol. 9, p. 51]

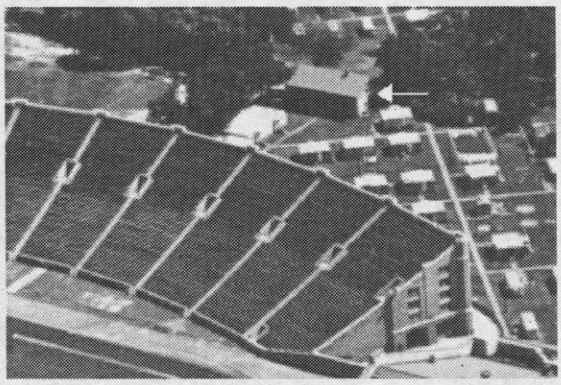


Fig. 2. Camp Randall, showing location of Women's field house (see arrow), c. 1949. [Series 8/7 Camp Randall, v2-56]

Built in 1917 at Camp Randall to provide field house space for women's athletics, this building was used as a field house and social center until the construction of the memorial shell in 1954.

In 1914 the director of the department of physical education reports that the only facilities for women's outdoor exercise are nine tennis courts and three acres of Camp Randall memorial park for one small hockey field and several courts for minor games with a capacity of about seventy students. "The use of the athletic field is solely on the sufferance of the Memorial Park Committee ... The women dress at their gymnasium [Lathrop Hall] eight blocks from the field. A tent has afforded slight shelter and a place to remove skirts. In spite of these most serious handicaps successful work has been done in hockey, baseball, archery and other sports." [1] For the women the fields cannot be located within less than six blocks of their present gymnasium..."[2] Earlier than this time, plans had been made to locate the women's athletic fields near the site of the women's dormitory group, located on the 1908 general plan near the current site of Elizabeth Waters Hall. After the decision to build Barnard Hall, the planning of athletic facilities shifted to the Camp Randall site. In 1915 the state legislature appropriated $5,000 for a women's field house. The regents approved the getting of plans and bids on September 25, 1915. A building housing dressing rooms, showers and lockers was designed in July of 1916 by the office of the supervising architect Arthur Peabody. Mr. Peabody takes credit for the design but Alden Aust credits it to Albert Gallistell.[3] The building, about 250 feet east of the stadium (see Fig. 2) was finished by 1918 and little further is heard of it. It was two stories 32 by 56 feet, stucco with an asphalt roof. It contained an assembly room with fireplace on the first floor, and 24 dressing cubicles with lockers on the second. The field house appears in the Badgers of the early 1920s in the women's athletic sections. It was used as a social center and nursery school for the Monroe trailer colony after WW II. It was demolished in 1954 for the erection of the memorial shell.[4]

1) *Regent's Report*, 1913-1914. p. 286, Regent's Report, 1914-1916, p. 253, 1916-1918, p. 326, p. 257. *Daily Cardinal*, October 7, 1915. Regent's Minutes, September 15, 1915.
2) *Regent's Report*, 1913-1914. p. 292.
3) Alden Aust "*A Tabular History of the Buildings of the University of Wisconsin*, 1934.
4) *Regent's Minutes*, August 15, 1946. Burns to Fred, August 12, 1946, series 4/16/1 box 28.

OLD INFIRMARY

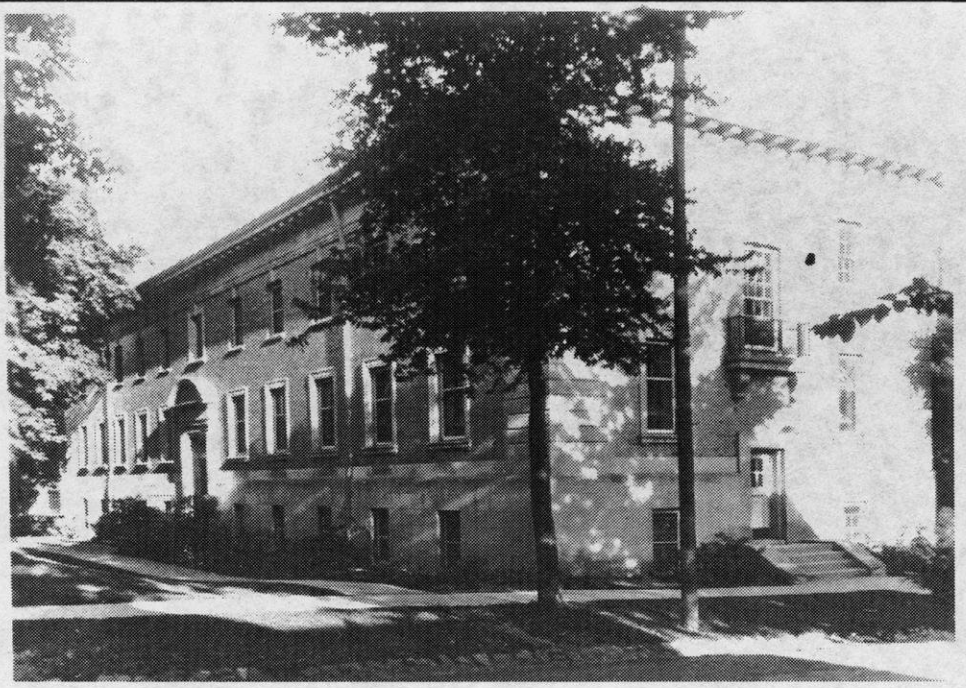


Fig. 1. Original infirmary from the west. c. 1920. The 1930 addition was attached to the end of the infirmary at the right of the picture. [G1026]

This building was built in 1917 with donated funds and served as a student infirmary, then medical school space until the late 1980s when it became home of the department of social work. A 1930 addition enlarged the infirmary and connected it to the Wisconsin General Hospital.

In 1916 there was considerable controversy surrounding the idea of the University founding a four year medical college. But in the wake of a 1908 typhoid scare at the university medical dean Charles Bardeen and president Van Hise argued strongly for building at least a student infirmary.

There was a small student health clinic beginning in 1910 under Dr. Evans at 821 State Street later moved [1914] to the Raymer house on Langdon Street. This too was quickly outmoded, although its high level of use by the students helped pave the way for later developments. For a time also a commercial arrangement was made for supervised care of students with Madison General Hospital (on whose board of directors was Charles Bardeen). Indeed at one time in 1911 Bardeen proposed building a student infirmary as an annex to Madison General.

Private donations were sought for an infirmary, and in June 1917 large donations were received from the family of Harold C. Bradley ($50,000), T. E. Brittingham ($25,000), and a Mr. Carl Johnson (who hoped with little success to remain anonymous, $25,000) and the legislature responded with an appropriation of $50,000.[1] After deciding to build with this unexpected bounty not only a student infirmary but the first unit of a research hospital (Bradley Memorial), the regents decided to locate the infirmary and hospital on the property they already owned in the area bounded by University Avenue on the south, Linden Drive on the north, Charter Street on the east and Warren [later Lorch] Street on the west.

In the general plan of 1908 by Laird Cret and Peabody, this area had been reserved for the

school of engineering, but the practical necessities of the rising medical school made that plan obsolete. The remainder of 1917 was taken up with site selection and preliminary planning. The basic plan was to erect the infirmary and Bradley Memorial Hospital as wings to a new medical clinic building to be built at a later time. These plans by the office of Arthur Peabody (Alden Aust credits Henry Nyeland for both buildings[2]) with assistance from the architectural firm of Ferry and Clas, were ready for bids by March 1918. On May 10, 1918 the regents awarded the contract for construction of both the infirmary and the Bradley Hospital to the Chicago contractors Dahl-Stedman Co., for $137,445. During the spring and summer of 1918, the removal of existing houses and the construction of the infirmary progressed without incident. The infirmary was finished in the winter of 1918.

The building when complete was two stories above a raised basement of buff brick with Bedford stone trim, an unfinished attic and a red tile roof. There was room for about 40 students. The total cost was $60,000. The design was intended to harmonize with the recently completed home economics and extension building across Linden Drive, which the medical college hoped to one day take over. Although the building now appears to have been randomly placed in the middle of a block, this is the result of the university later vacating two streets in the area.

The construction of the new infirmary came just in time. In 1918 an epidemic of influenza broke out among the general population of Madison and in the student population where crowded living conditions and daily exposure to the infection in class rooms made the spread of disease fast and very dangerous. A student food server in a rooming house was later blamed for most of the outbreak. There were approximately 750 cases of influenza treated at the new infirmary, which was so overloaded that the adjacent Bradley Hospital, though still unfinished was pressed into service, as was the University Club. There were six fatalities among the students. There were other epidemics in the years following the First World War; small pox, typhoid fever, diphtheria and more influenza in 1919, 1925 and 1928. The infirmary was credited with helping to limit the spread of disease at the university. The great service of the medical school in these emergencies did much to win support for their later undertakings. The epidemic of 1928 found the university enrollment so much higher than the capacity of the infirmary to handle during an outbreak of disease that as a precautionary measure the university was closed for four days just before Christmas vacation in 1928.

Shortly after this the university successfully asked the legislature for funds to build an addition to the infirmary. Architect Arthur Peabody designed a flat-roofed wing that ran south toward the recently completed Wisconsin General Hospital. This addition approximately doubled the size of the infirmary to about 100 beds. This new section was connected to the hospital, which Peabody complained made 'his' infirmary look like an addition to the hospital, which indeed it does. This addition was completed in 1930 by contractor William Christensen of Racine at a cost of $100,000. In 1934 student health director Dr. Charles Lyght could report that "typhoid fever whose ravages led to the establishment of a student health center at Wisconsin has become practically non-existent."[3]

The infirmary although more or less constantly out of room and viewed skeptically by students, continued to function as intended well into the 1960s, but the student clinic functions were eventually moved to a much larger facility on University Avenue, and the old infirmary building became absorbed into the medical school complex. Then in the 1980s the medical school left the old hospital site for the new hospital and clinics buildings on the west end of campus. In 1993 in the wake of the demolition of the old Wisconsin High School the old infirmary underwent a $655,000 remodelling and became the home of the school of social work (formerly housed in the Wisconsin High School).

1) *Regent's Report*, 1918-1920, p. 15-16.
2) Alden Aust: A *Tabular history of the buildings of the University of Wisconsin.* 1937
3) *Wisconsin Alumni Magazine*, May 1934 p. 155.

BRADLEY MEMORIAL HOSPITAL

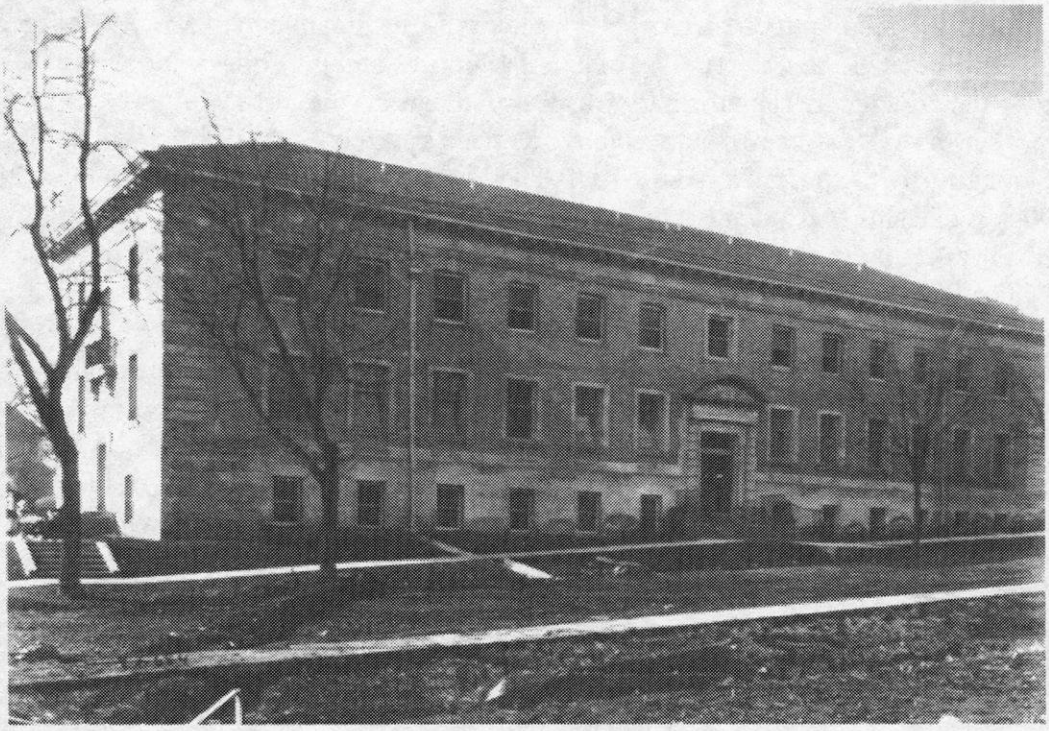


Fig. 1. Bradley Memorial Hospital across Orchard Street, c. 1920. [G1024]

Built in 1918 as a memorial to Mary Cornelius Bradley, the daughter of Professor Harold Bradley and his wife Mary Josephine Crane Bradley, Bradley memorial was used as a children's hospital until the 1930 erection of the orthopedic hospital. Since that time Bradley memorial has held assorted branches of the medical school, and currently houses the department of Medical Administration and International Health.

Dr. Harold Cornelius Bradley came to the University of Wisconsin as a junior professor of biochemistry in 1906. Within two years he had met, fallen in love with and married a student, Mary Josephine Crane, (who was completely deaf from age two) in her junior year. The bride's father, wealthy Chicago industrialist Charles Crane was personal friends with the famous architect Louis Sullivan, then at the nadir of his career. Crane hired Sullivan to design and build a house for the newlyweds, the huge and now famous Bradley house in University Heights. This house and yard occupied all of block 19 of the fancy new western suburb of Madison. The Bradley's first child, Mary Cornelius was born here May 2, 1909. Seven other children, all boys were to follow. Tragedy struck the Bradley family, when the child Mary contracted spinal meningitis and pneumonia and died January 15, 1916 age 6 years 8 months. In the following eight months, the Bradleys sold off in pieces the parts of their land not occupied by the house, and then in September 1917 sold the house and the four lots on which it stands to the Alpha Sigma Phi fraternity for $30,000. A few months previous to the sale of the house the Bradleys (together with Mrs. Bradley's family the Cranes) had

offered to the regents of the university a donation of $50,000 for the construction of a memorial hospital for the purpose of research into childhood diseases. Originally the name for this building was to be the Crane Memorial Hospital, but was soon changed to the Mary Cornelia Bradley Memorial Hospital.[1]

In Dr. Bradley's letter to the regents of June 5, 1916, he writes: "Mr. and Mrs. Chas. R. Crane, Mrs. Bradley and myself wish to establish a memorial for our little daughter, Mary Cornelia, whom we lost this winter ... We have felt that the best way to establish this memorial of ideals would be to build a research and teaching hospital in connection with the medical school ... we are not willing that this should be a memorial of a monumental kind. We realize that the amount to be expended is small. We wish none of it diverted from the more spiritual purpose of the gift, into costly architecture. We have in mind some simple and sincere type of architecture..."[1]

The Bradley Hospital was built at the same time and by the same contractor as the old student infirmary. The regents let the contract on May 20, 1918 to the Dahl-Stedman Company of Chicago for $137,445 (including both the Bradley hospital and the infirmary). The infirmary was begun and finished first, and the Bradley hospital was started June 1, 1918 and finished in the summer of 1920. Even before its completion the Bradley memorial was pressed into use because of the influenza epidemic of 1918 which swamped the recently completed infirmary. The Bradley memorial was located south of Linden Drive, facing on Orchard Street, a small north-south street just west of Charter Street, later vacated by the University.[2]

The two buildings (Bradley memorial and the infirmary), designed by Arthur Peabody or his employee Henry Nyeland, were essentially identical. They were two stories above a raised basement with walls of buff brick, floor of poured concrete, and a red tile roof. The buildings were trimmed with Bedford limestone.

The Bradley Memorial Hospital served its original purpose[3] well until 1930 when the university erected a larger and better equipped orthopedic hospital on the block to the west. Bradley memorial then began a long career as temporary quarters for transient departments of the medical school. These included: pediatrics, plastic surgery, and the Wisconsin Psychiatric Institute (1925-1963). The building underwent a complete interior remodelling in 1964.[4] In 1950 the connecting bridge to the main hospital was built. The Bradleys had asked that "because of the personal associations which the memorial has to Mr. and Mrs. Crane and ourselves, we do not wish to have its individuality lost or buried later in the probable development of the Medical School."[5] This has against all odds remained the case, even though by legislation, in the 1920s it became a part of the Wisconsin General Hospital. Currently [1993] the building houses the department of Medical Administration on the first floor, part of the UW clinics on the second floor, and in the basement, the department of International Health, and the intended long term user Middleton Medical Library storage. The memorial plaques commemorating Mary Cornelia Bradley still hang in the foyer and main waiting room.

1) *Wisconsin Alumni Magazine*, April 1948, p. 26-27, May 1950, p. 10; Madison City directories; Dane County vital records; *Perspectives of a University*, Gordon Orr et al. p. 84. *Regent's Report*, 1918-1920, p. 15-16.
2) *Regent's Minutes*, June 20, 1916, May 10, 1918;
3) And others as well: during the debate surrounding the construction of the Wisconsin General Hospital in the 1920s, Bradley Memorial was used for the care of the state indigent patients, which became part of the responsibility of the new four-year medical program.
4) Bradley to Seaman, June 5, 1916, series 24/1/1 box 6 University Archives.
5) Bradley to Seaman, June 5, 1916, series 24/1/1 box 6 University Archives.

1300 BLOCK UNIVERSITY

Fig. 1. The 1300 block of University Avenue, 1997. Visible at the extreme right of the picture are BAVI and the old Rennebohms. [Del Brown Photo, AP-82]

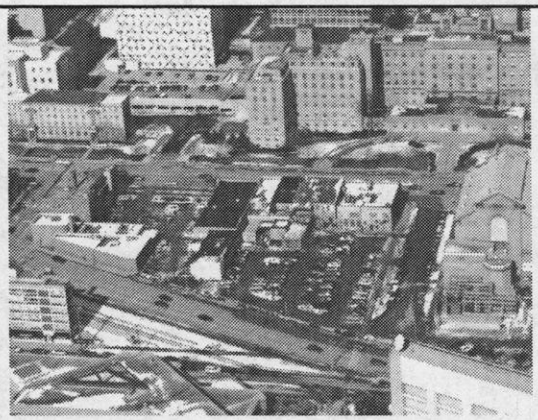


Fig. 2. The back of the 1300 Block from the air, 1997. Clearly visible here is the triangular nature of the block. [Del Brown Photo, AP-83]

At the turn of the twentieth century, the 1300 block of University Avenue was a residential neighborhood of single family homes, rental apartments and a grocery store. By 1920 several of the houses were gone and the beginning of a new use for the area had begun, the Schlimgen Monument building had been erected and Royston plumbing opened. In the decade that followed WW I several of the neighborhoods longest tenants opened their doors: Max Kaplan Clothing (1301), the Badger Cafe (1317), and Perlman's men's furnishings (1301). Later occupants were Kruetz's Restaurant (1307), the Amber Grid (1313), gift and sandwich shops, most of which depended on the nearby Wisconsin General Hospital for the bulk of their business.

The University bought the Schlimgen store in 1947, and gradually began renting space in other buildings nearby. By the mid 1970s only a few non-University functions remained on the block. Purchase of these buildings took place during the 1960s and 1970s. 1307 was purchased from Ralph Lawrence for $52,2000 in April 1969, 1301 from Max Perlman for $81,000 in April 1973, 1325 from University Book Stores for $66,142 in July 1971, and 1313 from Richard Hubanks for $281,0000 in December 1985. With the closing of Matthews book store in 1995, no non-University presence remained. This block (known to the University planners as "the triangle"-see Fig. 2) is the likely site of some substantial future University construction, possibly an arts building.[1]

1) City directories and register of deeds records; business records of the University regents.

700 BLOCK UNIVERSITY

Fig. 1. This 1924 photo shows the 700 block of University Avenue, looking west, and includes Tiedeman's Drug Store, and a horse and buggy. The second utility pole from the left of the picture is at Fitch Court, which marks the current limit of the buildings that remain. [Meuer photo vol. 3 p. 27, M5-5294]

Home to a series of neighborhood businesses beginning in the 1900s, the 700 block of University Avenue was gradually taken over by the University in the usual manner: that is, first by renting space as offices and specialized uses, then purchase when the properties came on the market.

In spite of its variegated appearance from the front, there are only three or four buildings on the block. The Cardinal block, built to house the Cardinal Creamery about 1902, makes up all addresses from 702 to 708 University Avenue. The name "Cardinal Building" can still be seen over the door at 706. The next set of addresses from 714 - 724 are housed in the second building, built about 1920. Next comes a tiny storefront that has housed a number of marginal businesses since the mid 1950s. This "building" is actually infill between the two adjacent business blocks, and occupies a space that was originally an outside stairway that provided joint access to the larger buildings. It is said to be the narrowest commercial space in Madison. The third major building on the block contains 730 and 734 University Avenue. It was evidently built near 1900.

Older residents will doubtless remember the longer lived businesses that inhabited this block. The Cardinal building housed Tiedeman Drugs and Restaurant, Klein Dickert Paint, Dunkell Shoes and the wide range of small businesses expected in a prime commercial location in a bustling city. The second building housed Kleinheinz dry goods, Evans Radio and Television, the Diamond Grocery, and a further assortment of cleaners, restaurants and retail stores. The third building, held Burger Hardware from 1902 to 1943. The infill space first appears in 1955 (although it may have been built much earlier) as the home of Bill's Key shop.

The infiltration of the University began as early as 1955 with the leasing of the space at 730 University as space for UW computing. The University presence grew nearly yearly after that until by 1970 only four independent business remained on the block. Five years later, only the restaurant at 704

remained. Commercial building often have more than one owner and the Cardinal building is shared by the University and the owner of the corner section (704) that has held a restaurant or tavern since 1950. The University has also not purchased the inter-building space at 728 University. The current UW occupants of the block include Student Services, student organizations, Veteran's Services, UW Inventory, Risk Management and some academic art programs. Because of its central location, there are long-term plans to acquire the rest of the block and eventually rebuild there.[1]

1) Madison Citiy Directories, Dane County Records, and Regent's legal records.

OLD HOSPITAL

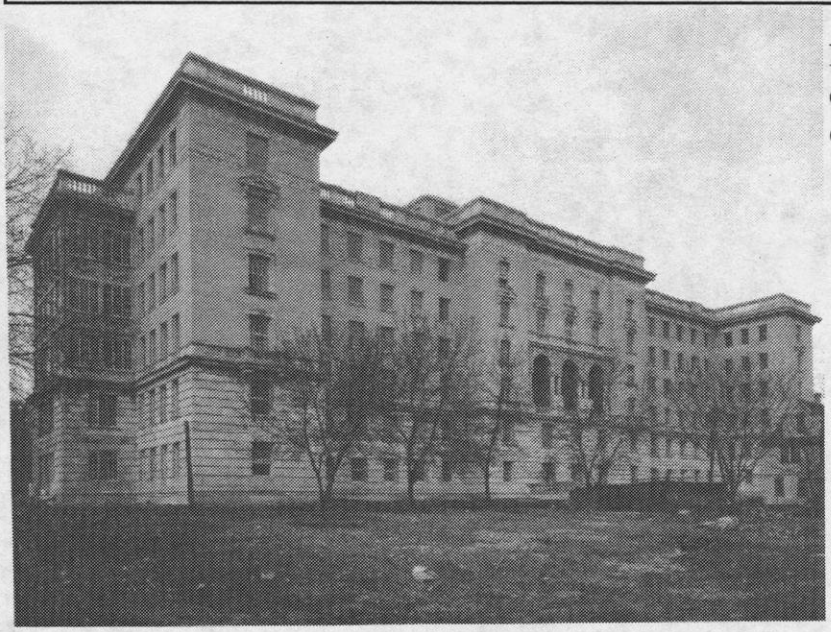


Fig. 1. Wisconsin General Hospital, c. 1925. [series 9/4 Wisconsin General Hospital, jf-48]

The Wisconsin General Hospital was erected in 1924 to provide a clinical program for the University medical school, and to care for indigent state residents. In 1949 additions and expansions more than doubled the size of the hospital. When even this expansion proved too small, the hospital and clinics was relocated to a new site on the west end of campus, and the old hospital was remodelled in 1980 for use by medical sciences.

Drs. Charles Bardeen and Joseph Evans believed strongly that their two-year medical program founded in 1907, (but restricted to two years) at the University of Wisconsin, should be allowed to expand into a full four-year program with clinical training. Unfortunately there were powerful people in the state who disagreed. These forces were mainly established medical men and existing medical schools and the politicians who represented them. This opposition had made the two-year program difficult to establish, and now made the four-year course even more contentious. The university had argued that they would never consider developing a clinical (i.e. four-year) program without a quality hospital under its own control.

Dean Bardeen informed the regents in a report in 1918 that the "attic medical school" (so called because it was housed in attics of several buildings scattered around the university) had reached a critical stage. It had 100 students in the second year and 150 in the first.

Bardeen argued that Wisconsin could restrict enrollment, abandon the medical school, or expand it into a full four year course. After discussing these three approaches, Bardeen voted for the third approach, saying that Wisconsin was losing too many medical men who fail to return after being educated elsewhere, that the state was behind her neighbors most of whom had a full medical school at their universities, and that a hospital facility would be of direct benefit to the citizens of the state by healing patients who might otherwise "be a lifelong inmate of a charitable institution. No expenditure

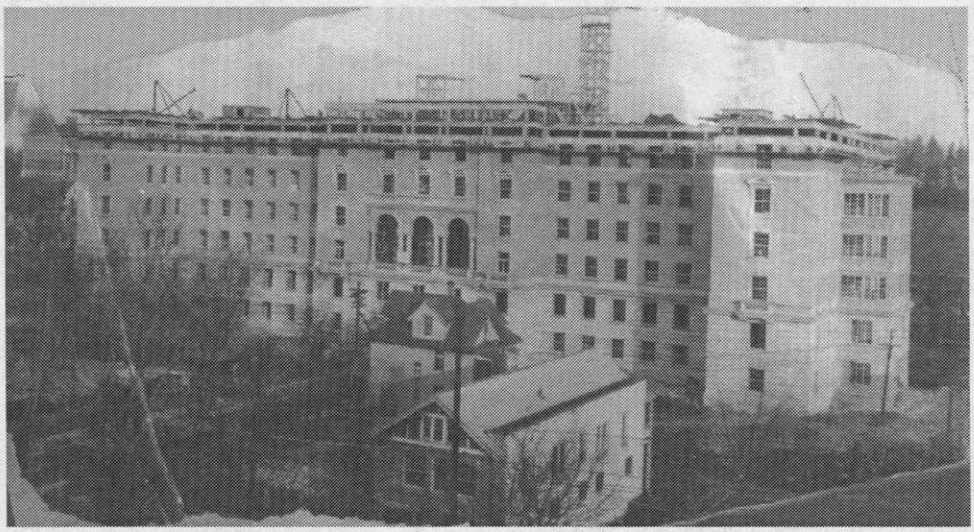


Fig. 2. Wisconsin General Hospital under construction from University Avenue, c. 1923. [Meuer photo, vol. 10, p. 69]

of public funds is likely to give greater return than that spent for scientific treatment of disease."[1] With a lessening of opposition in the medical community and a sympathetic administration, the bill establishing a four-year medical school was passed on April 25, 1919. In order to support this new school the university had to ask for a suitable hospital. It was widely understood that this would require a large appropriation and "It was therefore fortunate that Governor Emmanuel Phillip, who was a firm friend of the full school plan, could point to the unexpended balance of the Service Recognition Fund as a source of funds for such a project."[2]

This plan for funding a memorial hospital from the Soldier's Bonus Fund had the support not only of the governor and the regents but also the American Legion. A special session of the legislature was called to consider the plan and in June 1920 the bill was passed, providing $1.3 million for a "Wisconsin General Hospital" and nurses home. The future seemed assured for the hospital and the medical school. There were however still hurdles to be cleared. The site chosen was bounded by University Avenue, Linden Drive Lorch and Charter Streets. This site required the purchase of 20 properties for a total of $211,000. The preliminary design for the building was executed by state architect Arthur Peabody (who consulted with hospital specialist Frank E. Chapman of Cleveland) and approved September 28, 1920. The contract for the excavation and foundation was let in the October, 1920. The foundations were completed by December 20, 1920. Final plans, by Peabody and his associate Frank Moulton (in consultation with dean Bardeen) were approved November 26, 1921.

Construction was now stopped entirely. The new foundation lay covered for two years while the source of funding was debated and examined. Questions had arisen regarding the amount and availability of surplus funds in the Soldier's Fund. In 1922 the new governor, Blaine, was at last convinced that the balance in the Soldier's Fund was continuing to rise and signed the construction contracts.

The delay in construction caused considerable consternation among the medical school administration. Under the legislation of 1920-1921 providing for the hospital the medical school was required to provide medical care to indigent citizens of Wisconsin. This obligation remained even though the hospital in which such care was supposed to be provided had not yet been built. The school handled this problem by caring for the state's patients in existing facilities, namely Bradley Memorial Hospital (which having been donated as a research facility should not properly have been so used). Dr. Bardeen also warned that the delaying of the contracts was jeopardizing the financial health of the project.[3]

The governor had first authorized the regents to advertise for bids on the superstructure

December 7, 1921. The bids were not opened until January 24, 1922. This long delay between the bids and their award, caused the lowest bidder (Colwell and Long of Minneapolis) to withdraw their bid because prices had risen so sharply in that time. The general construction contract was awarded to the Immel Construction Co. of Fond du Lac for $668,843. Utility contracts were awarded separately bringing the total contract amount to $765,670. The regents and the contractor went to arbitration due to price rises during the project delays and the builder was awarded $14,000.[4]

The formal opening of the hospital was on April 29, 1924. On either side of the door were bronze plaques reading: "A Memorial to Those Who Served the Country in the World War.", and "Erected in Gratitude by the People of the State of Wisconsin." Flanking the arches over the front entrance are four symbolic figures: Humanity, The Lame and the Halt, Medical Science and Jurisprudence, and Maternity.

In the fall of 1924 Dr. Bardeen described the new building: "The State of Wisconsin General Hospital has six stories, a basement and a roof garden. The general design is in the form of a T, the horizontal wings of which face the south and the vertical wing of which points toward the north. The former are designed primarily for the immediate care of patients, while the latter is essentially a service wing with kitchens and dining rooms in the lower stories, laboratories and interne's quarters intermediate and an operating room on the top floor."[5] The building was 275 feet across the south (University Avenue) face and 107 feet deep, the north wing protruding another 88 feet to the north. Construction was fireproof with steel frame and brick sheathing, with the lower two floors sheathed in Bedford stone. Capacity was approximately 300 beds.

The central core of the building contained waiting rooms, administrative offices and treatment rooms. In the basement were hydrotherapy equipment, an electrocardiographic laboratory and storage. The upper floors of the main wings contained outpatient facilities (floor 1), neuropsychiatric wards (2nd), obstetrics and private patient care (3rd), general medical wards (4th), eye, ear nose and throat surgery and orthopedics (5th), and general surgery (6th). The roof (later enclosed) was equipped with a kitchen, duty rooms, and bathrooms for patients who were taking open air treatment.[6] The total cost of the hospital was $1,000,000.

It is noteworthy that there were no purely instructional facilities in the hospital, even though the stated aims of the hospital were to provide medical care to the indigent of the state and provide clinical facilities for the university medical school. The educational work of the medical school continued to be located in attics and scattered building around the campus, until later when the Service Memorial building was built (1928).

The new hospital was a tremendous boost to the medical school. The first class to graduate as doctors from the new program, began their third year of training at the new hospital in 1925, and graduated (twenty men and six women) in 1927. President Van Hise's insistence on nothing less than the best university in the world seemed a little closer to becoming true. Some figures compiled for the twentieth anniversary of the hospital celebration in 1954 illustrate the use of the hospital: 4.8 million patient hours provided, 72% of these hours were for public patients. Even in the purely financial realm the hospital was a success. In that same twenty years, income was $37.8 million, and expenses were $37.6 million. The story of great service to the state is clear. By 1942, 680 doctors and 320 nurses graduated from their respective programs.

But as early as 1941 the very success of the medical school was beginning to present problems. The building had been designed for 300 beds, and was now through constant compression of space (and the 1931 connections by corridors to the Bradley Memorial and the infirmary) handling as many as 600. The increasing popularity of the school was placing further strains on the facility. In 1946 the legislature approved $460,000 to build the east wing addition to alleviate the incessant demand for more patient space. Not until 1949 did funds become available for the west wing when

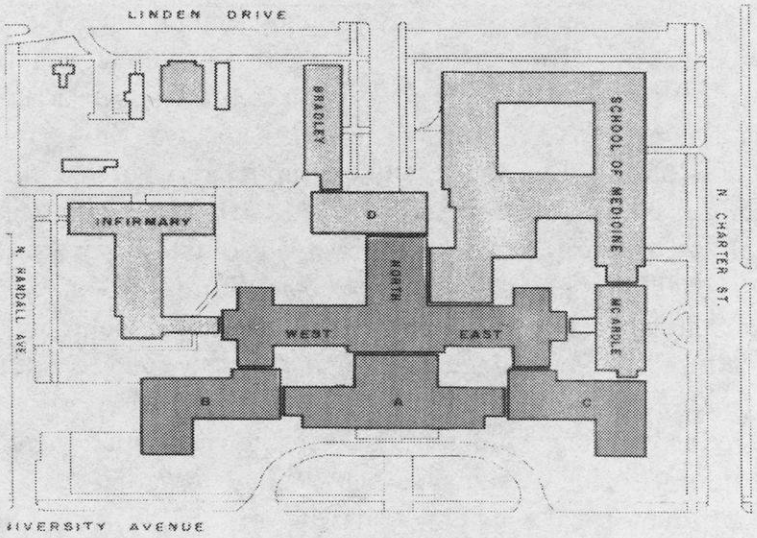


Fig. 3. A drawing showing the layout of the Medical Science Group in 1960. The sections marked East, West, and North are the original (1924) hospital. Sections A, B, C, and D are the 1949 additions. The connecting links to McArdle and the Bradley Hospital were also added at that time. The School of Medicine section was built up over several years, beginning with the Service Memorial Building in 1928.

the federal government made a grant of $975,000. At this point the planning for the hospital expansion entered a new stage of scale and ambition.

By August of 1949, the plan comprised huge east and west wings that would double the bed capacity of the hospital, an expansion and remodelling of the north wing, and the addition of an extension of the lobby into the old landscaped gardens at the front of the building for administrative space. The total cost of the project had risen to $3.7 million with a four year timetable. Ground was broken August 9, 1949, by Governor Oscar Rennebohm. Slowdowns due to material and labor shortages in the postwar building boom dragged the project out until February 1954.[7]

After the expansion was finished the medical school seemed very happy, and spoke glowingly of the alleviation of over crowding (capacity was now 1000 beds) and improved service to the state. But there must have been disquiet, since the paint was barely dry when the university commissioned a study of the "Program Management and Physical Plant of the Medical Center of the University of Wisconsin" by Hospital consultants James A. Hamilton Associates of Minneapolis. The Hamilton Report was submitted April 5, 1957. In the summary of the report is the statement: "It is pointedly obvious that the Medical Center has not adjusted sufficiently to the rapidly changing scene in medical care, medical education and health resources of the state." The report recommends another $4.5 million in construction to eliminate the worst of the perceived problems. This report cannot have been good news for the university after having just worked through a long and expensive expansion project. Nonetheless, within fifteen years, ground was broken for an entirely new hospital complex, and plans were made to turn the old hospital buildings into the Medical Sciences Group. This remodelling cost nearly $25 million.

1) Bardeen to Birge, November 24, 1919.
2) Curti and Carstensen, The University of Wisconsin Vol II p. 493. The service recognition fund was raised by a 3 mill per assessed dollar to provide every Wisconsin WW I veteran or their family with a cash bonus of $10 per month of service with a minimum of $50. Laws of Wisconsin 1919 Ch. 667.
3) Bardeen to Birge May 1, 1922.
4) Arthur Peabody, *Short Resume of University Buildings*, 1934, p. 47.
5) *Wisconsin Alumni Magazine*, November 1924, p. 6-10.
6) *Wisconsin Alumni Magazine*, November 1924, p. 9.
7) *Wisconsin Alumni Magazine*, February 1954, p. 14.

OLD LIBRARY SCHOOL

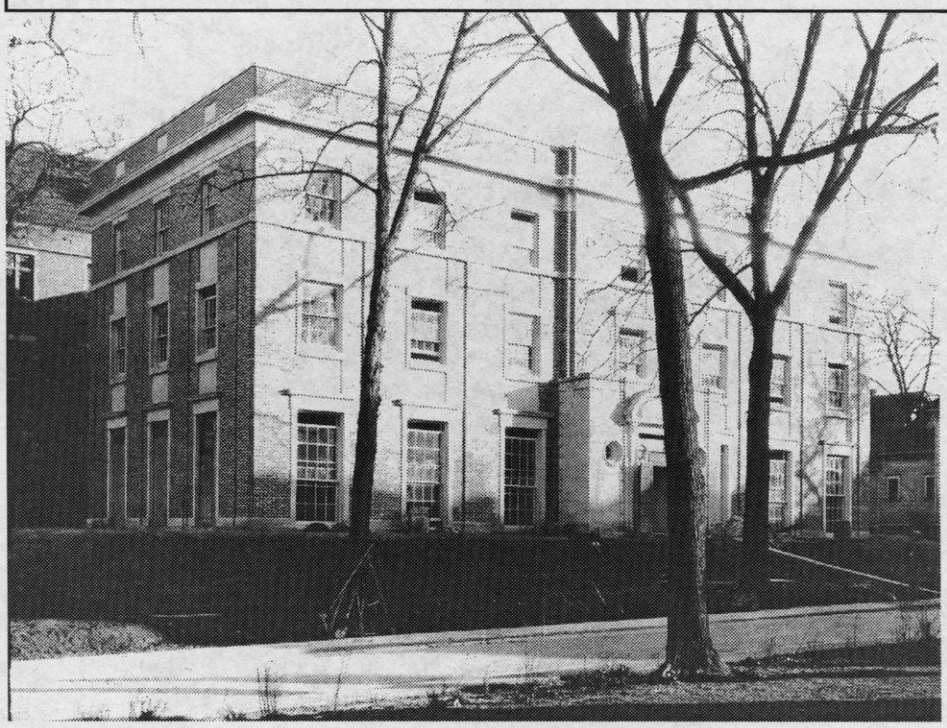


Fig 1. The Phi Kappa Psi house shortly after construction in 1922. [Meuer Photo, vol. 9, p. 48]

Built in 1922 as the Phi Kappa Psi fraternity house, this building became the property of the University in 1937. It was used as the library school until 1965, when it was changed to office space for University planning and construction. It was demolished in 1971 for construction of Humanities.

The heyday of the fraternities on the UW campus came in 1924. The goal of every fraternity was to build their own house. Each had a building fund that grew while the organization occupied (usually) rented quarters waiting for the great day when they could build. The Phi Kappa Psi house (PKP) was the third national frat on the UW campus. It was founded in 1875 went inactive in 1893, was refounded in 1897 and eventually had 600 initiates. Their first location was in a large frame structure at 28 E. Gilman. They prospered in this spot, and in 1923-24 bought the site at 811 State Street on which stood the old family home of former president John W. Sterling (see Fig. 2). This site actually faced on Sterling Court, a now vacated street that ran south from State Street to University between Park and Murray Streets. The fraternity removed the Sterling House and built a large (3 stories and basement, 40 X 80 feet) Georgian Revival house, designed by local architect Frank Riley (see Fig. 1). The plans for this building are dated 1921 but it appears that the actual construction took place in 1922.

Whether or not it was connected with the construction of the new chapter house, the fortunes of PKP began to go into decline. Throughout the middle 1920s, the correspondence between the officers of the fraternity and dean of men Scott Goodnight (who oversaw fraternity activities on campus) was filled with admonitions from the dean. The frat continued to 'rush' first semester freshmen in violation of the rule against it, they were constantly involved in disputes with neighbors about noisy and rowdy behavior, in one case being accused by local judge Ole Stolen of immoral behavior

Fig. 2. The first building at 811 State Street, the home of president John W. Sterling the building in the background is the University Club. The house was purchased as a frat house by the Phi Kappa Psi chapter, demolished in the early 1920s for a new frat house.

with a woman in a taxi. They were also placed on academic probation when the house's cumulative grade point fell below the required 1.0 on the 3-point system. As the depression of the 1930s took hold the number of pledges dropped and money began to grow tighter. At the end of the 1930s the ownership of the chapter house passed into the hands of the fraternity's creditor and was held by the Guardian Life Insurance Corp. In March of 1938 the Wisconsin University Building Corporation (WUBC) purchased the property from Guardian Life for $53,370.[1] Phi Kappa Psi lasted another year in rented quarters on Langdon Street and then passed out of existence, and despite occasional attempts has never been revived.

For the entire history of the library school of the university it had been housed in the Madison Public Library building. It was founded with a 1906 grant from the Carnegie Corporation to the State Free Library Commission. By 1916 the right of the library school to occupy the space in the library was in question. Calls were made by the schools director for larger and more conveniently located quarters and ones with unambiguous legality.[2] Nothing was done until in the 1930s a legislative dispute arose regarding the authority of oversight of the Library School. The two sides were those who argued for control by the Free Library Commission, and the side in favor of university control. The battle seesawed several times with the legislature passing and the governor vetoing various bills. The battle finally ended with the university faction victorious, in large part because they were able to assure the availability of high quality facilities for the library school, Those facilities were in the old PKP house at 811 State Street, leased from the WUBC until 1938 when it became the property of the University. The library school prospered in its new home for almost thirty years, offering only a bachelor of science degree from 1939 to 1950 and adding master's degrees after 1950. Then in April 1965 with space running out and the construction of the humanities complex imminent the library school was moved to a new home in the Wisconsin High School Building at 425 Henry Mall. These quarters were considered temporary at the time, and so they turned out to be. The library school was moved in 1971 to the Helen C. White undergraduate library. The old building on State Street was remodelled in 1965 for office space for the department of Planning and Construction and remained as such until the summer of 1971 when the building was demolished.

1) Minutes of the Regents of the University of Wisconsin, March 8-9, 1938.
2) Report of the Regents of the University of Wisconsin, 1914-1916, p. 256.

NURSES DORMITORY

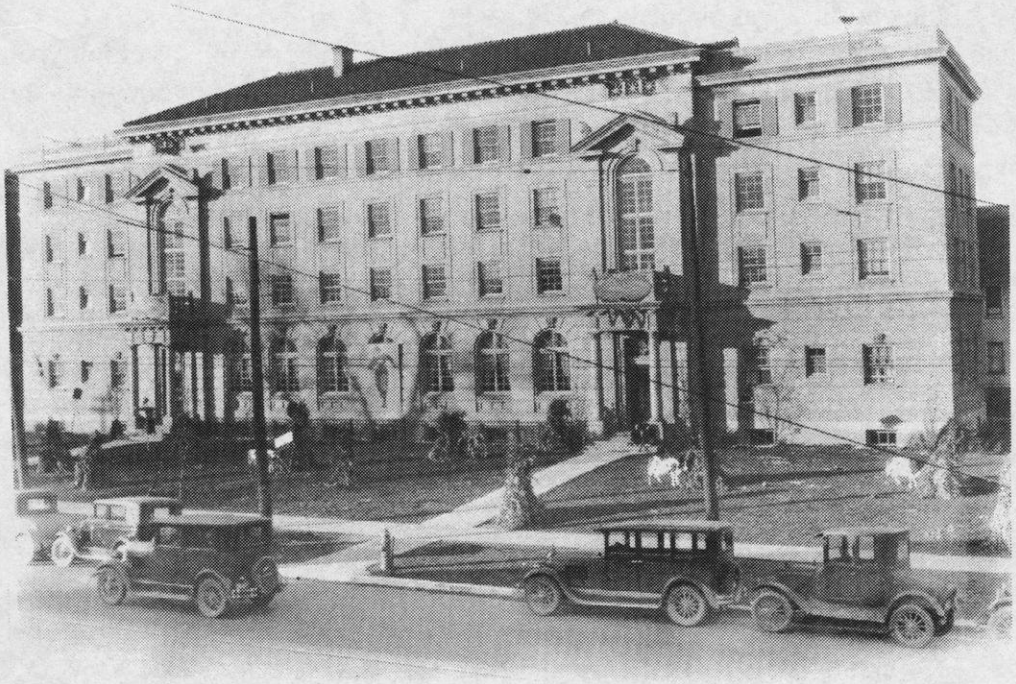


Fig. 1. The nurses dorm with home-coming decorations c. 1930. Note the hipped roof center section with flat roofed wings. [series 9/4, Nurses Dormitory, x25-2240]

Built in 1926 as the home of the University nursing program, this building was a dormitory for 96 nursing students until 1960 when it became nursing offices only. In 1978 it was taken over by the Reserve Officer Training Corps (ROTC). It was added to the National Register of Historic Places in 1987.

After the lull in campus expansion during the first world war, after the battles over whether there should be a four-year medical program at the university had been fought and won the legislature appropriated $1.3 million for a hospital and nurses dormitory. The hospital was built in 1923, but due to delays in funding, and some further disagreement about the medical school the final planning and construction of the nurses dorm was not begun until 1924.

The department of nursing at the university was founded in 1920, after the landmark Goldmark report on the study of nursing at public institutions. An earlier attempt in 1918 had failed due to inadequate facilities. The legislative appropriation for the hospital specifically included money for better facilities for nurses. The main nurse's home, beginning in 1919 was in a large house at 450 N. Charter Street (later demolished). The nursing department was still embryonic and considerably fragmented, but under the drive and energy of Helen Denne and her second in command Lila B. Fletcher this situation rapidly changed.[1]

In June of 1923 the team of Bardeen, Birge and state architect Peabody selected property on University Avenue occupied by homes between Lorch and Warren [later Randall] Streets, as the exact location for the nurses dorm. The land was purchased and plans were undertaken by Peabody and his staff. These plans were approved by the governor in October 1924.

The contracts for the construction of the nurses dorm were awarded by the regents beginning in December of 1924. The main construction contract went to the Deveraux-Olson Construction Co. of Minneapolis for $106,407 on December 10, 1924, stipulating that the building must be complete by September 1, 1925. Reflecting the growing specialization in the construction business at the time, for the first time separate contracts were let for the various utilities in the building. With the usual delays the building was not complete by the original goal date of September 1, 1925, but was first occupied in 1926.[2] The total cost of the building was about $136,214.

The design of the building was the work of state architect Arthur Peabody and his employee Frank Moulton[3] and was done in the Italian Renaissance Revival style which had been brought to the general campus plan by the architectural commission of Laird Cret and Peabody in 1908. The steel framed building consists of a 34 foot by 96 foot central block and two identical 29 foot by 30 foot wings .The central section is four stories in height with the first floor higher than the upper three, with all four sitting above a raised basement. This reinforced concrete basement extends three feet above grade, and the exposed wall surface is covered with Carthage marble. The front (south) side of the first floor of the center section is sheathed in terra-cotta resembling limestone. The upper floors are sheathed in the buff colored brick that had been made the standard for that section of campus. The center section is topped by a red tile hip roof which contains dormers on the east and west sides which are hidden from view by the parapet walls of the side wings. The two side wings are also four stories in height arranged symmetrically with the center section and contain the main entrances and stairwells. The wings have flat roofs hidden by parapet walls.[4]

The building was designed as a dormitory and made provisions for 96 nurses in 48 double rooms on the upper three floors. The first floor was given over to living quarters for the matron and supervisors of nurses, the nurses library, and a nurses lounge. There was a small lounge on each of the upper floors as well. The nursing program under Denne and Fletcher was such a success that the dorm operated at full capacity throughout its life as a dormitory. Nursing students in their junior and senior years were given free room and board in return for nursing duties at the hospital.

The nursing school was a successful and self contained unit both professionally and socially. This state of affairs lasted until the middle 1950s when several circumstances coincided to change matters completely. One was the rising enrollment in the school of nursing after WW II (the class of 1955 nearly doubled its previous enrollment). For a school which could accommodate no more than 100 nurses, this was a severe shock. The second major change was the increasingly widely held opinion in the medical profession that the social segregation of nurses in their own dormitory was a bad idea, and that the nurses should be integrated with the general student population.

As a result of this new situation, in 1960 the use of the building as a dormitory was discontinued in favor of integrating the nurses living arrangements with the rest of the students. The building was used for the offices of the school of Nursing from 1960 until 1978 when the completion of the new University Hospital and Clinics Building allowed the relocation of the school of nursing to entirely new quarters in that complex. At that time [1978] the old nurses dorm was reassigned to the offices and classrooms of the university's Reserve Officer Training Corps (ROTC). Because of the original use of the building for a dormitory, little alteration was needed to change the building into offices, and the nurses dormitory building remains almost completely intact. The ROTC's signs placed over each main door on the front of the building cover the original inscription "Nurses Dormitory".

1) Clark, Paul F., *The University of Wisconsin Medical School*, p. 203-208.

2) In a rare factual error Curti and Carstensen say that the nurses dorm opened in 1924 vol. 2, p. 493. As stated construction contracts were not let by the regents until 1924; *Regent's Minutes* December 10, 1924.

3) Alden Aust, *A Tabular History of the Buildings of the University of Wisconsin*, 1934.

4) Nomination papers for the National Register of Historic Places by the Historic Preservation Department of the Wisconsin State Historical Society, Historic Preservation Office.

VAN HISE DORMITORIES

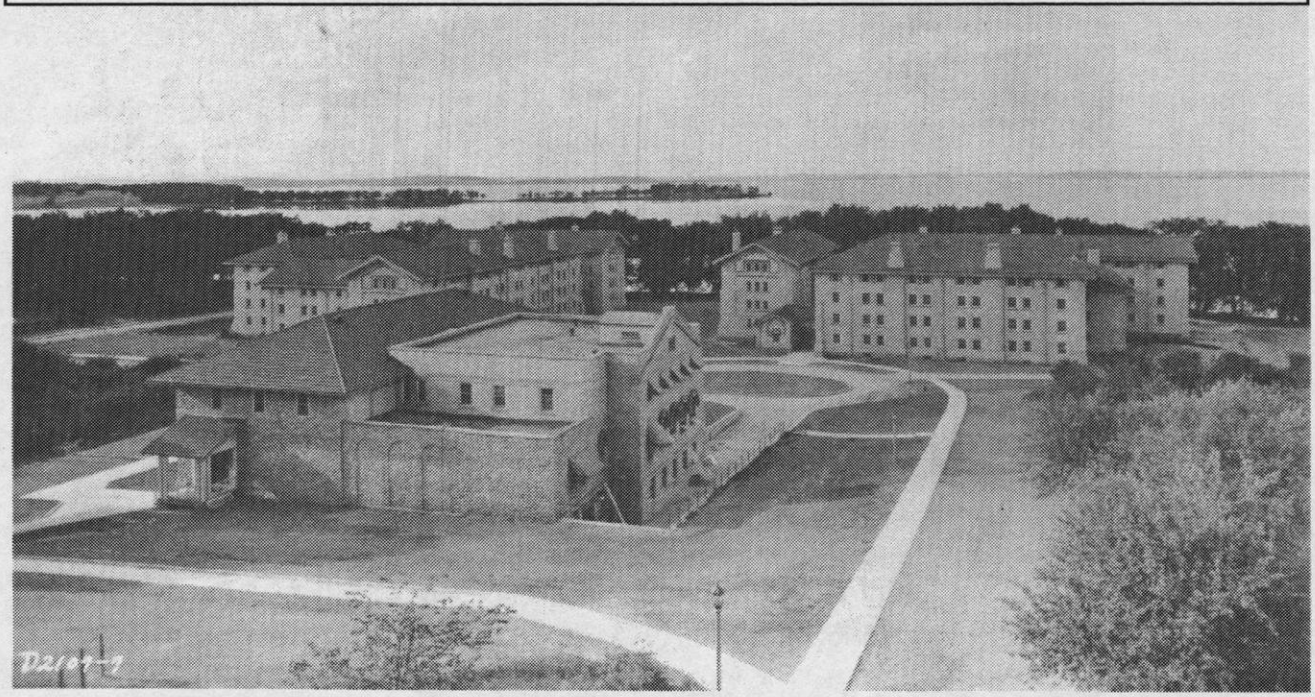


Fig. 1. Van Hise dorms 1929. Refectory in foreground, Adams Hall left, Tripp Hall right. [series 26/1, Exterior Views, Tripp and Adams, x25-1917]

The Van Hise dorms were built in 1926, as the first on-campus men's housing since North Hall was converted to classrooms in 1884. Tripp, Adams, and the Van Hise refectory (later renamed Carson Gulley Commons) building were first occupied in the fall of 1926. They were briefly used as women's and military housing in the 1940s, and the interiors have been extensively remodelled.

The genesis of the Van Hise dormitories lies in the inaugural speech given by president-elect Charles Van Hise in 1904. Van Hise made a strong plea for the English system involving halls of residence, commons, unions and athletic fields. "The communal life of instructors and students in work, in play and in social relations is the very essence of the spirit of Oxford and Cambridge ... for some reason these universities have produced an astonishingly large proportion of great statesmen, writers and scientists." He points out that until the time of the fire that destroyed the old Science Hall, the university of Wisconsin had been organized along the lines of the English system. Discussing the results of the fire, after which North and South Halls were converted for classroom space, Van Hise says: "Without ... any thought of the profound change which was being made in the character of the university, the students were turned from the dormitories, and halls of residence for men at Wisconsin were abandoned."[1] Van Hise also says: "...when the student goes out into the world, there is no part of his education which is of such fundamental importance as capacity to deal with men, to see the other fellow's point of view ... He must adjust himself to others. He must be genial, fair, likeable, or else his lot is rightly a hard one."[2]

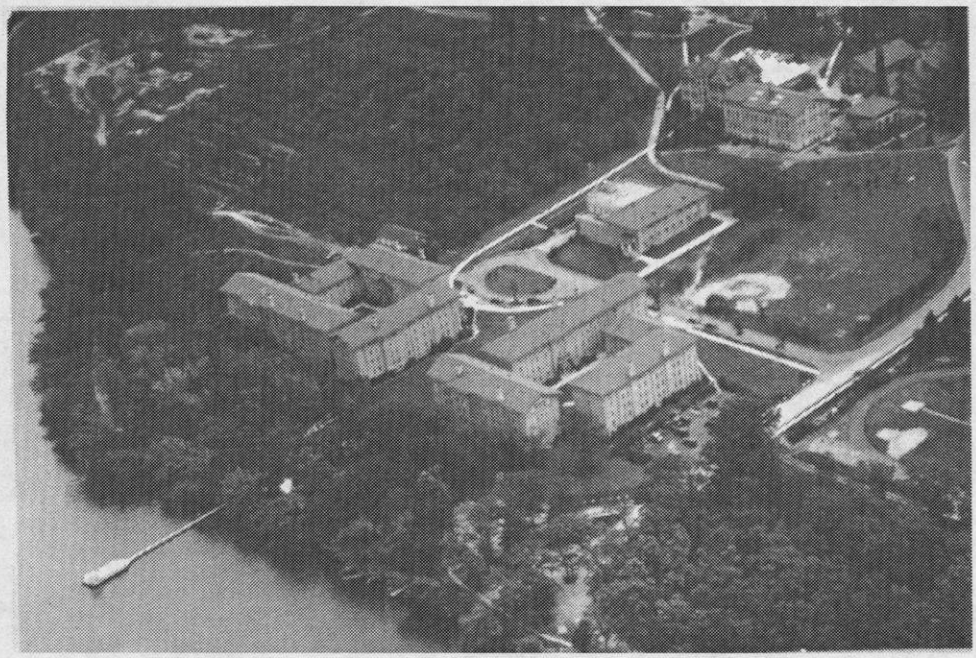


Fig 2. Van Hise dorms c. 1930. Tripp, Adams, and refectory, with King Hall in background. Note that the area east of Tripp Hall, now a vast parking lot, was at that time still in use by the agricultural college as experimental plots. [series 26/1, Exterior Views, Tripp and Adams, x25-1912]

But each year Van Hise would include in the requested appropriations money for men's residence halls, and each year was disappointed. Finally in his 1913-1914 report to the regents Van Hise reported that the legislature of 1913 had appropriated $300,000 for a men's dormitory, commons and union. A location for the dormitory was selected and plans were drawn by architect Arthur Peabody. Sadly for the project, the legislature of 1915 changed its mind, cancelling the appropriation. With the outbreak of WW I building at the university virtually ceased. Then on November 19, 1918 a week after Armistice Day Van Hise died unexpectedly. Principal among the advances of the next few years was the development of a new way of funding dormitory projects.

The first proposed method of funding residence halls was to lease university land to private investors who would construct the buildings and lease them back to the university. The state attorney general opined that no legal basis for this procedure was in place. After some further study another approach was tried. In 1922 the regents set up a nonprofit corporation, the Wisconsin University Building Corporation (WUBC), controlled completely by the regents which would lease university land, raise capital (by borrowing from university general and trust funds, or from the public) and build the dormitories. The dormitories would be leased back to and operated by the regents. In late 1922 this scheme of investing the university's surplus in revolving funds was approved by the legislature. The surplus revolving fund had been substantially expanded in August 1915, when J. Stephen Tripp, a lawyer and banker from Prairie du Sac left the bulk of his estate, about $350,000 to the university without reservations of any kind.

With the issue of funding the dormitories now well in hand, the regents turned their effort to the organization of the dormitory system. They appointed a faculty committee to report on the development of social life of the university, particularly with respect to the architectural plans for the Memorial Union Building and dormitories.

This committee included Harold C. Bradley, Scott Goodnight, and Charles Sumner Slichter. With the help of John Dollard, secretary of the Wisconsin Union, the committee examined dormitory systems at a dozen North American colleges; they discussed the plans with other faculty members, consulted with architect Arthur Peabody, and generally studied the question from every conceivable angle. It is important to remember that there had been no communal men's living arrangements since the science hall fire in 1884. The university was embarking on a difficult undertaking and the fact that

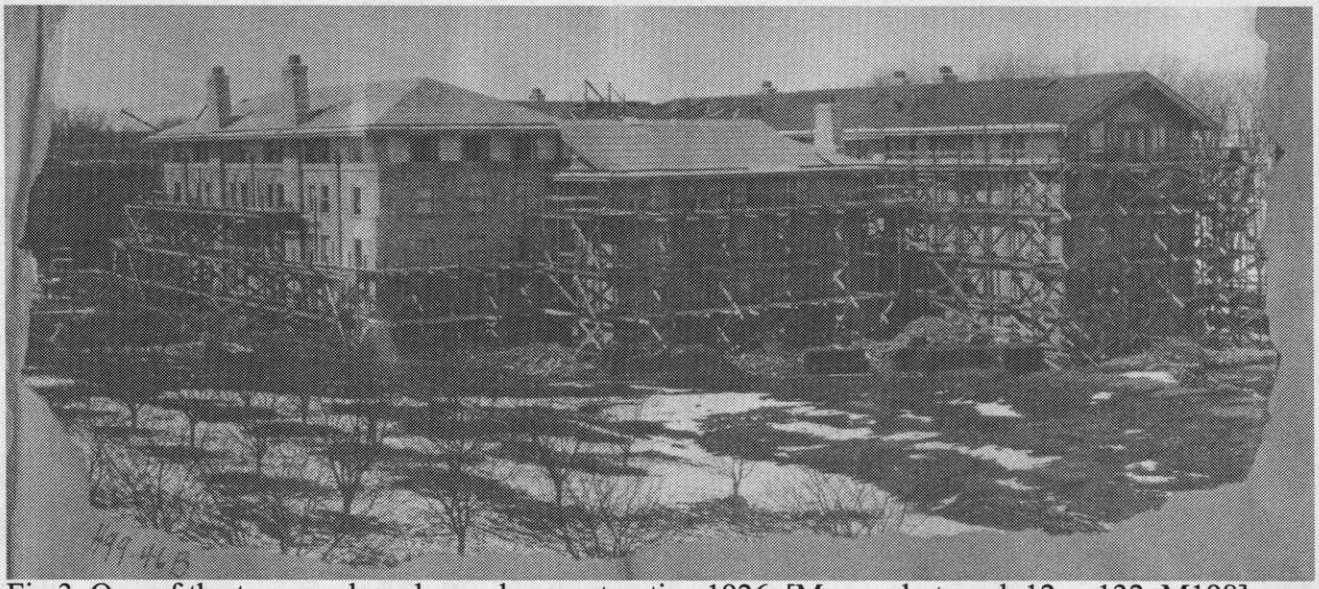


Fig 3. One of the two quadrangles under construction 1926. [Meuer photo vol. 12, p.132, M198]

it was a spectacular success is due in large part to the skills and thoroughness of the men on this committee.

In their January 1925 report the committee suggested that the dormitories, in the words of John Dollard: "should make student living conditions less costly, more comfortable, more thoroughly decent ... lessen social distinctions in student society ... and help to develop a vigorous and healthy morale." [3] Van Hise would have agreed wholeheartedly. The committee recommended the type of building they thought most likely to obtain the desired result, the entry-quadrangle type, several separate structures grouped to enclose a central court, with a separate door for each building of a varied and noninstitutional character. The buildings would be divided into houses with each house containing thirty men mostly in single rooms (with a few doubles). Each house would have a common room to help promote the social unity of the men in the house.

The committee at first believed that the dormitories should be reserved for freshmen, since they were most in need of the influences and advantages provided by the dorms. But as time went on they decided that each house would benefit by the inclusion of an older man as a dormitory "leader". He should aid the younger men by example, by counsel and by friendly interest. This idea later became the "house fellow" system. Later the proportion of freshmen to older students was adjusted to "leaven the lump of green freshmen". On the recommendation of architect Peabody the regents also decided to build a separate refectory for kitchen and dining facilities, rather than to place these functions in the basement of the residence halls as originally planned.

Finally at the meeting of the Executive Committee of the regents on October 16, 1925, the regents awarded the construction contracts for the construction of "Two Dormitory Quadrangles each quadrangle to consist of three buildings." The general construction contract was awarded to Walter W. Oeflein of Milwaukee for 550,310.34. The subcontracts, architect's fees and miscellaneous costs brought the total to $720,000. At the same meeting the contracts were awarded for the construction of the refectory building. The general contractor was J. P. Cullen and Son of Janesville for $74,211. Subcontracts and miscellaneous cost brought the total for the refectory to $102,843. The grand total for the projects contracts was $823,435.

The construction of the dormitory group was unusually trouble free. In March of 1926, the contractor told the Cardinal that they were a month ahead of schedule. By May 1926 the goal of using the dorms in the fall of 1926 was clearly in reach and the rules governing applications for

residency in the new dorms were published. By September 21, 1926 the Cardinal reports that Tripp and Adams Halls are fully occupied by more than 500 freshmen of the class of 1930. The four story buildings were steel framed, with concrete foundations and floors. Exterior cladding was Madison sandstone rubble and stucco, with stone trim. Approval of their appearance was widespread. The dream of Charles Van Hise had become a reality twenty three years after its first exposition.[4]

If the beginnings were complicated, and the construction simple, the operation of the dormitory was fraught with difficulty. No amount of planning could conjure up the reality of five hundred college freshmen living by their own rules.

The dormitory committee had decided early that residents should set their own rules with "the exception of certain fundamentals as to drinking, women and gambling ... officers of the university should step in only in case of an offence committed against the university body politic, it's good name or reputation."[5] On the *first night* in the new dorms a group from Adams Hall with saxophones, clarinets, and other noisemakers woke everyone within earshot until a group in Tripp Hall counter attacked with fire hoses. The following day the groups met to discuss house rules and quiet hours. Throughout that first year reports of students organizing, bargaining and compromising over the rules for the dorm make a strong case for the committee having guessed correctly.[6]

But the second year of the residence halls experiment, a new variable was introduced. Alexander Meiklejohn's experimental college arrived. The 'x-college' was an experiment to examine alternative ways of educating freshmen and sophomores in a university setting. As an experimenter, Meiklejohn wanted and remarkably got the use of half of Adams Hall to house the x-college. There were to be no subjects or exams in the usual sense, but instead a concentrated life course in thinking reasonably. The instructors would live in the residence halls with the pupils. Introductory course work was a steady diet of fourth and fifth century Athens. This introduction of the x-college into the embryonic dorm system was extremely disruptive for the dorm system. In a typically plain-spoken letter to president Glenn Frank, Dormitory Committee chairman Bradley says that during a discussion with Meiklejohn and his housefellows regarding the alleged breaking of house rules, it became clear that "uncouth behavior in the dining room is considered evidence of intellectual nonconformity, and so is of no moment and by implication a good sign ...The same attitude explains the general disregard of all rules made for the comfort of dormitory residents in general."[7] Meiklejohn's side of the discussion was generally in agreement with Bradley's. He wanted as much segregation and isolation as possible from the rest of the dormitory students. A victim of resistance from students and faculty but mainly declining enrollment the x-college stopped accepting new students in 1931.[8]

The dorms were filled throughout the late 1920s, and the systems supporting them both socially and financially were fine-tuned. The housefellow system in particular took a lot of adjusting, in part because the administration of president Frank allowed for considerable ambiguity in the definition of authority and areas of influence. The dorms were considered so successful that the university had some plans to eventually build very large dormitory groups, the "university city".

The times to come would make the dormitory experiment a trial for everyone. The great depression struck at the heart of the scheme that had allowed the regents to build the dorms. The construction loans were self-amortizing, and therefore depended on keeping the dorms full of students. By 1932 the two quadrangles were filled only to about 75% of capacity. Various means were tried to increase student enrollment in the dorms, including state wide recruiters at high schools. The blame for falling use was a due to a number of factors. Adams Hall in particular had gotten a bad reputation as a place for a student to live during the experimental college era, and this bad name took a long time to disappear. The Daily Cardinal ran continual denigrating articles about life in the dorms, attacking the fellows system and the food quality. Townspeople assailed the university for undermining the established boarding house industry. But mainly the depression was taking an economic toll on

what was after all an economic undertaking. The dorms struggled along through the 1930s cutting costs and boosting enrollment whenever and however they could.

Then as with many American economic institutions they were saved by the outbreak of WW II. Initially in the early 1940s as men left the University and entered the service the dorms appeared to be in serious peril. But university enrollment began to rise again, but now the typical incoming student was female. There were also several thousand members of the military in various training courses on campus. By 1945 there was a shortage of campus housing, although the Cardinal reports that the shortage will most seriously affect women students. In response to this new imbalance Tripp Hall and Adams were opened to women in the fall of 1945. By the following year with its deluge of returning veterans, both dorms were returned to men's housing. Throughout the 1950s and 1960s Tripp and Adams remained highly desirable dorms for incoming students. They were remodelled in 1960, to add built in furniture, repaint and generally repair the ravages of forty years of student occupancy.

After the social upheaval of the 1960s, the dorms became opened to both men and women. Several rooms originally intended as singles have been used as double rooms. The capacity of the dorms remains only a little higher than the original figure. They now hold about 550 students.

The names of the quadrangles are Tripp Hall to the east, after J. Stephen Tripp, whose 1915 legacy helped pave the way to the construction of the dorms; and Adams Hall to the west, after Charles Kendall Adams, president of the university (1892-1902). The houses within the quadrangles originally called A-H, have been named after various university benefactors, alumni, and prominent Wisconsin men. The refectory was initially called Van Hise Hall, and then in September 1965 re-named Carson Gulley Commons after longtime head chef Carson Gulley. This is the only university building named after a nonwhite person.

1) Van Hise Inaugural Address, June 7, 1904 Van Hise biographical file, University Archives.
2) Van Hise Inaugural Address, June 7, 1904 Van Hise biographical file University Archives.
3) John Dollard, Report to the Faculty Committee on the Social Needs of Wisconsin Undergraduates, 1924, copies on file at Division of University Housing and UW History Project.
4) *Regent's Minutes, October 16, 1925; Daily Cardinal*, December 13, 1925, p. 1
5) John Dollard, Report to the Faculty Committee on the Social Needs of Wisconsin Undergraduates, 1924, copies on file at Division of University Housing and UW History Project.
6) *Daily Cardinal,* September 22, 1926, p. 1, September 25, 1926, p. 1.
7) Bradley to Frank March 28, 1928 appendix XI to final report on experimental college in University Archives.
8) For a full treatment of the Experimental College see Cronon and Jenkins *The University of Wisconsin,* Vol III p. 143-211.

LAND TENURE CENTER

Fig. 1. The land tenure building, 1993. The old post office is just visible at the extreme right. [Author Photo, AP-11]

Between 1925 and 1927 the Badger Pharmacy, owned by Oscar Rennebohm, was moved from its original location at 1320 University Avenue across the street to a new commercial building erected by Rennebohm, from plans by architect J. Glaetti, on the corner of University Avenue and North Randall Street. The building had storefronts at 1357 University, where the Badger Pharmacy opened, and two smaller commercial spaces at 331 and 333 North Randall Street. Above the store fronts were two levels of six apartments each. Between 1929 and 1973 the building saw a series of small local businesses move through the small storefronts including Diemer Photo, Block Cleaners, and others. The apartments were more successful than the commercial space, nearly always full. The building is three stories above a full basement. It is 102 by 53 feet of masonry walls sheathed in face brick, with terra-cotta and marble trim. The old store windows have been covered over with stucco, as were many near campus after the turbulence of the 1960s.[1]

In 1966 the building was leased by the University for use as "surge space" for Engineering and the medical school. This situation lasted until 1979 when Rennebohm sold his entire chain of Madison drug stores to the Walgreen Corporation, which placed the Randall Street building on the market. The Wisconsin Foundation, a nonprofit channel for contributions to the University, purchased the property and leased it back to the University. In July 1992, the University traded parking lot #41 at 1800 University Avenue for the old Rennebohm property and the vacant lot to the east of it on University Avenue.[2] The building is now used mainly for the land tenure center, and the University Archives. It's future is uncertain because of long range plans to build new art facilities on its block of University Avenue.

1) Madison city directories, State Historical Society library, Madison city building permits, University planning and construction flat files.

2) Request for state building commission action, July 1992, series 4/31/9-3 box 6, parking lot #41 folder.

PRIMATE LABORATORY

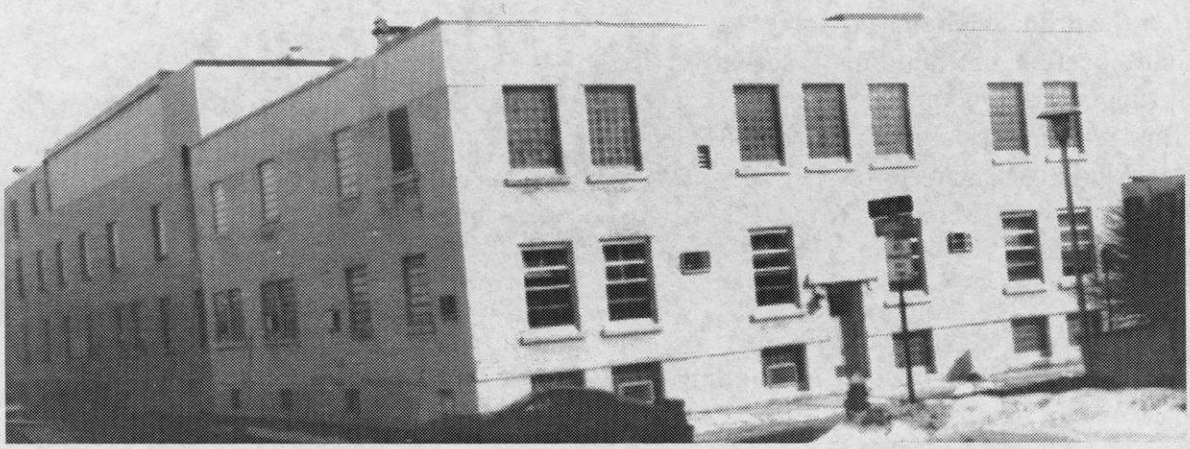


Fig. 1. 1994, Primate lab, original section in foreground, 1957 addition in background. [Author Photo, AP-12]

Built as a dairy plant in 1927, this building became the primate laboratory in 1955, and was added to in 1957. It is now named after Dr. Harry Harlow, the first directory of the facility.

When Harry F. Harlow joined the psychology faculty of the University in 1930, his first question was "where is the animal holding facility?" His department chairman informed him that it had been torn down the previous summer. The chairman's wife suggested that the Vilas Zoo had a monkey house, and for the next two years Harlow carried on his primate studies from a basement room at the Vilas zoo monkey house.[1]

In 1932 Harlow was given a small (24 by 24 foot) building at 1505 University Avenue (see Fig. 2.), recently vacated by the Forest Products Service. With his graduate students, Harlow remodelled and expanded this facility for the next twenty years. During this time, the building was considered an eyesore by the department of buildings and grounds, even after Harlow planted a thick hedge to obscure the off-the-record alterations being made to the building.[2]

In June 1946 the University notified property owners in a planned expansion region south of University Avenue that they should consult the regents before making large improvements to their property. One of these owners was the Madison Milk Co-op at 29 Coyne Court. On April 14, 1948 the Coop offered the Coyne Court property to the University for $85,000. After nearly four years of haggling over price, the regents and the Coop agreed on a price of $60,000 in January 1952. The purchase was to be funded through the Wisconsin University Building Corporation. The regents approved the outlay of $90,000 to provide for both the purchase price and remodelling costs. The Co-op was a sixty foot square, two story building of reinforced concrete built in 1927.

There were political difficulties in the financing of the purchase[3], which were resolved by the Wisconsin Alumni Research Foundation (WARF) purchasing and remodelling the property and leasing it back to the University.

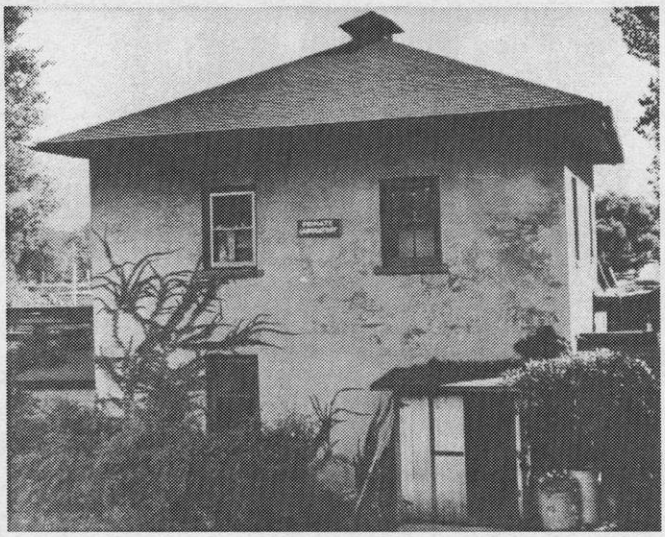


Fig. 2. c. 1950. The first primate lab at 1505 University Avenue, originally built by the U. S. Forest Product Service. After the U.S.F.P.S. left in 1931 this twenty four foot square building was assigned to Harry Harlow as the primate lab. It was extended several times by Harlow in the next twenty years. After the primate lab moved to the Coyne Court location, this building was used by Dr. Farrington Daniels for solar energy research, and was finally demolished in 1975 (Wisconsin Alumni Magazine, May 1975 p. 17). [Photo courtesy of Helen Le Roy]

The regents at first intended the building to be used for garage facilities for the physical plant, but during the negotiations, the psychology department obtained a large research contract involving primate research. This contract and the inadequate facilities available to Dr. Harlow, led to the decision to remodel the Coyne court building into a primate laboratory. This remodelling, planned by Harlow and building supervisor Albert Gallistel, cost $93,000. The lab was not ready until May of 1954 when Harlow and his staff moved from the University Avenue building to their new address on Coyne Court.

The success and increasing recognition of Dr. Harlow's work, led in July 1956 to the awarding of a large research grant by the National Institutes of Health involving rhesus monkeys, with the stipulation that the laboratory be expanded for the work. Again WARF provided funds for the expansion ($200,000), and in the summer of 1957, the lab was extended easterly through the block to Charter Street. When this brick two story addition (designed by Law, Law, Potter and Nystrom) was finished in April 1958, the address of the facility was changed to 22 N. Charter Street. The building was donated to the University by WARF in July 1959. The only substantial modification since that time was the 1960 addition (by Karel Yasko) of several rooms on the roof of the addition to provide extra animal holding and observation rooms. Dr. Harlow retired in August of 1974, and died in 1981. The building is now known as the Harlow Primate Lab.

1) Harry F. Harlow: *My Life With Men and Monkeys*, address at the University Club, Madison Wisconsin 1959. Papers of Helen Le Roy.

2) Dr. Stephen Suomi and Helen LeRoy, Appendix 7 to oral history of E. B. Fred, University oral history project.

3) Regent's Minutes, January, 12, 1952, March 8, 1952, November 22, 1952, January 10, 1953, September 8, 1956; Governor Kohler was politically embarrassed by the appearance of approving the purchase through the WUBC and asked if some other means of financing could not be found; the solution was purchase by WARF.

SERVICE MEMORIAL

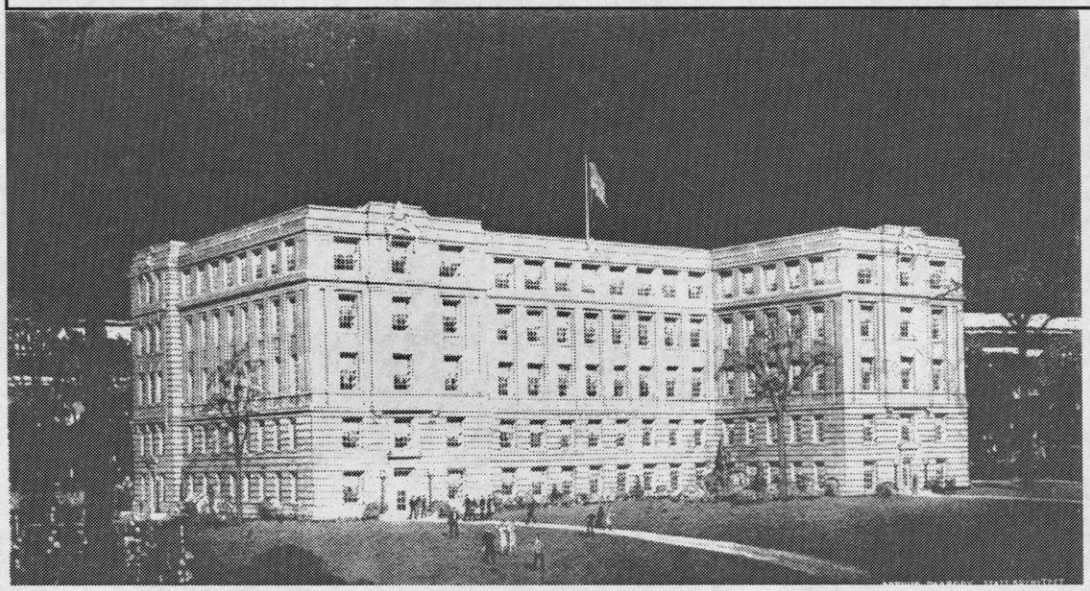


Fig. 1. The preconstruction architects drawing of Service Memorial. The view is from Linden Drive looking south, Charter Street is at the left. [series 9/4, Service Memorial, jf-49]

The Service Memorial Institute was built as the first dedicated home of the University medical school in 1926. The name is the result of the financing of construction with money from the state soldier's memorial fund. Major additions were made to the original building in 1956 and 1958. Since the 1972 construction of the new hospital and clinics the medical school now occupies the entire complex that was originally the hospital and associated buildings.

The "attic medical school" had been very patient for a long time. Since its founding in 1907 it had been housed in the attics of science hall, and the old chemistry building at 600 N. Park Street. Even in 1915 when the legislature appropriated money to build a physics or a medical building, there was little complaint when the regents decided on physics as the most deserving department to occupy the new Sterling Hall. The medical school, under dean Charles Bardeen, gratefully expanded into the large space in science hall vacated by physics.

This situation began to change in the early 1920s. By 1920 Dean Bardeen and his staff had two buildings (Bradley Memorial and the Student Infirmary) to begin clinical work in what had previously been a strictly two year non-clinical medical school. Even more important was the 1919 legislation which removed the two-year restriction from the department and allowed not only the establishment of a four-year degree program, but the construction of the Wisconsin General Hospital. The hospital was built with funds from the soldier's recognition fund in 1926. The success of the hospital showed up more strongly the inadequacies of the medical school's educational facilities. The rising enrollment in the medical school following WW I, and the lack of doctors in the state made the job of convincing the legislature to provide funding for the medical school relatively easy.[1]

In a memo to the chairman of the regent's Constructional Development Committee which was preparing estimates and plans to present to the legislature regarding university constructional needs for 1925 Bardeen explains that "... anatomy, physiology, physiological chemistry, pathology and bacteriology, and pharmacology of the medical school are now housed in Science Hall ... What

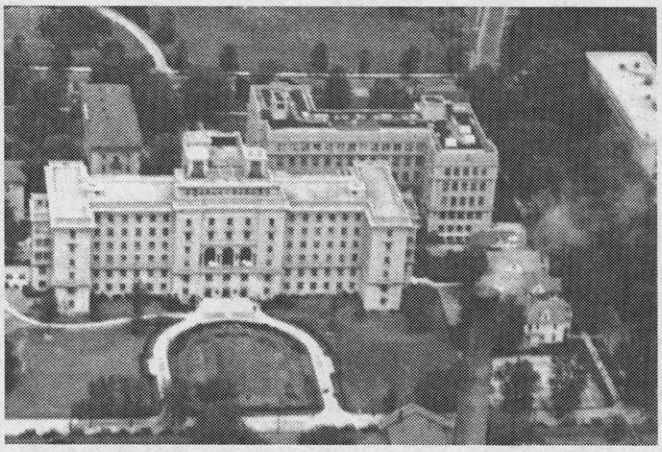


Fig. 2. This 1930 photo shows the shape and orientation of the original Service Memorial Building to the east [right] of the hospital. [series 8/4, jf-50]

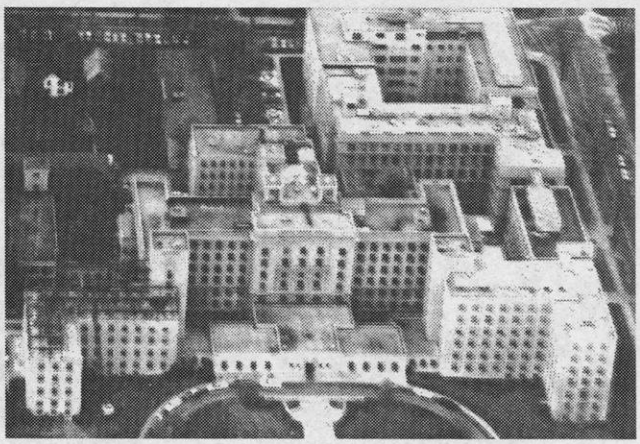


Fig. 3. c. 1960. The modern configuration of the hospital and the completed Service Memorial Building. [series 8/4, jf-51]

appears to be an ideal location for a medical school laboratory building is the side of Charter Street opposite the buildings where chemistry and physics are housed. Such a laboratory should be connected by a wing with the north wing of the new hospital. It should provide additional facilities for clinical research and teaching. At present there are no facilities for clinical lectures and no good facilities for hospital pathological work." Bardeen's estimate for the cost of the proposed project was about $1.2 million. This plan called for a large quadrangle to fill most of the space from the hospital to Linden Drive, and from the Bradley Memorial to Charter Street. It would be enough building to house all the functions of the medical school including future expansion space. Bardeen recognized that a building of this size would have to be funded at least partly by private funds.[2]

Then came a political upheaval that could have ruined the plans of a lesser man than Bardeen. Begun by a series of articles by Robert M. La Follette in January 1925 a general movement arose to compel the university to refuse funds offered by corporations. Six months of very inflammatory rhetoric followed: "Our universities, colleges ... are cringing and fawning for the favors of predatory wealth." [La Follette]; "We are not a morals squad. Let's be consistent and keep our halo on straight if we are going to wear one." [regent Michael Olbricht]. In August of 1925 the regents passed a resolution against the acceptance of "gifts, donations ... from any incorporated educational endowments or organizations of like character." This decision cost the university a pending grant of $740,000 for the medical school from the Rockefeller Foundation. The private funding Bardeen had counted on for the medical school was lost.[3] Bardeen immediately began new plans. The legislature of 1925 had passed a bill authorizing the construction of Service Memorial Institutes in connection with the university medical school "for the advancement and utilization of knowledge of medicine ... to be known as service memorial institutes." The money would be raised from the surplus of the soldier's rehabilitation fund, but this amount was insufficient.[4]

The university drastically scaled back the plan for the medical school. By February 1926 the medical school had decided to build only the southern half of the original quadrangle. Rather than force all of the medical school and state functions into the smaller building, they would leave certain functions (notably anatomy) in science hall. The height of the building was reduced. By April of 1926 it was clear that there was not enough money even for these reduced plans, and the decision was made to include in the new building only the medical departments whose space in science hall was most needed by the departments of geography and geology. The legislature insisted that the building's architecture be of a suitably monumental style, and not appear as an appendage to the hospital. By

May of 1926 the regents had approved the preliminary plans for the reduced project. The changes had reduced the estimated cost of the building to about $600,000, the amount available from the Soldier's Rehabilitation Fund.

In the fall of 1926 the regents formally instructed the state architect's office of the requirements for the building. The plans were finished and put out for bids on November 29, 1926. The regents voted to award the general construction contract to J. P. Cullen & Sons for $568,670. Equipment and utilities brought the total project cost to $810,670. Construction began in January 1927 and proceeded without notable delays, and completion of the Service Memorial Building was announced on September 25, 1928.[5]

The building consists of five stories, a basement and a superstructure (a flat roof with some rooftop facilities), of fireproof steel and brick and Bedford limestone and connected with the Wisconsin General Hospital on floors one and three. [see Fig 2.]. The east wing contained memorial reading rooms, offices for the medical school, and the medical library, with the main book stacks in the basement, physiological chemistry, the State Laboratory of Hygiene, and research labs in clinical medicine. The central wing of the building housed administrative offices, physiological laboratories and a museum of pathology, bacteriology and advanced pathology. Most of the west wing of the building was occupied by laboratories, but also there were the department of rehabilitation, physical therapy, shops, storage, the connection to the hospital, and x-ray and radium treatment centers. The transfer of the medical departments to the new building doubled the space for geology in science hall, and freed up the third floor of south hall. Though not completely furnished, the first section of the Service Memorial Building opened in the fall of 1928 as the new home of the medical school.[6]

The new building remained suitable for less than twenty years. In the explosion of medical advances and of enrollment in the post WW II years an addition to Service Memorial was commissioned by the regents in November of 1953, designed by Brimeyer, Greillinger and Rose of Milwaukee, and built in 1955-6; dedication of the new six-story section as "Bardeen Memorial Laboratory" took place on May 17, 1957. Guests included 1956 Nobel Prize (in physics) winner John Bardeen (son of dean Charles Bardeen). The wing was intended as a teaching wing, mainly for anatomy which finally left science hall. Medical school dean John Z. Bowers estimated that the new facility would mean a 25% increase in the number of physicians graduating from the university. This first addition projected north from the original building almost all the way to Linden Drive.[7]

Almost immediately, in the spring of 1958, a second six-story addition to Service Memorial was begun. It was also designed by Greillinger and Rose, and built by J. P. Cullen, the contractor on the original service memorial building. The total cost of the second addition which was intended mainly as a research facility was about $650,000. This addition completed the Charter Street, Linden Drive corner of the medical school and is named "Medical Sciences". This construction completed the quadrangle first envisioned by Bardeen and Peabody in the 1920s. [see Fig. 3] Since the construction of the new university hospital and clinics on the west edge of campus, the medical school has expanded into the entire old hospital complex at 1300 University Avenue, in much the same way they had first expanded into science hall 60 years before.[8]

1) Clark, Paul F., *The University of Wisconsin Medical School.*
2) Bardeen to John C. Schmidtman, October 21, 1924, series 12/1/12 box 2.
3) Curti and Carstensen, *The University of Wisconsin*, vol II, pp 223-232.
4) *Laws of Wisconsin*, 1925, chapter 545S.
5) *Regent's Minutes*, January 20, 1926, October 13, 1926, December 7, 1926; Daily Cardinal, January 12, 1927, October 2, 1926, November 17, 1926, September 25, 1928. *Wisconsin Alumni Magazine*, May, 1927 p. 234.
6) *Wisconsin Alumni Magazine*, December 1928.
7) *Wisconsin Alumni Magazine*, February, 1955, June 1957, December 1957.
8) *Minutes of the Executive Committee*, April 10, 1958.

MEMORIAL UNION

Fig. 1. The Memorial Union from Langdon Street, in 1930. The theatre wing was later built at the left of the picture. Just visible at the extreme right of the picture is the old YMCA, demolished in 1955.

The Memorial Union was built in 1926 to provide a "living room for the campus". The functions of a student union had been previously housed in the old YMCA building and other temporary spaces. The union was largely financed by private donations. The theatre wing to the west was added in 1938. The original design was by architect Arthur Peabody.

The usual starting point for the story of the Wisconsin Union is the inaugural address of Charles Van Hise in 1903. While it is true that Van Hise called for a union after the style of Oxford and Cambridge, and that he periodically asked the legislature for funds to build a union, nothing of a definite nature was specified in this or any other speech, and except for the land along Langdon Street and a $375,000 appropriation from the 1913 legislature that was promptly cancelled by the 1915 body, nothing was forthcoming from the state. It is thus hard to see Van Hise's speech as anything but an early expression of hope for the project that would later be accomplished by others, by which time Van Hise was dead.

Another version of the origin of the idea of the Wisconsin Union appears in a letter written by Willard Stephenson to Ted Stempel, two men who had been involved in the original union plan. As Stephenson recalls it, in the fall of 1907 "professor Frank C. Sharp, stopped [George] Hill and me ... and told us that the 'Y' was about to lose its building on a mortgage foreclosure and he asked us if we

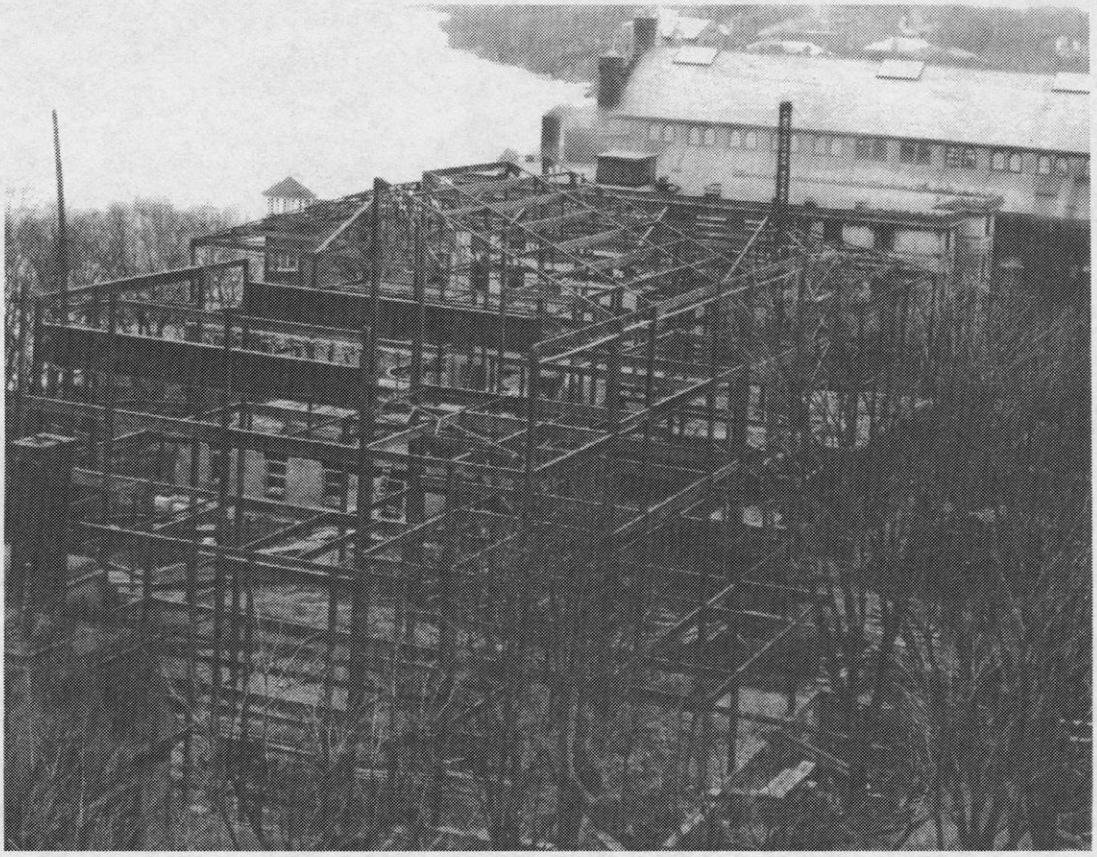


Fig. 2. The Union under construction, from Science Hall, 1928. [M188].

could make any suggestions that might head it off."[1]

Stephenson says that they suggested turning the first floor of the YMCA into a student union along the lines of the union they had seen in Ann Arbor. "The Y adopted our plan and we set about organizing the Union ... we ordered all religious literature sent up to the second floor, and turned the first floor into a student club, with cigar stand, billiard tables, popular magazines, etc." As the story goes, the presence of the union on the first floor made the moribund YMCA so popular that it had its "most prosperous year ever."[2]

In the spring of 1916 however, the drinking, gaming and general level of uproar, compelled the directors of the YMCA to terminate the agreement and ask the union to remove itself. The facilities had been no more than barely adequate. The union moved to a frame house on Langdon Street, previously the student infirmary, then to another at Langdon and Park, formerly the home of the university president. These makeshift quarters were inadequate and unsafe.

The union was surprisingly active during these nomadic years sponsoring a range of activities for students. These included 'Union Vodvil' a variety stage show (mounted at rented local theatres) featuring student actors (including the great Frederic March), the Haresfoot show troupe, free dancing lessons for the men, dances at Lathrop Hall, and concert series which booked world quality acts (Pablo Casals, Heifitz and Serge Rachmaninoff, among others).

These activities were very popular, and in some cases fairly profitable. The union board gradually developed a regular structure that could survive the loss of key personnel to graduation, and keep the union self-supporting. But the better the union performed its purposes, the clearer became its lack of facilities. The old president's house contained the union offices, an office for Haresfoot, and one or two gathering or games rooms. The lack of space precluded much improve-

Fig. 3. The beginning of theatre wing construction, 1939. [x25 - 469]

ment.

Then in 1918 regent Walter Kohler, business man and later [1928] state governor, became intensely and personally interested in the student union. Kohler had set up an employees union at his factory in Kohler, Wisconsin, and was both pleased with and proud of the results. It was obvious to Kohler that the sharply rising enrollment at the university had resulted in the loss of the homey atmosphere in which all the students and faculty knew each other, and that a union could help provide a return to that closely-knit attitude. He was appointed (by president Van Hise) chairman of a committee to initiate plans for securing funding for the construction of a "memorial building", without resorting to legislative appropriations.

It was clear to the regents that a union was a necessity to the university and that the state was not likely to provide for such a building.[3] Kohler, with the help of university business manager H. J. Thorkelson, and others began to lay the groundwork for the fund-raising that culminated in the Memorial Union. Throughout 1918 and 1919 this committee travelled and visited unions around the country, and held meetings in Milwaukee and Madison at which funding and features were discussed. These meetings yielded a plan that would cost an estimated $500,000, be called the "Memorial Union", and be funded by donations.

A permanent fund-raising committee was appointed by the regents with students as president and vice president, and including regent Kohler, dean Goodnight and Madison businessman Carl Johnson.[4] The labors of this committee would last for years and yield spectacular results. The sources

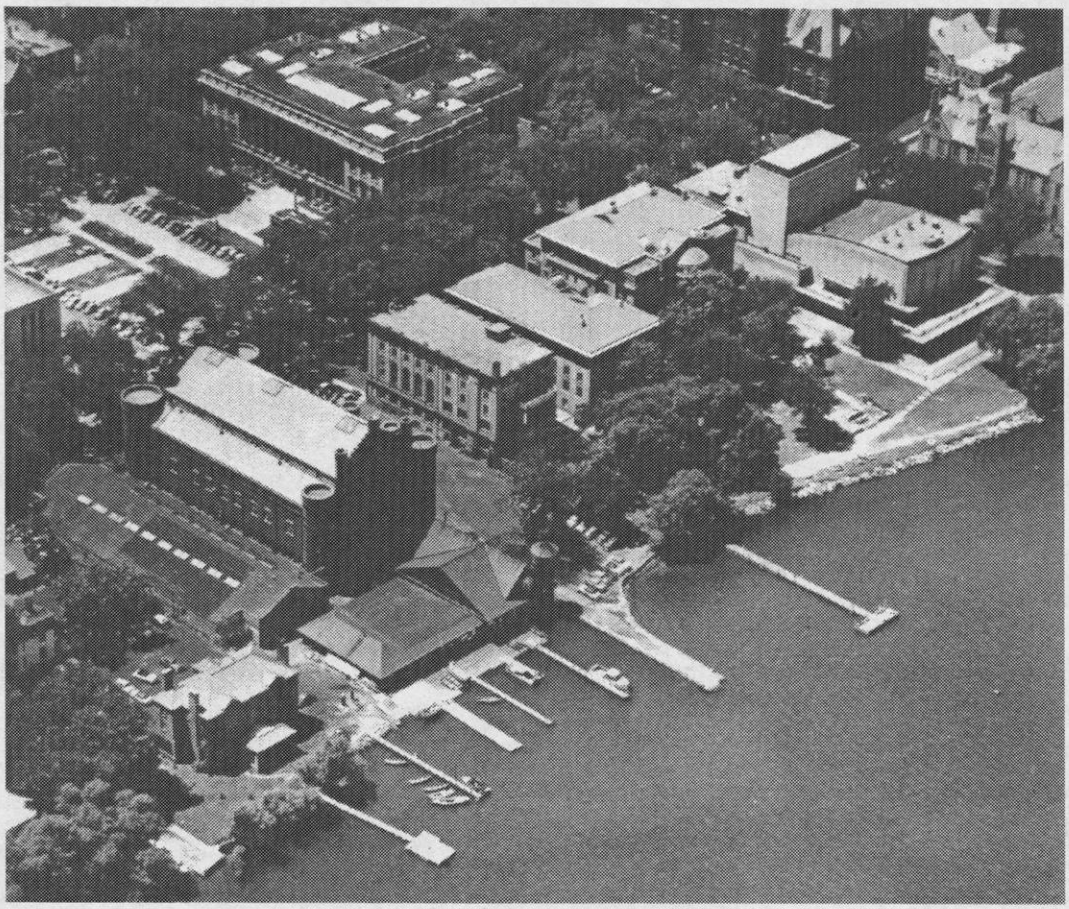


Fig. 4. The completed union from the air, c. 1952, over Lake Mendota. The old YMCA is still standing between the union and the red gym. Note the gymnasium annex, just to the east of the red gym, and cars parked on library mall in front of the Historical Society. The Lakeshore cafeteria has not yet been built on the east side of the union. [folder 8/2 lower campus folder]

targeted by the fund-raisers were the student body, high school students, alumni, faculty, the city of Madison, business men and friends of the university throughout the state. They set up a system of geographical regions, with chairmen and fund-raising goals. The method was to ask for pledges to pay a fixed amount at a later date, in a lump sum or installments. The pledge would not be binding unless the 50% point was reached, in the first case, $250,000.

This goal was reached so quickly (by October 1920) that the plan was almost immediately extended to $1 million. Oddly for a plan run by so many capable and successful business people, accurate estimates of the proposed building's cost would never be obtained, and even more remarkably would never include the costs of furnishing or decorating. Both these lacks would cause trouble later. The most logical explanation is that so few university unions existed at that time that examples of successful ones to examine were lacking. This was also a time of uncertain prices, both for postwar material, and labor, because of the early difficulties with labor union organization.

The committee informed each subscriber by letter that the goal had changed to $1 million, and stopped the practice of soliciting conditional pledges, asking instead for straight subscriptions. Much of the fund-raising effort was directed by professor of advertising and marketing, E. H. Gardner, who took a three semester leave of absence from teaching to aid the union drive. Gardner held this position until the fall of 1923, when he returned to teaching, and was replaced by his assistant John Dollard. Dollard was also serving the faculty committee which planned the men's dormitories. His elevation to secretary of the memorial union building committee signaled the beginning of the second major effort in fund raising.

Dollard changed the emphasis from the big contributor idea that had raised the first half

million quickly but as quickly slowed, to a small donation based program emphasizing school spirit, every alumni and every student a 'Wisconsin man', asking small contributions but numerous enough to raise a substantial sum. A report made of previous efforts, had shown that the lists of alumni were deficient in number and accuracy, and Dollard and new recruit Porter Butts, editor of the Daily Cardinal, managed to update and utilize alumni lists to great effect over the next few years. Dollard was also very effective at recruiting student leaders to boost student donations.

When Dollard took over in the fall of 1923, total pledges were $803,000, with $221,000 cash in hand, much from the big donors of Gardner's (including over $200,000 from the university's trust funds, particularly the Stephen Tripp bequest). The combination of Dollard's fund-raising ideas and Butt's control over the student newspaper raised almost as much money as hysteria. In the fall of 1925, in part by pitting the pride of the four classes against each other (the class of '26 fired a three-inch cannon over observatory hill for every $500 collected) Dollard raised $133,000 from students alone. He also was instrumental in the ongoing efforts to develop plans for the building, and was generally credited for the three unit building plan, with the union, commons, and theatre in three separate sections. Porter Butts took over as director of the Union in late 1926 when Dollard left Wisconsin to follow his professor mentor Max Mason, who had been named president of the University of Chicago.

The design of the building was not without ups and downs. The first design was done by state architect Arthur Peabody in 1919 or 1920. In the earliest days of organization, the union committee had agreed that they were a fund-raising body and that the planning, contracting and erecting of the building would be handled by the university through the regents. Peabody's initial design, from the early $500,000 days, was essentially a small copy of Washington D. C.'s Pan-American union building. Peabody did several iterations of this plan.

Porter Butts remembers that the first design was intended merely as a fund raising aid. As soon as the stakes were raised to $1 million, the union board altered their thinking and decided to hire their own architect. Since state architect Peabody was legally responsible for the design, the committee could only hire a consultant for him. By April 1922 the board had decided, with Kohler's help, on Alexander C. Eschweiler of Milwaukee. Eschweiler and Peabody agreed to an arrangement in which Eschweiler would act as Peabody's assistant. A formal contract to this effect was signed by the board and Eschweiler on July 1, 1922. Eschweiler's pay was to be 1.5% of the cost of the final building. The relationship among the board, Peabody, and Eschweiler eventually dissolved into legal wrangling. Through the fall and winter of 1923 the board worked with Eschweiler in an attempt to get a building they liked. By February 1924 the board threw in the towel, declaring that Peabody was in charge of the job, and that he could use Eschweiler's services if he liked. Peabody had nothing but scorn for the consultant's work, and didn't mind saying so.

By the fall of 1924 Peabody had new sketches ready for examination by the board, but with the extensive and repeated iterations asked by the board (the first plans had no doors out to the lake side, few electrical outlets in meeting rooms, insufficient bathrooms, and other wants) it was not until spring of 1925 that the final plans took shape. In 1926 when shown the final drawings by the board, Mr. Eschweiler, in a final act of pique refuse to sign drawings without having had any constructive part in their preparation. He eventually settled with the board for about $15,000. His influence on the actual design appears to have been minimal to nonexistent. The final design by Peabody borrowed heavily from the northern Italian Renaissance palaces of Venice and Padua. Considerable criticism resulted from this design as being derivative and inappropriate for a Wisconsin building. F. L. Wright later said of it "Yes it speaks Italian, extremely bad Italian, and very difficult to understand."[5] The four story building is of Bedford limestone with accent panels of Madison sandstone, a green tile roof, and steps of Winona travertine.

By the fall of 1925, the preliminary plans for the building were completed and approved by the regents. Dollard told the Cardinal "We will say it with stone from now on." This turned out to be only partly true. In an astute public relations move (donors had started to ask what their money was being used for) the union committee decided to build the foundation of the union in the spring of 1926, even though neither the plans nor the money for the building were complete. Architect Peabody suggested building the foundations first (a common method on public buildings, but seen as an immensely clever ruse when viewed through the Cardinal), since enough money was on hand to let that contract. Peabody also advanced the plans enough that the plans for the two projected sections (the theatre wing had been deleted) were reliable. This the regents agreed to, and the excavation contract went to George Fitton of Madison for $4188.98 on November 30, 1925, and the contract for the foundations was let to C. B. Fritz for $8,098 on June 2, 1926.

By August of 1926 the foundations were finished, the building fund stood at $700,000, the regents had approved final plans and authorized bids on June 18, 1926. Unfortunately the lowest bid was almost $100,000 over the money on hand. State law required that all cash must be on hand before a state contract could be let. The attorney general had early ruled that the union was a state building, even if built from donations. This meant that construction could not yet begin. Dollard persuaded the regents to delay consideration of the bids nine days until their October 13 meeting. The Cardinal howled "Memorial Union Must Raise $100,000 Cash in Nine Days".

The foundations were built, plans were finished, $700,000 was in the bank, the last big push was underway. The drive for funds among the students and faculty produced only $20,000. The remaining $70,000 was obtained according to the Cardinal by borrowing from a local bank (First Wisconsin of Madison), using as collateral the uncollected pledges (payment due by April 20, 1927) from the subscription drive.[6] What sober banker would approve such a loan remains unrecorded in the Cardinal. In a 1974 interview Porter Butts, who was there, remembered that seven men (unidentified by Butts) signed personal notes for $10,000 apiece.[6] Regardless of how Dollard got it done, the regents, faced with the secretary with cash in hand, had little choice but to approve the lowest bid of $773,000, for the first two units of the union. This they did on October 22, 1926.

The regents had a reason besides the cash in hand law for being stiff-necked about awarding the contract. The board was strongly, though not unanimously, pro-labor in the union organization battles then taking place in the country, and the lowest bidder was Jacob Pfeffer of Duluth, Minnesota, who ran an open shop. There was discussion and dissent on the board of regents regarding the use of a nonunion contractor from another state, but the law required that the lowest bidder be awarded the contract.

Pfeffer's men appeared within 48 hours of the signing of the contract, and materials began accumulating on the site. From October 1926 through March 1927 the job ran without incident. In April 1927, union workers left work and began to picket, protesting the use of nonunion personnel in key positions. The key men refused to join the union, and after three days, Pfeffer went back to Duluth for more workmen. Local labor leaders called for a strike. Picketers began to interfere with the coming and going of the workers both union and nonunion, stoning them and the taxicabs used to bring them to and from the job site. During April these episodes continued, growing more serious. Local law enforcement was conspicuous by its absence, and contractor Pfeffer erected a shanty behind the building as temporary housing for his crews.

On the night of May 20, 1927 a mob of 200 union men marched down Park Street and attacked the shanty in an attempt to dump it into the lake. When they could not move it they began to demolish it. Occupants were dragged forth, beaten and thrown into the lake. A man lost an eye, a jaw and ribs and teeth were broken. Police declined to respond to repeated riot calls by Mr. Butts. The attackers threw ink on the front of the building. Public opinion appears to have shifted against the

union after this episode. After it became clear that the city would be held responsible for the damage to the building, the law was enforced to protect the building and perhaps incidentally the workers. After a few other violent episodes in May of 1927, work proceeded. In June of 1927 the courts restrained the union members from interfering with the laborers. On May 30, 1927, the cornerstone ceremony was held. President Glenn Frank, rose from his sickbed to turn the first spade, and the gold star roll of Wisconsin war dead was placed in the ceremonial box in the cornerstone. Work proceeded using union and nonunion labor and the building shell was finished in July 1928.[7]

The plans and funding for the building had no provisions at all for furnishing the interior. As the erection of the shell proceeded, the fact that the union would be useless without furnishings began to dawn on all concerned. There was no chance that donations could be secured; that source had been bled white. Earlier the regents had approved for the Van Hise dormitories, a scheme (of Kohler's) by which capital could be borrowed through a dummy corporation. This corporation was called the University of Wisconsin Building Corporation (UWBC), and would borrow capital, construct buildings and would then lease the building back to the University. The regents approved the financing of the union furnishings by this method. In October 1927, the UWBC borrowed $400,000 from the state annuity board for the union's furnishings.

With the issue of funding resolved, in November 1927 the union board hired French interior designer Leon Pescheret, (designer of the Drake hotel in Chicago), who with his wife, and the constant input of Porter Butts and the union board, designed the interior of the union. The board asked that the decorating scheme reflect both the memorial nature of the building and the Wisconsin theme. The memorial hall contains walnut scrolls containing the names of Wisconsin war dead. The Old Madison Room, the Paul Bunyon and Beefeaters rooms, the Rathskeller and the general decoration scheme reflect the local, British, German and Indian influences on the state.

The completed union which opened October 5, 1928, was extremely popular from the beginning. By June of 1929 more than a million visitors used the union, making it the busiest union in the country.

The project had originally been conceived of as a men's union, both in Van Hise's vision of an Oxford style club, and by the intent of the first organizers, whose club at the YMCA was male only. But the women students of the university even though they had their own social center in Lathrop Hall, were so enthusiastic and supportive of the new union project, there was after 1920 almost no idea that the union would be for men only. The fact alone that the women outperformed the men in student fund-raising drives, as well as their participation in union activities like 'Vodvil' guaranteed them a place in the finished union. There was some segregation of the sexes in the building when the final plans were approved. Women were expected to confine themselves to the Ladies lounge on the great hall floor (now occupied by a travel agency), the ground floor cafeteria in the commons wing, and the ball rooms.

Almost immediately after opening there were complaints from both sides about the rightful places of the sexes. Throughout the first years, various schemes were tried, men on the ground floor, women on the great hall floor and shared spaces on the main floor. But as recognized by director Butts, these divisions were unnatural and not wanted by most students, and unenforceable to boot. They gradually fell away under the pressure of social change and increasing student enrollment. By far the most contentious point was the use of the Rathskeller, which had been intended as a men's only club. As the other barriers fell, the main lounge, the library and Tripp commons, the men consoled themselves with the rigid control of the Rathskeller. This barrier began to fall during the 1930s when dances, the most common way of meeting the opposite sex were held in the Rat. Then in July of 1937 the union board opened the Rat to women, though only for the summer session. In the summer of 1946, the Rat was opened to women during certain hours for the fall semester. These part time, on

and off again rules could not and did not last. Although there was no formal announced change, by 1950, there was no enforceable barrier to either sex in any part of the building, except bathrooms. This distinction too has now been eliminated, with the introduction of oddly named "Unisex" facilities. The skies have not opened, civilizations have not fallen, and the Memorial Union is more heavily used than ever.

The greatest lack of the new union was the theatre facilities which had been deleted for lack of funds. For more than a decade, the students made do with the limited facilities offered by the great hall on the third floor. Butts tells the story of an unnamed baritone who was interrupted in mid aria by the ringing of a telephone on the stage. With great composure, he lifted the phone, said "you can't call right now", hung up the phone, signaled the pianist, and resumed the aria.

In 1937 with federal Public Works money available, Butts and the board began to make plans for the theatre wing. Arthur Peabody, still state architect, agreed that he was not qualified to design a theatre, leaving the union board free to hire their own designer. They asked Lee Simonson, a nationally known theatre authority, to consult on the site and layout of the theatre. After surveying the site, and discussing the needs of the union with the board, Simonson recommended Michael Hare, a young theatre designer with Corbett and McMurray of New York. Mr. Peabody agreed to put Hare on the state architects staff, although he was paid by the union board, thus meeting the law regarding state buildings being designed by the state architects office.

The wing the board wanted included a large theatre to accommodate 1300, a small theatre for 300, facilities for the increasingly popular Hoofers outing club, bowling alleys, recording studios, and a new crafts shop. Hare's first design for the wing was presented to the board of regents in October of 1937. The regents hated it. They said the plans looked like a silo, a woman's hat, and a grain elevator. The modern streamlined look was a little too much for the regents and some of the general public (Madison's mayor James Law, an architect himself, was worried about the design destroying the natural beauty of North Park Street.). Within a few weeks, modifications to the Langdon Street face of the design were made, by architect Paul Cret, who was instrumental in the design of campus buildings from twenty years before. The modifications required the reduction of the small theatre to 168, and considerable rearrangement of interior spaces. But the facade of the building now blended suitably with the existing union.[8]

Ground was broken on the theatre wing on January 1, 1938. The general contractor was Jacobson Bros. of Chicago for $486,370. With utilities and subcontracts, the total cost of construction was $895,535. The funds were raised by donations of $50,000, a PWA grant of $236,000, and UWBC loans of $580,000 from the state annuity board. Construction on the new wing proceeded without serious setback, except that on July 12, 1938, the west wall of the old union building, scheduled for demolition, to connect the new wing, collapsed without warning and killed two workmen. Investigation showed that the wall had been undermined by previous work by the crew. The construction progress mightily disrupted the traffic patterns and use of the union; the Paul Bunyon Room was taken over for use as the music room, which had been in the west section removed for construction.

The Theatre wing was opened to the public on October 8, 1938. The open house included radio addresses (from studios attached to the main theatre) by Simonson and Hare, the designers. The grand opening performance was a sellout performance of Lunt and Fontaine in The Taming of the Shrew. The theatre got rave reviews. Sinclair Lewis called it: "The most beautiful theatre in the world."[9] Other concerts staged in the new wing in that first year were: Paul Robeson, Gunnar Johansen, and the Minneapolis Symphony. The entire wing, the auditorium with its advanced lighting capabilities, small theatre, craft shop, bowling alleys, and studios, was a complete success.

The radio and recording studios fell out of use after WHA radio obtained their own facilities for remote broadcast. The small theatre was named after alumnus and union board member Frederic

March in 1974. The Union Theatre has been a center of culture and arts in Madison ever since its opening. Even its "modern architecture" has lost any discordant impact over the years. This is partly because it is only obvious from certain angles [See Fig. 4]. F. L. Wright had an opinion about the theatre too: "You should have put up a tent, because this will all be obsolete in a few years on account of the designs I am making for theatres."

Other major modifications to the union are surprisingly few. The Hoofer's boating facilities were greatly enlarged in the 1960s. In 1956, the ground floor of the commons wing, (the Lakeshore Cafeteria), was doubled in size and glassed in to take advantage of the view. Some modifications to the Great Hall helped increase its seating capacity. Many interior modifications have taken place over the years to accommodate changing activities. A typical example is the replacement of the flagstone floor in the Rathskellar with terrazzo in 1953 (the Paul Bunyon Room retains the old flooring. The opening of Union South in the 1970s occasioned reorganization of spaces.

The Memorial Union has brilliantly fulfilled the goals of its planners to become the social and leisure center of the campus of the University of Wisconsin. Remarkably in a job that has a usual span of four or five years, the Wisconsin Union has had in its sixty seven years of operation only two directors, Porter Butts (1927-1965) and Theodore Crabb (1968-).

More than any other university building, the Memorial Union is accessible. Visitors can wander into almost every part of the building, and there are always new and interesting things to look at, food to eat, places to rest, an art gallery. The broad terrace behind the building, originally designed by Charlotte Peabody, the architect's daughter, is the center of summer life on the campus. The Union is a wonderful addition to the campus, truly the living room of the university as hoped by president Glenn Frank during its construction.

1) Stephenson to Stempfel, February 8, 1954, These men were all members of the order of the Iron Cross, an senior's academic honors society. Stephenson said in the letter "I guess we can give old Charlie [Van Hise] credit, but the union was an Iron Cross project."
2) Ibid.
3) *Regent's Minutes*, December 4, 1918, volume J, p. 228.
4) *Regent's Minutes*, June 24, 1919, volume J, p. 298.
5) *Daily Cardinal*, October 28, 1932, p. 1.
6) *Daily Cardinal*, October 22, 1926 p. 1.
7) Cronon and Jenkins, *University of Wisconsin* vol. III pp. 589-600; Porter Butts interview, Oral History Project, University Archives.
8) *Porter Butts interview*, Oral History Project, University Archives; *Daily Cardinal*, October 17, 1937, January 12, 1938, July 14, 1938, October 6, 1939, October 21, 1939, *Wisconsin Alumni Magazine*, June 1937, November 1939; *Capital Times*, October 29, 1937; *New York Times*, March 20, 1938;/ *Regent's Minutes*, April 11, 1938; *Executive Committee Minutes*, April 14, 1938.
9) *Capital Times*, September 26, 1940.

NAVAL ROTC ARMORY

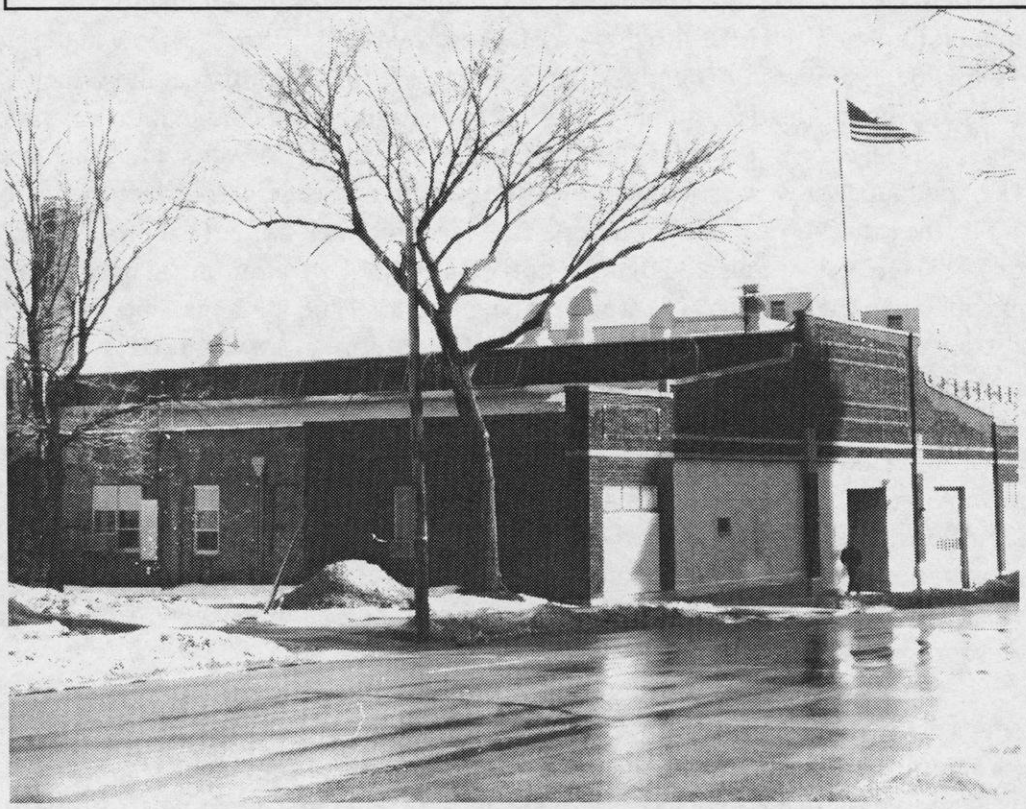


Fig. 1. Naval ROTC armory December, 1994. The original front of the building had a semicircular drive in entrance. [Author Photo, AP-13]

Originally a gas station built about 1927, the Blackhawk garage, was purchased by the University in 1942. It served as home to the Naval radio school until the end of WW II. In 1948 the building became the home of the Naval ROTC program.

In 1925 when the Badger Garage oil company and service station opened at 1610 University Avenue it had been only nine years since automobiles had begun to outsell the horse in Madison.[1] The Badger garage was bought out by the Blackhawk Motor company in 1927. It is probable that the existing building, designed by architect Alvan Adams, was built at that time. The front of the building on University was a semicircular drive-in filling station. The Blackhawk garage operated successfully throughout the 1930s, on the strength of its proximity to the relatively wealthy and auto owning University Heights neighborhood.

The university assumed that eventually it would obtain this property; president Dykestra wrote: "From the long term point of view the University has always expected some time or other to be able to take over this property for we now own on both sides of it and any future plan of development of our campus would require this area."[2]

The immediate attempts to acquire the property began in January of 1942, when Dykestra wrote to regent M. J. Cleary to inform him that the Blackhawk Garage was available "at a fine price", and that it would be useful to the university as temporary laboratories for the training of short course students in defense industries. Dykestra asks Cleary to present the matter of funding this purchase to

governor Heil. The hope was to obtain funds from the state emergency fund.[3] On January 19, 1942 the university had realtor Paul Stark obtain a two week option on the property for $47,500. Later that month dean of engineering F. Ellis Johnson informs Dykestra that the Blackhawk garage will require an estimated $60,000 in modifications to make it suitable for use by the departments of electrical or chemical engineering. Johnson says that even with these expensive alterations, the building would be acceptable only as temporary quarters, but that the departments were so cramped that they would be happy to have even this small help.[4] The following day Dykestra wrote to Elmer Barlow at the state tax commission to explain the university's need for the property. He told Barlow that the principal need was for laboratory space for the department of agricultural engineering, and that the university plans to use the building as is, except for better lighting and some benches. A week later the realtor Paul Stark told Dykestra that Barlow reported a lukewarm reception from governor Heil, who believed that "very likely, the boys know more about repairing farm machinery than the professors."[5]

In March of 1942, the Navy requested that the university establish a training school in radio and naval communications on the campus. There would be a total of 1200 students, 300 at a time, staying in university dorms, with the navy paying rent as well as equipment, wear and tear, modification and amortization charges.[6] The school began on April 1, 1942. During the summer of 1942 navy Commander Heslar, university building and grounds director Albert Gallistel, and state engineer Willson, inspected the Blackhawk property and agreed that it would provide an ideal code room for the navy program. On August 4, 1942, the regents voted to purchase the Blackhawk Garage for the reduced price of $38,500 and to proceed with remodelling for use in the navy program, to be paid for by the navy. These alterations were estimated to cost $21,200. The 108 foot X 112 foot, building was brick and concrete construction with steel trusses and frame roof, and contained a 64' X 68' basement with boiler and coal rooms.

The naval radio school moved into the remodelled Blackhawk garage in mid-September 1942. They stayed until war's end. At that time, the regents authorized president Fred to apply for a four year naval ROTC program. The university could meet all requirements except that for space. The regents planned for a program which could accommodate 400-500 students, creating a "little Annapolis".[7] Some preliminary plans were made for a naval science building. These plans died in the building crunch that followed WW II. The naval ROTC program first appears in the university catalogs in the fall semester of 1948 and the program was housed at 1610 University Avenue, where it remains until the present day.

1) Mollenhoff, *Madison a History of the Formative Years*, p. 366; Madison city directories, State Historical society library. Dane county register of deeds.
2) Dykestra to Barlow, January 28, 1942.
3) Dykestra to Cleary, January 17, 1942.
4) Johnson to Dykestra, January 27, 1942.
5) Memo dated February 6, 1942.
6) Regent's Minutes, March 14, 1942, p. 7. This request was first made February 20, 1942 by rear admiral John Downes.
7) *Wisconsin Alumni Magazine,* April 1945, p. 4.

FIELD HOUSE

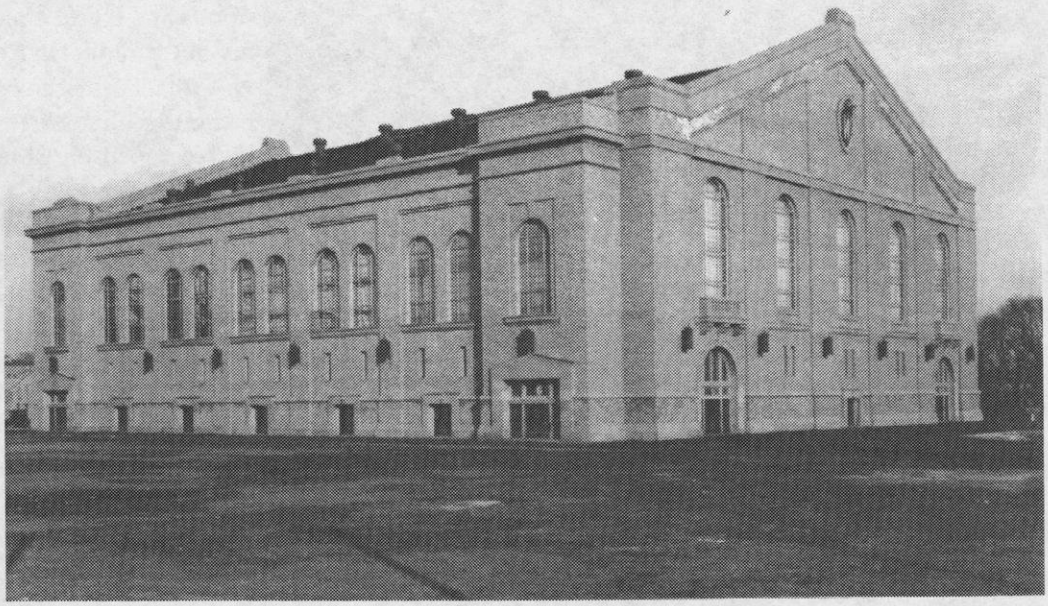


Fig. 1. The Field House from the southwest, c. 1932. [Series 9/11, jf-53]

The field house was the project of athletic director George Little. It was begun in 1929, first used in 1930 and has been used for basketball and large community gatherings such as convocations and concerts, ever since. The second level seating was added in 1936 and a major remodelling took place in 1974. Because of limited size and fire danger, a new field house (the Kohl Center) was begun in 1996.

When George Little took the job as athletic director at the University of Wisconsin in 1925, he also became the football coach. Little had been an assistant of Michigan's famous Fielding Yost. Yost gave Little a glowing recommendation to J. F. A. "Sunny" Pyre, the ex-football star and faculty chairman of the athletic council.

Little acted as coach for two years, before hiring coach Glenn Thistlethwaite away from Northwestern, and turning strictly to administrative work. A hardworking and persuasive man, Little had a vision for the athletic facilities at the University. By 1927 he had developed a three million-dollar master plan for athletic facilities, including replacements for the armory, the gymnasium annex, and the boathouse.[1] His support for this enormous project was considerable. The legislature of 1927 approved an appropriation of $350,000 to begin the project. Because of economic hardship, this bill was pocket vetoed by Governor Zimmerman. Rather than pursue this avenue of funding, Little turned to the regents. His plans had now shrunk considerably. He now asked only for $350,000 for a field house without facilities for non-income-producing sports.

Football was well provided for at the Camp Randall stadium; the real problem was with basketball. Wisconsin played basketball in the old red gym. The gym was built in 1892, and for basketball games held 2240 spectators. It was called "the little cigar box gym" by newspapermen, and complaints were heard about scalping of the scarce tickets. In the fall of 1927, in an interview with a

Fig. 2. 1930, the field house is born into the west campus. The steel framework rises to the south of the stadium. Breese Terrace (with trolley cars) is at the left. The recently completed Van Hise dorms and Lake Mendota are in the far background. Note that the engineering campus is almost entirely undeveloped, only the old forest products lab, and the "old sawtooth" engineering lab building (which within two years would be the site of mechanical engineering) are shown. [Series 9/11, M111]

Chicago paper, basketball coach Walter "Doc" Meanwell either did (the *Chicago Tribune*) or did not (Meanwell) call the gym a "foul-smelling rat trap".[2] A new field house became Little's main priority. The regents had been discussing a field house since 1925, and had decided to locate the field house at the south end of the stadium[3].

The regents were persuaded by Little to fund the field house through the University Building Corporation, the dummy corporation that had recently been used to fund the Van Hise dorms, and the furnishings of the Memorial Union. The regents approved a loan of $350,000 at 4.5 percent for thirty years.[4]

By this time State Architect Arthur Peabody in consultation with architect Paul Cret, had produced plans for the field house which were approved by the regents on March 6, 1929. This building clearly showed the techniques that Peabody and his staff had learned from architects Laird and Cret twenty years before. The Italian Renaissance style is similar to, though much less formal than, Laird and Cret's Lathrop Hall design. The deep reveals around the enormous round-headed windows, the decorative use of Bedford limestone and terra cotta trim, the recessed panels suggesting columns, and other details show the influence of Peabody's associate Cret. As an interesting detail, the large "W" symbols on the north and south faces of the building were apparently not the work of either Peabody or Cret. The original plans have a note to bidding contractors to "submit model" for this decoration. Presumably some unknown designer at the winning contractor's office did the design, arguably the most beautiful University symbol on any UW building (it graces the cover of this book).

Bids were opened June 22, 1929, and all bids were rejected. There were two problems: first, the regents specified that the building be completed by December 11,1929, which no bidder would guarantee; and second, the regents specified that any arbitration would be decided by them alone, to which no bidder would agree. The regents capitulated on both points. By late September they had signed contracts with Quinn Construction Company of Madison for the excavations and foundations, and with William Christenson of Racine for general contracting for the building. Completion was set for basketball season 1931.

Ground was broken on September 26, 1929 by the Quinn company. It was believed that the

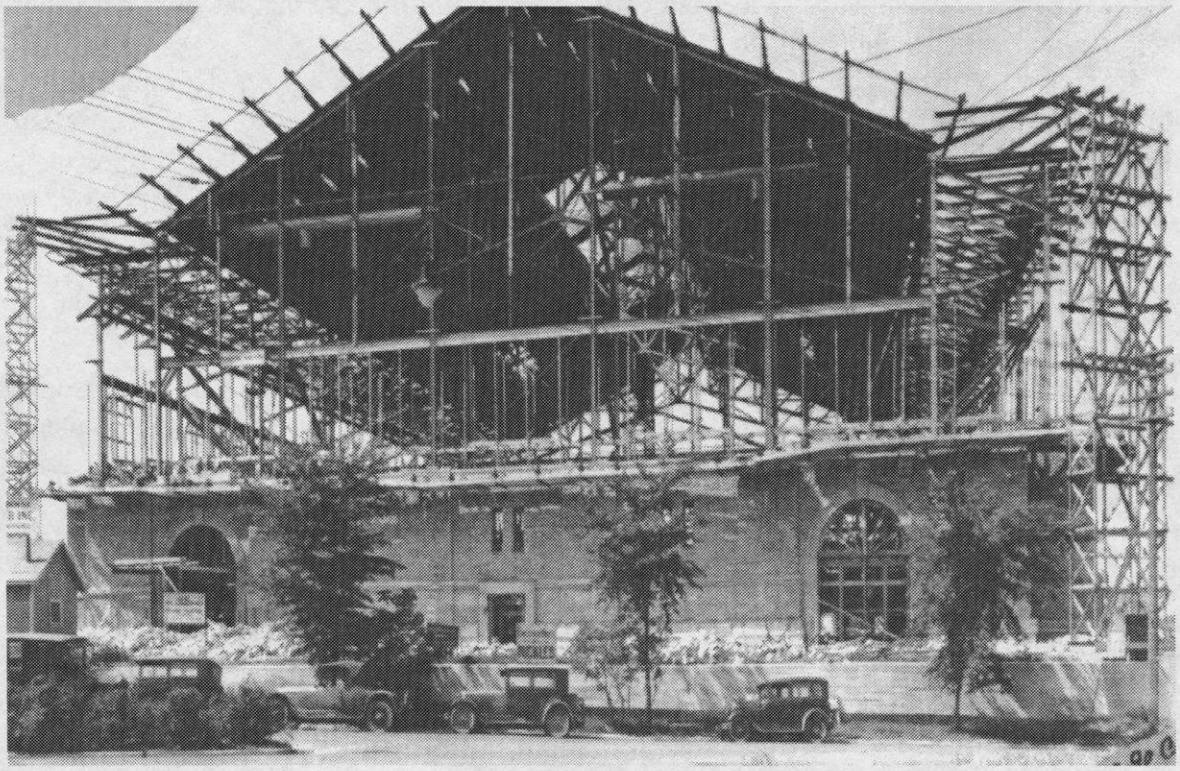


Fig. 3. 1929: the field house under construction from the Monroe Street side.

building would be ready for use by the fall of 1930. The cost was estimated at $453,756, of which $51,000 would be repaid from athletic receipts, $5000 per year for ten years. By November 16, the Cardinal reported that the field house was one-third done. All steel was in place by March 30, 1930. Work progressed rapidly and smoothly throughout 1930, and the building was dedicated December 18, 1930, with a win by Walter "Doc" Meanwell's Badgers, who by means of the "famous short passing system" defeated Pennsylvania by the score of 27-12, before a sellout crowd of 8600.[5]

The building was 240 feet by 200 feet. It had a dirt floor, with a one-eighth mile cinder track. Two portable basketball floors were used for practice, though they were replaced by one large one for "regulation" play. The building was large enough to play baseball and football in when weather-proof conditions were needed. Track and field events were also accommodated. Because it was originally intended that the field house be connected by tunnel to the locker rooms and facilities under the stadium, no such facilities were included in the field house itself. After the building was complete it was found that a gathering place of this size had been needed for some time. Graduation ceremonies and other large gatherings of that sort, which had begun to overflow the Stock Pavilion were moved to the field house.

The walls were of concrete and faced with Madison sandstone rubble work, a style that had been used with good results on the Van Hise dormitories a few years earlier. Because the Madison stone quarries to the west of the city (from which had come the facing stone for most of the best buildings on the older parts of the campus) were nearly played out, this uncoursed rubble was all that was available. Peabody was determined that the field house have a texture and color consistent with

the rest of the campus, in which he succeeded very well. It is unfortunate that his plan to sheath the adjoining stadium with this rubble stone style was never carried out.

All reviews of the new facility were favorable. For several years, the only complaints heard were that there were too few seats and that the huge brassribbed skylights dripped condensation on the basketball court. As a cost saving measure, the field house had been built without the second balcony. This additional seating was soon needed. It was planned by September 1936 and funded by a new loan and a Public Works Administration grant, for a total of $55,500. The regents hired contractor George Nelson of Madison and by January 8, 1936 (the same day University President Glenn Frank was ousted by the regents), the second balcony was finished, bringing the total seating to 12,000. In 1940, the offending skylights were removed and the building reroofed.

In the fall of 1974 a remodelling by Potter, Lawson and Pawlowski, built permanent lower level bleachers, dressing rooms and concession areas below the bleachers, installed a permanent floor, and cosmetically refurbished the building. This $671,000 remodelling was partly the result of the Wisconsin Interscholastic Athletic Association (WIAA) threat to find another site for the heavily attended (and profitable) annual state wrestling and basketball tournaments. This renovation, which cost more than the original construction, alleviated the threat by the WIAA.

Now in 1994, with the recently rejuvenated Badger basketball program, familiar complaints are being heard. There aren't enough seats for the games; scalpers are thriving; there are too few exits in case of a fire emergency. Since a thorough rebuilding of the field house would cost millions, the current plan is to build a new field house (to be known as the Kohl center) to the east of the southeast dormitories, which will accommodate basketball and hockey. The old building will most likely be used for minor and intramural sports.

1) *Wisconsin Alumni Magazine*, November 1928, p. 39.
2) *Daily Cardinal*, November 9, 1927, p. 1.
3) The regents decided on January 20,1926 to put the field house at Breese and University. But after a petition from the neighborhood, they moved it to the stadium site (regent's minutes, December 8, 1926).
4) Papers of the Board of Regents, March 7, 1928, and the *Daily Cardinal* March 31, 1928 p. 3
5) *Daily Cardinal*, December 19, 1930, p. 1.

MECHANICAL ENGINEERING

Fig. 1. Mechanical Engineering, 1932. A "U shaped building of concrete and steel, sheathed with Madison sandstone rubble, some of the last stone to be taken from the west-side quarries. [series 9/6 Mechanical Engineering, x25-586]

Mechanical Engineering was the first significant building erected after the University decided to move engineering from Bascom Hill to the Camp Randall site. It was built in 1929, and encloses an older shop building within its "U" shape.

Even with the completion of the 1910 addition to the 1900 Engineering Building on Bascom Hill, the post WW I burst of enrollment in the school of engineering, caught the department off guard. Due to lack of funds the engineering department, with a freshman enrollment which doubled between 1916 and 1920, could build nothing but the Randall shop building, which alleviated the worst crowding of the heavy machinery and equipment laboratories. This shop building was significant in a number of ways. It was twenty thousand square feet of relatively inexpensive ($65,000) laboratory space for a very cramped department. Most importantly the Randall shop building (known as "old sawtooth" for its distinctive roof design), established a precedent for the location of the engineering campus. The old engineering building had been built on Bascom Hill before any coherent general plan for the campus existed. A 1920 examination of the Bascom Hill site by state architect Arthur Peabody, yielded the opinion that because of the steep terrain the site could be expanded enough to provide for no more than fifteen years of enlarged enrollment. This was insufficient for the regents.[1]

The 1908 Laird, Cret and Peabody plan for the campus had set aside a large area for engineering on University Avenue between Charter and Randall Streets. In a triumph of the vision and influence of dean Charles Bardeen and his associates in the medical school, this site became the location of the hospital and medical college buildings. As a result Arthur Peabody developed and the regents

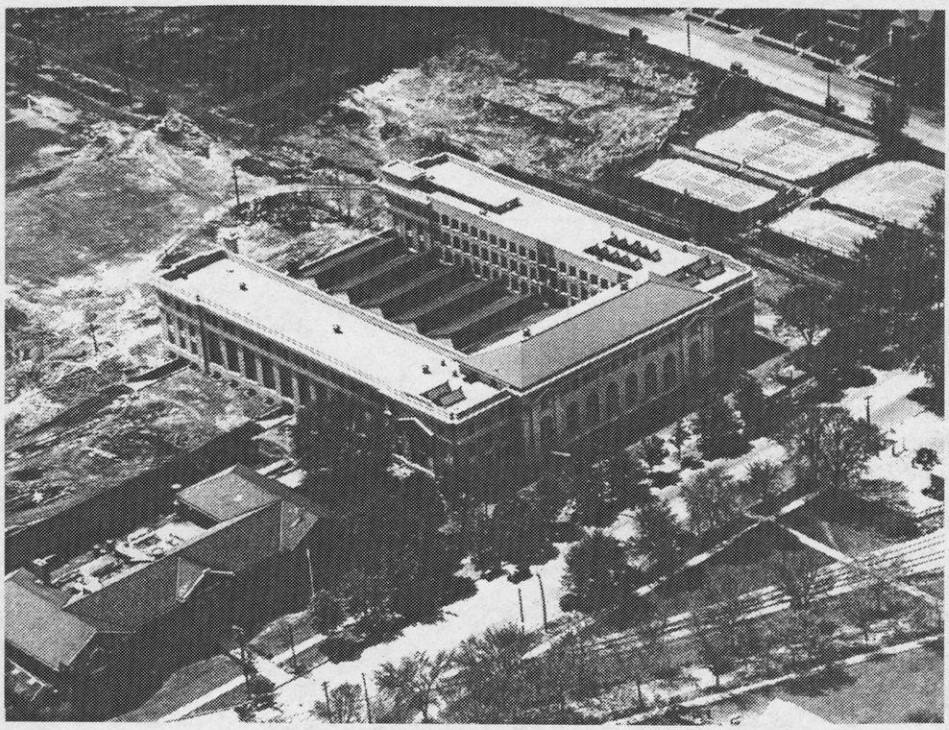


Fig. 2. Mechanical Engineering, from the air c. 1931. This view clearly shows the old engineering shop building surrounded by the new building. University Avenue is the street in the foreground. The Forest Products Lab at the left was in the process of reverting to the university, and became Mining and Metallurgy. This photo was used on the cover of the buildings dedication program June 22, 1931. [series 9/6, Mechanical Engineering, jf-54]

approved a new site for the engineering campus on the north end of Camp Randall, south of University Avenue, between Breese Terrace and Randall Street. Only the Forest Products Laboratory building was located there and it would be suitable as an engineering building when it reverted to the university. The Randall shop building was built on this site. The contract was let to L. B. Gilbert for $42,767, on June 9, 1920. It was ready for classes in the fall of 1920. This shop building did nothing for the rest of the overcrowded college of engineering, and made no provision for expansion.

In 1925 as a result of these continuing deficiencies, engineering dean Turneaure appointed an engineering construction committee to plan the removal of engineering from the Bascom Hill building to the Camp Randall site. The result of this committee's work was the mechanical engineering building. The committee relied heavily on the expertise of architect Peabody, who was working in a familiar style, the "modern" Italian Renaissance, which featured a central section flanked by long wings at both ends. The committee consisted almost entirely of engineering professors, who were generous with the space and facilities needed by their fields. A striking feature of the design was that it completely enveloped the old sawtooth shop building [see Fig. 2].[2]

By spring 1927 the project planning was advanced enough to present to the state legislature. This presentation was made to the Finance Committee of the legislature by university president Glenn Frank. The presentation was so successful that the legislature of 1927 appropriated $250,000 for a mechanical engineering building. This was not nearly enough money for the project envisioned by the university. The 1928 legislature added another $327,000, as well as $55,200 for tunnels and foundations, bringing the total appropriation for the building to $632,200. Planning continued throughout 1928 and most of 1929. The university business manager published the request for bids on July 9, 1929. Seven bids were tabulated on August 6, 1929.

Because of some peculiarities of the construction business at that time, the cheapest siding material for the building was Madison rubble sandstone, a material that had been used with excellent effect on both the Van Hise dormitories, and the recently completed field house. The lowest bid by J. H. Findorff & Son, was well over the budgeted amount. Mr. Peabody held meetings with the contractor and worked out ways of reducing the bid. These alterations succeeded in reducing the cost of the building to the amount of the appropriation.

On August 30, 1929, the executive committee of the regents voted to award the general construction contract for the mechanical engineering building to J. H. Findorff and Son for $512,812. Because the money from the state was not yet available, the contracts were not signed until September of 1929, and not approved by the governor (Walter Kohler) until April 2, 1930. The ground breaking took place the following day.[3] Construction proceeded smoothly through the summer and fall of 1930. Findorff's contract called for completion by summer 1931, and he met this deadline.

The formal dedication of the building took place on June 22, 1931 at 4 PM. Speeches were made by president Glenn Frank, engineering dean Turneaure, and governor Phillip La Follette.[4]

The new building established an impressive presence on the new site. It is three stories in height, in a huge 'U shape, facing University Avenue, and the wings pointing to the south. [See Fig. 2] The structure is of concrete faced with Madison rubble sandstone on the wings, Bedford limestone on the north face, and terra cotta trim overall. A small amount of dressed Madison stone, some of the last of that material available, was used on the third floor of the front. The center section is 238 feet long, and has a red tile hipped roof. The legend "Mechanical Engineering" is incised in the stone entablature. The wings are 210 feet long with flat built up roofs. The wing roofs contained skylights in the areas above drafting rooms and some laboratories. In all the building provided 101,000 square feet of space (including the old shop area), but not including the basement or center section attic, which initially remained unfinished storage space.

The interior of the building was relatively plain, befitting a building used primarily for laboratories of an industrial kind. Principal among the aesthetic touches that survived were a soaring entrance hall that occupied the first two floors of the front of the center section. At the dedication there was an airplane hanging in that space. The rest of the center section first floor contained lecture halls (for 150 students), a lounge, and locker facilities. The center section also contained conference rooms and offices and two huge drafting rooms, lit by the bank of windows overlooking University Avenue.

The entire east wing's lower level was also two stories high. This was not for art's sake but to ensure ceiling space for very tall equipment that was part of the steam and gas engine's lab equipment. The ceiling was equipped with a travelling crane for moving heavy machinery. The third floor of the east wing contained seven class rooms and a drafting room lit by skylights. The west wing held foundry, machine, carpenter and pattern shops. On the west wing third floor were the forge room, welding laboratory, with skylights, and the sheet metal laboratory. The Engineering library was housed in the upper floors of the building until the construction of the Wendt Library in the 1970s.

When the engineers moved into the new building in the fall of 1931, the space evacuated by the engineering department on Bascom Hill, and in the old shop building at 600 North Park, was taken over by the department of Manual Arts, and eventually by the school of education.

The mechanical engineering building has been much modified over the sixty five years of its life, as engineering advances were made, and requirements changed. A nuclear reactor and a solvent facility were installed in the east wing in 1959 and 1960. The west wing was remodelled in 1978. The majestic lobby was divided into two floors in June 1981. The old 1920 sawtooth shop section remains in use in the center of the building. The site on the north end of Camp Randall is now nearly completely covered by the engineering department, as envisioned seventy five years ago, by Mr. Peabody and dean Turneaure.

1) *Regent's Minutes*, June 9, 1920, *The Wisconsin Engineer*, April 1920 p. 20-261, March 1943 p. 5; Regent's Report, 1910 p. 150;

2) *Wisconsin Alumni Magazine*, June 1930, p. 348, January, 1929 p. 110; *Wisconsin Engineer*, April 1920; *Regent's Minutes*, August 30, 1929; Dedication brochure, University Archives Mechanical Engineering subject folder.

3) *Wisconsin Alumni Magazine*, June 1930, p. 348.

4) *Wisconsin Alumni Magazine*, June 1931, p. 351.

OLD BANK

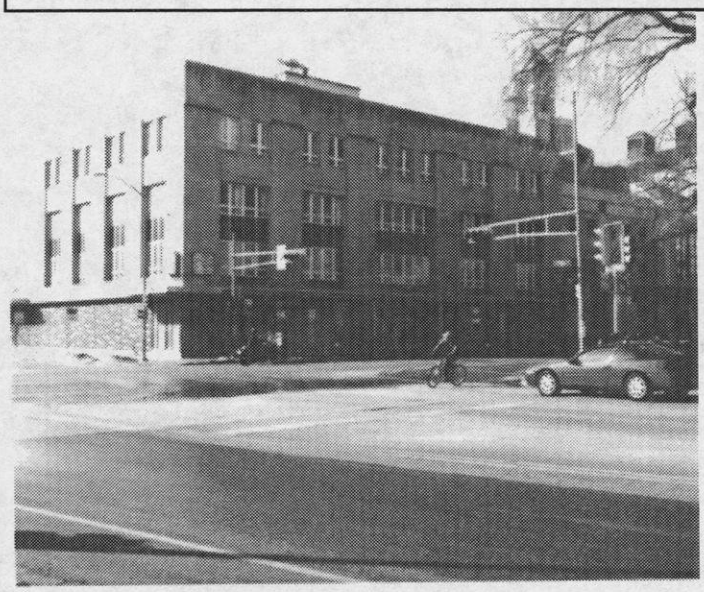


Fig. 1. The old Bank at Park and University Avenue, 1995. 81 by 106 feet, four stories and a full basement built of concrete, with decorative stonework on the street facades. The one story addition faced with lannon stone was added in 1962. [Author Photo, AP-14]

The property at the corner of University Avenue and Park Street was developed by the First Central Company in 1928. They built a commercial building for $200,000 (designed by local architect Frank Riley and built by contractor J. H. Findorff) on the site and leased it to the University Avenue National Bank who appeared at 905 University Avenue in 1929. This bank was in business at that location for less than two years. By 1931 the building was the home of the First Wisconsin National Bank who stayed at 905 University Avenue for more than fifty years. The bank used only a relatively small part of the three story building and rented the rest of the space to a succession of local businesses and to the University.[1]

In 1977 the bank moved their operation out of the building and placed the building on the market. On June 15, 1977 the First Wisconsin National bank sold the building to the University of Wisconsin Foundation for $680,000. The Foundation makes a practice of acquiring real estate in the campus area to preserve its availability to the University. The foundation continued to lease the building to the University. In 1984 the foundation who, at the request of the University, had purchased the building very quickly to prevent a commercial deal-in-progress wished to extract its investment from the building and offered to sell the building to the University for the approximate assessed value of $1.1 million. The University accepted this offer but the state building commission objected to the deal on legal grounds and the state legislature finally passed a law in the 1985-1987 biennial session that allowed the University to buy the building. The regents accepted the deed at their November 1985 meeting. They would pay the $1.1 million purchase price in monthly installments of $20,656 for six years. At the time of purchase the building was about 85 per cent occupied by University programs (the UW system, the UW law school, and academic counselling). The remainder of the space was held by private businesses.

The building is now occupied principally by the McBurney Center, and an assortment of counseling services. It may eventually be removed for expansion of Grainger Hall.

1) Madison city directories, State Historical society library; Dane county register of deeds.
2) Regent's Minutes, February 8, 1985, November 8, 1985. Laws of Wisconsin, 1985-1987, Act 29 section 8.

ORTHOPEDIC HOSPITAL

Fig. 1. The Children's hospital, from Linden Drive c. 1932. The Kennedy Memorial was added to the top of the wing at the left of the picture in 1963. [series 9/4 Orthopedic Hospital, jf-56]

The orthopedic hospital was built in 1930 as a dedicated hospital for the children of Wisconsin. In 1962 an addition and major remodelling took place. In the 1970s the hospital was converted for use by the department of nutritional science.

Part of the agreement reached with the legislature in 1920-21, when Wisconsin General Hospital was funded, was that the university medical school would provide care for crippled Wisconsin children. The university began doing this (in small numbers in the Bradley memorial hospital) even before the squabbles surrounding the main hospital were resolved. But these facilities were never suitable, and advances in orthopedics were being made rapidly. A dedicated children's hospital was needed. The drive for this facility was headed by Dean Charles Bardeen. The state legislature of 1929 approved an appropriation of $300,000 for such a hospital.

The regents' committee for the new hospital reported in November 1929, recommending that an 'L' shaped building be located at the corner of Linden and Randall Streets, and that Randall should be closed at the north end. Mr. Albert E. Gallistel, university supervisor of grounds and building, drew plans from the sketches of Drs. Bardeen and Buerki. Members of the committee had visited children's hospitals at Minneapolis, St. Louis, Detroit and Ann Arbor. The in-hospital living quarters for staff, common at the other institutions were eliminated from Wisconsin's plan to reduce size and cost. On April 23, 1930 the regents approved the plans presented by the office of state architect

Arthur Peabody.

Bids were opened on May 24, 1930, and the contract was awarded to the lowest bidder, J. H. Kelly of Madison for $205,700. With subcontracts and miscellaneous cost the total cost of the hospital was $300,000. By the fall of 1930, several houses and small buildings occupying the site were removed, and the north end of Randall Street was closed. The cornerstone ceremony was held on November 8, 1930, with speeches by governor Kohler and president Frank. The hospital was opened on June 5, 1931.[1]

The finished buff brick building had a three story eighty foot square center section at the corner, with two story wings projecting 92 feet to the west and south and a full basement. The center section has a red tile hipped roof, while the wings have flat roofs. The parts of the basement above ground are sheathed in Missouri marble, while the rest of the trim on the building is Indiana limestone. The court yard between the wings was intended as an outdoor exercise yard. There are reliefs of children's heads on the upper portion of the center section.

The capacity of the hospital was 113 patients, with a two bedroom suite for staff. The kitchen, laundry and swimming pool were in the basement. Operating rooms and an x-ray facility were located in the center section third floor.

For thirty years the hospital served it's intended purpose very well, including the terrible polio epidemic in the early 1950s. In May 1961 the regents announced a gift of $225,000 from the Joseph P. Kennedy, Jr. foundation (named for Joseph Sr. and Rose Kennedy's eldest son) for the support of the research program in mental retardation.

By October of 1961, it had been decided to build an addition to the orthopedic hospital to house the Joseph P. Kennedy Jr., laboratories. State architect Karel Yasko designed the addition which consisted of a third floor added to the south wing of the building.[2] Upon further review it was decided that this was an appropriate time to update and remodel the whole building, so another year went by in the preparation of these additional plans. As estimated in October of 1962 the total cost of the remodelling would be $500,000 of which $265,000 came from the Kennedy fund. The mental retardation research program was headed by Dr. Harry A. Waisman of the department of pediatrics.

The addition and remodelling was dedicated November 20, 1963, by Edward Kennedy, R. Sargent Shriver, Harry Waisman and governor Reynolds. Two days later the Kennedy family lost another son.

With the construction of the Waisman center in 1971 and the removal of the hospital functions to the new hospital and clinics building in the late 1970s, the original functions of the orthopedic hospital were gone and the first phase of the building's life came to an end. In 1976 the University assigned the building to the department of Nutritional Sciences. This new use was inaugurated in 1979 when the state approved a remodelling project at a cost of $1.4 million. This remodelling was nominally completed in 1982, when the department moved in, but difficulties with environmental systems plagued the building for another four years.[3]

1) *Daily Cardinal*, June 5, 1931, p. 1

2) *Regent's Minutes*, October 20, 1961. p. 5, September 14, 1962 exhibit H.

3) Harper to Wendt, March 16, 1976, Harper to Shain, April 25, 1979, request to state building commission, October 1979, Ganther to Fulop, November 12, 1986, series 9/31/9-3 box 6, Nutritional Science folder.

MEAT AND MUSCLE LAB

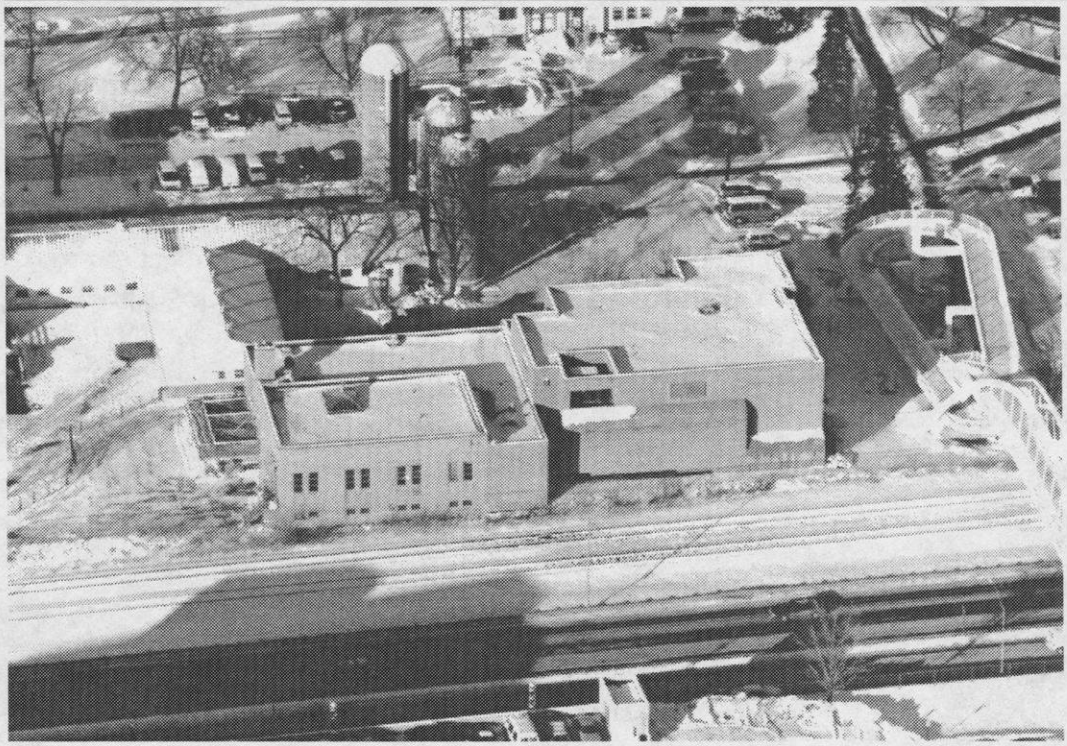


Fig. 1. The Meat Lab February 1997. The original section is at the far left. The 1959 addition is the 'L' shaped section around the original rectangle. The 1969 addition is at the right. The diary center is in the left background. [Del Brown Photo, AP-67]

The muscle and meat lab was built in three major sections, in 1930, 1959 and 1969. It became the home of one of the best animal research departments in the country. It saw the discovery of niacin by Conrad Elvehjem, and the seminal studies of animal nutrition by Gustav Bohstedt and E. B. Hart.

The first section of this three part building was the section to the west, built in 1931 as the animal science lab. It was erected at the request of dean of agriculture H. L. Russell, to accommodate the highly acclaimed work of E. B. Hart, Gustav Bohstedt and Harry Steenbock. Bohstedt received a job offer from the University of Iowa in 1930, and told President Frank that Iowa's modern facilities for animal research were a strong attraction, since the work at Wisconsin was carried out in very inadequate facilities in the old wooden farm buildings on campus. Frank promised to help rectify this situation, and the first section of the animal science complex was built. The regents approved the preliminary plans on August 6, 1930. Bids were opened on March 20, 1931 and the general contract let to George Nelson and Son for $22,580. The state appropriation for the building was from the emergency fund, and was for only $35,000. Because the equipment was projected to be fairly expensive it was necessary in architect Arthur Peabody's words: "that the building be made very plain and of inexpensive materials." It was intended at the time that this structure be a part of a quadrangle for animal research. The depression prevented these plans from being carried out.[1]

The animal science building, designed by state architect Arthur Peabody, was a basement and

one and a half story, 40 by 60 foot rectangle just to the west of the stock pavilion. The basement held cattle pens, feed storage rooms and holding pens; the first floor contained labs, offices, an autopsy room, and refrigerated cool rooms. The first bids on the equipment for the building were about $1000 over available funds and were rejected by the regents on June 20, 1931. After respecification by the college of agriculture, the equipment was rebid in August 1931, and satisfactory bids were received. The building went into use in the fall of 1931.

The second section was designed by the staff of the Agricultural Engineering department in January 1959. It was entirely devoted to meat science. It was 'L' shaped on the east and north sides of the existing building, measuring 77 by 73 feet on the east side and contained meat processing labs, offices, coolers, slaughter rooms.[3]

The third and last major addition was for muscle biology research, and was designed by the state department of engineering in April 1969. It was a 76 by 82 foot section built onto the east of the old part of the building. It contained biochemistry labs, coolers, offices, and instrument rooms It was built by Anthony Grignano and cost about $625,000. The designers used some curved brick shapes on the south side of the building to break up the extremely blocky shape of the building. Unfortunately, the effect on the appearance is minimal when seen from the south, the only side usually visible.[4]

1) Bohstedt, Gustav, oral history, University Archives; H. L. Russell to Glenn Frank, June 15, 1930, series 24/1/1 box 3. Peabody to Phillips December 2, 1930, archives series 24/1/1/ box 63; Regent's Minutes, June 21, 1930, August 6, 1930; Peabody to Phillips, December 2, 1930, series 24/1/1 box 63.

2) *Minutes of the Executive Committee*, March 27, 1931.

3) Files of the department of planning and construction, blueprints in physical plant plans room. *Regent's Minutes*, May 9, 1959 exhibit B.

4) Files of the department of planning and construction, blueprints in physical plant plans room; *Regent's Minutes*, April 19, 1968, December 6, 1968, July 25, 1969, exhibit A.

OLD POST OFFICE

Fig. 1. 317 North Randall St. 1993. The 1966 addition is at the right. The side facing the camera was the entrance to the old post office. The second story of the front section is only 30 feet deep, and does not extend to the back of the building. [Author Photo, AP-16]

The plans for this building are labelled "Post Office for Mr. Oscar Rennebohm", dated September 27, 1929, and signed by architect Phillip M. Homer. The general contractor was the Vogel Brothers, who erected the building at a cost of $13,000. The post office building was 114 by 28 feet, framed with 2 X 10 wood joists, the walls built of common brick covered with face brick.[1]

From 1931 until 1961 the building was used as the University substation of the Federal Post Office. In 1962 the building was rented by Mr. Rennebohm to the University, who used it as record storage for the University Hospital, then at its old location in the 1300 block of University Avenue. In 1966 a one-story addition without basement, was designed and constructed for the owner by J. J. Flad. This addition extended the building toward the south and east and was angled along the Johnson Street right of way. The addition more than doubled the gross area of the building.[2]

In the summer of 1979, the Oscar Rennebohm Foundation donated the building and an adjoining vacant lot (1345 University Avenue) to the Wisconsin Foundation, a non-profit organization for the channelling of private donations to the University. In November 1979 the Foundation notified chancellor Shain that the property was ready to be given to the University. The regents formally accepted the gift on December 14, 1979. The combined value of the land and building was $242,000.[3]

The University converted the old post office to its new use of housing the safety department. In 1994 the forty employees of the safety department left the old post office and moved to temporary quarters on Lake Street. The building was taken over by graduate art students then housed in old houses scattered around the campus. The art students are probably also temporary tenants, since plans are afoot to build a new art building.

1) Plans in the files of the department of planning and construction.
2) Madison city directories; plans op. cit.
3) Agency Request for state building commission action, series 4/31/9-3 box 6, folder "Parking Lot #41"

OLD LAKE LABORATORY

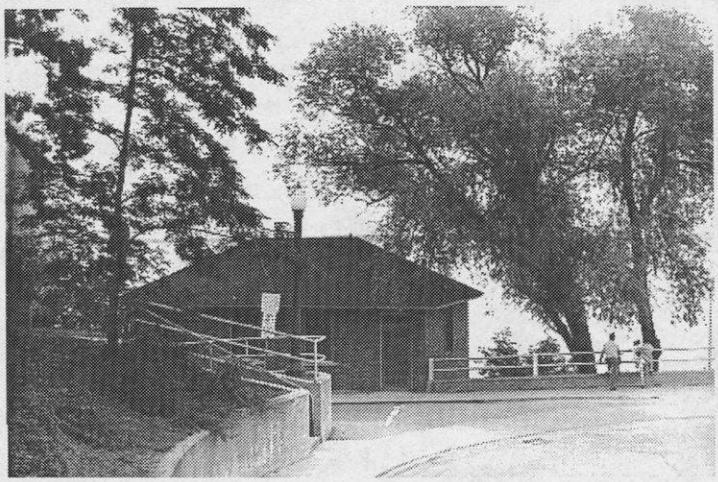


Fig. 1. Lake lab looking north from Park Street c. 1960. [Series 9/2, Lake Lab, x25-699]

Fig. 2. The "remodelled" Lake Lab, from the lake side, 1994. Note the large oak to the east of the building in both photos. [Author Photo, AP-17]

In 1931, in the depth of the depression, to replace a lab destroyed in the building of the tank house, the regents approved the construction of a marine biology laboratory on Lake Mendota.[1] The architect was Arthur Peabody, and the construction was done by the Vogle Brothers (for $4435). The total cost of the lab was $7,500, paid out of the state's emergency fund. Zoologist Arthur Hasler (later director of limnology), who occupied the building beginning in 1937, said that until he moved in, the lake lab was never used as a laboratory. Hasler said that zoology chairman Michael Guyer had built the lab and that Guyer assigned it as living quarters for graduate students.[2]

The building was two stories with basement, a twenty two by thirty four foot red-brick structure with a concrete foundation and a hipped roof with asphalt shingles (see Fig. 1.) The basement level was a boat house, the first floor had several small rooms and a staircase to the upper level. The second floor was occupied by a single large laboratory, with a door on the south side at the level of Park Street. With the arrival of Hasler in 1937, the building became a laboratory. It remained in that capacity until 1961 when the Limnology Building was finished. At that time the old lake lab became storage and occasional lab space.

In summer 1980, partly because the upper stories were in bad repair, and because the building had always blocked the beautiful view from Park Street over Lake Mendota, the top two stories were removed from the building, and replaced with a concrete deck (see Fig. 2). The basement remains intact and is used for boat storage by the Union Hoofer's Club.

1) Executive Committee Minutes, September 25, 1931; Regent's Minutes, January 20, 1932.
2) Arthur Hasler, oral history, University oral history project.

CARILLON TOWER

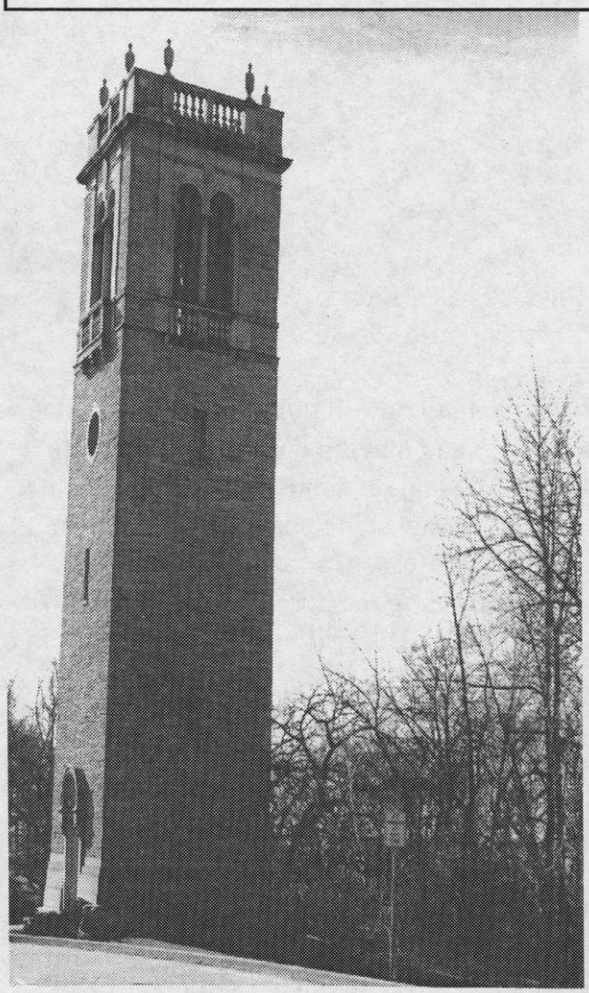


Fig. 1. The carillon tower c. 1938. [Series 9/1, Carillon, jf-57]

The carillon tower was built with donated funds in 1936, with a set of 35 bells. The bells have been added to twice, in 1963 and 1973. More than any other campus building, the carillon tower symbolizes the Madison campus of the University of Wisconsin.

The original plan of the class of 1917 was to collect money to help replace the burned dome on Bascom Hall, and to install in the dome a set of chimes. As this fund-raiser gradually took shape, succeeding classes (1917 through 1926) donated to that fund, rather than set up and define their own projects. In 1931 after consultation with state architect Arthur Peabody, it was found that both structurally and aesthetically, it was very unlikely that the dome would ever be rebuilt.[1]

The fund-raising had been so successful that the committee decided in the spring of 1932 that they could buy not only carillon bells, but a structure in which to hang them. Throughout the fund-raising period, the chairman of the "chimes committee" was Norris Wentworth. By the end of 1932 the regents had authorized final design and bids. The location was set as the knoll northwest of Bascom Hall near the Blackhawk marker.[2]

State architect Arthur Peabody submitted a design for the Carillon tower to the chimes fund on June 9, 1933. The tower was eighty five feet high, twenty feet square, with a steel frame and stone walls; it had a stone parapet above the cornice and a flat roof. The iron stairs lead steeply to the third level playing floor, and upwards to the bell chamber, with its arched openings. The Madison rubble stone walls and the balustrade with turned stone balusters deliberately mirrored the design of Bascom Hall. Estimates indicated that the project would cost about $30,000.[3]

When bids for construction were received, prices had risen and there was little money left for the bells. The committee appealed to the Public Works Administration and the Public Works Administration (PWA) responded with a grant of $8700-$11,600. On October 10, 1934 the regents approved the lowest bid of $28,200 of Maas Brothers of Watertown Wisconsin. Ground was broken the next day. The cornerstone ceremony featuring a dedication speech by president Glenn Frank (see Fig. 2) was held December 5, 1934. The tower construction was completed in June 1935.[4]

The committee had decided through investigation of existing carillons, that a set of thirty five bells would be suitable. They made contact with several bell manufacturers before deciding on Gillett

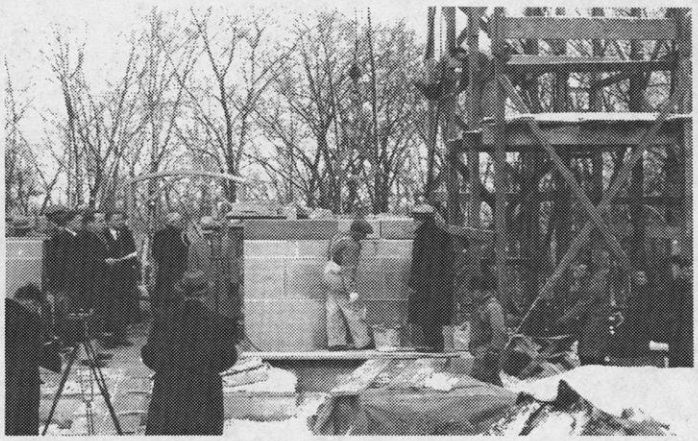


Fig. 2. December 5, 1936, the cornerstone ceremony, with president Glenn Frank. [Series 9/1, Carillon, ns-895]

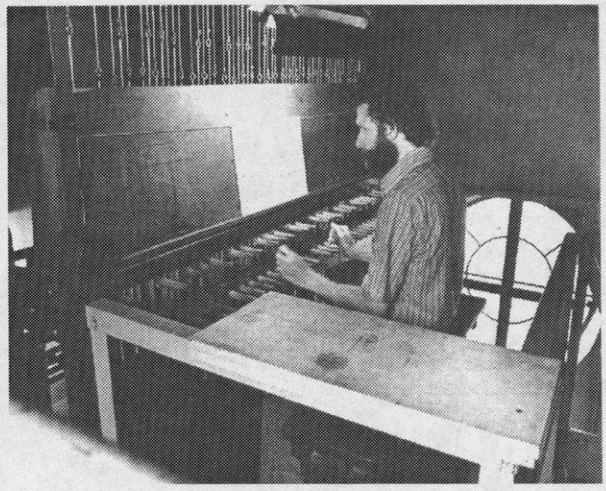


Fig. 3. The carillon keyboard in use (Ralph Ehlert). [Series 9/1, Carillon, jf-58]

and Johnston Ltd. of Croydon England. Funds were not sufficient to buy all thirty five bells at once so the committee settled upon twenty five bells, but the framework and playing console were built to accommodate thirty six bells, the set to be completed by adding five lighter and six heavier bells at a later date. The dedication concert was held on June 20, 1936. The music included "On Wisconsin" and "Drink to Me Only With Thine Eyes"; the carillonneur was Professor Ira Schroeder of Iowa State. Persons in automobiles were requested to refrain from sounding the horn or starting the engines during the recital. In 1937 the five smaller bells were added to the carillon. This configuration of thirty bells was suitable for about twenty five years.

In 1963 a major renovation took place. Twenty seven small bells were installed, six to replace old ones that had proved unsatisfactory (the new bells were cast by the French firm Georges Paccard). This brought the total to fifty one bells. The playing console was changed, and a practice console installed on the second level. The rededication was on September 22, 1963 and again featured Ira Schroeder as carillonneur. At this time, too, the UW Foundation which had collected the $10,500 for this renovation, began to accept gifts for five large bells which would complete the set. Calculations indicated that the tower could accommodate the additional ten thousand pounds.[5]

This set of bells (from the Eisjsbouts foundry in Holland) was ready in the summer of 1973. Besides the new bells the regents installed a mechanical player which can ring the hours, and play 30-second prepared melodies. Other changes included the installation of heat, and a new staircase. These changes brought the carillon to a total of fifty six bells in four and one half octaves, one of the largest carillons in the country. The second rededication of the carillon took place on May 13, 1973, and again featured Ira Schroeder. The public is welcome to visit the carillon tower during the regular Sunday concerts.[6]

1) The idea came from Belle Fligelman '13 according to Norris Wentworth the chairman of the fund committee. *Wisconsin Alumni Magazine*, November 1934, *Daily Cardinal*, December 13, 1966.

2) Minutes of the Executive Committee of the Regents, May 8, 1933, December 13, 1932, September 11, 1933, April 4, 1934, *Wisconsin State Journal*, June 2, 1935,

3) *Wisconsin Alumni Magazine*, May, 1957, May, 1947, files of the department of planning and construction.

4) *Wisconsin Alumni Magazine*, January 1935, July 1935, *Milwaukee Journal*, January 23, 1936, *Capital Times*, January 26, 1936, Dedication Program, Carillon subject folder, University Archives.

5) *Wisconsin Alumni Magazine*, July, 1963; *Capital Times*, September 4, 1964; *Wisconsin State Journal*, September 23, 1963.

6) *Wisconsin State Journal*, June 25, 1972, May 13, 1973; *Wisconsin Alumni Magazine*, July, 1973; *Capital Times*, March 2, 1973;

KRONSHAGE DORMITORIES

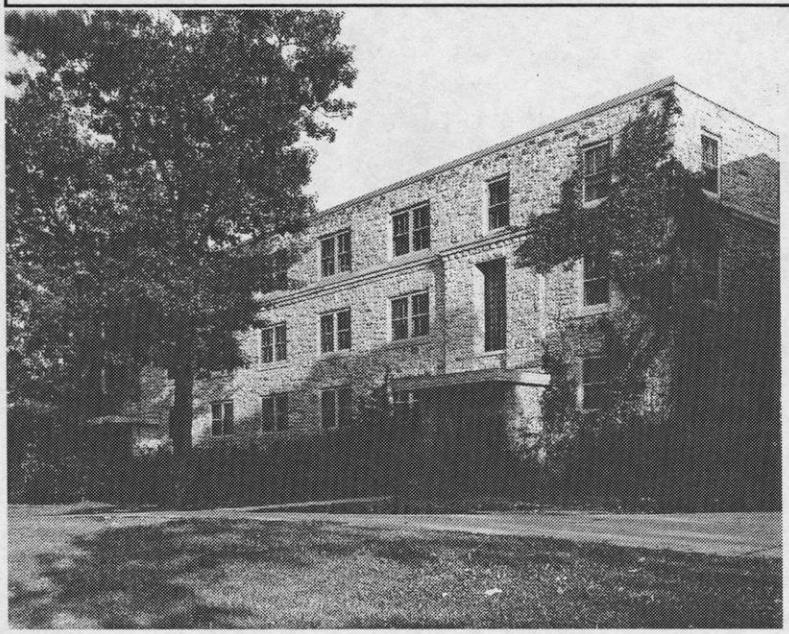


Fig. 1. 1940: Mack House. Mack, Turner and Gilman houses were the first three units of the Kronshage dorms. Three stories with a basement, built of concrete and steel and sheathed with sandstone rubble masonry. They were originally called "A, B and C". [Series 26/1, Kronshage, ns-1519]

Erected in response to a severe shortage of inexpensive student housing, the first three houses of the Kronshage group were occupied in the fall of 1938. The other five houses followed in the fall of 1939. With Tripp and Adams Halls, they brought men's dorm space to 1200.

On the afternoon of November 30, 1936, a fire broke out in the Mueller shoe shop at 651 University Avenue. The blaze was extinguished by eight o'clock; but unknown to fire-fighters four university students had been living in windowless uninspected rooms in the rear of the building. When freshman Richard Ranney returned from classes, he discovered that his 22 year old brother Donald had been killed in the fire. Donald Ranney's body was recovered from the basement. He had been working odd jobs and living in the cheapest possible manner in order to return to the university, which he had attended briefly, then withdrawn due to poverty. The outrage of students at this loss, and the horror of Madison resident's that conditions like this were tolerated, had an enormous long-rang effect on student housing in Madison.[1]

Less than one month later, the regents received a report on the student housing situation, which stated that 55% of the 6884 men enrolled in the university were living in private commercial housing in Madison, and that one third of those were in unapproved or uninspected housing. The report states that most of this housing was not fireproof, and was substandard in nearly every way. The point is continually made that what is needed is not inspection, since removing these units from the market will reduce the housing pool to an unsuitably small size. The housing was being used because it was cheap, and there was a class of students who lived in it strictly because it was all they could afford. What was needed was decent *and cheap* housing.[2]

The report recommended a return to the university city concept from the days of the Van Hise dorms. A key question was whether the university would or should take responsibility for housing students who are too poor to pay the customary expenses of college. Implicit in the university's

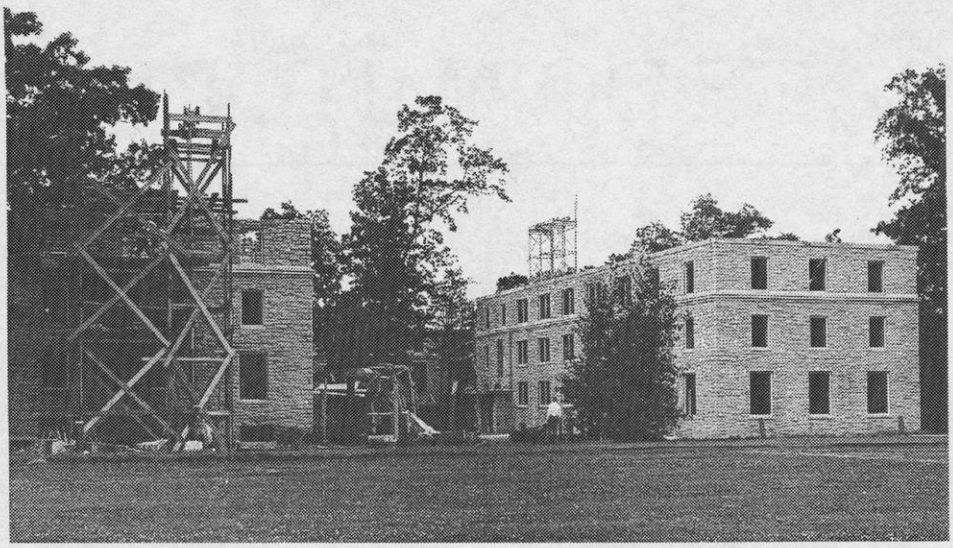


Fig. 2. July 1938, Gilman and Turner houses going up. [Series 26/1, Kronshage, jf-72]

response to this and subsequent reports was yes, they did intend to provide for such students. The crux of the regent's problem was how to fund housing units at a time when the great depression lingered and money just to keep the university open was scarce.

The regents asked the university business office for an analysis of dormitory construction. This report concluded that the state was very unlikely to provide funds for dormitories, that there was a housing shortage and that construction of low cost dormitories was the logical solution. The report further says that a project of about $475,000, financed through borrowing by the of Wisconsin University Building Corporation (WUBC) was financially feasible.[3]

The committee on dormitories (Don Halverson, Otto Kowalke and Harold Bradley) presented a report in November 1937, which recommended placing the new dorms on the lake-shore to the west of the Van Hise dormitories (as suggested by the 1908 Laird Cret and Peabody general plan), that they should be three stories high, with double rooms comprising houses of forty men each with meeting rooms. Total capacity was recommended at 200 men. Substantial recreational facilities were suggested, for sports and hobbies, since "...destruction, gambling, and drinking become a minimum worry if boys are busy and happy at work and play."[4]

In December 1937, the regents cautiously approved financing for one or two houses for thirty to forty boys at a cost not to exceed $40,000. The following March they approved the plans and arrangements by the state engineer, and now requested bids and contracts on up to eight units. The building committee investigated the idea of prefabricated building units. But after a storm of public protest, and the estimates of minuscule savings over conventional construction the idea was scrapped. Students argued unsuccessfully that the dorms should be designed by Frank Lloyd Wright. The bids the regents received changed their thinking considerably, In April, the regents approved three buildings to cost $70,000 each, and the financing of $289,000 through the UWBC. George Nelson and Son of Madison was chosen as lowest bidder ($129,430) on May 2, 1938. Construction began May 9, 1938. Completion was scheduled for occupancy by September 1938. By July the nearby residents of Tripp and Adams were complaining about the construction noise.[5]

The first three dorms of the Kronshage group, initially called "A, B and C" (later Turner, Gilman and Mack houses) , were ready as per Nelson's contract for occupancy in the fall of 1938. They had different organizations. Dorm A was a full service unit with maid service and food service in the Van Hise dining facility, yearly cost was $96 for room and $245 for board. Dorm B residents paid $75 for room and $245 for board, but had no maid service. Dorm C was cooperative, meaning

that there was no maid or janitor service and the residents could choose whether to board at the refectory or elsewhere. The fees were to reflect the actual cost, estimated at about $70 per year exclusive of board. These first three units of the Kronshage dormitories held 240 men.[6]

During the construction of these first three units, the regents had received word that the federal Public Works Administration had granted them $229,909 for the dormitory project. With this money, and with the head start they had on the project, the regents planned to complete the group, by adding five more units and a refectory. The total cost of the project was estimated at $510,909. On October 14, 1938, the regents awarded the general construction contract to Jacobson Bros. of Chicago for $297,000. Construction proceeded very rapidly. Ground was broken on October 19, 1938, amid some regret that two fine Indian mounds and a popular wooded area were being destroyed for the new foundations. During the summer of 1939 as the five new units were going up, the regents decided on names for the eight houses: Frederick J. Turner, Stephen W. Gilman, John G. D. Mack, Grant Showerman, Allan D. Conover, Thomas Chamberlin, Burr Jones, and Magnus Swenson, all named for outstanding university regents or scholars. Since the refectory was named for Theodore Kronshage, the group became known as the Kronshage group.[7]

The construction was completed in time for the fall semester of 1939, a year after the first three units had been finished. They were full from the first with a total of 640 students, the director of housing saying that the waiting list was as long after the opening as before. Of the five new houses two (Jones and Swenson) were cooperative, though unlike Mack house, refectory meals were required. Kronshage was the first refectory on campus to adopt the cafeteria style of food service.

Considering that they were intended as low cost housing, the dorms had considerable amenities. The full basements were used as public space to provide: a barber shop (in Mack), a nonprofit cooperative store (Mack), a library and music room (Gilman). By the end of the first semester, the students had begun a newspaper, the Dorm Dweller, and a radio station. The dorms were administered, after the fashion of Tripp and Adams, by a student self-government organization. The dorms had turned out very much as the dorm committee of Halverson, Kowalke and Bradley had envisioned. For the modern student who may be tempted to view these dorm rooms as small and low quality, the qualifications for university approved housing at the time Donald Ranney died in the fire, included: no more than twelve students per single bathroom, a fort watt light bulb per student, and a hot water supply available for washing and shaving. The dorms must have seemed like palaces to the students accustomed to those standards. Decoration and trim was kept to a minimum as befit a low cost project.

The dormitory city by the Lake, including the Van Hise dorms and the new Kronshage dorms, comprised nearly 1200 men students, and they were about to be joined by the 540 women of the new women's dorm on the lake shore Elizabeth Waters Hall, begun at the same time as the second group of Kronshage units.

1) *Daily Cardinal*, December 1, 1936, p. 1, December 3, 1936, p. 1; *Wisconsin Alumni Magazine*, January, 1937, p. 172.

2) The Student Housing Situation, Goodnight and Dollard, regents papers December 6, 1937.

3) Proposals for Additional University Dormitories, J. D. Phillips, March, 1937, series 24/1/1 box 126, dormitories folder.

4) A Proposal for Additional Dormitories for Men, November 23, 1937. series 24/1/1 box 156.

5) *Regent's Minutes*, December 7-8, 1937, March 8-9, 1938, April 26-27, 1938, October 14, 1938; *Daily Cardinal*, December 9, 1937, January 20, 1938, January 21, 1938, April 26, 1938, July 14, 1938, September 23, 1938, October 9, 1938.

6) *Daily Cardinal*, October 1, 1938, October 7, 1938; *Wisconsin Alumni Magazine*, November 1938.

7) *Regent's Minutes*, October 14, 1938, June 16-17, 1939; *Daily Cardinal*, May 3, 1938, July 30, 1938, October 21, 1938, October 1, 1939, October 20, 1938; *Wisconsin Alumni Magazine*, April 1940, p. 213.

ELIZABETH WATERS HALL

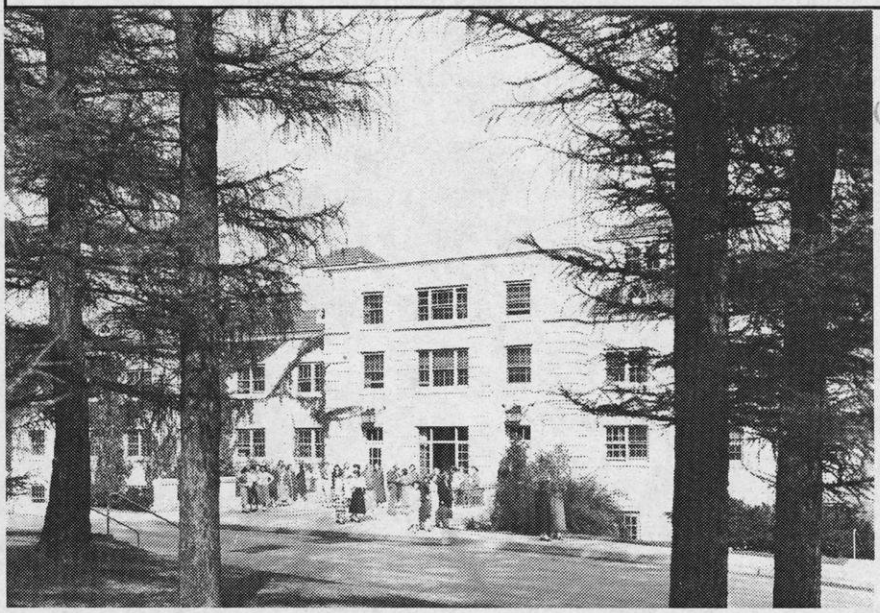


Fig. 1. Liz Waters front entrance c. 1950. [Series 26/1, Liz Waters, x25-1896]

Built in 1938 with state and federal funds to alleviate the shortage of housing for women students, this dormitory is named for long time University regent Elizabeth Agnes Waters (1864-1933). It was opened in May 1940.

The planning for additional women's dormitories began in 1937 at the same time as the planning that resulted in the construction of the Kronshage dorms for men. The women's dorm took longer than the men's for a number of reasons. The university officers in charge of housing had considerably more experience in the operation of men's housing. The existing dorms for women were now old, Chadbourne (1871) and Barnard (1912) provided little in the way of example for the operation of a modern dorm. Regardless of the causes for the priorities, planning for women's dorms proceeded in parallel with the planning of the men's units.[1]

The plans proceeded along lines similar to those for the Kronshage dorms; several small units were planned rather than large ones. In June 1937, the dormitory committee recommended the construction of two units, but since funding was still unresolved, the plans were still fluid. In a letter to business director Peterson, dean of women Greeley asked that the units be increased to three stories, based on medical evidence that the occupants would not be harmed by climbing the stairs.[2] The regents and building committees examined several different configurations of small units, estimating their cost both with and without financial assistance of the federal Works Progress Administration (WPA). The vagaries of funding for the project were such that even after ground was broken, the exact configuration of the building was not complete.[3]

In October 1938, the regents accepted $162,000 in grants from the WPA, implying a project of about $360,000. After further planning and correspondence, the WPA grant was increased to $363,088 in March 1939. The new project was to cost about $806,000. Still the plans remained flexible. The foundation contract was awarded in October 1938, to George Nelson and Son of Madison. Groundbreaking took place on October 19, 1938, and the foundation was to be completed by

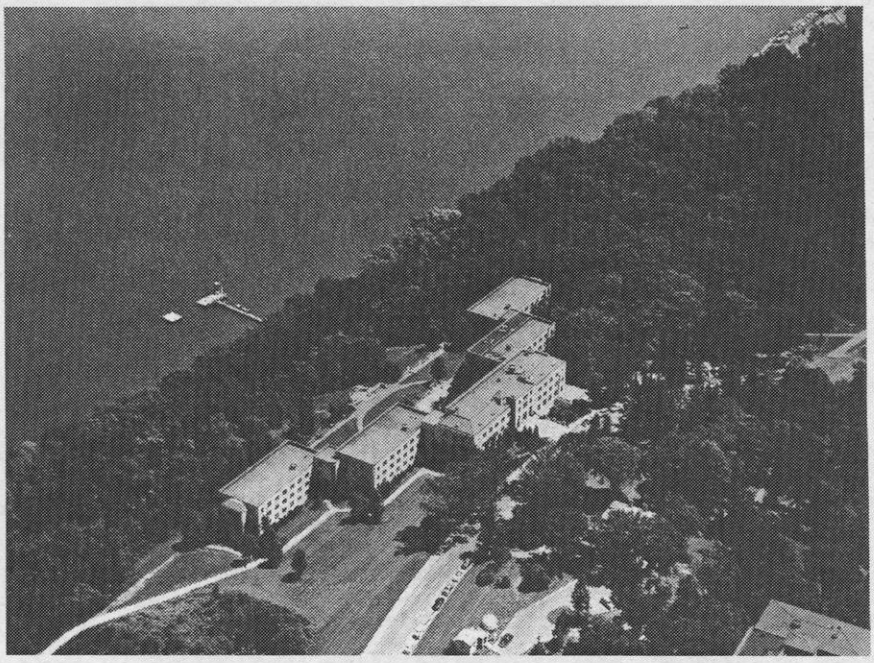


Fig. 2. Liz Waters c. 1940 looking northeast. Note the student observatory near the bottom of the picture, the observatory hill office is across Observatory Drive from the front of Liz Waters. [Series 8/3, jf-102]

February 1939. Near the time this phase of construction was completed the design for the building appears to have been completed. The regents describe it as "Five connected units of dormitories for women including kitchen and dining rooms. Total capacity is 478."[4] In February 1939 the regents decided, with the recommendation of D. L. Halverson, directory of dormitories and commons, to name the new dormitory Elizabeth Waters Hall.[5]

Contracts for construction of the women's dormitory were let by the regents in April 1939. The general construction contract went to the Maurice Schumacher Co. for $158,000. Subcontracts brought the total to $341,006. Construction proceeded smoothly and the building was ready for public inspection on May 19, 1940 during the annual Parent's Weekend.[6] The three story steel-framed lannonstone faced "superdorm" contains 239 double rooms, half of which have lake views, in five units, each unit with a kitchenette and date parlour.[7] The interior was designed by Leon Pescheret, the noted Chicago interior designer, who had designed the memorial union interiors. Different decorating and color schemes were used in each of the five units of Liz Waters.

The new dorm was integrated quickly into the growing university housing community along Lake Mendota. Elizabeth Waters Hall is one of the few dormitories on campus that was not integrated when the dormitories system went coed in the 1970s. This is because of the somewhat peculiar structure of the five connected sections which requires that to get to a rear unit from the front door, one must pass through all intervening units.[8]

1) *Regent's Minutes*, January 17-18, 1939, October 14, 1938, March 8, 1939
2) Greeley to Peterson, July 23, 1937, archives series 24/1/1 box 137.
3) *Daily Cardinal*, October 9, 1938, p. 8.
4) *Regents Minutes*, January 17-18, 1939; *Daily Cardinal*, October 20, 1938.
5) *Regents Minutes*, February 11, 1939. Elizabeth Agnes Waters had died March 3, 1933, and was one of the most mourned of University figures. In a memorial passed by the regents March 7, 1933, President Glenn Frank said " It is with difficulty that I associate the word shadow with Elizabeth Waters even in death. The memory of her radiance belies the word." The Wisconsin legislature passed a joint resolution (#67, A) on March 7, 1933 honoring her life and career. Waters served as a University regent from 1911 to her death, at which time she was vice president of the regents.
6) Teicher and Jenkins, *A History of Housing at the University of Wisconsin*, p. 38; Regent's papers, April 25, 1939.
7) *Wisconsin State Journal*, April 18, 1940.
8) *Badger Herald*, January 31-February 3, 1974 p. 2.

ANIMAL DISEASE LAB

Fig. 1. Animal Disease Control Building 1994. [Author Photo, AP-18]

Built in 1938 with WPA funds and labor, this building's original use was to house the state animal disease control laboratory. After the 1965 removal of that function from campus, the building was reassigned to the food research institute, and later the department of horticulture.

In 1930 the University became host to the state Department of Agriculture and Markets. This was the combination of the state departments of Dairy and Foods, Markets, and Agriculture. It oversaw inspection and licensing of dairy products, crop protection efforts, and animal disease control. In keeping with the University's commitment to the residents of the state, the Veterinarian control, and Pure Foods state labs were moved into room B7 in the basement of Agriculture Hall. At the beginning of this period, the duties of the state veterinary control officer took up the half time services of one man. As the farmers of the state became increasingly aware of the service available in the diagnoses of diseases among livestock, the work by 1938 required the full time work of five pathologists. The housing in the small basement quarters, and the constant stream of dead and diseased animals coming into a busy and crowded University building, the lab created an "intolerable situation".[1]

In the fall of 1938, Agricultural dean Christensen, state director Ralph Ammon, and president Dykestra discussed the construction of a new building for the animal disease control lab. In December 1938, the state emergency board appropriated $14,000 for the laboratory as a Works Project Admin-

istration (WPA) project. The emergency board was the state mechanism to fund the University during the depression. The regents voted to approve the construction of the new lab near the serum plant to be built and furnished with emergency board funds.[2]

The plans for the building as drawn by state architect Roger Kirchhoff, show a 40 by 97 foot wood-framed building, with a basement, one floor and attic, asbestos shingles, and a hipped roof with dormers. The resemblance of this building to a residential house of the same period is not accidental; the labor to erect the building was to be supplied by the WPA, and this is the kind of residential construction with which the WPA crews were familiar. Work began in March 1939.

University directories show the veterinary control lab at 2115 Linden Drive (later named Herrick Drive) from 1943 to 1966. A new crematorium addition was built in 1956. In the 1960s the state department moved off campus, and in 1966 the building was remodelled for the use of the Food Research Institute. It remained in this use until 1975, when Food Research moved to Elm Drive, and the building was reassigned to Horticulture, who with entomology remain there to this day.[3]

1) *Wisconsin Blue Book*, 1940, p. 274; Christensen to Peterson, December 27, 1939, series 24/1/1 box 145, Christensen folder; notification of emergency board appropriation, December 28, 1938, series 24/1/1 box 146, emergency board folder.

2) Regent's Minutes, January 17-18, 1939, p. 303; Christensen to Peterson, December 27, 1939, series 24/1/1 box 145, Christensen folder; Christensen to Hiestand, December 28, 1938, and Christensen to Petersen, December 27, 1938, series 24/1/1 box 145, Christensen folder.

3) Plans on file at the plans room of the physical plant; Christensen to Petersen, December 27, 1938, series 24/1/1 box 145, Christensen folder; Wisconsin Blue Book, 1993-1994, p. 402-407; Madison city directories, and University directories.

STATE HIGHWAY LAB

Fig. 1. Computer Engineering and Plasma lab, December 1993. This picture shows the Johnson Drive face of the original Highway lab building. [Author Photo, AP-19]

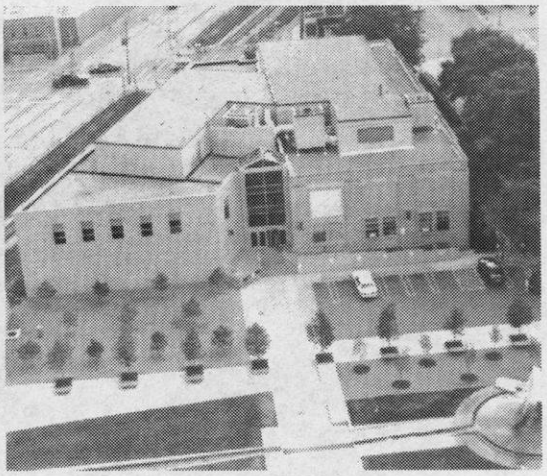


Fig 2. The CAE building from ERB, 1996. Notice the 1987 angled addition (left) to the original rectangular highway lab (right).

Built with state funds to house the state highway laboratory in 1939, this building became the property of the University by virtue of the 40 year lease of the land. The lease expired in 1977, and the building was remodelled for use by the computer science department, and physics. It was enlarged in 1983.

As early as January 1924, when there were less than 5000 miles of paved roads in Wisconsin, the university and the state highway commission had a mutually advantageous relationship. The state had room in a frame building behind the engineering building on Bascom hill, in which they carried out material testing. In return the state engineers gave lectures and demonstrations to the students in mechanical and civil engineering. Engineering Dean Turneaure was an ex officio member of the highway commission.[1]

This relationship worked well throughout the 1920s and early 1930s. Then as space requirements grew and the condition of the old building deteriorated, the state decided to seek new quarters. In July 1937 president Dykestra read to the regents a request from Thomas Pattison of the Wisconsin Highway Commission for the lease of University ground on which to erect a laboratory building for the Highway Commission. The months that followed are marked by discussion and proposals of various kinds referring to the highway lab. H. F. Janda, professor of Highway engineering, lobbies business manager Phillips, in favor of the lab. Acting dean of engineering, A. V. Millar, tells Phillips that he has consulted the faculty of civil, mechanical, and chemical engineering and finds them in accord with the opinion of dean Turneaure, that the highway lab should be located in the vicinity of the engineering laboratories on the camp Randall site.[2]

At their December 1937 meeting the executive committee adopted a motion of the business manager that the regents approve a lease to the State Highway Commission for the lab. The lease

had been in the works since at least September and grants the highway commission the wedge of land bounded by Randall Street, the railroad tracks, and a north south line to the west of Randall Street. The lease was for forty years, and was non- renewable. It allowed the state to erect a building for materials testing, marking and signing facilities and other functions. The state would provide educational and research facilities. The university besides providing the land, agreed to remove a rail spur from the site, and to provide heat and electricity to the building at a reasonable rate. The state agreed to maintain the building, sidewalks and roads around it in good repair, and to remove the old building on Bascom Hill. At the end of the lease the land and building would revert to the university. This lease was signed in December 1937.[3]

Although the regents had retained the right to approve of the plans for the building, no record has been found that they ever so approved. The building was designed by state architect Arthur Peabody, near the end of his long career in Wisconsin. Peabody's plans are dated January, 1938. The fact that Peabody and his work were well known to the regents may account for the casual treatment. Likewise no record has been found of the exact dates or circumstances of the erection of the building, but most sources indicate 1939. The 162 foot X 62 foot building was steel framed, with concrete floors and roof brick sheathing, stone trim, two stories, and a full basement.[4]

For the forty years of its lease the state highway lab operated in the Camp Randall location, testing materials in conjunction with the engineering department, and making highway signs. The metal signs were made in the state prison, but the wooden signs were made in a room at the laboratory. Then in July of 1976 the highway department (by then the DOT) informed the university that they were about to build a new laboratory facility at Truax field and would vacate the old building in the fall of 1977.[5]

The first use of the building by the university was as the home of computer engineering, then a relatively small enterprise. When the engineering department remodelled the building in 1983, the computer labs and graduate study areas were kept open during the work. This $2.3 million job by Arnold and O'Sheridan of Madison renovated the rooms on the first and second floors and built a new penthouse on the roof. The building was not big enough for long. In February of 1987, the university spent another $2.5 million to add a wedge-shaped two story addition to the north side of the building to house Computer Aided engineering labs and offices on the first floor, and biomedical labs and offices on the second floor. Silicon fabrication facilities and plasma laboratories were installed in the older part of the building. This job was designed by Berners-Schober Associates of Green Bay, and brought the building to its current (1993) configuration.[6]

1) Executive Committee Minutes, January 25, 1924; Roettiger to Phillips, October 29, 1937, series 24/1/1 box 139 Highway laboratory folder; Wisconsin Blue Books

2) Minutes of the Regents July 10, 1937. Millar to Phillips, October 12,1937, series 24/1/1 box 139 Highway laboratory folder. Janda to Phillips, October 11, 1937, series 24/1/1 box 139 Highway laboratory folder.

3) Regent's Minutes, December 7-8, 1937, October 12-13, 1937; Memorandum of conference for Proposed State Highway Commission Laboratory, series 24/1/1 box 139 Highway Laboratory folder.

4) Plans in the plans room of the physical plant department.

5) Wisconsin Blue Books.

6) University directories; plans at physical plant plans room. McGown to Edsall, July 12, 1976, papers of general counsel Chuck Stathas.

OLD MCARDLE LABORATORY

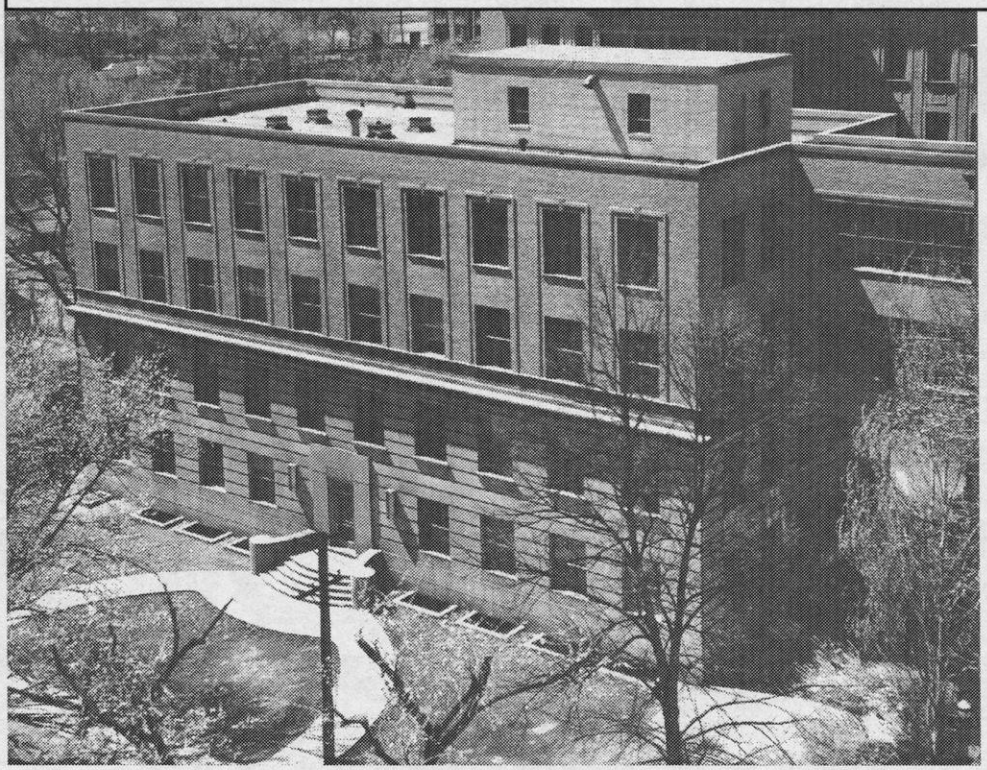


Fig. 1. The McArdle laboratory building c. 1942. Later construction added two floors to the building. [Series 9/4, McArdle, jf-59]

The original McArdle laboratory was built in 1939 with funds from the estate of Michael McArdle ('01). It remained the site of the McArdle laboratory for cancer research until the erection of the new building in 1965. The old building is now part of the medical sciences complex.

Serious cancer research began at the university with the 1934 bequest by Jennie Bowman of $420,000 for cancer research in memory of her father, Jonathan Bowman. The regents used the income from the Bowman bequest to hire several young and promising researchers, rather than spend the whole income on a single "name" professor. Among these bright young men was Harold P. Rusch, later director of the department of oncology, which formed around the cancer researchers.

For the first four years the Bowman researchers and their animals were housed in a few small rooms on the second floor of the Service Memorial Building. In 1937 with the encouragement of dean E. B. Fred, and Dean Middleton, plans began for a larger space, but no funds were available in the depths of the great depression. Fred and Middleton inquired without result, into the possibility of funding from the recently formed Federal program, the National Cancer Institiute.[1]

In April 1935 a Chicago businessman named Michael McArdle (UW class of 1901) died and left in his will the sum of $10,000 and residuary estate to the university to be used for study and research work in cancer. According to Harold Rusch, no one in the medical department knew about the existence of this money until the spring of 1938, at which time the value of certain stock in the estate was much increased and the total worth of the grant was brought to the attention of medical dean Middleton. Harold Rusch, with the backing of dean E. B. Fred, and professor Walter Meek, was

still agitating for more space for cancer research. Middleton obtained $108,000 in matching funds from the federal PWA. The total projected cost of the building was $240,000.[2]

In late 1938, the regents had approved the financing of the cancer facility, by the University of Wisconsin Building Corporation (UWBC), with PWA matching funds. During the fall and winter of 1938, Harold Rusch, selected by Dean Middleton, conferred with state architect Roger Kirchhoff regarding the design of the building. They designed a four story building connected at the third and fourth floors to the Service Memorial Building medical school. The first two floors of the new building would be occupied by the department of radiology, which was in very cramped quarters in the basement of the Wisconsin general hospital. Even with the restriction of using only the third and fourth floors, the cancer researchers were going from less than 1000 to 6500 square feet of space.[3]

The regents announced the selection of contractors January 17, 1939. The general contractor was Maurice Schumaker for $143,985. Utilities and subcontracts brought the contracted total to $200,188. The ground under the site was so poor (a spring disrupted by the Service Memorial Building next door was saturating the site) that the state engineer had to redesign the foundations and the completion deadline was advanced from October 1939 to December 2, 1939.[4]

On March 1, 1940 the building was completed and named the McArdle Memorial Laboratory for Cancer Research. Dr. Rusch says that dean Middleton promised that the first two floors, used by radiology, would soon revert to the cancer researchers. Complete with equipment and furnishings the cost of the building was $244,582. The finished building was 45 feet by 100 feet, basement and four floors of brick with stone sheathing on the lower two floors (see Fig. 1). The stupendous growth of some stock (Chicago Flexible Shaft Co., later the Sunbeam Corp.) in Mr. McArdle's estate made it possible to immediately liquidate the debt incurred by the UWBC in its construction. This left the building debt-free from its inception.[5]

The first ten years of the McArdle laboratory were marked with steady growth and the ongoing frustration experienced by all early cancer research. In July, 1941, the state legislature appropriated an annual sum of $10,000 to supplement the McArdle and Bowman funds for cancer research. During the years of WW II, work at the cancer center went on, due in part to the IIA (essential to the general health and welfare) draft classification of the principle researchers, Rusch and Potter.[6]

In 1947 dean Middleton first broached the idea of adding two floors to the top of McArdle to house cardiovascular research. The huge remodelling project that transformed the Wisconsin General Hospital, was the impetus that completely rebuilt the McArdle laboratory building as well. The hospital additions (including the addition of two floors to McArdle) were carried out first. This work was finished in 1953. Radiology moved to the new hospital, and the remodelling of the first two floors of McArdle proceeded. The plans were done by July 1952, the work was begun January 1954, and completed in January 1955. The new space was funded by the regents, the National Cancer Institute, and the American Cancer Society. The total cost of the renovation and furnishing was about $260,000. This remodelling destroyed any visual sense of the original building, since it has now been engulfed on three sides by the hospital. This is of course true of most of the older buildings of the old medical group.

After the construction of the new McArdle laboratory building in 1965, the McArdle name over the Charter Street door was covered by a sign reading 420 Charter Street. The building in 1993 houses parts of the medical school, including medical physics, and therapy offices.

1) Rusch Harold: *Something Attempted Something Done*, 1984, p. 46-7.
2) Ibid p. 48-50; *Wisconsin Alumni Magazine*, June 1935 p. 276.
3) *Regent's Minutes*, October 14, 1938. March 7-8, 1939.
4) *Regent's Minutes*, January 17-18, 1939, April 25, 1939.
5) *Daily Cardinal*, July 23, 1940 p. 6., November 2, 1940, p. 3.
6) *Laws of Wisconsin* 1939, chapter 408. Rusch, Harold, op cit.

SEED BUILDING

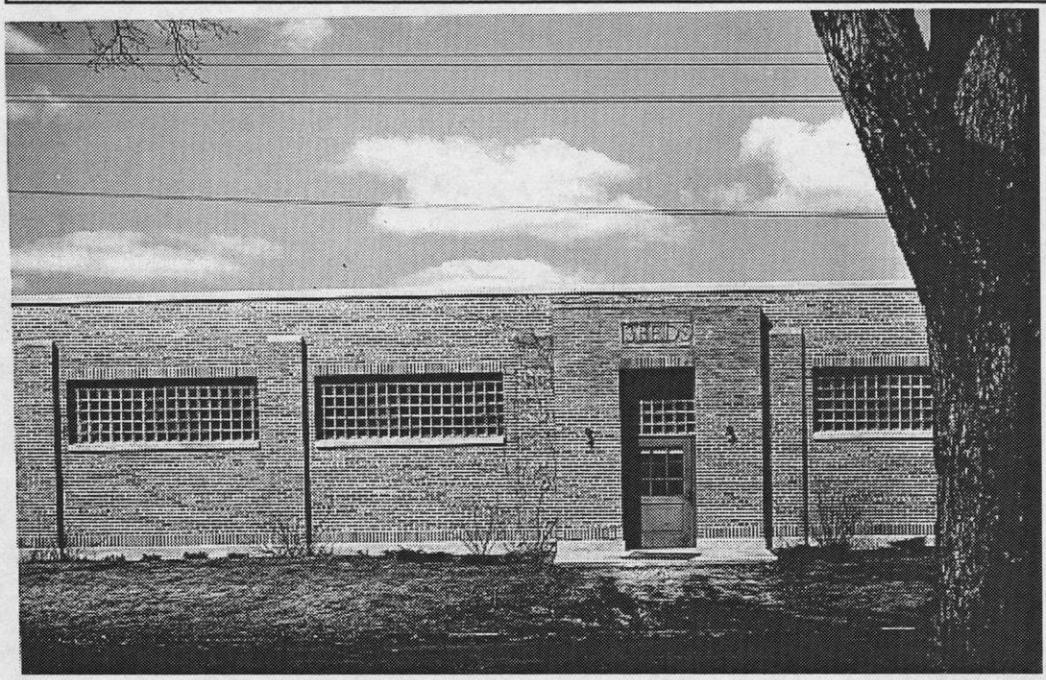


Fig. 1. The agronomy seed building south face. [Series 9/3, Seed Storage Building, jf-60]

In the late 1930s, the agronomy department of the university under Ransom A. Moore was raising all the hybrid seed corn in the state, as well as doing experimentation to produce better hybrids in all important Wisconsin farm crops. The storage facilities for the seed produced by this department was woefully inadequate. Storage in buildings scattered around the campus, the outlying experimental farm, and rented space in Madison, made careful supervision and efficient retrieval impossible. Finally in 1939 the state legislature approved an appropriation of $25,000 for a seed storage building. The department began to plan the new building.

In order to keep cost to a minimum, the state architect Arthur Peabody and agronomy professor Norman P. Peal decided to build a structure across the south ends of two 70 foot long existing metal storage sheds (probably the main seed storage facilities), while adding a third metal shed to the row. This produced a building shaped like an 'E' with the three sheds pointing north from the Linden Drive front. This front section was a plain one story brick building 175 feet by 48 feet without a basement, with a flat concrete roof, and large glass brick windows (see Fig. 1). The building was power ventilated and temperature controlled for best seed storage condition. A plan to add a second story to the building was never carried out.[1]

Bids were called for on May 24, 1940. The regents approved the plans and estimates on May 27, 1940. The $25,000 appropriation was supplemented by income from university dairy sales to bring the total to $26,325. The next day contracts were signed with George Nelson & Son of Madison for $19,900 for general construction. Utilities and grading subcontracts accounted for the balance of the cost. The general contract called for completion by August 31, 1940. The building was ready for use by October 1940. The metal shed sections were expanded 10 feet each in June 1953 by Trachte Brothers Construction Company at a cost of $3779.[2]

1) Daily Cardinal, October 20, 1940.
2) Executive Committee Minutes, May 27, 1940, plans in records of department of planning and construction.

UNIVERSITY PRESS

Fig. 1. The University Press Houses: left to right: 807, 811, and 817 W. Dayton Street, 1995. [Author Photo, AP-20]

The University Press is housed in three old houses and a beer distributor's warehouse. These quarters reflect the difficulty in funding an operation that is supposed to be self supporting. The buildings may be demolished as part of the Kohl Center construction.

The University Press was founded in 1937 under the direction of Miss Livia Appel. It was housed that year in Bascom Hall. It moved in 1939 to quarters in the old library school at 811 State Street. In 1955 The University Press moved across to 430 Sterling Court (a north-south street between State and University vacated for the construction of Humanities). This was the Press's home until forced in 1965 to leave by the demolition of Sterling Court which made way for the Humanities Building. They moved into the old houses at 807 and 811 W. Dayton Street. These houses had been purchased by the Wisconsin University Building Corporation in August 1964 (807 W. Dayton) and February 1962 (811 W. Dayton). The WUBC leased the properties to the University for amounts required to amortize the purchases. 817 Dayton was used in 1965 by the school of music. After the opening of the Humanities Building in 1969, it was occupied by the UW Press.[1]

There were several reasons for selecting this location for the University Press. Although a department of the graduate school the Press tries to support itself financially. Sadly it has never managed to do so, running a substantial deficit from the beginning. Therefore it was undesirable to place the Press in expensive quarters. In addition the nature of the Press's business requires a warehouse, and it happened that the WUBC had purchased the General Beer Distributor's warehouse at 415-417 North Murray Street in January 1962. This proximity of a warehouse and office space was a natural choice for the new home of the UW Press.

Fig. 2. University Press Warehouse, 1995. [Author Photo, AP-21]

The current house at 817 W. Dayton replaced a much earlier one. Members of the Law family, who produced architects and mayor James Law and his brother Edward lived in the house for 40 years. This house contains the periodical functions of the Press.

The oldest of the three houses is the one at 811 W. Dayton. It appears in the 1902 directory as a family home, and passes through several hands, including congressman John M. Nelson, before its purchase by the WUBC in 1962 from Donald and Lorraine Tobias. It houses the editing and marketing arms of the Press.

The largest house, 807 W. Dayton was the most recently built, first appearing in the 1914 directory. By 1920 the house was the property of the Endres family and stayed in the Endres family until its sale to the WUBC in 1962. This house contains the administrative offices of the Press.[2]

The warehouse is sixty by seventy feet of two stories and a basement, and was built in 1927 by the Trachte Brothers for Mautz Paint and Glass. Mautz sold the property in 1937 to Max Weinstein. Over the years a number of one story additions have been made to the rear of the building. The property included the building and a adjacent parking lot. Weinstein and other members of his family formed General Beer Distributors in 1945 and the warehouse was used by this corporation until the death of Max Weinstein in 1951 at which time the warehouse was appraised at $45,000. The Weinstein family sold the warehouse to the WUBC in January 1962 for about $190,000. The WUBC immediately transferred the title to the regents. The University Press uses the warehouse for shipping, receiving and storage. The bookkeeping function are also housed in offices in the warehouse, as is a small store that sells the books distributed by the University Press.[3]

The University Press has not been especially happy in its Dayton Street quarters. Two major objections are periodically voiced. One is that the old houses are inadequate to the task of housing the staff and their work. The second is that the quarters are old and shabby and make the Press look like a poor step child of the University. Suggestions have been made to house the Press in the University club, and in the old bank building at Park Street and University Avenue. Plans for the construction of the Kohl center may require the relocation of the University Press.

1) *Wisconsin Alumni Magazine,* January, 1950 p. 10-11;
2) University directories; Madison city directories.
3) Papers of the regents in regent's vault, deed folder 457. *Regent's Minutes*, January 5, 1962.

WEST DAY CARE

Fig. 1. Day care buildings, 1994. The 1935 flat-roofed building is at left, with the 1965 gabled-roofed one at the right. [Author Photo, AP-22]

The U. S. Forest Products Laboratory occasionally erects a building to test the practicality of a building material or technique. These experimental buildings were usually erected near the main building at the west end of campus. In 1962 the FPL bought several acres of land near parking lot #60. They intended to use this land to relocate their experimental buildings to provide space to extend their main building. When in the mid 1970s the University needed to reclaim this land to facilitate the construction of the new medical complex, the FPL's experimental building were already on the land. The land became the property of the University, but the FPL maintained ownership of the buildings. In 1979 the University negotiated an agreement with the FPL to use the two buildings as a day care center and pay rent to the FPL in the amount of $330 per month. The agreement would expire September 1983. The University also contracted with Child Development Incorporated to establish a day care center in the buildings.[1]

The buildings were altered to provide offices, and play areas for the day care center. The plans for the alterations are dated a few months before the lease was made. The plans insulated parts of the buildings, replaced windows, and returned experimental panels to the engineers at the FPL.

The smaller flat-roofed building was constructed in 1936 as a test bed for "stressed-skin" prefabrication techniques, and according to the FPL is the first of its kind in the world. The flat building is 25 by 38 feet, built from stressed skin panels, and a flat wood-framed roof. It houses offices and day care space.[2]

The larger building to the east was probably built about 1965 to test some other prefabricating techniques. This building is 28 by 40 feet, with a gable roof, and a basement. It houses the day care offices, and play space for the children.

Plans are occasionally broached to replace these shabby, cold and draft buildings with a modern day care facility. The Forest Lab retained the right to reclaim the buildings if the University decides to raze them.

1) Bruce and Sandbank, *A History of Prefabrication*, January 1944, NA 8480 B75 1972, library of the Forest Products Laboratory; Draft of a request to negotiate a use permit with the Forest Products Laboratory, Papers of the Regent's Meetings, July 1978; Regent's Minutes, November 1979, exhibit III, October 10, 1980.
2) *Automated Builder*, October 1994, p. 22.

HOME MANAGEMENT HOUSE

Fig. 1. The home management house c. 1944. [Series 9/3, Home Management House, jf-61]

Erected in 1940 the home management house was used to provide practical instruction in homemaking to home economics majors. In the 1960s it was converted to office space.

By 1939 the old home economics practice cottage was worn out. In a letter to president Dykestra, dean of Agriculture Christensen described it: "The present house used for practice training is an old house built in 1911. Not only is it too small, but it is poorly planned, impractical, and inadequately equipped for the training in home practice management which is conducted by the Home Economics staff." Dean Christensen, and Miss Frances Zuill, head of the home economics department, had discussed and planned for a new home economics practice house since the late 1930s. No building was done because of the lack of funding for construction during the depression, but the plans were refined and discussed.[1]

So it was that when, in January 1940, the Wisconsin Utilities Association offered $20,000 in private funding for the home management project, Dean Christensen could present to the regents sketches and estimates at the same time that he announced the gift.[2] So prepared was the dean, that before the end of the regents meeting, he had obtained approval of his plans (including the proposed site between home economics and agriculture hall), permission to advertise for bids, and approval to raze the old solar observatory, by then used only for storage and in the way of the new building.

Formal plans and specifications were drawn up by the state architect, Roger Kirchhoff, in the spring of 1940.

Unfortunately for these plans, when bids were opened on June 28, 1940, all were far above the amount available for building and all were rejected. There were three principal reasons for the overruns: first, the specification of Madison sandstone for the exterior, which had all but run out in the old quarries on the west side of Madison, second, the concrete floors, roof construction, and hollow tile walls, needed to make the building fireproof, and third the paucity of almost all building materials in Madison. By respecifying the exterior in brick, and proposing alternate materials to the bidding builders the cost was lowered considerably. The new plans were put out for bids in July 1940, but again the bids were too high for the funds donated. It was clear that the project was going to cost about $32,000 as envisioned by Christensen and Zuill, and not the $20,000 available.

In August 1940, the Wisconsin Utilities Association offered an additional $12,500 for construction and furnishing the home management house. This bonus removed all difficulties from the project. The general construction contract was awarded to the Fritz company for $20,988. The work was to be finished by January 1, 1941 (later extended to March 17, 1941). With utilities and subcontracts the total contracted cost was $33,900. The $1400 above the donation was made up by the physical plant budget. Work began on the building on September 23, 1940. During construction the project ran into small difficulties with the Industrial Commission, due to the commission's insistence that the building was a dormitory, and requiring multiple exits on that basis. The changes were minor, and Kirchhoff made them rather than pursue the issue. Delays were minor and completion was about two months late.

The home management house was opened for examination on June 21, 1941.[3] It was a two story colonial revival, of light brick, with stone trim, an asphalt shingled hipped roof, enclosing about 3700 square feet. There were four bedrooms, three bathrooms, a study, an instructors suite, kitchen, a laundry, demonstration rooms, and sun porch. It was intended to accommodate an instructor and eight students at a time, and was pressed into service immediately in the fall of 1941. Every senior in home economics was required to spend two weeks in the house.

The house filled its role beautifully for twenty five years. Then in the middle 1960s when anything that looked archaic was in peril, a home management house ceased to be of use, and after the departmental name change from "Home Economics" to "Family Resource and Consumer Science", the building was converted to office space.

1) Regent's Minutes, January 19-20, 1940; Christenson to Dykestra, January 19, 1940, *Wisconsin Country Magazine*, February, 1940, October 1941, December 1942, November 1955; *University Press Bulletin*, January 26, 1940.
2) Christenson to Dykestra, January 19, 1940, ; Regent's papers, August 1940, January 19-20, 1940.
3) *Wisconsin Alumni Magazine*, July, 1941, p. 329, February 1941

SMALL ANIMAL HOUSE

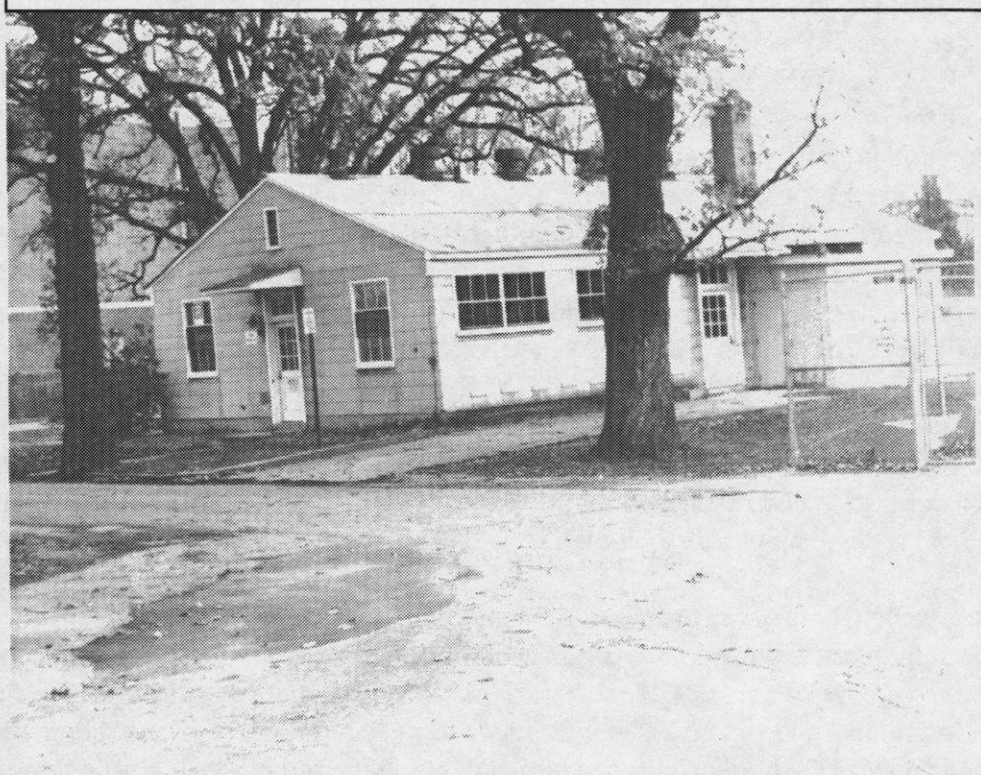


Fig. 1. The small animal building in 1994. The tiny doors on the side of the building were for monkey egress in Dr. Clark's day, and boarded up in Dr. Shackelford's. [Author Photo, AP-23]

Built as a virus research laboratory in 1941 for Drs. Paul Clark and Conrad Elvehjem, this building housed Dr. Shackleford's fur research program from 1951 until 1974. It is now storage space.

Dr. Paul F. Clark came to the University in 1914 from The Rockefeller Institute, where he had studied the polio virus under the renowned Simon Flexner. Dr. Clark took charge of medical bacteriology, in the fledgling medical school. Facilities for Clark's study of viruses were severely limited, and his work was undertaken in the "animal research laboratory", later the meats lab. This location was the best that could be found for the work covered by a $62,000 grant from the National Foundation for Infantile Paralysis, to be under the control of Drs. Paul Clark and Conrad Elvehjem, received in March 1941. These were highly unsuitable quarters. Dr. Clark later (1969) said that "our cramped animal quarters made it impossible to quarantine our animals adequately before using them in experiments". The regents voted to add $3500 in unassigned funds to a $12,000 WARF grant for the construction of a small animal house for the research studies in infantile paralysis. This building was first going to be located between the highway lab and the mining and metallurgy buildings, on the engineering campus. Without explanation, the location was changed to the far west campus

which later became Herrick Drive. Probably this was to eliminate the presence of diseased animals in a central campus area; the west end location already held the hog cholera labs and the state animal disease control lab. Contracts for the small animal building were let by the regents on July 26, 1941, with the general contract going to George Nelson and Son for $7,149. Total contracts let were for $15,500, with funding coming from a $12,000 WARF grant and the $3500 balance from the regents unassigned fund.[1]

The building was a 34 by 50 foot, one story wood frame building sheathed in asbestos insulation board. The building had special features due to Dr. Clark's use of monkeys. These included special sealing of the walls to prevent the monkeys from stuffing them with trash, and small doors to the outside which allowed the monkeys (Macaca mullata) access to the outdoor pens from their individual indoor pens.

Dr. Clark spoke highly of the new facility, and gave much of the credit to his colleague Dr. Conrad Elvehjem. After a decade (1942-1952) of research on polio and other viral diseases, and the effects of nutrition on disease in the new building, Dr. Clark reached the mandatory retirement age of 70 and was retired in 1952; by this time Elvehjem was dean of the graduate school, and "we both realized that our story had been told and gave up the 'virus laboratory' for nutritional studies in fur bearing animals"[2]

The study of fur bearing animals had been going on at the University since October 1937 when two legislators appeared before the board of regents to describe the ravages of disease in silver fox and other fur bearing animals. The regents asked the emergency board for funding and in July 1938 the board appropriated $10,000 for this use. The 1938 state legislature appropriated $15,000 per year for fur research in fox and mink. This funding was gradually discontinued in the 1940s. Wisconsin has always been a major producer of mink.[3]

Into this situation came a young new faculty member named Richard M. Shackelford. He had recently graduated from the genetics program and was offered a position studying the genetics of fur-bearing animals. He accepted the position in 1940 and began his work in quarters in an old barn on the agriculture campus that had been partially destroyed by fire. In 1951 when asked by Dr. Elvehjem if he would like to take over the old "polio lab", he was overjoyed. The regents approved money for remodelling the "polio lab" in September 1951. The monkey cages were removed, but the outside animal doors still remain (see Fig. 1). Dr. Shackelford's mink and fox research program did not survive his retirement in 1974. In 1985, The Virus and Fur Research Building was renamed Herrick Drive 2105, and became the home of the Physical plant director, and part of the sea grant program.[4]

1) Annotated Bibliography, Paul F. Clark, 1969 p. 15. Archives, Paul F. Clark biographical file; Regent's Minutes, January 18, 1941, March 8, 1941, Oral History, Paul Clark, 1972, archives oral history project; Executive Committee meeting, July 26, 1941. Contracts, series 1/8 contract #85-1.

2) Annotated Bibliography, Paul F. Clark, 1969 p. 22. Archives, Paul F. Clark biographical file; p. 22;

3) Regent's Minutes, October 12-13, 1937, August 16, 1938, October 1, 1938, October 29-30, 1937, ; Executive Committee Minutes, June 13, 1938.

4) Regent's Minutes, September 8, 1951, Richard M. Shackleford, interview by the author, fall 1994.

TRAILER PARKS

Fig. 1. The first 91 trailers of the Randall Trailer Camp, 1945. The Monroe Park would later be out of the picture to the left. Permanent buildings in the picture are the mechanical engineering building, top left, and the state highway laboratory center right. [Series 26/1, Randall Trailer Park, x25-1910]

UW Will Admit All Students It Can House". The headline demonstrates the depths of the housing shortage in Madison during the postwar enrollment surge that tripled the enrollment of the University between the spring of 1944 and the fall of 1946. The University's first response to the overload of returning veterans was the Randall Park Trailer Camp. Later responses included trailer parks, overnight cabins, houseboats, and permanent housing. Randall Park was the first "vetsville" on a college campus in the country, and drew national media attention. The State Emergency Board approved $40,000 to erect the camp on April 11, 1945.

The trailer park was erected in August of 1945, with the installation of 64 standard, 27 "expansive" trailers, four toilet units, and two laundry units. The Randall trailers were leased by the University from the Federal Public Housing Authority for $1 per month. The University set rates of $25 and $32.50 per month for small and larger trailers respectively in the non-profit camp. These rents paid for installation and upkeep only. Each trailer had sleeping for four, and a hot plate for cooking. The trailer camp was restricted to married veterans and their families, 75 per cent of whom had children. The fact that the trailers did not have running water did not detract from their attractiveness as temporary housing and as long as temporary housing existed at the University the Randall Park trailers were the most popular. Randall Park opened full in September 1945. In January and February 1946, an additional 113 trailers were erected to the south of the first camp. This group was called the Monroe Trailer Camp, and used the old women's field house as a community building.[1]

When construction of the east wing of engineering was approved in April 1951, the Randall trailers had to go. Residents were given priority in the Monroe park, which lasted until 1955. The trailers were discarded, having deteriorated under heavy use and a low maintenance budget.[2]

1) *Daily Cardinal*, May 3, 1946, September 25, 1945; *Wisconsin Alumni Magazine*, October 1945, *November 1946, December 20, 1945; A History of Housing at the University of Wisconsin*, Teicher and Jenkins, p. 48-49; *Wisconsin Magazine of History*, Winter 1969-1970 p. 83. *Regent's Minutes*, August 15, 1946.

2) *Regent's Minutes*, April 15, 1950, January 10, 1953; *Wisconsin Alumni Magazine*, March 1953, p. 11.

UNIVERSITY HOUSES

Fig. 1. University Houses going up, January 6, 1948. [series 26/1, University Houses, x25-2152]

University Houses were built in response to the enormous post WW II enrollment increase. Housing for professors was very scarce. Built in 1947, funding for the faculty apartments was handled by Wisconsin Alumni Research Foundation (WARF), who then presented the project to the University as a gift in 1951.

In the explosion of enrollment that more than doubled the student population from 1945 to 1947, the most obvious needs were for classroom and lab space, and student housing. These primary needs were met by temporary buildings and quonset huts, temporary housing at Truax field, Badger Ordnance works, and other emergency measures. A less obvious need was housing for the faculty which rose from 900 to 1300. Because federal money, the mainspring of wartime housing projects was aimed at student housing, funding was not available for faculty housing. The situation grew acute, with professors commuting up to fifty miles, enduring wretched quarters in Madison, and one recorded as living on a houseboat on Lake Mendota. One out of eight faculty members had no place for his family. Recruits refused to join the faculty unless housing was provided.[1]

University president E. B. Fred, who had himself been a homeless professor, when he first came to Madison, was concerned that the lack of faculty housing would cripple the university, and appealed for private interests for help. No private contractors showed interest. During the summer of 1946, the directors of the Wisconsin Alumni Foundation (WARF) discussed the issues with Fred, and in July 1946 agreed to finance $2 million worth of construction of faculty apartments on University land. The University would pay 1 percent interest on the unpaid loan, and amortize the total for fifty years. The housing project would be administered by University Houses Incorporated, a non-profit corporation operated by WARF. The regents had selected as a site a twelve acre plot between the University orchard and the village of Shorewood Hills. This land had been donated to the University by the Thomas Brittingham foundation. Late in 1946, after the state refused to allow basement apartments in the project, several more acres, and another $500,000 were allotted for more buildings.[2]

University Houses Inc., directed by Boynton Butler of WARF selected architects Leonard

Schultz and Associates of New York. This firm had designed New York's Waldorf-Astoria Hotel, as well as projects similar to the Madison's project in several other cities. The general contractor selected by the foundation was George A. Fuller of Chicago, known to the University through his construction of Slichter Hall (begun in the fall of 1946). Some grumbling was heard about out of state contractors, but Fuller employed local workmen. Groundbreaking on University Houses took place in May 1947. The first units ready for occupancy were those in the eastern section, which were assigned in April 1948. The rest were finished by spring 1949. Assignments were made on the basis of faculty rank, veteran status, and need.

There are three different types of apartment buildings: 4 type 'A' buildings which contain 2 one bedroom flats on the ends and 2 central two story three bedroom apartments, 18 type 'B' buildings each holding 4 2- bedroom 2 story apartments, 9 type 'C' buildings containing 2 one bedroom flats on the ends and 2 central two bedroom two story apartments, with utilities in the basements. Types 'A and 'B' buildings have no basements, and have their utilities in the service building. University Houses contains 150 total residences in 32 buildings (31 apartment buildings and 1 service building). All buildings are wood frame with concrete floors and tile roofs. The apartments range in size from about 800 square feet to about 1125 square feet, all with kitchens, and access to laundry facilities. Initial rents were $100 to $135 per month based on size. The project was to be self amortizing, that is all loans, utilities and maintenance were to be paid from rentals and rents adjusted to meet costs. In 1961 as service building for the complex was erected at a cost of $25,000 by contractor Home Lumber and Improvement.

In an effort to avoid the look of barracks living, each building is slightly different in exterior treatment, using brick and lannon stone sheathing, different colored roofing materials, and trim materials. The intent of the architects was to produce the effect of a subdivision of large homes instead of rows of apartment buildings. Heat for all apartments was furnished by oil-burning furnaces in five "key" buildings, avoiding any industrial looking smokestack plant. Utilities were brought in underground to improve appearance.

In October 1951 representatives of WARF appear before the board of regents and offered to give the University Houses to the University, in order that the payments on the principal mortgage could be applied to research in the natural sciences. This gift estimated at a value of $2.75 million, was the largest gift ever presented to the University at that time. WARF's University Houses Inc. was dissolved and the University Houses were turned over to the Division of Residence Halls. In the next few years, the University made several changes: the oil furnaces were replaced with gas fired ones and some roofs were replaced. The intention of the University was that University Houses provide temporary housing for new faculty while they searched for permanent locations. During the period from its opening in 1948 through August 1953, 405 families moved through the apartments. At that time of the original residents only 14 faculty members remained who had arrived there in 1948, including professors Curt Leben and Julius Weinberg. In January 1957 the regents set a maximum time of occupancy of five years.[3]

1) *Wisconsin Alumni Magazine*, March 1948, p. 20.

2) *Regent's Minutes*, July 25,1946, November 22, 1946, January 17, 1947; *Wisconsin Alumni Magazine*, May 1949 p. 11; Daily Cardinal, June 4, 1947, April 1, 1948. A (possibly) apocryphal story is told of E. B. Fred. A citizens group of Shorewood hills residents (including UW Professor Bradley) called on Fred to protest the development of an area so near their homes. Fred told the committee, gesturing to a roll of plans on his desk, that he was glad the area had been selected for housing, because he believed that the hog farm proposed for the area by the ag school would be detrimental to the neighborhood. By the end of the meeting the citizens group was in favor of the faculty housing project, and Fred had never unrolled the plans for the 'hog farm'.

3) *Regent's Minutes*, January 12, 1957, October 6, 1951, December 9, 1960; *Wisconsin Alumni Magazine*, November 1951, p. 7.

QUONSET HUTS

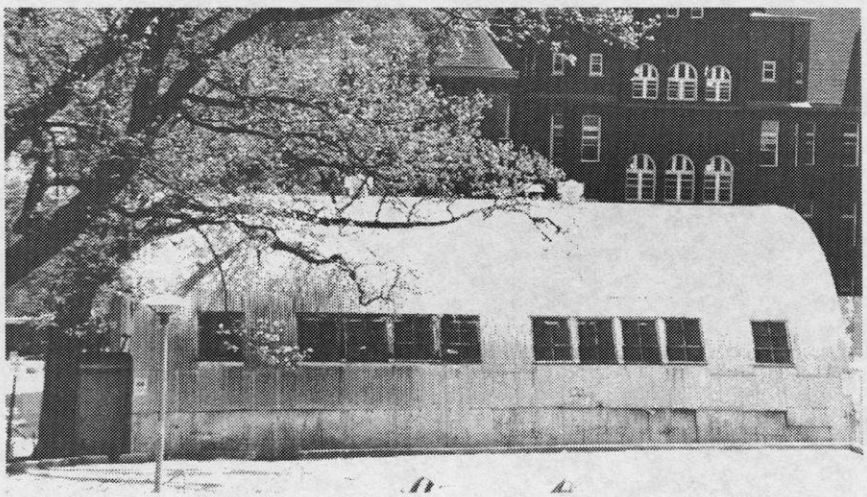


Fig. 1. 1993, Q15, the last Quonset sits behind Education, with Science Hall in the background. Q15 has survived by staying generally out of sight, and supplying useful space for engineering, the art department, and general storage. Since the space on which Q15 stands may never be built, due to its steep terrain, the last quonset may yet have a long life ahead of it. [Author Photo, AP-24]

In the desperate search for classroom space that accompanied the doubling of student enrollment in 1945-1946, came the quonset huts. On May 24, 1946 the regents officially began to erect quonset huts on campus. They approved the erection of a 40 foot wide by 240 foot long temporary structure, connected by covered passway to the State Historical Library for university library reading room facilities on the lower campus. This was expanded to a total of twelve quonsets on the lower campus in the next six years. Although in photos, there appear to be only six connected to the main quonset each of the six were double. The lower campus quonsets were used as general purpose classrooms as well as library space.[1]

All through the summer of 1946 quonsets sprang up around the campus. In July, the regents approved contracts for library, classroom and chemistry labs quonsets. In August came approval for nine units at a total cost of $189,110 including the buildings, assembly, foundations and utilities. The general contractor was George Nelson and Son of Madison. This money came from state appropriations, and $60,000 from the fines and unclaimed library fee deposits. There appear to have been about fifteen quonsets built during the late 1940s. Q1-Q13 were temporary library facilities on the library mall. Q14 was an engineering lab near the hydraulics building. Q15 was another engineering lab located behind the old engineering building (now Education) on Bascom Hill.[2]

Most of the rest of the quonset story involves getting rid of them. They were a great help during the post war crunch, but they were even colder, more poorly lit, and uglier than the much maligned transite temporary buildings scrounged from Camp McCoy. In July 1953, after Memorial Library was under way, the regents approved the removal of Q1-Q13. In the fall of 1953, the library mall quonsets were sold to Dane County and the city of Madison. The foundations were demolished and the area landscaped in 1954. Q14 was removed to build Helen C. White Hall.[3]

Alone among the quonset huts erected in the immediate post WW II period only Q15 in back of the Education building on Bascom Hill remains (see Fig. 1).

1) *Regent's Minutes*, May 24, 1946, July 25, 1946;
2) *Regent's Minutes*, August 15, 1946;
3) *Wisconsin Alumni Magazine*, March 1947 p. 9, December 1951 p. 12, October 1953, p. 13; *Daily Cardinal*, October 8, 1953, November 12, 1953, November 2, 1954, January 26, 1960.

SLICHTER HALL

Fig. 1. Slichter Hall c. 1950. [Series 26/1 Slichter Hall, ns-1732]

Built in 1946 Slichter Hall provided permanent dormitory space for a greatly increased post WW II student body. It is named for Professor Charles Sumner Slichter, a long time and much beloved professor of mathematics, and initiator of the dormitory house-fellow system.

Well before the end of WW II, the university's department of housing knew that they might be in for a rough time. The enrollment at the university 6,615 in 1944-45, tripled in two years to 18,598 in 1947-48. At the same time, the Division of Residence Halls, was providing living and dining quarters for thousands of military personnel, attending the training classes held at the university. In addition to these duties, the Division of Residence Halls was actively planning permanent student housing for the post war period.

Director of Residence Halls Donald Halverson proposed to president E. B. Fred in 1944 that the university build three new dormitories, as soon as materials became available. Of the three projects only one was completed, the west addition to the Van Hise units. Halverson argued that even if the dormitory had to be financed with the entire assets of the division, it would still be a sound investment. Some of this confidence came from the fact that never had any amortization payment been missed by the division since its inception in 1926, even in the lean depression years. The earliest halls, Adams and Tripp, were nearly paid off. These evidences that their business practice was sound made the argument to build more halls more compelling.[1]

During early 1946, the division of residence halls consulted with the state architect Roger Kirchhoff, to plan the new dormitory. They collected suggestions from the house-fellows and residents of the Van Hise and newer Kronshage dormitories. By late summer of 1946, the plans were ready. The regents approved the plans and authorized the contracts. The contractor was the George A. Fuller Company of Chicago. Fuller took the job on a cost plus fee basis, the first time the university had employed this contracting scheme. The estimated cost was $554,843, and Fuller's fee was $27,742. This is a fee of less than 5 per cent, reflecting the low return on investment current at that

time. With the additional costs of utilities, fees, and landscaping, the estimates came to $700,000.[2]

The regents authorized the Wisconsin University Building Corporation (WUBC), to borrow a maximum of $750,000 from the state annuity board, the WUBC's usual source of funds, at 3%. This money was to be used for the west addition to the Van Hise Dormitory, to be amortized in 28 years. Tripp and Adams halls were used as collateral.

Ground was broken in the fall of 1946, in the hope that the dormitory could be finished in time for the fall semester of 1947. This very aggressive schedule was nearly though not quite met. Severe weather in the winter of 1946, the contractor's simultaneous work on University Houses, and post-war material shortages caused minor slippage, all the while business manager A. W. Peterson nipping at the contractor's heels. By November of 1947, after the job was supposed to be done, the house-fellows and some residents were living in the old sheep barn, previously used as the short course dorm, while the contractors finished up the first floor intended for use as the offices of the division of residence halls, who were then located in Chadbourne Hall. The regents authorized another $50,000 for the project to cover material overruns.[3]

In November 1946, six weeks after his death, the regents voted to name the new dormitory after Charles Sumner Slichter (1864-1946). Slichter joined the U.W. mathematics faculty in 1886, became dean of the graduate school in 1920, and was deeply involved in the development of the university dormitory system, serving as a pivotal member of the original housing committee. He is widely credited with having originated the U.W. house-fellow system. An enduring interest of Slichter's was the acquisition and hanging in each residence hall of a portrait of the person for whom the house is named. He believed that the students would be aided and influenced by the effects of the portraits. It is therefore especially appropriate that Slichter Hall, unique among university buildings, bears in stone above the front entrance a carved likeness of its namesake.

The finished building was four stories and a basement, shaped like a '[' with the short wings projecting to the east, of brick construction with concrete floors. The exterior sheathing was lannon stone, the material first used in Liz Waters, and in the short course dorms. The classic Madison sandstone last used in the Kronshage dorms was no longer available. The building was divided into four houses, Bierman, Gavin, Goldberg, and Luedke, first through fourth floors respectively. These were all university men who died in WW II. There were 50 double rooms, with interiors designed by Leon Pescheret, the interior designer who had done the memorial union, and Liz Waters. The rooms were identical, thereby eliminating the extra trouble of assigning more desirable corner rooms in the older style dorms. Capacity was 200 students and four house fellows.[4]

In 1962 an addition was built to Slichter, which filled in the east area between the wings. This one floor, flat roofed addition was designed by Graven, Kenney, and Iverson, Madison architects. It contained additional office space for residence halls.[5]

Like all the lake-shore dormitories, Slichter hall is a highly desirable place to live and is constantly filled. In 1952 in preparation for the demolition of old Chadbourne Hall, Slichter was assigned as a hall for women students. As part of the Van Hise group it is without dining facilities, students taking their board at the Van Hise (later Carson Gulley) commons.

1) *A History of Housing at the University of Wisconsin*, Teicher and Jenkins, 1987.

2) *Regents Minutes*, August 15, 1946, p. 11.

3) *Daily Cardinal*, November 26, 1947, p. 5, April 17, 1947, January 25, 1947, September 28, 1946, p. 1, November 26, 1947; Collinson to Peterson, February 21, 1947, Peterson to Collinson February 18, 1947, series 24/1/1 box 214, Residence Halls-Construction folder; *Wisconsin Alumni Magazine*, May 1947, p. 12, November 1947, p. 5,

4) Burns to Schmelzer, May 15, 1947, series 24/1/1 box 214, Residence Halls-Construction folder; *Regent's Minutes*, September 14, 1946, August 15, 1946, September 14, 1946, October 30, 1946, November 23, 1946, November 15, 1947, April 11, 1952.

5) *Regent's Minutes*, May 6, 1962; Peterson to Culbertson, April 9, 1962, Smith to Wendt, September 20, 1961, series 24/9/2 box 13.

MEDICAL WAREHOUSE

Fig 1. The Medical Supply Warehouse, 1995. The front (Lake Street side) is a basement and two stories of brick, and contains the main loading dock, and office space for ordering and delivery. Behind the front section is a one-story addition that connects to three 40 foot metal quonset sections of one story on a concrete slab. [Author Photo, AP-25]

The operation of a major health care institution requires the instant availability of a wide range of medical-surgical supplies, including pharmaceuticals, x-ray film, instruments, and laboratory chemicals. The stocking and delivery of this material requires a specialized facility.

Beginning in June 1966 the University hospital, in recognition of the critical need to monitor and control its inventory, leased the warehouse at 112 North Lake Street at a cost of $13,000 per month. The warehouse was built in 1947 by F. Gordon Davie, as a grocery warehouse for Central Wisconsin Food Stores. It remained a grocery coop warehouse until it was leased by the University. When the hospital was at the University Avenue location, the warehouse was nearby, and after the hospital moved to the west side of campus, the warehouse was running smoothly and reliably and the location was of little importance. Some consideration was given to including the medical warehouse in the new Stores/Extension building erected on North Murray Street in 1984, but the volume and specialized needs of the medical facility made it impractical.

In the early 1980s Davie offered to sell it to the University. Faced with the task of relocating the medical warehouse to another location, the 1985-87 state building program authorized the purchase of the facility at a maximum cost of $600,000. The regents approved a resolution to buy the warehouse and its 1.09 acres of land for $587,500 to be paid by program revenues. The property transaction closed on December 23, 1985. At the price obtained by the University and the annual lease cost of $60,000 the payback for purchasing the building was ten years.[1]

The building is a 100 by 22 feet. The rear sections contain most of the actual medical supplies and project nearly through the block to Murray Street (see Fig. 1).

The front section of the medical warehouse was demolished in April 1996 to make room for the Kohl Center.

1) *Regent's Minutes*, April 1, 1966, May 9, 1969, April 7, 1972, June 9, 1978, February 5, 1982, December 7, 1984, October 11, 1985.

2) Agency Request for State Building Commission Action, October 1985; Legal papers in regent's vault, F. Gordon Davie file. Plans on file at physical plant plans room.

OLD WARF

Fig. 1. 1995. The old WARF building. Built in 1947, it is three stories of concrete and steel over a full basement. It is skinned with face brick and granite trim. [Author Photo, AP-26]

The founding of the Wisconsin Alumni Research Foundation (WARF) can be regarded as one of the most significant acts in the history of the University. Set up in 1925 by professor Harry Steenbock and others as a mechanism for handling the administration of patents generated by University researchers, its first significant role was in handling the patents resulting from Steenbock's vitamin research in the 1920s. Through the 1920s and 1930s the corporations offices were located in modest rental space at 770 Langdon Street. In 1946 WARF decided to erect a building of their own. The site selected was on the far west edge of campus on University land just east of the Forest Products Laboratory (FPL).[1]

The plans were drawn by the respected local architects Law, Law, Potter and Nystrom in the fall of 1946. They define a building 53 by 94 feet, three stories high over a full basement. The building was built by the J. J. Flad company. The exact date of construction is not known, but it was WARF's official address in 1947. The building contained offices, a board room, a library and laboratories. Although the new WARF building was erected in 1969 and WARF's offices were moved into the new building, WARF continued to occupy the old building, and two other smaller buildings until 1974. In 1974 the planning for the new University hospital complex required that the University acquire a parcel just to the south of parking lot #60. In a complex three way trade with the University and WARF, the FPL gave up that parcel, made a cash payment of $973,000 and received the land and the three old buildings belonging to WARF. Beginning in 1974 the buildings on the site, were leased by the FPL to the University for use by the medical school's department of preventative medicine. This arrangement is periodically updated, and will run at least until the year 2000.[2]

1) Curti and Carstensen, *A History of the University of Wisconsin*, vol. II p. 413; Madison city directories;
2) Plans in the files of the department of planning and construction; Regent's Minutes, June 10, 1977, June 10, 1983, August 3, 1973 September 6, 1991.

TEMPORARY BUILDINGS

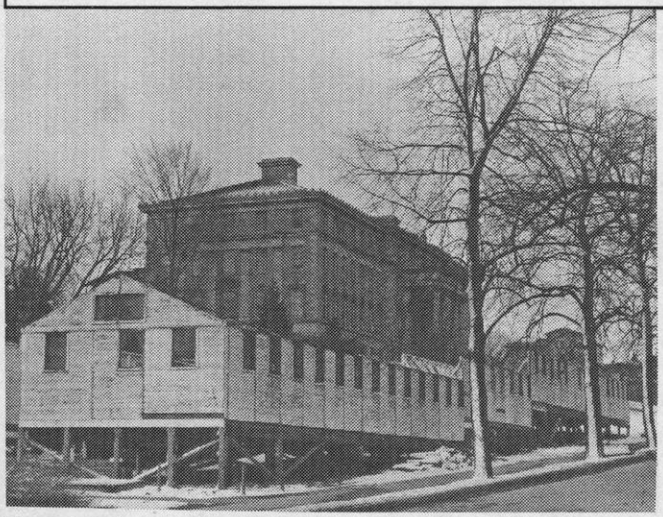


Fig. 1. The temporaries go up, T15 & T16, in 1946. [Series 9/3, Temporary Buildings, jf-62]

Fig. 2.The temporaries come down, T17, in 1962. [Series 9/3 Temporary Buildings, ns-3040]

The temporary buildings were barracks and offices transported from U. S. army bases, principally Camp McCoy to be erected on the University campus in the summer of 1947. Twenty seven temporaries were built in clumps scattered around campus. They were demolished as new permanent buildings took their places. A few "temporaries" still survive, mostly on the engineering campus.

The largest enrollment increase in the history of the University came in 1946, when fueled by the influx of returning WW II veterans, the number of students attending the Madison campus in the spring semester of 1946 was 99 per cent higher than the previous year, and 25 percent higher than the previous record high.[1] This meant that 12,400 students attended the Madison campus that semester. In the face of this enormous rise in attendance, the regents instructed the steering and master plan committee to report the best solution available to the problem of securing emergency and temporary classroom and office space.

In October of 1946 the regents hired architects Weiler and Strang to furnish services needed for the removal of twenty six government buildings from "Camp McCoy and other bases" and their re-erection on the Madison campus. These buildings which had been army barracks and office buildings, were declared government surplus, and offered to other government bodies free of charge. Wisconsin was the first University in the country to file a request with the Federal Works Agency for surplus army buildings.[2] The principal job of Weiler and Strang was to plan for foundations and the running of utility lines for the temporary buildings. The locations of the buildings were selected by the campus planning committee. This committee in the person of Mr. Leroy Luberg reported the selected locations to the regents in December of 1946.[3]

The locations are a good indication of the trends in enrollment of the new influx of students. By far the heaviest concentration of temporary buildings were on the west end of campus, in the areas

of the schools of engineering and agriculture. These areas got fourteen of the twenty six total temporary buildings. Other clumps were located more centrally behind Bascom Hall and at the corner of University and Park Streets. It is not surprising then that the first burst of permanent building after WW II consisted mainly of engineering and agricultural facilities.[4]

Foundations and utility construction began in early 1947. The buildings were erected in the summer and fall of 1947. By the beginning of the 1947 school year 120,000 square feet of temporary classrooms, labs and lecture halls were ready. Some of these buildings were very large: 50 by 200 feet. By spring 1948 the buildings were all complete. The total cost had been about $490,000. Students and staff alike complained that the buildings were drafty and cold, and a visual blot upon the beauty of the campus.

Even with their faults the temporaries were a lifesaver for the overstuffed campus. Particularly Engineering, Commerce and Chemistry could hardly have gone on without them. In addition, three of the temporaries at Breese Terrace and University were made into a student cafeteria to serve the increasing number of students at that end of the campus. The campus had become so large and classes so scattered that the traditional ten minute period between classes was extended to fifteen to allow enough travel time.

Within four years after they were erected, the temporaries began to disappear. As permanent buildings were constructed the temporaries began to be demolished. Among the first were T-20 in the way of the state diagnostic center, and T-8 through T-11 behind Bascom, torn down for the construction of the new Commerce building. In the early 1950s nearly every new building project involved the removal of some temporaries. By 1957 they had dwindled to seven. The Breese Terrace cafeteria burned in 1968. Because Union South was in the planning stage, this loss was not severe. Periodic exposes regarding the increasingly permanent temporaries appeared in the newspapers throughout the 1960s.

Still, a site with sidewalks, roads and utilities installed is not a thing to be lightly discarded, and some of them were not. T-16 in front of bacteriology housed the ROTC departments as late as 1968. A few more remain in use even today. T-21, the remains of the cafeteria damaged by fire, still house engineering student organizations at Breese Terrace and University as does T-23. The union food service uses T-22 as storage at the same site. T-24 just to the west of the mechanical engineering building has been resided, remodelled and connected to the mechanical engineering building; it is now called General Engineering, and is no longer temporary. T-26 has retained its original use as automotive research east of mining and metallurgy.

These buildings cannot, after nearly a half century of use, be regarded as temporary in any sense other than the geologic. There are long range plans for an Engineering Center at the Breese Terrace corner that will remove four of the remaining five temporaries. No one could have foreseen the huge expansion of the campus that caused the old army barracks to be needed by another group as fast as they were emptied. Ugly, cheap, and unloved, they helped the University survive a great crisis. Their ongoing utility has enabled them to survive the century in which they were built.

1) Kenneth Little: Report of the Registrar to the regents, May 4, 1946.
2) *Wisconsin Alumni Magazine*, December 1946 p. 9
3) *Regent's Minutes* December 14, 1946
4) The locations of the 26 buildings were: T1-T3 at NE corner of Park and University, T4-T6 at NW corner of Park and University, T7 behind Art Education, T8-T11 behind Bascom Hall, T12-T13 Charter and Linden, T14 north of Nurses dorm, T15-T16 Babcock and Linden, T20 east of Naval ROTC, T21-T24 Breese Terrace and University, T25 east of Mechanical Engineering, T26 south of Mining and Metallurgy.

INSTITUTE FOR ENZYME RESEARCH

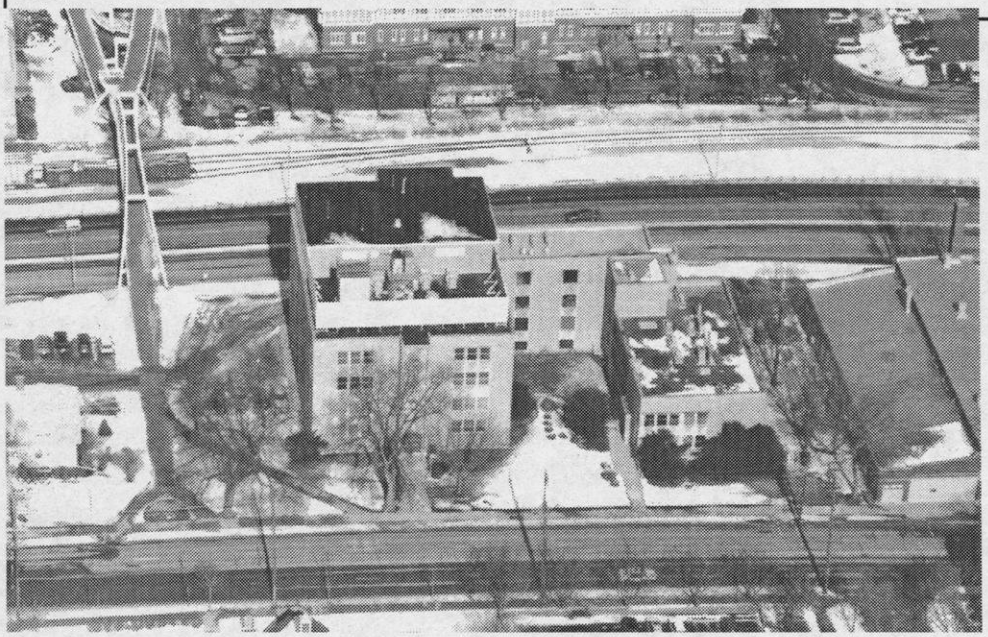


Fig. 1. The Enzyme Institute, 1997. The 1948 section is at the right, the 1959 at left, the connecting link was part of the 1959 addition. [Del Brown photo, AP-27]

The enzyme institute was founded in 1947 in the old WARF laboratories with the work of Dr. David E. Green. The current building was built in 1948, with additions in 1959 and 1968. It has housed such world renowned researchers as Conrad Elvehjem, David Green, and Nobel prize-winning Dr. Har Gobinder Khorana.

The germ of the idea for a world class research institute to investigate the fundamental chemistry of biological life, came in a letter to the Rockefeller Foundation, from Dr. C. G. King, biochemist, and discoverer of vitamin C. Dr. King set forth the opinion of leading biochemists and cancer researchers that a central institute for enzymology was needed to replace the great research centers in that field destroyed in Europe during WW II. Dr. King further suggested that the University of Wisconsin "seemed to offer the best promise for the development of such an institute, and I am sure that Dr. C. A. Elvehjem and Dr. Van Potter would be interested in such a project and could give it excellent supervision." This letter was written in October 1945. Dean Fred found university faculty enthusiastic about such an institute.[1]

After the Rockefeller Foundation asked for information concerning developments in the field of enzymology, Fred asked Conrad Elvehjem to prepare a statement. This statement, delivered on September 19, 1946, stated that Elvehjem and Dr. Van Potter discussed in late 1945 the need for an institute for the post-doctorate training in enzymology. They believed that Wisconsin was a logical site for the foundation. The committee recommended that a dedicated building be erected along Henry Mall, in order to make it central to the schools of medicine and agriculture with which it would be most closely allied. They estimated costs at $500,000-$750,000 for the building, and an annual budget of $200,000 for six teams of researchers.[2]

To staff the institute, Dr. Potter began to woo Dr. David E. Green of Columbia University. Green, who had been at Cambridge and Harvard, had recently organized the enzyme research facility at Columbia, and was a world recognized researcher in the field. To house Dr. Green's

work until the new building was ready, space was provided in the old Wisconsin Alumni Foundation (WARF) laboratories. Green began his work in the old labs in June 1947.[3]

In July of 1947, President Fred appealed to WARF. Fred estimated that the scaled down, and relocated enzyme institute would cost $250,000-$300,000. He asked WARF to lend money on the same terms as for the biochemistry addition. On July 18, 1947, the WARF trustees voted to approve a loan not to exceed $300,000 for the enzyme building.[4]

Plans proceeded through late 1947 and early 1948. Architect Lewis Siberz had final plans drawn by March 1948. The regents executive committee approved the awarding of contracts for the building. The general contractor was George Nelson and Son of Madison for $187,397. Total contracts were for $350,000. In late 1947 the site for the building had been moved from the Henry Mall site to a parcel west of the naval ROTC building on University Avenue. This .2 acre parcel had been donated to the university by WARF in August 1946. Some of the Henry mall site was privately owned, and it was already intended as the location for the state hygiene lab; making the enzyme institute part of the hygiene lab was discussed but judged too difficult and disruptive.[5]

Ground was broken in the summer of 1948. The laboratory was opened on November 1, 1949. The building was a 90' X 50' three story brick building. The main entrance was on the west side of the first floor. Heat was brought from a new boiler installation in the naval ROTC building. The first occupants were the research teams of David Green and Henry A. Lardy. This gave the new institute two of the top enzyme researchers in the world. In April 1948, the Rockefeller Foundation granted the university $100,000 to help equip the new institute. For almost ten years the institute's work went forward under these two team leaders, then as the work progressed they decided to add more teams.

In 1957, after WARF made a grant of $300,000 for additional space at the enzyme institute, the regents voted to apply to the federal National Institute of Health (NIH) for a matching grant for construction and equipage of an addition to the enzyme institute estimated to cost $600,000. By April 1958, the NIH had granted the request for matching funds. The regents approved the plans for the addition in August 1958. The plans were done by Siberz-Purcell-Cuthbert of Madison, and consisted of a two story brick and stone trimmed addition on the west side of the existing lab, with a two story connecting link between the old and new section; the front entrance was moved to the west wing. Ground breaking was July 10, 1959. The total space in the institute was more than doubled at a cost of $600,000. The institute now added three new research teams. The new teams were headed by Drs. H. G. Khorana, Helmut Beinert, and Louis Gosting.[6]

This space was sufficient for about another decade. In 1968, Dr. Khorana became the university's second (to Joshua Lederberg) Nobel prize winner for his work in gene synthesis. Planning had already begun for more space when the prize was awarded. After a series of meetings with the team leaders and campus planners, it was decided to expand the facilities by adding three floors to the west wing and connecting link. These plans were done in 1967 by Ames-Torkelson of Madison. When finished the facility comprised more than 65,000 square feet. The cost of the addition was $1.7 million. Dr. Khorana left the university in 1970.

1) Memorandum concerning the development of the Enzyme Institute, E. B. Fred to the regents, April 17, 1948. *Wisconsin State Journal*, December 1, 1968.

2) Memorandum concerning the development of the Enzyme Institute, E. B. Fred to the regents, April 17, 1948; *UW Staff News*, July 1949; *Wisconsin State Journal*, April 17, 1948;

4) Fred to Haight, July 16, 1947; *Kenosha News*, August 18, 1947;

5) A. W. Peterson to Fred, July 25, 1947, *Executive Committee minutes*, May 6, 1948; Regent's Minutes, May 28, 1948; *Wisconsin Alumni Magazine*, December 1947 p. 5, December 1948, p. 18, August 1948, p. 7, October 1949 p. 5; December 1949, p. 6,

6) *Regents Minutes*, July 13, 1957, March 15, 1958, June 9, 1959; *Daily Cardinal*, July 16, 1959; *Executive Committee minutes*, July 11, 1958;

PRIMATE ANNEX

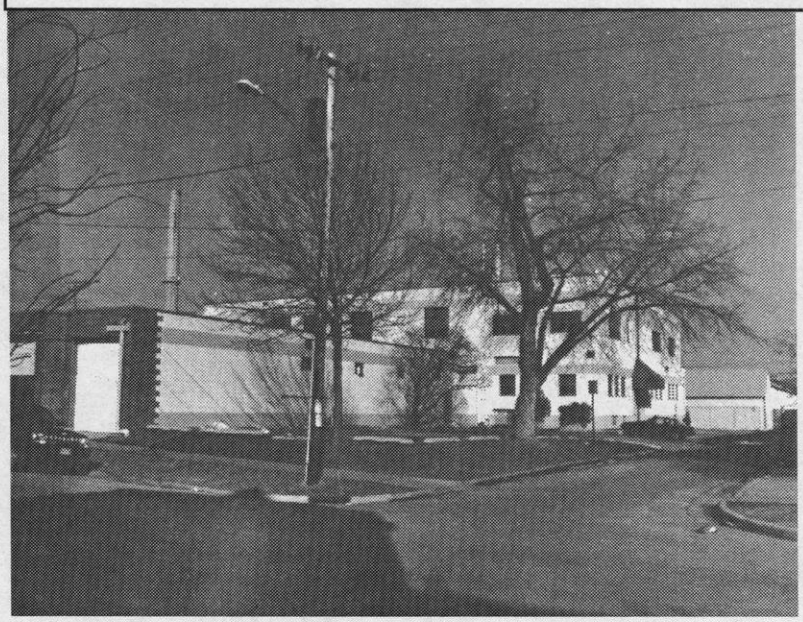


Fig. 1. The Primate Annex, 1994. The Orchard Street section is at the left, and the camera is looking down Capitol Court. [Author Photo, AP-28]

Built as commercial warehouse space in the 1940s, the primate center first rented space here in the 1970s. The buildings were purchased by the University in 1986. Major remodellings took place in 1988 and 1993.

The federally funded Primate Center was too small almost as soon as it opened in the spring of 1964. Its mission—to provide research space to scientists from other academic disciplines and from other institutions in the Midwest—required more space. As early as 1966 Dr. Harry Harlow began planning an expansion of the center building to the north to cross Capitol Court.

The property on the north side of Capitol Court was occupied by a pair of buildings owned by Edward and Charles Carpenter, who had built a warehouse at 1220 Capitol Court in about 1947 and rented it to a series of businesses. The primary resident of the building was the Wisconsin State Selective Service Office, who arrived in 1947. The Moser Paper Company began to rent part of the space in the 1960s. The location was profitable enough that the Carpenters built another building on the property in 1954 that faced on Orchard Street. This building was rented by a series of aluminum window manufacturers and Madison Casket Wholesalers.[1]

In 1971 the Primate Center began to lease parts of the buildings as an alternative to expanding the center. Through the 1970s the Center leased increasing amounts of the Carpenter's buildings, and by 1984 the Center occupied more than half of the Capitol Court building, sharing the rest with Moser Paper. In 1983 after eleven years of occupancy, discussions began to purchase the building. Besides the money lost by the University in leasing rather than owning building space, Federal grant money, the lifeblood of the Primate Center, forbade the expenditure of grant funds on leased facilities. Another serious consideration was that international concerns for the care and feeding of primates periodically threatened to cut off the supply of experimental animals. The Federal Primate program encouraged its regional centers to develop breeding programs. For all these reasons the University placed the acquisition of the Capitol Court property on the priority building list for the 1981-83 biennium, but because of budget considerations was deferred until the 1985-87 biennium.[2]

Fig. 2. This picture was taken in August 1970 just after the firebombing of the primate center. The camera was looking west on Capitol Court (the opposite direction as Fig. 1). The Wisconsin Selective Service Building, the target of the firebomb is at the right, under the fire-escape. The Primate Center is just out of the picture at the left. The group of soldiers is standing at Capitol Court and Orchard Street. [Photo courtesy of Helen Le Roy]

In March 1985 the state building commission agreed to allow the University to sell their unused property at 1954 East Washington Street, to raise money for the purchase of the Primate Center project. In August 1985 Dr. Robert Goy, the director of the Primate Center was informed that the Center had been awarded a Federal grant of $350,000 for remodelling purposes with another $100,000 per year available, which had to be committed prior to April 1986. This meant that if the buildings were not acquired by that time the grant money would be forfeited. Because the East Washington Street property was not yet sold, the regents received permission from the state to borrow money to buy the Capitol Court property remodel it with federal grant funds, and pay off the loan with the proceeds from the eventual sale of the Washington Street property. Negotiations with the Carpenters proceeded and on September 23, 1985 an agreement was reached that the properties (including both buildings) were sold to the University for $510,000. Final date of possession was January 11, 1986.[3]

There were two major buildings on the property. The main one, at 1220 Capitol Court was an 85 by 114 foot warehouse of a basement and two stories of reinforced concrete and concrete block walls. The second, at 33-35 North Orchard Street was a one story brick and glass commercial building. By March 1986, architects Tavarez and Associates had developed a plan in five phases to be constructed as grant money became available. By October 1986 another $780,000 in federal grant money was received, and phases I-III were combined into the first phase. This work, by J. H. Findorff (for $454,750) was finished by early 1988 and principally involved the basement area for animal housing, and the entire building's HVAC system. Total phase I cost was $1.13 million.[4]

Late in 1988 the Primate Center requested permission to finish remodelling the buildings with more federal grant money. This phase developed the first and second floor of the warehouse building into offices, a small animal complex, storage and laboratories. This construction also made convenient and permanent the connection between the warehouse building (Capitol Court side) and the shop building (Orchard Street side). The exterior was remodelled at this time also. This work was approved by the state in July 1990. As more grant money arrived the budget for the work was revised upwards to a final total of $1.67 million. Governor Thompson spoke at the dedication on May 6, 1993. The shop building remains substantially as it was originally built.

As of the spring of 1995 plans are well advanced to provide more space for the Primate Center, by purchasing the building between the Capitol Court building and Charter Street, and erecting a new multistory building in that area.

1) Madison city directories, Dane county register of deeds.
2) *Regent's Minutes*, March 11, 1983, February 11, 1985, September 6, 1985.
3) *Regent's Minutes*, September 6, 1985, Regent's legal papers, in regent's vault, "Carpenter" file.
4) plans in plans room of physical plant. *Regent's Minutes*, October 10, 1986, February 5, 1988, March 6, 1992, June 7, 1991.

ENGINEERING BUILDING

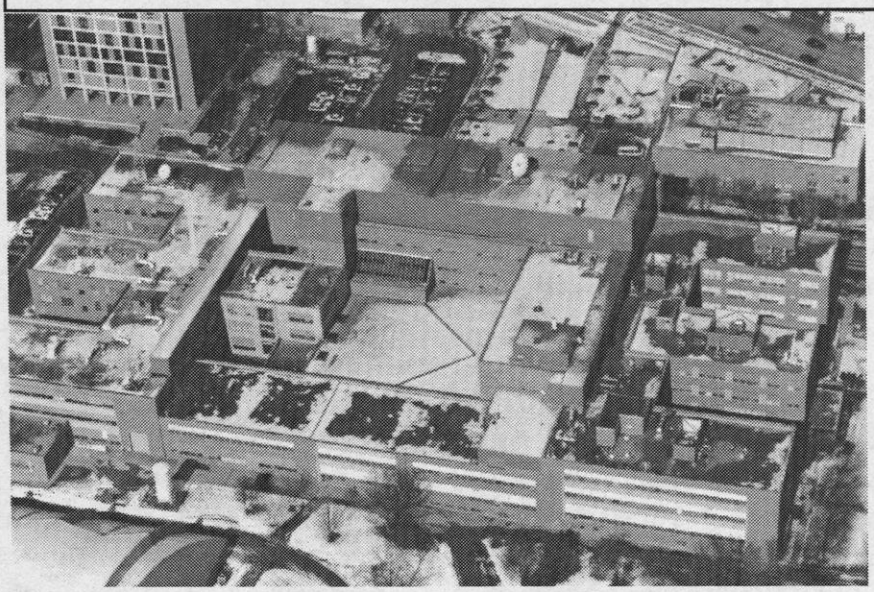


Fig. 1. The Engineering Building after the completion of the Engineering Hall addition. [Del Brown photo AP-80]

The engineering building was erected in several sections, with the first part built in 1948. Additions were built in 1952, 1962 and 1993.

The convergence of powerful forces produced the engineering building in 1948. First, the enrollment in the university had reached 18,669 compared to 10,001 in 1930, the date of the last permanent engineering construction. Secondly, an increasing proportion of the students wanted to be engineers. Engineering enrollment went from 400 in 1900 when the Bascom Hill engineering building was built, to 3400 in 1946. Even with the erection and occupation of several temporary buildings in 1946, to call the engineering facilities in 1948 overtaxed is being charitable.[1]

The 1945 state legislature appropriated $8 million of the $12 million requested by the regents for postwar University construction. The regents formulated a priority list. At or near the top of this list were a new library, an engineering building, a dairy building, and short-course dormitories. Nearly everyone agreed that of these projects the most pressing was the library. It was initially believed that the $8 million would build the library and engineering building. In order to give no one, especially the legislature, the idea that the money was not needed, President E. B. Fred was insistent about beginning to spend the construction appropriation immediately. With this intent, the building program could not begin with the library because final plans were not finished. On the other hand, plans for the engineering building were well advanced. Engineering Dean Withey proselytized everywhere, giving speeches to engineering groups, interviews to magazines and newspapers. Industry was told that a steady supply of engineering graduates would be good not only for their businesses but for the country, and for the University, since new facilities for engineering would release much classroom space needed by other departments. The need for new engineering facilities and plans therefore were well established by the time funds became available.[2]

The plans were the result of a planning group that began meeting in March 1945 as a subcommittee of the campus planning commission. Two major issues were decided by this committee. First, in December 1945 the site of the building was changed from the initially proposed University Avenue site to the "area adjacent to Randall Avenue, between Johnson and Dayton Streets extended". Second

Fig. 2. Construction on west wing October 1949. [Series 9/6, Engineering Bldg, x25-2499]

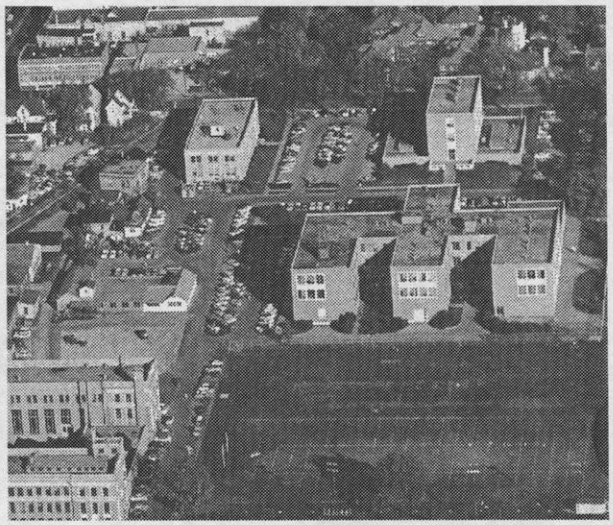


Fig. 3. West wing and chemical engineering section (unit #2) complete, c. 1955. [Series 8/6, jf-64]

they decided whether engineering should be accommodated in several small buildings or whether all departments could be assigned space in a single large building. As the realities of postwar building (which favored maximizing area under one roof) conditions became clearer, the proponents of the separate building scheme began to drop out of the committee, rather than have their name connected with the radical single building idea. On October 30, 1947, all the members who had not resigned in protest voted to develop the single building plan submitted to the committee by the architectural firm of Foeller, Schober, Berners, Safford and Jahn of Green Bay. These plans called for two huge 'E' shaped wings connected by a one story section (see Fig. 4). These plans were passed through the chain of committees and were approved by the regents on November 15, 1947. Unfortunately so much time had passed since initial estimates had been made that building costs had risen extremely sharply, driven between the twin prongs of labor costs and material shortages, and there was no way for the University to build all the postwar top-priority buildings. The committee decided to build only the west 'E' shaped wing, to house electrical engineering and mechanics the first unit of the building, and that the balance of the building would be completed as soon as state funds became available. On January 15, 1948 the committee proceeded with the west third of the building.[3]

On December 11, 1948 the contracts, for the construction of the west wing of Engineering, were approved by the regents, General contractor was the George Fuller Company of Chicago, for $1,947,580. Total contracts let amounted to $2.55 million. Within days ground was broken by regent Frank Sensebrenner and President E. B. Fred. Thirty trailers of the Camp Randall trailer park had to be removed. The cornerstone ceremony was held June 18, 1949. It was planned that the engineers could move into the building in 1950, and begin using it for classes in the fall of 1950. Material shortages delayed the project about a year. Formal dedication took place on Engineer's Day, May 4, 1951, and the building went into full use in the fall semester of 1951.[4]

It was not however large enough. The diplomacy which led to the allocation of the available space in the new building did not hold even as long as it took to finish the west wing. The plight of chemical engineering was arguably as bad or worse than that of electrical or mechanics, and department chairman O. A. Hougen did so argue. In memos to Dean Withey, President Fred and the regents Hougen reiterated the desperate crowding, lack of suitable labs for graduate and faculty research work, and especially the "powder-keg" safety problems. There was a threat that the department might lose its accreditation without new facilities. By April 1950, the regents had approved plans, by Foeller

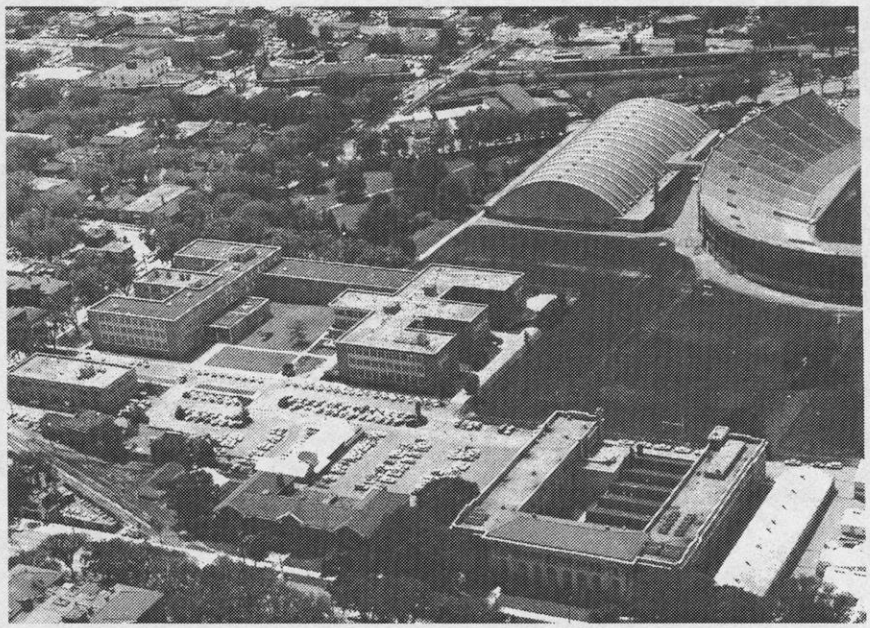


Fig. 4. Engineering c. 1965. East and west wings complete. This is the completion of the original design for the building. Mechanical engineering, and old forest products lab are in the foreground, Camp Randall stadium in the background. [Series 8/6, jf-63]

et. al, for the center arm of the east 'E' (see Fig. 3). Funding was from the surplus in the west wing fund and a loan from WARF to the WUBC. After the first round of bids came in, the regents upped the amount of the WARF loan to $500,000 for a total of $885,000. In March of 1951, the regents signed contracts worth $885,000 for the construction of chemical engineering section. The general contractor was Harold Purtell Company of St. Paul, for $449,000. Construction on the 50 foot by 100 foot basement and three story building was started in the spring of 1951 and finished about a year later. The engineering building now had the configuration shown in Fig. 3.[5]

Throughout the 1950s the departments of civil engineering and engineering drawing had remained in the temporary buildings erected in the post war era. Finally in 1962 the regents authorized a $2.9 million dollar project to complete the east wing of the building, with a portion of the funding coming from the Nation Institute of Health and the National Science Foundation. The general contractor was the Vogel Brothers Building Company for $1.27 million. Construction was begun in June 1962 and was dedicated on April 30, 1964. After this phase the building was as shown in Fig. 4. The architects for this section were still the original Foeller et. al. After this project most departments abandoned the temporary buildings.[6]

In 1990 the need for more office space and the long term lack of quality lecture halls in the building led to the construction of yet another section. This time the center court was filled in. Architects Bowen, Williamson and Zimmerman with Foeller et al. designed the $26 million dollar addition and remodelling. The general contractor was Kraemer Brothers for $8.135 million. This final section of the engineering building (see Fig. 1) was finished in mid 1993.[7]

1) *The Wisconsin Engineer*, Dean M. O. Withey December 1946, May 1941 p. 4, October 1948, p. 6; *Wisconsin State Journal*, December 17 and 18, 1944; *Milwaukee Sentinel*, March 24, 1947; *Wisconsin Alumni Magazine*, March 1947, p. 10, July 1949 p. 32, February 1951 p. 26; Building needs of the College of Engineering, series 24/1/10 box 2.
2) E. B. Fred, Address to the faculty, October 4, 1948; Regent's Minutes, October 28, 1944 series 4/16/5 box 5;
3) Withey and Kurt Wendt *Memorandum on the steps which led to the Engineering Building*, series 8/1/16 box 16.
4) *Wisconsin Alumni Magazine*, June 1951, p. 18. Jon M. Harkness; *Electrical Engineering at the University of Wisconsin*, 1991 p. 68. Regent's Minutes, December 11, 1948; Capital Times November 27, 1948;
5) Peterson to Fred, August 30, 1950, series 4/0/3 box 182; *Regent's Minutes*, April 15, 1950, June 15, 1950; *Executive Committee minutes*, March 7, 1951;
6) *Regent's Minutes*, April 6, 1962 exhibit G, February 9, 1962; *Wisconsin State Journal*, June 26, 1962; *Wisconsin Alumni Magazine,* November 1962; Daily Cardinal, April 30, 1964.
7) *Regent's Minutes*, September 8, 1989, December 10, 1993; *State Budget Letters*, dated February 14, 1991.

BABCOCK HALL

Fig. 1. Babcock Hall after the 1990 addition. [Del Brown photo, AP-81]

Babcock Hall was built in 1951 to replace the outmoded Hiram Smith Hall as the home of the dairy department. It contains instructional space and an entire working dairy plant. Babcock Hall was substantially enlarged in 1990.

As dairy Professor Howard C. Jackson was fond of pointing out in the 1940s, there was a time when the University of Wisconsin had the finest dairy building in the world. But that time was 1893, when Hiram Smith Hall was built. By 1945, Smith Hall was completely inadequate to its task. The first difficulty was that it was too small. In a state that led the world in production of Swiss cheese, the state university had no room for a Swiss cheese facility. Second and worse, Smith Hall was nearly impossible to keep clean, its wood floors, plaster walls and wood furnishings simply could not be sterilized to the standards of a modern dairy operation. The depression and cessation of construction in the 1930s meant that the dairy department just did the best they could with the embarrassingly antiquated facilities they had. However the department, especially Professor Jackson kept planning for the day when a new structure could be built. This vision and persistence was rewarded in 1945, when the state legislature, who had been kept continually aware of the disservice to the state's dairy farmers, appropriated $8 million for postwar University construction. Significantly the only restriction the legislature put on the appropriation was that $600,000 was for a dairy building. Professor Jackson who appears to have been principally responsible for the building planning, selected Milwaukee architects Grassold and Johnson to develop plans. By January 1948, their plans for the dairy building had been approved.[1]

At that time the project was still constrained by the $600,000 appropriation. In August of 1948, the state architect told the University's Albert Gallistel that he had asked Grassold and Johnson about the estimated cost, and received the reply of $2.1 million, "this cost information is distressing". The grim realities of the postwar building business were sinking in. The $600,000 that had seemed so generous only four years earlier seemed like a sarcasm now. During 1949, the dairy department discussed with the architects, the possibility of erecting only a part of the building. The 'T' shaped

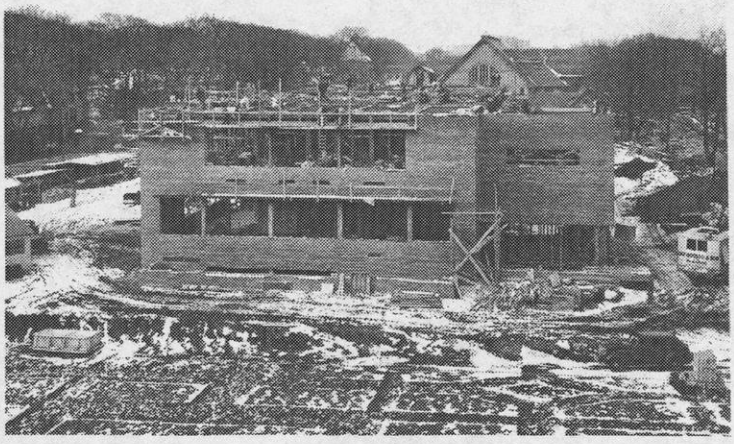


Fig. 2. Winter 1950, Babcock Hall under construction, Stock Pavilion and horse barn in background. Series 9/3, Babcock, ns 556]

design with its relatively discrete functions between classroom (stem) and manufacturing (crossbar) sections made this a reasonable approach. The $600,000 was not even enough to build half the planned structure. They also revised the plans with an eye to reducing cost.[2]

Bids received by the regents in February 1949 showed that, even after cost reductions, the "distressing" estimates had been surprisingly accurate, the building would cost about $2.4 million. Labor costs, which were being negotiated by the American Federation of Labor were in such flux that the regents asked bidders to extend the bids' validity until May 1, 1949 instead of March 8. The need for a new dairy building was so acute that on April 18, 1949, governor Oscar Rennebohm (who was generally opposed to building during times when prices were so high) agreed to release $2.4 million from the 1945 postwar building fund for the Dairy Building. The regents awarded contracts a week later, the general construction contract went to J. H. Findorff & Son for $1.2 million. Total construction contracts (exclusive of equipment) let were for $1.897 million. The specialized equipment for the building cost another $200,000.[3]

Groundbreaking took place in mid May 1949, and construction proceeded throughout the rest of 1949, with the cornerstone ceremony in the fall. It had already been decided, by the faculty of the College of Agriculture, to name the building after the inventor of the first reliable butterfat content milk test, Stephen Moulton Babcock (1843-1931). The building went into use in the fall of 1951, when the dairy department moved out of Hiram Smith Hall to the new Babcock Hall. The legislature toured the new building on March 15, 1951.[4]

The official dedication ceremony was held February 7, 1952. The ceremony included hymns by the University choir, the presentation of the building by Governor Walter J. Kohler. More than 3000 people visited the building during the ensuing open house. After many years of neglect, the University again had the finest dairy building in the world. It must also be mentioned that the Agricultural Journalism, the new occupants of Smith Hall, got a wonderful facility also since their requirement for sterile conditions were less stringent.

The building was two stories over a basement of steel reinforced concrete with a flat roof, sheathed in red brick. Because of the terrain, the basement was not exactly below grade, and was referred to as the ground floor. The style was the new (in 1950) International style, the glass block windows, aluminum window and door frames, and general streamlined look, point to the new architecture that would replace the old predominantly Renaissance revival style used on campus. In the ground floor were many large and well equipped labs and storage for the industrial wing. The first

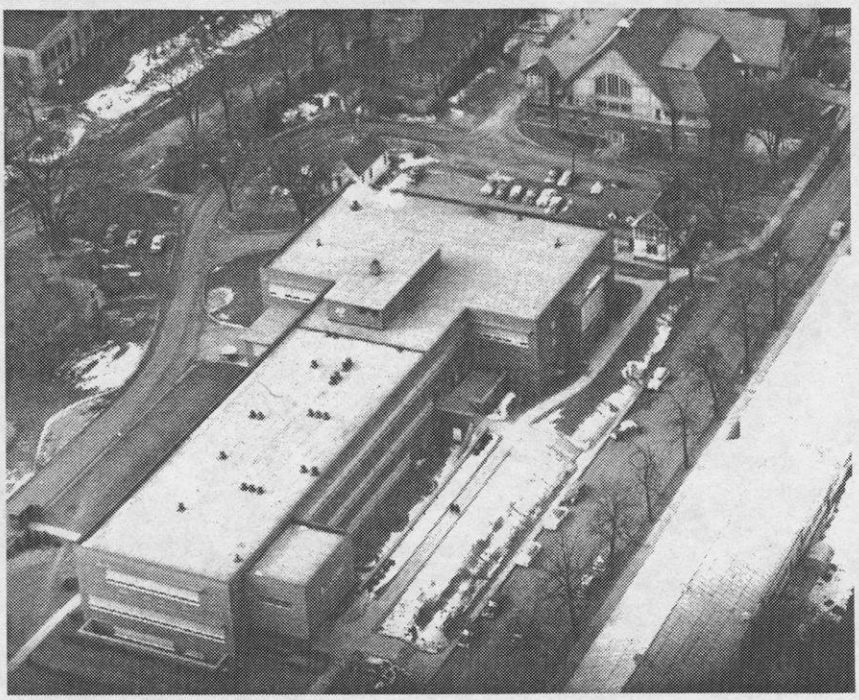


Fig. 3. Air view of Babcock Hall as completed in 1952. [Series 8/5, jf-65]

floor of the stem of the 'T' contained offices and class rooms, including a large lecture hall with a capacity of 275. The second floor was used for more lab space especially for advanced and research labs. The poured concrete floors throughout were covered with ceramic tile as were the walls to a height of five feet. This use of tile was the direct result of the old difficulty of sterilizing the old dairy building.[5]

The industrial portion of Babcock, in the top of the 'T' carries the tiling feature to an extreme, with tile carried clear to the two story ceilings. This industrial section was intended to be a complete commercial dairy operation to give practical instruction in dairy industry manufacturing and marketing. An aspect of this instruction, deeply imbedded in the affections of Madisonians and UW graduates everywhere is the production of tremendously high quality ice cream. This famous Babcock ice cream is sold in serving or bulk quantity at a small store section in the first floor of the west section. An entertaining feature of Babcock is the public observation deck on the second floor of the industrial wing. Visitors can watch the actual work of the dairy in operation, hours are typically 6 AM to noon.

In the late 1980s the food science facilities in Babcock Hall became inadequate and an addition for more lab space was planned. The regents approved the $6 million dollar project in October 1988. The job was begun in March 1990, and completed in October 1992. This addition filled in the open area of the 'T' along Linden Drive, and brought Babcock Hall to its 1994 configuration.[6]

1) *Regents Minutes*, December 11, 1949; Dedication speech by John Jones, February 7, 1952, archives Babcock Hall subject file. *Wisconsin Country Magazine*, March 1950.

2) Kirchhoff to Gallistel, August 30, 1948, series 24/1/1 box 255; This (designing buildings to be built in sections) was a trick that was contemplated for many of the high priority buildings in the 1950s including the engineering building, the dairy building, and the library. It was a legacy of the state ignoring the estimates of the University of a $12 million need in 1945. The buildings were sorely needed, but the money was insufficient. *Wisconsin Country Magazine*, March 1950.

3) Peterson to Halbert, April 23, 1949. series 24/1/1 box 255.

4) Froker to Fred, December 23, 1948. series 24/1/1 box 255.

5) *Wisconsin Alumni Magazine*, November 1951; Acceptance speech, by John Jones, February 7, 1952, and dedication pamphlet, archives Babcock Hall subject file;

6) *Regent's Minutes*, March 6, 1987, October 7, 1988; State Budget Letters, dated March 1990 and October 1992.

SHORT COURSE DORMS

Fig. 1. Short course dorms from south west. c. 1950. [Series 9/3, Short Course Dorms, ns-1723]

Fig. 2. Construction of short course dorms, April, 1949. [Series 9/3, Short Course Dorms, ns-1724]

The short course dorms rectified a serious lack of housing for the agricultural short course students. Built in 1949, they were the first permanent building erected with state funds since 1931. In 1960 the two dorms were named for two agricultural professor, Byron Jorns and George Humphrey.

By 1940 the agricultural short course facilities had become quite an embarrassment to the university. Since 1932 the students in the oldest university short course in the nation, were housed in a remodelled sheep barn, fed and instructed in WW I barracks salvaged from camp Randall. In the winter of 1940 and the spring of 1941, agriculture dean Christensen began planning for the construction of short course buildings. Christensen and state architect Roger Kirchhoff developed several plans, some of which were quite elaborate. They included two dormitories, and a central building containing a commons, a lecture hall for 950 seats, lobbies and lounges. This complex of three buildings was intended to occupy the site at Babcock Drive and Linden Drive (the current site of Russell labs).

To support these plans the regents included the short course buildings in their high priority list to the legislature of 1941. In notes prepared for the legislature, regent Cleary refers to the short course buildings: "...too small and wholly unfit for their purpose ... located less than twenty feet from a slaughter house ... These buildings were cheaply constructed when built and any expenditure on them at present would be a waste of money. They are dangerous fire traps and the boys are packed in double bunks with no modern facilities ... The place is too small to hold all the boys and a sad picture to present to visiting business men. The enrollment has increased in these short courses from 148 in 1931-32 to 440 in 1940-41." On July 1, 1941 the legislature appropriated $200,000 for the construction and equipment of a short course agricultural student's dormitory. This amount was that estimated by Mr. Kirchhoff in January 1941, using the 1938 Kronshage dormitory costs. This estimate would cause trouble later. Plans were completed in 1941, but war time restrictions on building made the construction impossible at that time. During the following four years the regents continued to con-

sider plans for the project. The scope of the project was reduced from a cluster of buildings to two dormitories. In December 1945, they approved the new site near the president's residence, 10 North Babcock. In 1945 the legislature earmarked $7.4 million for postwar construction. The regents allocated $150,000 from this fund to the short course project, bringing the total financing available to $350,000. In August 1946 the regents authorized the state offices to draw up plans and advertise for bids. A month later on September 14, 1946, the regents approved two Kronshage type dormitories. At the same time the regents allotted another $100,000 from the post war funds to the project. In January 1947, the regents advertised for bids. When these bids were opened in February, the dismay was severe. The lowest bids exceeded estimates by 308%! All bids were rejected. The principle problem was that architect Kirchhoff's nine year old estimate had given the regents a false sense of current building costs in the post war world.[1]

The regents believed that the bids were not realistic and that building costs would soon drop, so they allowed the January bids to expire. During the rest of 1947 the regents repeatedly called for bids which continued to rise. By July 1947, it was clear that because of costs and other commitments, the state was not going to release their $260,000 share of the project's cost. The old frame buildings still in use had been condemned in 1942, causing the enrollment in the short course to be capped, at a level considered safe for the old fire traps.

On December 11, 1948, the regents faced the reality of the new costs of building and asked the governor to release $339,465 from the post war appropriation for the short course dorms. The general construction contract was awarded to J. H. Findorff & Son for $338,833. Utilities and sub-contracts brought the total to $539,465. Ground was broken in March of 1949, with the goal of completion by fall 1949. This goal was met. This was the first new building since 1930 to be built with a state appropriation. As designed by state architect Roger Kirchhoff, the dorms were structurally identical to the Kronshage dorms. They were three story and basement fireproof buildings. Each building contained forty rooms, intended for three students each, provided housing for 240 students, and contained lounges, and recreational facilities in the basements. Since the dorms contained no dining facilities, the students at the short course dorms were boarded at the Van Hise refectory, and later at the Breese Terrace cafeteria, and later still at Holt commons. The exterior sheathing was lannon stone instead of the depleted Madison sandstone rubble used on the Kronshage dorms. The old sheep barn and barracks were still used to house overflow students.[2]

In 1941 the regents had passed a motion to name the short course buildings after W. A. Henry the first dean of agriculture and founder of the short course. But in December of 1960, president Elvehjem recommended and the regents approved, that Unit A, be named George Colvin Humphrey Hall, and unit B, be named Byron Charles Jorns Hall. Humphrey was chairman of animal husbandry for thirty five years (1903-1942), and died in 1947, during the planning for the dorms. Jorns was a professor of agriculture Journalism (1935-1958) and a noted watercolor artist. Both were closely identified with short course student welfare and progress.[3]

The dorms still [1994] house the agriculture short course students from November to March, and serve as temporary housing for short term visitors to the campus, visiting professors, athletes etc.

1) *Regent's Minutes*, December 1, 1945, January 19, 1946, September 14, 1946, January 17, 1947, February 15, 1947, June 25, 1947; Laws of Wisconsin 1941 chapter 49 203-s; M. J. Cleary, notes on Bill 555A. Regent's meeting papers, May 1941; Halverson to Peterson, June 28, 1941, series 24/1/10 box 2.

2) *Regent's Minutes,* December 11, 1948; *Wisconsin Alumni Magazine*, March, 1949, p. 7, October 1949, p. 5; Plans in plans room of University physical plant.

3) *Regent's Minutes*, December 6, 1941, December 9, 1960; archives biographical files "Jorns, Byron" and "Humphrey, George".

BARLEY AND MALT LAB

Fig. 1. The Barley and Malt Laboratory from Walnut Street, c. 1960. [series 9/3, Barley and Malt Lab, ns-569]

The federal Research and Marketing Act of 1946 provides for research on utilization and development of "present, new and extended uses of agricultural commodities and products." This act led in the spring of 1948 to an agreement between the federal government, in the form of the Agricultural Research Administration, and the regents of the University. They agreed that the government would establish at the University the national Barley and Malt Laboratory. Under the agreements, the University would supply land, security, maintenance, and utility connections to the lab. The government would construct and equip the building, and staff the lab.

The regents sold to the government a .72 acre parcel of land on the east side of Walnut Street for $6000 in May 1948. The building was erected in the summer and fall of 1949. It's cost to the government was about $200,000. It was staffed by six researchers and six laboratory technicians. The cost to the University was about $9000 (of state funds) for utility hookups.

The building remains the property of the federal government and as such is not technically a part of the University physical plant.

MEMORIAL LIBRARY

Fig. 1. West front of Memorial Library, 1977. The modern interpretation of the classical style is evident in the symmetrical central bay with end sections, the column-like effect between banks of windows. Langdon Street is in foreground. [series 25/1 folder #2, x25-2862]

The University library, after a century in poor facilities, now has suitable quarters in Memorial library. Construction of Memorial library began in 1950. Major additions were erected in 1973 and 1988.

By the late 1940s the University's library was in miserable condition. It was sharing a building with the State Historical Society, in facilities that had not been expanded since 1914. A library that was designed for a student enrollment of 1,848 was in 1949 trying to serve 18,000. Professors were designing classes to avoid use of the library. Material was scattered around the campus, and was physically deteriorating, due to inadequate storage facilities. Quonset huts were used for reserved books and reading rooms. At a time when best practice suggested that a university library should be able to seat 20 per cent of the student body, Wisconsin could seat about 8 per cent. The 1949 Board of Visitors called the need for a library "overwhelmingly critical."[1]

In 1945 the legislature appropriated $8 million for university construction. Except for $600,000 specified for a dairy building, the appropriation was unassigned. Unfortunately, the plans for the new library, although begun in 1945 by state architect Roger Kirchhoff and the library construction committee, were not ready. This delay was apparently a combination of factors, but especially conditions in the state architect's office. The delay cost the library project its place at the head of the University's priority list, and the 1945 appropriation was largely spent on other projects, engineering and the dairy building, whose plans were finished. The state architect was responsible for selecting and overseeing a private architect for a state building project. In the case of the Memorial Library, Mr. Kirchhoff selected himself. He was relatively inexperienced in large building design, and slow by nature. He also had no staff to aid with the huge project. In 1949, Kirchhoff hired the Milwaukee firm of Phillips and Eble. They served mainly as a detail and drafting staff for Kirchhoff, although Richard Phillip was involved in the exterior design.[2]

The effort to obtain additional funding for a university library was begun in 1949 by President E. B. Fred. Fred lobbied intensely for the library before the governor, the legislature and the Joint Finance Committee. Governor Oscar Rennebohm's $25 million state construction project went

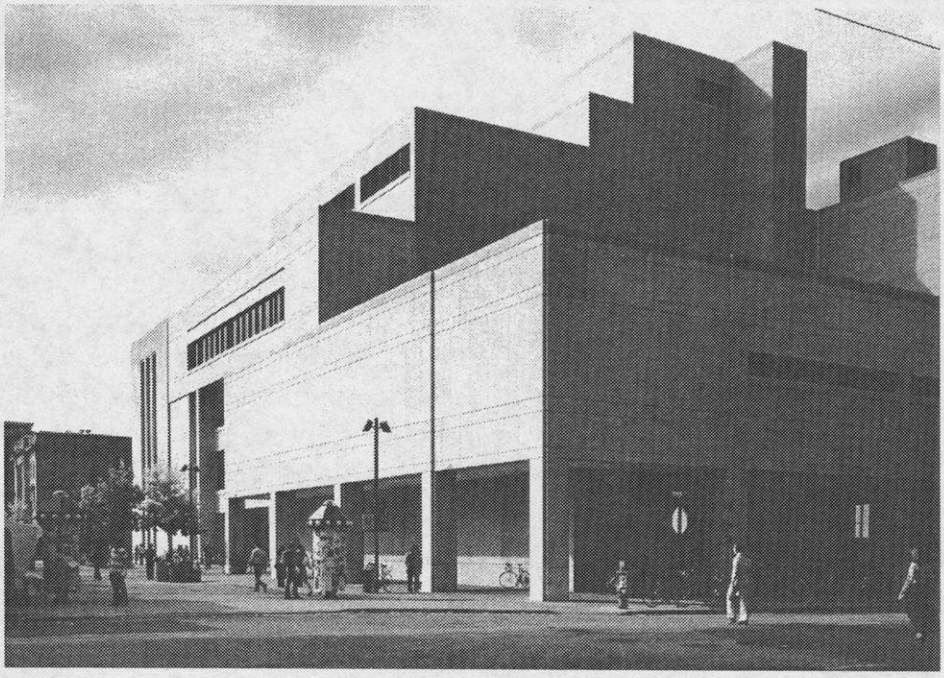


Fig. 2. 1977, the Memorial Library's 1974 addition, from corner of State and Lake Streets. [series 25/1 folder #2, jf-67]

through a series of political ups and downs during the summer of 1949, but with support from the governor, veteran's groups, a sympathetic press, and constant pressure from the University, the construction bill was signed into law by the governor on August 3, 1949. The bill included $5.9 million for the library. A senator told a Cardinal reporter "without President Fred, the library was a dead duck." Later Oscar Rennebohm said: "President Fred said that I was sympathetic. Well, when a man comes to see you every day, you either get tired or sympathetic."[3]

The money was now available, but plans still were not. The plans for the library were not completed until late 1949. The Library Building Committee gave final approval to the plans on December 7, 1949 and the regents followed suit in March 1950. Bids were received June 28, 1950; and contracts let July 15, 1950. The general construction contract went to the Gus Newberg Construction Company of Chicago for $2.28 million. Utilities were an additional $823,425. Contracts for bookstack construction, furniture and architectural fees were deferred pending alterations in the design. The regents were pleased that the bids were below appropriations.[4]

Groundbreaking took place on July 24, 1950, with speeches by E. B. Fred and governor Rennebohm. Hundreds of students and state citizens helped turn the first earth. The state's biggest building project since the state capitol building in 1917 was underway at last. The principal work done in the rest of 1950 was the completion of the enormous excavation. The building was intended to take between two and three years to build.[5]

Steel erection began in late 1950, and was halted in February 1951 due to steel shortages and delivery problems. By early March steel was again arriving and progress resumed. On March 16 1951, thirty tons of the temporarily riveted steel framework was struck by the boom of a crane and collapsed onto the ground. No one was injured but time was lost. The cornerstone ceremony was held on June 25, 1951. The governor's pen that signed the appropriation, and other curiosities were placed in the time capsule behind the cornerstone. Construction proceeded without more difficulty, the stonework on the exterior began to be placed the first week in May 1951. Furnishings and finishing took the winter of 1952 and spring of 1953.[6]

On July 27, 1953 the transfer of books from the old library in the historical library building began. The ceremonial first book was the rare Coverdale bible, and was carried by Professor Emeritus

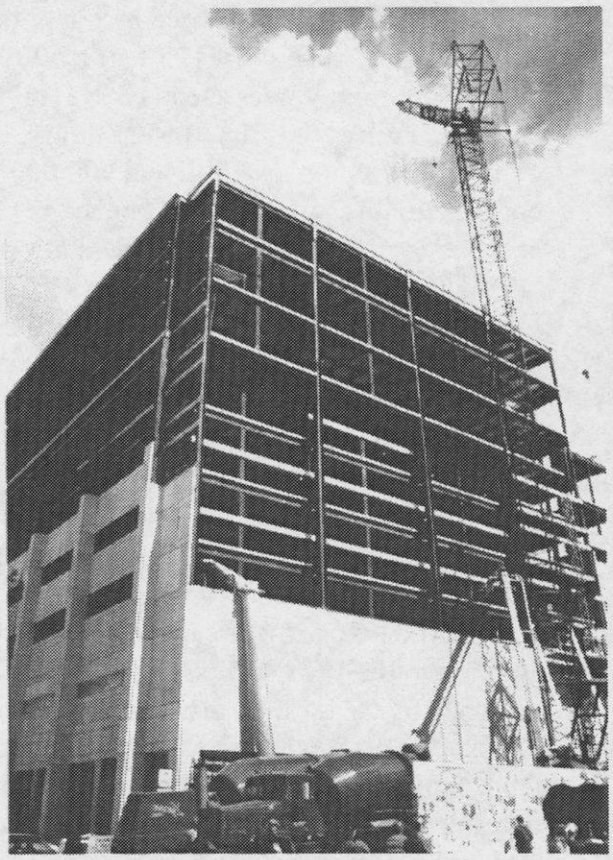


Fig. 3. Memorial Library, 1988 addition in progress, from Lake and State Streets.

L. C. Burke, who as a student in 1900 had carried the first book from the old Library building on Bascom Hill to the historical library building. Because of the old and unreliable elevators in the old building, an outside book elevator was erected on Park Street. The job of transferring 600,000 books to the new building, while keeping the library in operation took the rest of July and August. The first books were circulated from the new library in September 1953. The new library building was open to the student body in the fall semester of 1953. It was an 'L' shaped building with the long side (250 feet) along Langdon Street from Lake Street to the lower campus, and the shorter leg (230 feet) from Langdon to State Street. It was four full stories with a partial fifth floor, and eleven book-stack levels. The exterior was sheathed in Bedford limestone, except the "temporary" outer walls along Lake Street which were faced with brick. The main entrance was on the west side facing the old library building with other entrances on State and Langdon Streets. There was seating for 2,200 students in the enormous (40 by 240 feet) reading rooms, and space for 1.2 million books in the stacks. One hundred small faculty studies occupied the fifth floor. Three hundred fifty study carrels were placed in the stacks. A plaque dedicating the library to the men and women who served the armed forces in WW II, was placed in the main entrance. The official dedication of the library took place on February 1, 1953, in the memorial union theatre with a main address by alumnus Howard Mumford Jones.[7]

The new library, designed for a student body of 18,000 was a complete success for the university; by 1955 the use of the library had tripled from the old building. There were a few difficulties with the building, mostly related to insufficient air circulation and climate control. Kaplan blames these problems on the inexperience of architect Kirchhoff and the utilities designer Robert Hattis of Chicago. These problems were exacerbated by the use of incandescent lighting in a huge building without air conditioning. But the University was no longer in President Fred's words "trying to run an eighty cow farm with a twenty stall barn". This happy state of affairs would last about seven years.[8]

By 1960 the library that had been designed to serve 18,000 was at capacity. The library committee began to formulate plans for expansion, which would occupy the southeast part of the block the library was on. This would require removal of the three small brick buildings that housed the Kollege Klub, the University Book Store, and the WSA store. At the time of the initial planning in 1960, it was intended that the addition be ready by 1972. Although substantial branch libraries were planned for medicine, engineering, and Law, the Memorial Library would be unable to adequately serve the campus without more space. Two major causes of this need were an increased proportion of graduate students who needed fixed study space with book storage, and the unexpected increase in circulation in proportion to the rise in enrollment. The library was working better than had been expected. By 1965 the problems were getting severe. The library addition was placed on the construction priority list for the 1967-1969 biennium, at fifteenth place. On January 11, 1973 construc-

tion on the addition was begun by contractors J. P. Cullen and Sons of Janesville. The design, by John J. Flad, was a four story 125 foot by 200 foot section on the corner of State and Lake Streets. Cost was $4.7 million. It was sheathed in Bedford limestone to match the original building. Housed in the new space were the Mills Music Library, greatly expanded service areas, and four levels of bookstack, holding an additional 600,000 volumes. Scheduled for completion in 1975, the bulk of the construction was finished and opened in the fall of 1974. Much remodelling took place in the old building to improve service. This addition was designed so that it could be extended vertically at a later date.[9]

A dramatic change in library policy took place in 1970, when the stacks were opened to patrons. Previous to this time undergraduates and visitors, had to fill out a book request slip and a staff member retrieved the book from the stacks. After this change, the stacks were open to all patrons to locate their own books, or browse the collection. In May of 1979 a woman student was attacked with a fire axe in the library by a nonstudent. Although her injuries were not severe, this tragic event cause dramatic changes in the operation of the library. The building was closed to all but students, staff, and registered guests. Traffic was controlled by requiring all patrons to enter past a check point, and security was increased.[10]

The time for vertical expansion came in 1986 when the regents approved an eight story addition to the 1974 section to hold additional bookstacks, offices, and study areas. This project was designed by the Strang Partners of Madison, and cost $7.3 million. Work began in July 1988. In early November 1988, when the steel framework for the elevator was erected, complaints were heard that the height of the addition would block the view of the capitol from Bascom Hall. After a month of investigations and recriminations, construction was halted by Mayor Joseph Sensenbrenner. The regents explained that building code changes between 1986 and 1988 caused the increase in height. After investigating several options for changing the design, the regents decided to remove the top floor, and increase the capacity of the remaining bookstack space by installing electric compact shelving. This addition was completed and went into service in the fall of 1990. This work brought the Memorial Library to its current configuration.

1) Cronen and Jenkins, *The University of Wisconsin,* vol. III, p. 686-690;
2) The committee consisted of: M. R. Irwin, Ricardo Quintana, Mark Ingraham, Albert Gallistel, Gilbert Doane, Louis Kaplan and Roger Kirchhoff, Minutes of the campus planning commission, series 24/1/10 box 1; E. B. Fred, Address to the faculty, October 4, 1948; Regent's Minutes, October 28, 1944 series 4/16/5 box 5; Louis Kaplan, interview with author April 2, 1994; *Regent's Minutes*, January 31, 1948, October 16, 1948, April 23, 1949;
2) *Wisconsin Alumni Magazine*, October 1949 p. 4
3) *Daily Cardinal*, June 30, 1949, July 1, 1949, July 7, 1949, July 12, 1949, August 4, 1949, July 25, 1950; Oscar Rennebohm, The Library, A Living Memorial, an address at the dedication of the library.
4) Regent's Minutes, March 11, 1950, July 15, 1950; Daily Cardinal, July 18, 1950.
5) *Wisconsin State Journal*, December 1, 1988 p. 1; *The Capital Times*, July 25, 1950; *The Milwaukee Journal*, November 30, 1952. *Wisconsin Alumni Magazine*, October 1949, p. 4, April 1950 p. 29, October 1950, p. 22, December 1950 p. 12; *Daily Cardinal*, July 25, 1951.
6) *Wisconsin State Journal*, March 17, 1952; Wisconsin Alumni Magazine, May 1951, p. 16; Daily Cardinal, March 2, 1951, March 17, 1951, March 20, 1951, April 28, 1951, June 26, 1951.
7) *Wisconsin State Journal*, June 14, 1953; *Daily Cardinal*, July 24, 1953; *Wisconsin Alumni Magazine*, July 1953 p. 19; *Capital Times*, June 3, 1953, September 17, 1953; *Wisconsin State Employee*, September 1953 p. 11;
8) Wisconsin State Journal, January 23, 1955.
9) *Daily Cardinal*, April 28, 1965, October 4, 1960, July 28, 1967, January 19, 1973; March 5, 1965; *Regent's Minutes*, October 7, 1966; *Wisconsin State Journal*, June 12, 1968, April 17, 1971, January 11, 1973; *Badger Herald*, March 11-13, 1974;
10) *Daily Cardinal*, , May 4, 1979, May 7, 1979, May 9, 1979, July 27, 1979, August 14, 1979, Fall Registration issue, 1979;
11) *Regent's Minutes*, December 9, 1988; *Wisconsin State Journal*, November 11, 1988, November 17, 1988, December 1, 1988, December 10, 1988, December 3, 1988.

INTERNS' DORMITORY

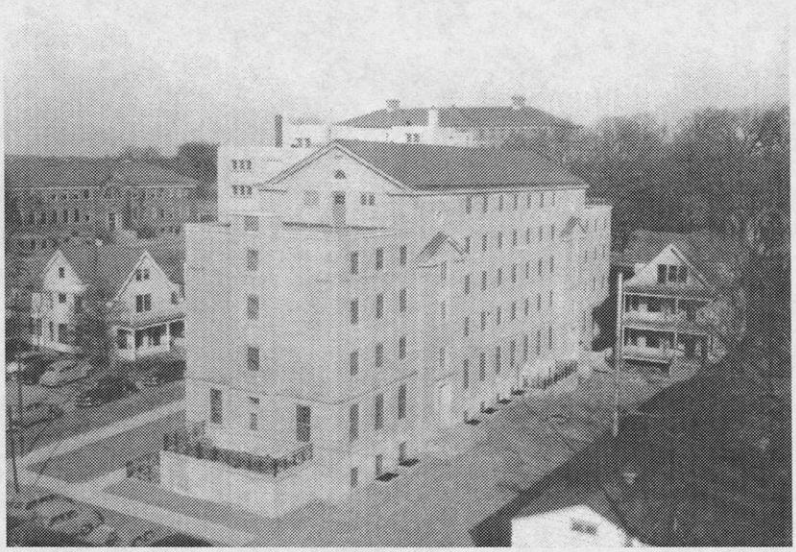


Fig. 1. 1952: The Interns' dorm from the hospital. Lorch street is at the left. The houses were still in use as temporary housing for medical personnel. [Series 9/4 Intern's Dorm ns-1506]

The intern's dorm was built as housing for interns and resident doctors in 1951. It has since housed, psychiatry and occupational therapy. In 1983 it became the home of Agricultural Economics and was renamed Taylor Hall.

One of the ways that the University had restrained the cost of the medical building in the 1920s and 1930s was to eliminate the dormitory facilities for the staff personnel common to most hospital buildings. Both the Wisconsin General Hospital and the Orthopedic Hospital had been cost-reduced in this way.

At Wisconsin, this housing was in a group of houses which had been acquired when the property between Charter and Lorch Streets was purchased. Nurses, residents and interns were housed (two and three to a bedroom) in the old homes along Lorch and Linden, and these houses held up under their use as dormitory space about as well as hundreds of other old houses in Madison; that is to say they aged quickly and gracelessly. By 1940 plans were begun for better and permanent housing for the hospital personnel. These early plans were done in 1940 mainly by Dr. Buerki of the medical school, and Albert Gallistel, the University's director of buildings and grounds. By 1941 they had planned a single wing dormitory "similar to the nurses dormitory." These plans and their funding were approved in August 1941, but disastrously high bids put an end to the intern's dorm until after WW II.

The second round of planning began during 1944, when hospital superintendent, Dr. H. M. Coon, wrote to state architect Roger Kirchhoff asking for plans for an intern's and resident's dorm to replace the old wood houses. At this time the plan is for the axis of the building to run east and west. The executive committee of the regents approved Kirchhoff's plans and approved advertising for bids if financing could be obtained that did not use the postwar appropriation of 1945.[1]

Not until 1951 was such financing finally obtained. When the regents approved financing

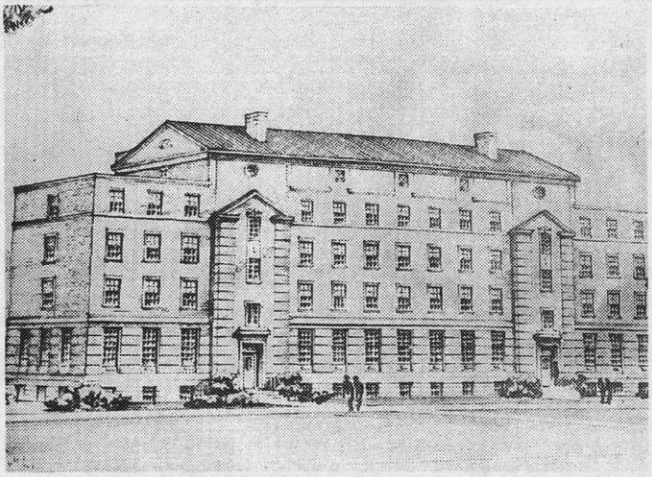


Fig. 2. Architects drawing of the Interns' dorm shows the resemblance to the 1926 Nurses dorm. [Series 9/4, Intern's Dorm, ns-1505]

Fig. 3. Construction of the Interns' dorm 1951. [Series 9/4, Intern's Dorm, ns-1502]

the project with $100,000 from the accumulated fund of the department of housing, and a $610,000 loan through the Wisconsin University Building Corporation (WUBC). They also approved the awarding of contracts in the amount of $710,000 for construction. The general contractor was J. H. Findorff, for $457,194. There is a charge of $15,000 from architects Phillips and Eble of Milwaukee for services on the project from 1951 to completion. By this time the axis of the building had been reoriented to lie north and south.[2]

Groundbreaking took place in June 1951, featuring Governor Walter Kohler, Dr. Harold Coon, and regent Matt Warner. It went into use about July 1, 1952.[3] The building was a basement and four and a half stories in height, of steel, reinforced concrete, and sheathed in brick. It has a strong resemblance in style to the 1926 nurses dormitory, with its central section with side wings, two full height entry-ways at the ends of the center section, and a hipped roof over the center section, but is far plainer. It housed 80 occupants in single rooms. The partial fifth floor was intended to hold racquet ball courts, but was convertible to more dorm rooms.

For about 10 years the building was used as a dorm, then in 1963 the same integration theory that caused the nurses to be moved out of a special dorm caused the dispersal of the interns and residents into the general student population. From 1963-1966, the dorm was used as the home of the department of occupational therapy, which had been housed in temporary buildings nearby. In 1966 the scattered department of psychiatry, which had requested but never obtained a large building of its own, moved in and stayed until the new clinic and hospital complex was built on the west end of campus, in 1978. The dorm was then used as expansion space until 1983, when the current occupant, the department of agricultural economics moved from its cramped facility in Agriculture Hall. It was also at this time that the building was renamed Taylor Hall, after Professor Henry Charles Taylor, the founder of the subject of agricultural economics.[4]

1) *Regents Minutes*, April 17, 1948, p. 17. This appropriation was used only for the highest priority projects, the engineering building, Memorial library, Babcock Hall and the short course dorms. Kirchhoff to Coon, August 1942, series 24/1/10 box 3. *Executive Committee Minutes*, August 26, 1940.

2) *Minutes of the Executive Committee*, March 7, 1951 p. 3; *Regent's Minutes*, June 15, 1950, September 30, 1950; *Daily Cardinal*, March 13, 1951, April 28, 1951.

3) Wisconsin State Journal, March 17, 1952.

4) University Directories; Gordon Orr, *Perspectives of a University*; *Regent's Minutes*, January 6, 1961, May 12, 1961, Orientation to Physical Facilities University Medical Center prepared for legislative study committee, series 40/1/2-1 box 14.

STOVALL LABORATORY OF HYGIENE

Fig. 1. Hygiene lab from steps of Ag Hall, 1994. [Author Photo, AP-29]

The State Laboratory of Hygiene was founded in 1903 to provide diagnostic services to state residents. The current building was erected in 1951. It was named for Dr. Stovall in 1973.

The state hygienic laboratory was established in 1903, by the state board of health at the urging of H. L. Russell of the University, and his friend Dr. Cornelius Harper (appointed to the state board of health by governor La Follette). The state agreed to attach the laboratory to the university and to make Russell director. The university provided a basement room in the new Agriculture Hall. The state was thus availed of the existing facilities of the university, and the university gained a little income and prestige.[1]

The purpose of the hygiene lab was to provide facilities and expertise in the diagnosis of diseases common in Wisconsin, as a service to state doctors. Among these diseases were typhoid, diphtheria, rabies, anthrax, and glanders. The lab also examined water and milk samples. The lab opened in October 1903, and in the first nine months examined 102 samples from around the state. Dr. Russell became dean of the college of agriculture in 1907, and gave up the directorship of the hygiene lab to Mazyck P. Ravenel. An outbreak of rabies in 1909 dramatically increased the lab's work load.

In June of 1914, the regents accepted Dr. Ravenel's resignation. Dr. W. D. Stovall, his assistant, took over the operation of the lab. Dr. Stovall was appointed director in 1918. The growth of the lab can be seen in the fact that by the 1930s tens of thousands of samples were sent annually to the lab for analysis.

In 1918 the lab was moved from Agriculture Hall to South Hall where, after medical bacteriology was moved to Science Hall, it occupied the entire top floor. When this space became insufficient in 1928, the lab was moved to Service Memorial Institute, the home of the University's medical school. When in the postwar enrollment explosion, this space was needed by the medical school, and

was again becoming restrictive to the hygiene lab, plans were begun for a separate building to house the lab. These plans were driven mainly by the vision and persistence of Dr. Stovall.

In 1949, the state legislature redefined the relationship between the board of health and the University. A coordinating and policy-making committee, comprising the president of the University, the president of the state board of health, and the dean of the medical school, was created. The regents were empowered to appoint the director and staff of the lab. In addition the state agreed to support Dr. Stovall's drive for a new building. In October 1949, state architect Roger Kirchhoff began corresponding with the University's business manager about the design of the new lab building. From the beginning, the preferred site was on the western edge of the medical school group, on the corner of Linden Drive and Henry Mall. There were already two small buildings there, the home economics practice cottage, and nursery school, but both were old frame houses that had been moved to the site, and were expendable. More importantly there was a private home located at 436 Lorch St. on the southern edge of the area planned for the hygiene lab. This caused a short-lived plan to erect a smaller building, that could be contained on the land already owned by the regents. The regents purchased this property for $10,000 from the Schmelzer family on March 11, 1950, thereby completing the larger building site.

The architecture of the building was of considerable concern to the University, who wished that it harmonize with the buildings surrounding it. In March of 1950 the state selected Milwaukee architects Brimeyer, Grellinger & Rose. They were chosen at least in part because of their conservatism. The university's physical plant director Gallistel, wrote: "I do not believe the building should take on the character of the Johnson Wax Company Building for instance in that location. There might be such a proposal if an architect steeped in "Modernism" should get the commission."[2] After rejecting a few initial designs as not harmonizing enough, the regents accepted the architect's design for the new lab on July 15, 1950, suggesting that it be built of buff brick and trimmed with Bedford stone. With the exterior of the lab set, the regents had no more to do with the project. A contractor, J. P. Cullen and Son, was selected in early 1950, and the design of the interior of the new lab occupied the rest of that year. Ground was broken about April 30, 1951. There was no particular difficulty in construction, and the formal dedication was held February 8, 1953, in the 90 seat lecture hall in the new building, with speeches by Dr. Carl Neupert, director of the state board of health, president E. B. Fred, and other luminaries. Total cost was about $1.7 million, funded from the state, the federal government, and the university. The lab moved into its new quarters in spring 1953.[3]

The building is a full basement and four story, concrete and steel structure, sheathed in buff brick and trimmed with Bedford limestone. The shape is rectangular with a 152 foot face on Henry Mall, and a 96 foot side on Linden Drive (see Fig. 1.). The south east corner of the rectangle was not originally filled in. This 30 foot by 91 foot four story section (designed by Torkelson and Associates) was added in 1972.[4]

The interior arrangement of the new lab had offices, conference rooms, and a library on the first floor, laboratories on the second and third floors, and animal rooms on the fourth. The 1972 addition contained cytology, bacteriology and air pollution labs, and in the basement a data processing facility. This addition brought the building to its current configuration.

On September 7, 1973, the regents formally named the building The William D. Stovall Building, in honor of the man who had been director of the hygiene lab for forty four years.

1) Paul F. Clark: *The University of Wisconsin Medical School,* p. 63; *History of the State Board of Health*, manuscript by William Foote Whyte M. D., State Historical archives series 872 loc. 3/24/D4; *Regent's Minutes*, October 5, 1903, regent's papers, September 22, 1903; Executive Committee minutes, October 5, 1903; University directories.
2) Gallistel to Peterson, March 8, 1950.
3) *Wisconsin Alumni Magazine*, October 1952, p. 13.
4) Plans in the plans room of the physical plant.

HEATING SHOP

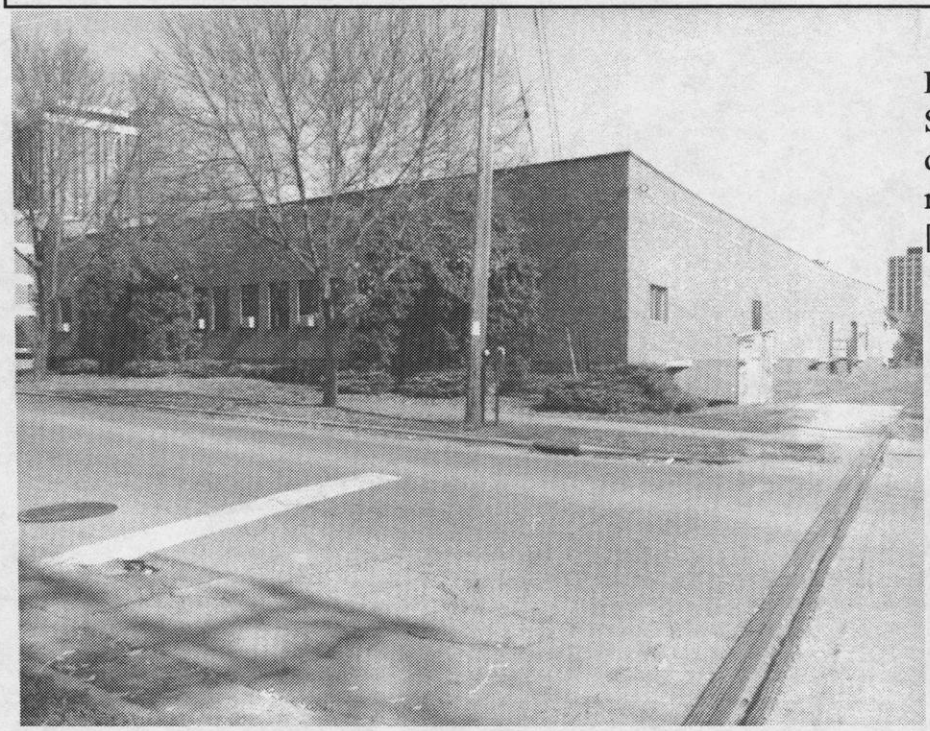


Fig. 1. 115 North Mills Street 1994. Note the curve of the south wall along the railroad right-of-way. [Author Photo, AP-30]

Among the several south of the tracks properties acquired by the University in the 1960s was the warehouse at 115 North Mills Street. This property was owned by Patrick Hennessey, who had purchased it from the Illinois Central Railroad in July 1951. A month later Hennessey, as president of Badger Feeds, Incorporated had plans drawn by architect Grover Lippert, for a warehouse on the site. The building was 200 feet long, and following the shape of the railroad right of way to the south tapered from a street width of 109 feet to 58 feet at the rear of the property. The building was constructed of concrete block and sheathed in face brick.[1]

This building housed a number of different businesses in the next decade. The earliest tenant to share the building with the Badger Feed Company was the Hoover Vacuum Cleaner Company, followed in 1960 by the Hennessey Heileman Beer wholesaler, and Winkler's barber shop. As measured by the increasing level of debt on the building Hennessey's businesses were not fairing well. By late 1963 there were more than $270,000 worth of mortgages, liens and back taxes against the property.[2]

The University purchased the property from Hennessey and his wife on January 21, 1965 for $250,000. It was used as storage until 1973 when the heating department was moved from its home in the old heating plant on University Avenue. In 1985 the building was insulated and stuccoed at a cost of $160,000. It is now the home of the heating-steamfitter's department of the physical plant who repair and maintain all heating utilities on campus, and the safety department who collect and dispose of dangerous materials from labs and other sources on campus. The department of heating maintains offices in the front of the building.[3]

1) *Regent's vault*, Hennessy file; Plans in plans room of University physical plant.
2) *Madison directories*; Regent's vault, Hennessy file
3) *Regent's Minutes*, October 11, 1985.

UNIVERSITY HEALTH SERVICE

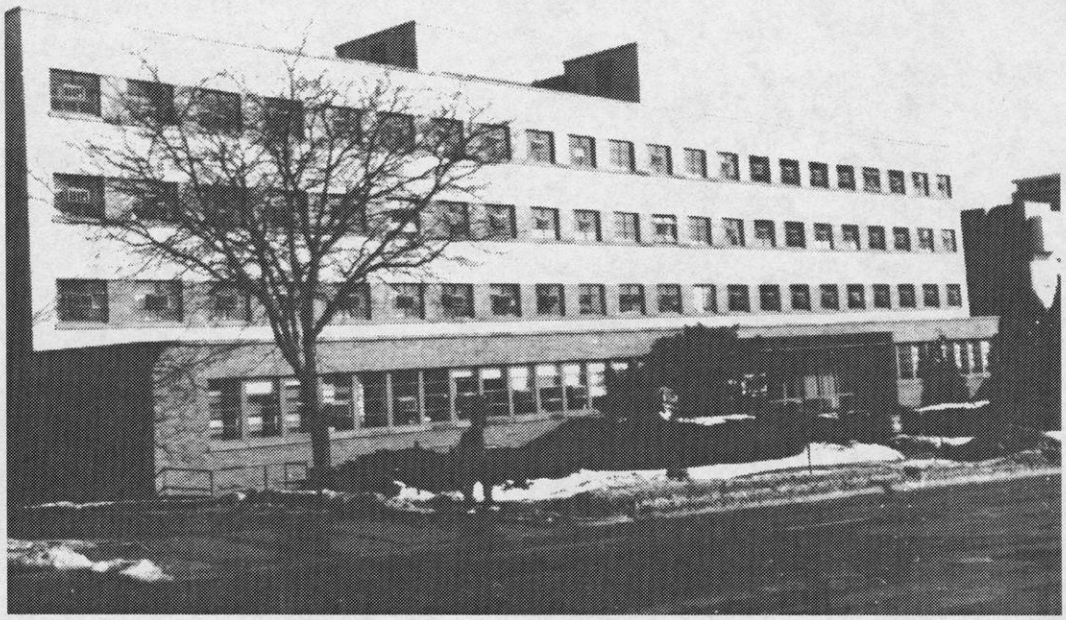


Fig. 1. University Health Services, 1994. The one-story front section could be enlarged to four, and the four story back section to seven if desired. [Author Photo, AP-31]

Built in 1952 as the home of the state psychiatric hospital, this building became the property of the University in 1970. By that time it was already in informal use as part of the medical school. It now houses the student health center.

With the rise of the study of psychology after WW II came the desire to delve into the origins of mental disease. The state legislatures of 1945 and 1949 appropriated a total of $1.2 million for the establishment of a state diagnostic center. This center would provide temporary residence and diagnosis of state persons committed to institutions under the State department of Public Welfare. The center was to be staffed by the faculty of the University medical school, appointed by medical Dean Middleton, and administered by the public welfare department. Principal among the founding of the diagnostic center were Dr. Leslie Osborn (director of the Wisconsin Psychiatric Institute of the UW medical school), governor Kohler, and Mr. John Tramburg (director of the State Department of Public Welfare).

As passed by the legislature, the diagnostic center was to be constructed "near the Wisconsin general hospital". The area set aside by the University for the medical school was nearing saturation, and where the new facility was to be built was not obvious. Beginning in May 1951, Tramburg, President E. B. Fred, and governor Kohler began to work on this problem. The earliest idea, was to locate the center in the general hospital itself by adding two extra floors. This idea was rejected because the available space was less than that desired by the state. The second idea was to build a separate building on land owned by the state on north Orchard Street across from the University heating station, the building to be connected to the hospital by tunnel under University Avenue. The Orchard Street solution was rejected by governor Kohler for unstated reasons. Other suggestions were rejected by both parties. Finally in July of 1951, the regents voted that the state build the diag-

nostic center on the triangle of land bounded by University Avenue (on the south), the railroad tracks (on the north), and the naval ROTC building (on the west). The regents agreed to exchange this piece of property for the state owned one on Orchard Street. To this arrangement the state agreed. The following week the regents exercised an option on a lot in the triangle from John and Francis Meyer for $15,000, thereby completing the land they had offered the state. Dr. Osborn gave approval, but asked that part of the triangle site be reserved for a Child Center program at a later date.[1]

Once the site was decided, the project moved ahead at a deliberate pace. The architects selected by the state were Eschweiler and Eschweiler of Milwaukee. By December 1951 they had delivered rough drawings. 1952 was taken up with finalizing plans for the building, and resolving disagreements about utility service. The University's heating plant was nearing its capacity, and the enormous new Memorial Library was about to come on line. The University in the person of Albert Gallistel, director of buildings and grounds was loath to add the state building to University steam lines. Likewise governor Kohler would not approve of a separate heating system for the building. To resolve this disagreement, the University hooked up the building by running a new steam line from Babcock Drive, and the state installed a temporary boiler in the Diagnostic Center in case of insufficient heat from the University. Work on the building was begun by general contractor J. P. Cullen in September 1952. Construction took almost two years. The diagnostic center received its first patients on August 9, 1954.[2]

The building was 63 by 178 feet of steel and reinforced concrete, four stories high except for the front (south) half, which was one story. The building was sheathed in brick, the first floor brick being dark like the older buildings on the agricultural campus, and the upper, more visible stories in buff brick to match the nearby Enzyme Institute. The one story front section was designed to be extendable at a later time to four stories, and the four story north section was extendable to seven stories. Neither of these additions have taken place.

There were beds for 76 short term psychiatric patients. The entire second floor was devoted to children. The first floor held professional offices, classrooms, and therapy rooms. The fourth floor was reserved for men. In the basement were laboratories, occupational therapy rooms, and a kitchen.

The number of psychiatric patients in state institutions began to decline shortly after the diagnostic center was opened, and its use as a mental health facility was never heavy. According to the State Blue Book, the maximum number of patients at the center was 37 in 1960 and thereafter was zero. After 1960 the medical faculty increasingly, though informally, began to use the building as part of the medical school. In 1967 they petitioned the state to assign the building to the University Student Heath Center, Pediatric outpatient service, and University child health service. These programs had been forced to rent space around the University for several years. These programs were allowed to use the building.[3]

In 1970, the secretary of the regents reported for the record, that the state had discontinued the use of the Diagnostic Center, that the University had been using the facility on an informal basis for several years, and that the state had now quit claimed the property to the University, including land and building. Thus as surely anticipated by both president Fred, and the state, the diagnostic center became a part of the University physical plant.[4]

1) Minutes of the Executive Committee, July 6, 1951; *Laws of Wisconsin* 1955, chapter 244; Clarke to Tramburg, July 9, 1951, series 24/9/2 box 3.

2) *Wisconsin Alumni Magazine*, June 1954, p. 16, October 1951 p. 12.

3) Wisconsin Blue Books, 1970 p. 762, 1954 pp. 388-389, 1956 pp. 450-451; *Wisconsin Alumni Magazine*, June 1954, p. 16; *Regent's Minutes*, January 11, 1952;

4) *Regent's Minutes*, December 18, 1970. A quit claim is a legal document that relinquishes all claims to ownership of property. The state *gave* the building to the University.

DAIRY CATTLE CENTER

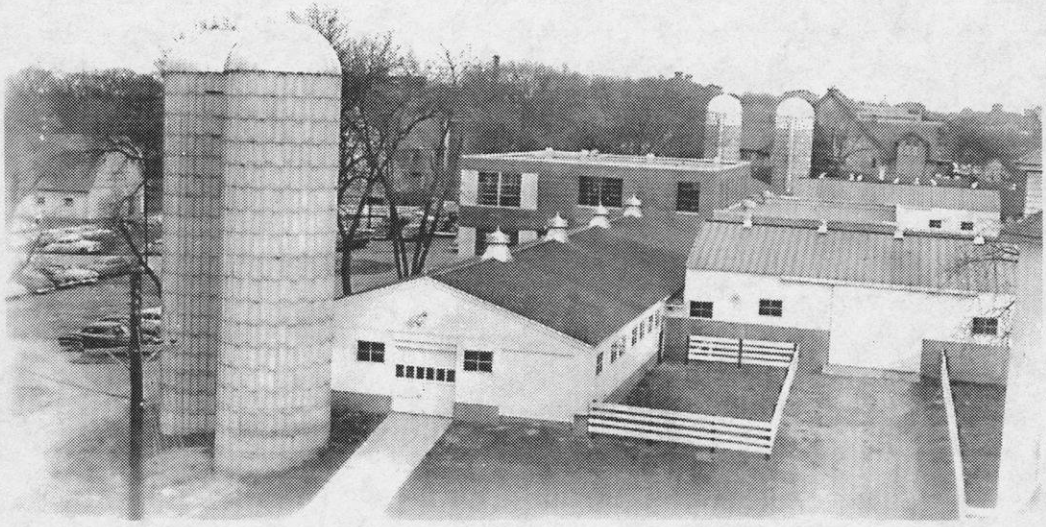


Fig. 1. The Dairy Center November 1954, a two story brick and steel center section 25 by 80 feet, with two 140 foot wings projecting to the east and west. The camera is looking east. The silos in the foreground and background show the extent of the wings. [Series 7/7 folder #1, jf-69]

When dean of agriculture Rudolph Froker told the state legislative committee in 1951 that "our present buildings are old, outmoded and totally inadequate" he was not exaggerating for effect.[1] The old dairy barn had been built in 1897 when the idea that agriculture could benefit from research was a quaint new idea. The facilities for instruction and research in the dairy field had barely been altered in the fifty years since the old barn was built. One senator said "It is a rat trap; it is a fire trap; and if it belonged to a private farmer the state fire inspector would condemn it." On May 21, 1951 the appropriation for $400,000 to build a new dairy building was passed by the legislature.[2]

Froker and his staff wasted no time. In December 1951 the college of agriculture selected Law, Law, Potter and Nystrom architects for the new building. During the spring of 1952, a site was selected, just to the east of the old dairy barn. On May 16, 1952 the regents approved the preliminary plans. Bids were sought in November 1952. These bids were opened February 4, 1953, and were all over budget and rejected. Changes were made by the agricultural staff; the major changes being leaving the second floor unfinished and eliminating two silos. The second round of bids were opened April 28, 1953, and were under budget. On May 9, 1953 the regents awarded contracts for the construction of the Dairy Cattle Instruction and Research Center. The general contractor was the Vogel Brothers Building Company of Madison for $174,266.

Groundbreaking took place in the first week of June 1953. Final inspection was done on March 8, 1954. The second floor areas were finished in 1955 at a cost of about $37,000.

The wings are one story metal shed construction and are the main cattle barns; each has a 60 foot projection to the south to hold hay and bedding material. The center section has a milking parlor on the first floor, with a public viewing window. The upstairs of the center section holds classrooms offices, and an apartment for student operators of the dairy.

1) *The Daily Cardinal*, April 12, 1951

2) *The Daily Cardinal*, May 17, 1951, May 22, 1951. Wisconsin Alumni Magazine, July 1951 p. 19. *Regent's Minutes*, December 11, 1954, July 11, 1953. May 9, 1953.

WALNUT STREET GREEN-HOUSES

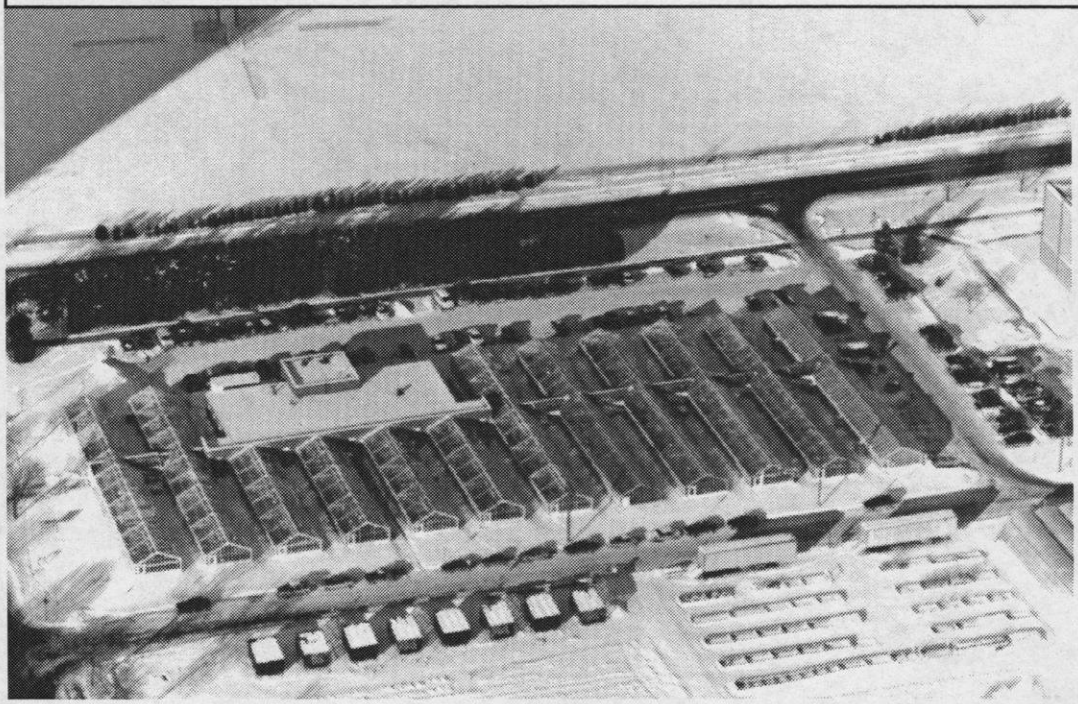


Fig. 1. The Walnut Street greenhouses range February 1997. Above (north) of the range is Walnut Street, below it is Herrick Drive. The headhouse is the light rectangle at the upper left of the range. [Del Brown Photo, AP-72]

Like every department in the early 1950s, agriculture was bursting at the seams. The departments of Agronomy, Genetics, Horticulture, Plant Pathology, Soils, and Entomology all needed greenhouse space for teaching. In 1953 all were using the banks of greenhouses south of Horticulture, and the smaller set south of King hall. In response to the severe crowding, a committee , headed by professor Robert Muckenhirn, was appointed to plan a new green house range. This committee selected a site on the extreme western edge of campus, near Walnut Street.

Plans were drawn by Madison architects Weiler and Strang, with greenhouse specialist Walter Kelsey of New York. They were approved in the fall of 1953, and contracts awarded in November 1953. The general contractor was Anthony Grignano with a contract for $197,816. Ground was broken in July 1954, and on November 16, 1954 the final inspection was made and the building accepted. Total cost was about $360,000. The head house is solid brick, 70 by 120 feet. There were originally fourteen 21 by 83 foot sections of greenhouses in the range serviced by this headhouse.[1]

On July 13, 1957 the regents received an offer from the Wisconsin Canners Association to donate fund to construct more greenhouses on the Walnut Street range. The gift was accepted, the plans approved, and by March 13, 1958 the new greenhouses were complete. Another expansion took place in 1968 when $112,448 in gift and grant funds were used to build a greenhouse and connecting link to the Walnut Street range.[2]

The head house is now (1994) used for storage and a few laboratories, there are 69 sections of green house space, with three sections per greenhouse. Space is allocated across all departments in the school of agriculture. Because of the 1995 removal of the horticulture greenhouse range for a biochemistry addition, the Walnut Street greenhouse range will probably be expanded further.

1) *Regent's Minutes*, November 14, 1953.
2) *Regent's Minutes*, January 12, 1968.

COMMERCE

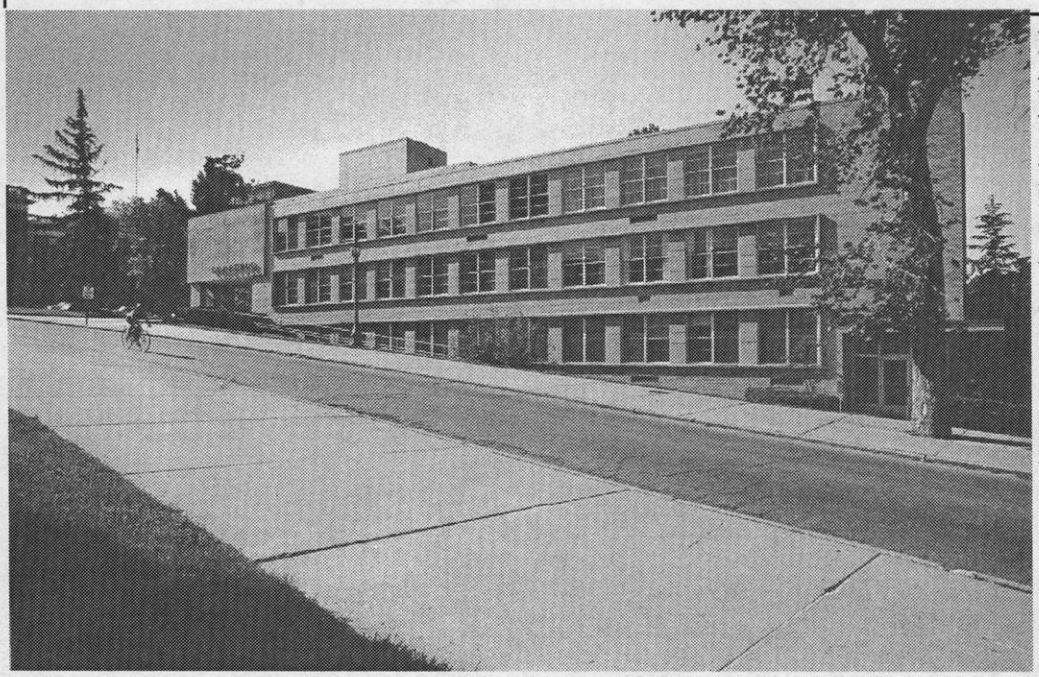


Fig. 1. The Commerce building, from the corner of Charter and Observatory Drive, 1959. The first of the "modern" buildings on the upper campus, the strong horizontal lines, are broken by the vertical stone panels, and still do not quite abandon the illusion that the outer walls are load bearing. [Series 9/1, Commerce, jf-70]

Erected in 1954, Commerce was the first modern design to be built on Bascom Hill, and provided a unified home for the school of commerce for the first time since 1918. Commerce has now moved to Grainger hall, and the old commerce building was renamed Mark Ingraham Hall. It will be used by the social sciences after a remodelling to be finished in 1996.

The origins of the Commerce department at the University date back to 1857 when in response to requests that the University provide for "the preparation of young men for trade in its several branches", the regents annexed Bacon's Commercial College of Madison. In 1900 under president C. K. Adams, commerce courses became the School of Commerce. Still later under Charles Van Hise, the semiautonomous school of Commerce became attached to the College of Letters and Science. Finally in 1944, at the urging of state business leaders, the regents split commerce from L&S, and created the school of commerce. In the course of these wanderings through the administrative world, Commerce had steadily grown in enrollment. In 1918 when Sterling Hall opened, commerce moved into the fourth floor. They would stay there until 1956. By 1950 Commerce had outgrown their Sterling Hall quarters so badly that courses were being taught in 29 separate buildings, including several WW II temporary buildings, scattered around the campus. Clearly a new home for the school of commerce was badly needed. In addition to the obvious need, the school had powerful allies. The legislature was sympathetic to the requests of state business interests for a more modern training facility, and the Dean of the school of commerce, Fayette Elwell, was a powerful force and persuasive advocate within the University.[1]

In 1952 the state building commission allotted $1.75 million for a building for the school of commerce. The availability of the money found the University ready. The site for the new building,

immediately west of Bascom Hall, and east of Charter Street, had been selected in 1950, at the peak of enrollment in Commerce. The new building was regarded as the first unit of a Social Studies building, and after a building boom in laboratory buildings was significant as the first construction of a purely classroom building since the 1930s. Plans for the building, by Law, Law, Potter and Nystrom of Madison, were approved by the regents in February 1954. In April of 1954, the awarding of contracts and fees for a total of $1.57 million were approved. The general contractor was J. H. Findorff and Son of Madison, for $900,842. The unexpected surplus of $156,249 from the building allotment was applied to the remodelling of the Chemistry building for the use of Pharmacy.[2]

Ground was broken for the new "ultramodern" building on May 26, 1954, with speeches by president Fred, governor Walter Kohler, and regent Matt Werner, who said of dean Elwell "he has done more than anyone to make this building a reality." The schedule for construction called for the building to be ready for use in the second semester of 1955. This was an aggressive schedule for a modern building on a steeply sloping site. The excavation was completed and mason work begun in April of 1955, but this fast start was negated by a shortage of bricklayers and constant material shortages. The labor problems were caused in large part by the huge amount of construction taking place on the University campus, Findorff finally pulled masons off the less crucial biochemistry addition job in order to complete commerce in time. In September 1955, the University decided to put a protective coating on the Bedford stone wall on the south side of the building, to discourage "student art work". Cement and glass shortages caused further delays, but by February 1, 1955 classes were being held in the new building.[3]

The formal dedication of the Commerce building was held May 4, 1956. Dean Elwell was now emeritus, and had been replaced by dean Erwin Gaumnitz; both spoke at the dedication, as did president Fred. The new building was steel and concrete, with brick sheathing and a small amount of stone trim. It was the first modern style building to be erected on the central campus, and it set a precedent for the location of new buildings for the Social Sciences. It was five levels, a subbasement, a basement and three upper floors. Because of the steeply sloping site, the basement level is almost completely above ground, and is fully finished space. The building is roughly 'U' shaped opening to the west, with the 70 foot by 170 foot, basement and two story north arm containing classrooms, reading rooms, storage, and offices. This arm looks out over Observatory Drive and the Carillon tower. The 70 foot by 178 foot east wing is a basement and three stories and contains more classrooms, offices, and on the second floor large Accounting and Statistic laboratories. The south wing of the building is only the basement and subbasement levels in height and provide two large lecture halls. These lecture halls are the first known classrooms on campus to explicitly provide writing desks for the lefthanded.[4]

Reflecting the changing emphasis of the discipline, the name of the building was changed in 1966 to the School of Business. Since enrollment continued to rise throughout the 1960s, 70s and 80s, the business school was moved in 1993 to newer and elaborately developed quarters in the new Grainger Hall. The old commerce building is providing temporary space during the asbestos abatement work in the Social Science building across the street, and will eventually be remodelled for use by the Social Sciences. It has been renamed Mark Ingraham Hall.[5]

1) Curti and Carstensen, *The University of Wisconsin*, v.1. p. 77; *Wisconsin Alumni Magazine*, April 1954, p. 13; *Wisconsin State Journal*, April 29, 1956.
2) *Wisconsin Alumni Magazine*, April 1954, p. 13; *Regent's Minutes*, April 10, 1954, April 15, 1950;
3) *Daily Cardinal*, May 21, 1954, May 27, 1954.
4) *Daily Cardinal*, May 11, 1956; *Wisconsin Alumni Magazine*, June 1956, p. 16; Archives subject file, "commerce building". *Wisconsin State Journal*, April 15, 1944; *Capital Times*, December 30, 1956.
5) *Regent's Minutes*, March 5, 1993.

CAMP RANDALL MEMORIAL

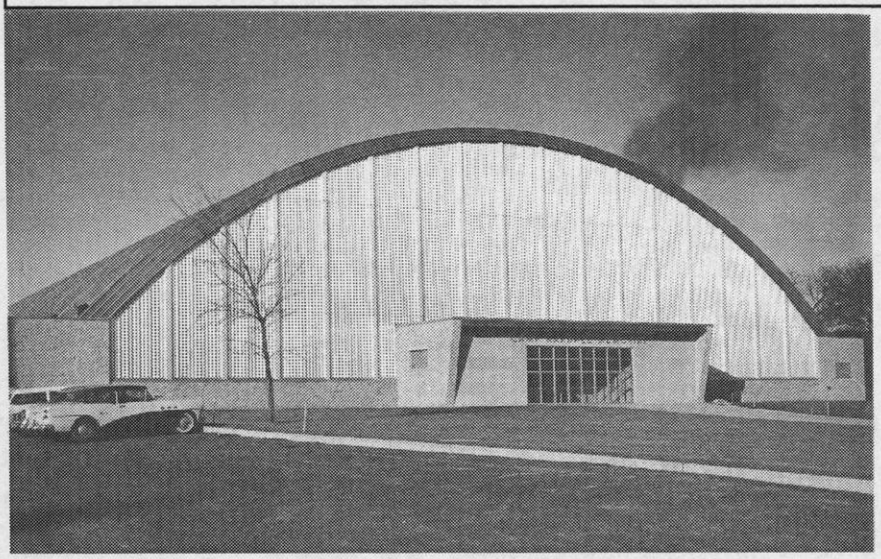


Fig. 1. The south face of the Camp Randall Memorial, c. 1958. [series 9/10/3, jf-71]

The Camp Randall Memorial Practice Building was built in 1954 to provide indoor athletic facilities, housed until that time in the old gymnasium annex on Langdon Street. The Camp Randall Memorial shell went into use in May 1956. It was remodelled to include an ice rink in 1974.

Two attempts, in 1949 and 1950, to build a replacement for the 1911 gymnasium annex failed. Both plans assumed a site on Walnut Street. Objections included funding difficulties, government rationing of materials, and unstable soil at the swampy site.

During 1952 and early 1953 the University, spearheaded by coach Guy Sundt, worked at new plans. In the fall of 1953 the regents decided that the practice building should be constructed adjacent to the Camp Randall stadium on the east. This site meant that the building could be connected to existing steam lines, and by building a connecting bridge to the stadium, the need for new locker and shower rooms was removed. It was decided to finance the $1.5 million building from $900,000 supplied by the athletic fund and $600,000 borrowed by the WUBC. The loan would be repaid from athletic receipts.[1]

The choice of site caused some objections by citizens and veteran's groups, on the grounds that the area was a memorial park. It was also the home of 44 families living in trailers as temporary housing in the Monroe trailer park. The University passed a resolution to designate the building as a memorial to the Union Veteran's of the Civil War, and installed prominently on the building a plaque telling the story of Camp Randall as a Civil War camp. The University asked the legislature to make the rest of the park a perpetual memorial. These developments satisfied the protestors.[2]

Groundbreaking for the practice building took place about February 5, 1954. The architect was Fitzhugh Scott of Ammons and Whitney from New York. The general contractor was the J. L. Simmons Company of Chicago. The concrete shell shaped roof was poured in 14 29 foot wide bays. 16 foot tall concrete piers took the weight of each pair of sections, through the three foot wide ribs. The finished roof contained 1,600 tons of concrete, and hundreds of tons of steel reinforcing rod.[3]

On March 18, 1956 the Badgers hosted Minnesota and Purdue in a triangle track meet, in the

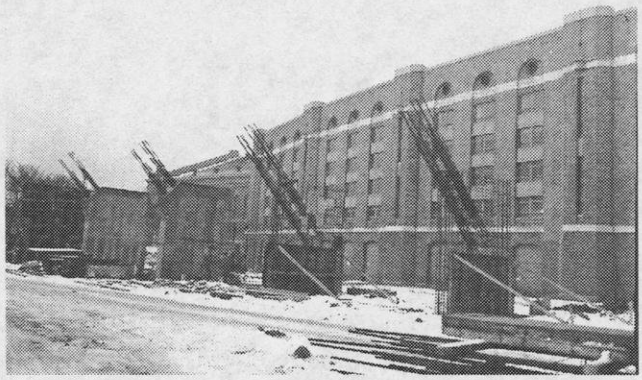


Fig. 2. The Camp Randall Shell under construction, 1954. The stadium dorms are in the background. [series 9/10/3, ns-256]

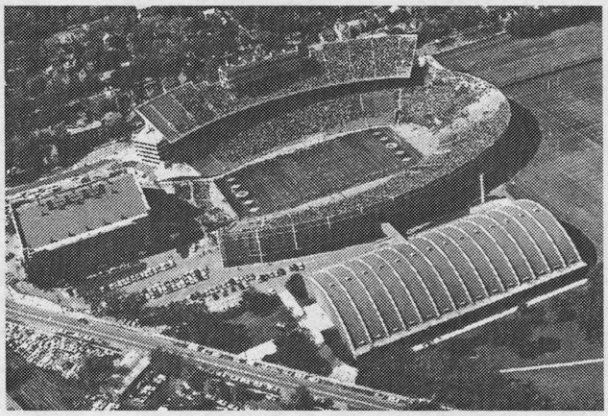


Fig. 3. Camp Randall Athletic facilities, The stadium, the field house, and the Camp Randall memorial. 1974. [Series 8/7 Camp Randall, jf-103]

new, though unfinished building. The Badgers won the meet. Sadly, athletic director Guy Sundt, who had worked so hard for the facility, had died the previous fall. The formal dedication of the building was held on May 18, 1956. The building was 200 by 400 feet, with a dirt floor, and had room for baseball, tennis, and track to be practiced simultaneously. It had no permanent seating for spectators. A small dedicated heating plant for overload and emergency situations was built near the northwest corner of the shell. The exterior sides of the shell was sheathed with Kasota stone to match the nearby stadium. The ends were covered with aluminum sheathing with a vertical pattern to prevent excessive reflection (see Fig. 1). The main entrance was through a lobby on the south end.[4]

The new facility performed up to expectations for a little more than a decade. In 1965 Hartmeyer arena, the city owned ice rink facility on Commercial Avenue went up for sale, jeopardizing the future of the hockey program at the University. A two phase plan to remodel the Memorial shell, was developed. Installing the ice rink and replacing the dirt floor with artificial turf was phase I. Cost of this phase was $245,000 paid through intramural recreation fees. The 85 foot by 195 foot rink took up the south 100 feet of the shell. The south entrance lobby was changed into a skaters lounge. Phase II remodelling added a 30 foot by 150 foot section of locker rooms and shower rooms to the west side of the shell. At the same time, a new main entrance was built, also on the west side. The original main entrance on the south side, has been converted to a hall of fame display, with plaques for notable athletic figures in the University's history.[5]

The Camp Randall Memorial is now used mainly for the ice rink, track and field practice and basketball practice.

1) *Regents Minutes*, October 24, 1953; Wisconsin Alumni Magazine, November 1953, p. 10;
2) *Regent's Minutes*, July 17, 1954, October 24, 1953; *Daily Cardinal*, October 8, 1953, October 27, 1953, September 23, 1954;
3) *Regent's Minutes*, December 12, 1953, June 17, 1954, September 25, 1954; Daily Cardinal, June 4, 1954; *Wisconsin Alumni Magazine*, October 1949, p. 6, ;
4) *Wisconsin Alumni Magazine*, March 1956, March 1957, p. 22, October 1955, p. 18; Dedication Brochure, Archives subject folder, " Camp Randall memorial" file; *The Wisconsin Engineer*, October 1954, p. 10; Archives Guy Sundt biographical file. Plans in physical plant plans room.
5) *Capital Times*, October 13, 1965; *Regent's Minutes*, November 4, 1966; *Wisconsin Alumni Magazine,* January 1975 p. 15; *Daily Cardinal*, September 5, 1973, April 14, 1965;

ZOE BAYLISS HOUSE

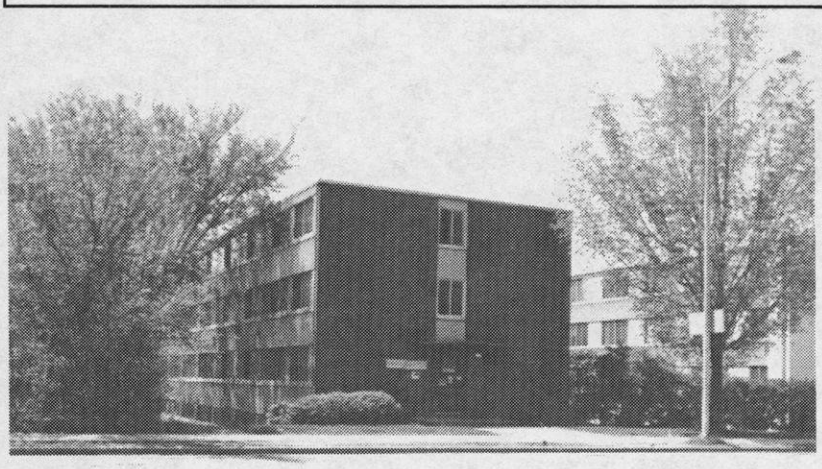


Fig. 1. Zoe Bayliss House 1994: a 32 by 91 foot basement and three floors built of concrete block and poured concrete. Minimal housing for 50 women students. [Author Photo, AP-33]

A 1954 study of students at the University showed that 88% of undergraduate men and 73% of undergraduate women earned all or part of their college expenses, and many were entirely self supporting. The regents decided to build cooperative dormitories after the successful pattern of the Tabard Inn, the Anderson House, and the co-op houses in the Kronshage group. They began by building low cost co-ops for 100 students. Because space was no longer available on the campus proper, the regents decided to build in the area south of University Avenue. By July 1954 the site of the women's dorm had been settled as 915 W. Johnson Street, and planning was begun by architects Weiler and Strang of Madison. The plans for the building were approved by the regents on January 8, 1955. A budget of $176,778 was set in March 1955, and late that month contracts were awarded. General contractor was George Nelson and Son of Madison, for $157,000. Funding was arranged through the Wisconsin Building Corporation.[1]

Groundbreaking took place on March 30, 1955. Trucking strikes, bad weather and material shortage delayed construction slightly during the summer of 1955. The fifty members of the new co-op lived for the first three weeks of the fall semester on the fourth floor of old Chadbourne Hall, and completed their move to the new dorm on October 11, 1955. Their room and board in that first year was $53 per month. The members of the cooperative were responsible for all work except that done by the two paid employees, the housemother and the cook.[2]

Laundry, kitchen and dining rooms were in the basement. The first floor held six bedrooms, and the housemother's suite. On the two top floor were 20 more bedrooms, and a library. All rooms were doubles and were mostly eleven by thirteen feet with built-in closets. The regents named the co-op after Zoe Burrell Bayliss, assistant dean of women from 1928- 1943.[3]

Bayliss is the only one of the original four (Bayliss, Schreiner, Rust and Davis) still operating as a co-op. Costs are now about $2,500 per year.

1) Low-cost housing for single men and single women: a memorandum for discussion with the state building commission, April 22, 1954; Regent's Minutes, September 25, 1954, March 12, 1955, January 8, 1955, May 8, 1954, October 10, 1955, November 14, 1953, June 16, 1955, May 7, 1955.
2) *Daily Cardinal*, October 11, 1955, November 30, 1956, Registration Issue, 1956.
3) *Regent's Minutes*, December 10, 1955; *Daily Cardinal*, June 11, 1943.

DAVID SCHREINER HOUSE

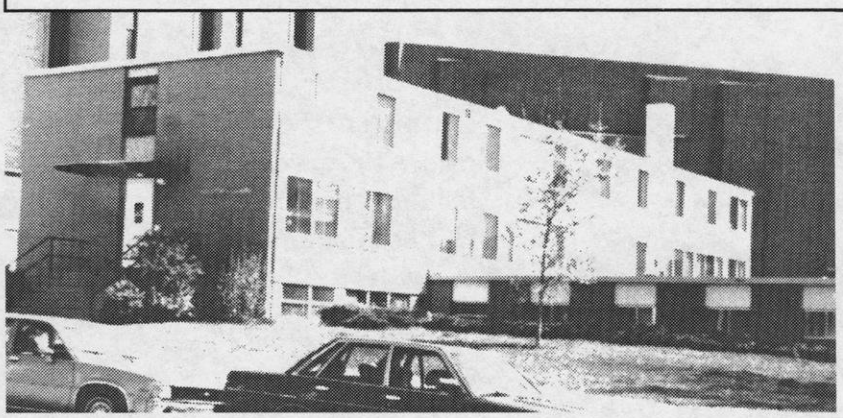


Fig. 1. Schreiner House 1994; a 32 by 91 foot rectangle with basement and two floors of cement block and poured concrete. There were no kitchen or eating facilities. The low structure to the right of the picture is part of the Rust House addition of the 1960s. [Author Photo, AP-34]

Schreiner House was built as the men's cooperative dormitory half of the pair of low cost dorms (with Zoe Bayliss House) in 1955. A study of student housing in 1954 had shown a severe need for low cost housing for those students working their way through school. The co-op idea had already been developed by the pioneer co-ops like Anderson house (for women) and Mack and Babcock Houses (for men). During late 1954 plans for co-op dorms for 100 students (50 men and 50 women) were developed by the regents and Madison architects Weiler and Strang. The Orchard Street location for the men's co-op was determined by May 1954. Final plans were approved by the regents on January 8, 1955. In March of 1955 contracts were let, with the general construction contract going to George Nelson for $157,000. The men's dorm was to cost about $107,317. Groundbreaking took place in the middle of April 1955. Labor strikes and material shortages delayed construction in the summer of 1955. Further delays resulted when Bayliss House was made a higher priority, and workmen moved to that job. The contractor reported that the men's dorm was occupied as of October 24, about two months late.[1]

The building was a 32 by 91 foot rectangle with basement and two floors of cement block and poured concrete. The basement held utilities, a lounge, and a game room. On the first floor were twelve bedrooms and the housemother's suite. The second floor held 17 10 by 12 foot bedrooms. There were no kitchen facilities, since most men's student jobs had meal privileges.

The 55 students who lived in "poverty palace" that first year paid $20 per month for their rooms, and were responsible for managing, housecleaning, and routine maintenance. The only outside employee was the housemother. Membership in the co-op was determined by scholarship and need. In December of 1955 the regents named the co-op "David Schreiner House" after a University student and football star who was killed at Okinawa.[2]

After years of success as a co-op, changing economic and social conditions made it impossible to attract enough students to keep the co-op running. In 1989 the University began to use Schreiner for grad student housing.

1) Regent's Minutes, September 25, 1954, March 12, 1955, January 8, 1955, May 8, 1954, September 10, 1955, November 14, 1953, June 16, 1955, May 7, 1955, September 25, 1954;
2) *Daily Cardinal*, Registration issue, 1956, November 16, 1956; Archives biographical file, "David Schreiner". The name Schreiner had also been attatched to one of the discontinued houses in the stadium dorms.

HARVEY STREET APARTMENTS

Fig. 1. Harvey Street Apartments 1993. The picture shows the Harvey Street face of the quadrangle; there are seven buildings holding forty eight apartments. [Author Photo, AP-35]

The closing of the temporary wartime housing facilities weighed especially heavily on married students with families. Among these temporary facilities were Truax Field, The Monroe Trailer Park, Badger Village, and the University Cabin Courts.

The University Cabin Courts (originally Sullivan's Cabins) was a kind of early motel, which opened in the 2900 block of University Avenue about 1939. The court had sixteen small cabins. In 1946 a University law student suggested to president E. B. Fred that the facility be purchased by the University. In September 1946, the Wisconsin University Building Corporation (WUBC) paid $40,000 for the Cabin Court. Permanent heat and electrical connections were made to the sixteen cabins, and the open area laid out for four private quonset huts and 25 private trailers. These facilities were occupied by married students and faculty. The residents paid $8-$28 per month plus an electrical charge, and governed themselves through an elected board. On June 16, 1955 the regents voted to use the site to build 48 apartments for married students. The court was closed on September 1, 1955. Financing for this project, amounting to $380,000, was to come from the anonymous and Kemper Knapp funds.[1]

Based on proposals received during September of 1955, the regents awarded contracts for construction of seven buildings containing 48 apartments, to the Grant Kittle Builders of Madison for $297,500. This was the first time that the University had built without an architect; Kittle, the builder, designed the buildings. Construction was begun in November of 1955, and by August of 1956 all of the buildings were completed and occupied. Total cost was $380,000. The seven buildings form a quadrangle on the north side of Harvey Street. They are frame construction, 25 by 51 feet with hipped roofs, faced with brick, each building with a mixture of one and two bedroom apartments. Their design heavily influenced the layout and design of the Eagle Heights apartments begun a year later.[2] In 1996 as the result of changing demands, the Harvey Street apartments were converted to single graduate student housing.

1) Summary of University Cabin Court, Lee Burns, March 8, 1947, series 24/1/1 box 213; *Madison city directories*; *Regent's Minutes*, June 16, 1955, September 14, 1946, October 1, 1955, November 12, 1955, March 9, 1957.
2) Plans in the possession of the department of Housing.

NURSERY SCHOOL

Fig. 1. The Nursery Laboratory February 1997. [Del Brown Photo, AP-68]

The present nursery school was built in 1955 to replace a temporary building (T-17) that had housed the campus nursery school for many years.

A cooperative nursery school was started in 1926 by professor Abby Marlatt, chairman of the home economics department and several college women. It was named the Dorothy Roberts Nursery School, after a faculty member who died as a result of a lab accident in 1921. By definition a cooperative nursery school was one in which the permanent staff was aided by one or more parents of the children attending. The school provided to the department of home economics the opportunity to observe and experiment in child development and nutrition. Children were drawn from faculty, students and Madison citizens. From the beginning, the nursery school was housed in the first floor of the old house used for home management located on Linden Drive. In 1930 this building was moved a few blocks (to make way for the children's hospital) to 1501 Linden Drive, where it remained in dual use until 1940 when the home management house was built. At that time the old practice cottage was remodelled and used entirely as the nursery school. This old and cramped cottage provided space for only 16 children at a time, and provided no effective facilities for observation and study. In the middle 1940s the nursery school was moved to T-17, a temporary building near the corner of Linden and Babcock Drive. The professor in charge at this time was Helen C. Dawe under chairman of home economics Frances Zuill.[1]

After WW II the enrollment in home economics grew so large that the state was persuaded to add the long-planned west wing to the home economics building and remodel the existing sections. The budget set for this project proved insufficient for all the improvements desired by the home economics faculty, and one of the high dollar items trimmed to meet the budget was the nursery school addition. This reduction in scope was enough to bring the project within budget, but left the nursery school in its old quarters in T-17. The resolution of these difficulties began in 1955 when the

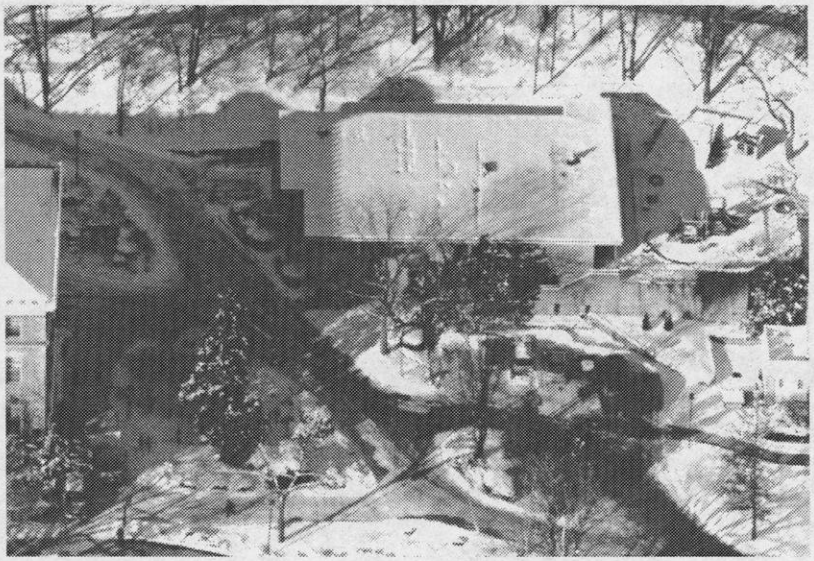


Fig 2. The Nursery School from the air, February, 1997. Just visible at the left is the east edge of Agriculture Hall. [Del Brown Photo, AP-69]

state building Commission appropriated $125,000 for a nursery school. All the effort that professors Zuill and Dawe had put into the first plan was now of use again.

On November 17, 1955, the regents approved the location and preliminary plans for the nursery school. The architects were Weiler and Strang of Madison. The preparations of final plans took until July 14, 1956, when they were approved by the regents. On October 6, the regents selected J. H. Findorff & Son as general contractor for $70,031, total contracts awarded amounted to $125,000.[2]

Groundbreaking took place in November 1956. Construction was generally unremarkable, although the filling in of part of the hillside to provide an outside play area turned out to be more difficult than anticipated. On September 25, 1957 the University officially took over responsibility for the preschool laboratory. Because of the hillside setting, problems with drainage and ice buildup were much in evidence throughout the winter of 1957 and into the spring of 1958. The finished building was a 61 by 74 foot two level building of concrete faced with brick, set into the south side of observatory hill.[3]

The building still serves as the main preschool lab for the University, under the auspices of the school of Family Resources and Consumer Sciences. Cost for each child has risen from the 50 cents per day of the early days of the co-op preschool to the current $80-140 per week. Thirty to fifty children per week attend the preschool on Linden Drive, and they still come from the University faculty, students and Madison residents on a first come-first serve basis.

1) *Wisconsin Country Magazine*, December 1941 p. 13, January 1944 p. 7, April 1937, p. 6; *Wisconsin Alumni Magazine*, February 1934, p. 129; *Daily Cardinal*, December 13, 1921;
2) *Regent's Minutes*, October 1, 1955, November 12, 1955, May 12, 1956, July 14, 1956, September 8, 1956; *Wisconsin Alumni Magazine*, November 1955 p. 9;
3) *Wisconsin Country Magazine*, October 1957, p. 6; *Wisconsin Alumni Magazine*, December 1956, October 1966 p. 12.

WISCONSIN CENTER

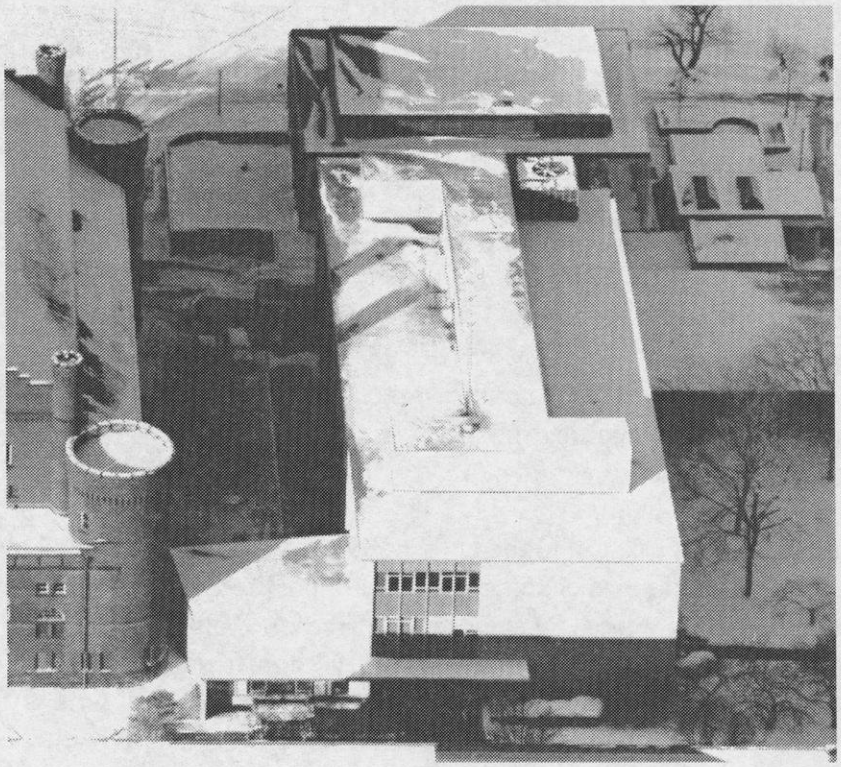


Fig. 1. The Wisconsin Center, February 1997. The red gym is at the left. The Center's entrance is near the bottom, and the auditorium at the top right.[Del Brown Photo, AP-75]

The Wisconsin Center was built with donated funds to provide a "roof for the Wisconsin Idea". It was finished in 1958 and donated to the University by the University of Wisconsin Foundation.

The University of Wisconsin Foundation, an organization to channel donations and gifts to the University, was founded in 1945. In 1947, with the centennial of the University approaching, the Foundation decided as its first big project to build a home for adult education programs; then scattered through classrooms and temporary buildings in a haphazard and unorganized manner. At the earliest meetings it was decided that the Foundation would erect and donate the building.

In November 1949, architects Foeller, Schober, Berners Safford & Jahn of Green Bay presented the first of many plans for the center in November 1949. They proposed to erect a $4.5 million 4 story building that would have filled the block from the red gym to Lake Street, and from Langdon Street to the lake. They intended that the red gym, the gym annex, and several frat houses would be demolished for the project. The plan called for 64 hotel rooms, full kitchen and dining facilities, a 600 seat auditorium, and an underground tunnel to the union. It was on the basis of these plans that serious fund raising began in 1950. It was clear within a few months that the scale of the building would have to be reduced.[1]

The most serious issue to be resolved was that of location. The earliest meeting of the University of Wisconsin Foundation assume that the center would be located at Lake and Langdon, The Foundation and the University investigated other locations for the center. These included Breese and

University and Picnic Point, finally it was decided that the original location had been the best.

As planning progressed, the size of the building was drastically reduced. Among the features eliminated were the hotel rooms and dining facilities. Much of the appeal of the Lake and Langdon site was that the memorial union could provide these facilities; in fact there were plans made (but never executed) to add a five story hotel wing to the northeast side of the union. Parking was also seen as a major problem at all studied sites for the Wisconsin Center, but is was hoped that the area between the union and the red gym recently purchased by the University of Wisconsin Foundation (from the YMCA) would provide a location for a parking structure. By late summer 1955 the plans were advanced to the point that the University had the gymnasium annex, and the old YMCA building razed, evicted the tenants of the condemned frat (Phi Delta Theta) house on the site, and advertised for construction bids. Estimated cost was now $2.2 million. In November 1955, the J. L. Simmons Company of Chicago was selected as general contractor.[2]

Groundbreaking ceremonies were held at the site on September 29, 1956. At this time the Foundation was about $400,000 short of the estimated total cost. Construction proceeded without incident and ahead of schedule through the mild winter of 1956, and spring of 1957.[3]

The cornerstone ceremony was held on May 18, 1957, with speeches by Frank Birch, governor Oscar Rennebohm, and president Fred. The cornerstone contains the state constitution, bylaws of the Wisconsin Foundation, and an explanation of the University "Sifting and Winnowing" motto. At this time it was expected that the building would be ready in the spring of 1958.[4]

At the dedication ceremony held on April 11, 1958, the building was formally presented by the University of Wisconsin Foundation as a gift to the University of Wisconsin. The $2.4 million gift was the largest ever at that time. Presentation speakers included Frank Birch, and University president E. B. Fred. Bronze plaques, honoring Frank J. Sensenbrenner, Herbert Kohler, and Frank Holt, were unveiled. The "roof for the Wisconsin Idea" had become reality. Significantly, the Wisconsin Center shares its block with the Memorial Union, another center of University life built with gifts.[5]

The reinforced concrete building faced with brick is a squarish 'S' shape, with the 82 by 210 foot three story main section running north to south, with a lobby protruding west from the south end, and an 236 seat auditorium (since remodelled and reduced) protruding east from the north end. There are no hotel rooms; Lowell Hall on Langdon Street is used as a guest house. Food is catered from the kitchens at the memorial union. The principal function of the Center is meeting rooms, and there are seventeen on the three floors of the main section, most in constant use by University seminars, short courses and guest lectures. Permanent and travelling art exhibits adorn the walls and fill the lounge. The building and its operation are under the control of the University Extension.

The building is so heavily used that there are plans now underway for a 1997 major expansion. Two floors will be added to the center section to house "long distance education", classes by satellite feeds, cable hookups, etc. On the east side a four story section will envelope the current auditorium to provide, larger halls and more office space. The issues of inadequate parking, catered food, an undersized auditorium, are all a legacy of the planning of the original building, and are still among the problem areas for the facility.[6]

1) *Wisconsin Alumni Magazine*, June 1949, p. 9, June 1950, p. 10, April 1953, p. 12, October 1955.
2) The demolition of the gymnasium annex was made possible by the finishing of plans for the Camp Randall memorial practice building, which took the place of the annex. *Daily Cardinal*, December 6, 1951; *Executive Committee Minutes*, August 12, 1955; Regent's Minutes, May 8, 1954.
3) *Wisconsin Alumni Magazine*, November 1956, p. 5; *Daily Cardinal*, September 28, 1956.
4) *Daily Cardinal*, May 7, 1957, May 21, 1957; *Wisconsin Alumni Magazine*, June 1957, p. 7, May 1957, p. 9.
5) *Daily Cardinal*, April 16, 1958; *Wisconsin Alumni Magazine*, March 1958; *Milwaukee Journal*, April 11, 1958;
6) *Wisconsin Alumni Magazine*, June 1958; *Wisconsin State Journal*, May 24, 1959, April 28, 1973; Paul Tierney, interview fall 1994.

HOLT DORMITORIES

Fig. 1. The Holt dorms are the three light colored buildings in the foreground. Cole Hall on left, Sullivan Hall center, Holt commons at right, 1997. In the background are some of the Kronshage dorms. [Del Brown photo, AP-78]

The first of the post WW II dormitory construction binge, the Holt dorms were built in 1958 with federal funding guarantees. They are named after three faculty members (Sullivan, Holt and Cole) who had recently died when the dorms were planned.

In the early 1950s undergraduate men's housing was becoming very scarce. Not since Slichter Hall in 1946 had the University erected men's dorms on campus. Since enrollment had risen drastically (roughly from 7500 to 10,000) in the postwar era, new housing became a high priority.

In 1956-57, the University's developed an overall plan to build housing for 1300 men and 1200 women by 1959. The first project in this plan was housing for 500 men to be built south of Kronshage. This site was then occupied by intramural playing fields for the Kronshage dorms. Planning began in the spring of 1956. In January 1957 the regents applied to the federal HHFA for loan assistance to build the dorms. The HHFA granted approval in December 1956. Projected cost was $2 million. As with almost all University dorm projects the cost was to be amortized by student rentals. Final plans were approved by the regents in March 1957. The plans called for two dormitory units each to house 250 men students in double rooms, and a two story dining hall to be attached to the Kronshage kitchen unit. No parking lots were planned in the belief that the lots for the Kronshage and short course dorms would provide enough parking.[1]

In June 1957 the general construction contract was awarded to the J. L. Simmons Company in

the amount of $1.06 million. Construction began late in June 1957 with completion scheduled for fall 1958. The regents decided to name the buildings after three recently deceased faculty members; Frank O. Holt, University director of public relations, Llewellen Cole, coordinator of graduate medical education, and Richard E. Sullivan, chairman of the extension division commerce department. Houses in the dorms were named for former faculty members: George Bryant, Aldo Leopold, Julius Olson, Philo Buck, William Kiekhoffer, Edward Ross, and Benjamin Snow, and former regent secretary Maurice McCaffrey.[2]

The dorms opened on schedule in the fall of 1958 at a cost of $2.1 million. Rentals were set at $780 per year per person. Following the tradition of a dorm group being known by the name attached to its commons building, they became known as the Holt dorms. Because a planned women's dorm between Tripp Hall and Liz Waters, was cancelled due to concerns about interference with the view from Observatory hill, it was decided to use Cole Hall as a women's dorm. This is the first time in the history of University housing that men's and women's dorms shared a commons.[3]

The two dorm units were four story structures of reinforced concrete columns and beams with concrete slab floors, and concrete block walls, faced with brick. Sullivan Hall is 'L' shaped with one wing 162 feet and the other 132 feet. Cole Hall is more nearly linear, with two 110 foot wings projecting from a center section. Holt commons is a two story brick on block structure 100 by 115 feet, containing dining cooking and student service areas. It was intended that the dining facilities at Holt would serve only the 500 residents of the Holt dorms, but that recreational spaces, meeting rooms, and service areas would be used by all University students. With the completion of the Holt dormitories, the first phase of the post WW II housing construction boom was ended. In quick succession would come the Elm Drive Dorms, and new Chadbourne Hall.

Like all the Lakeshore dorms these units are popular with students. Since changes in the commons at the Van Hise, Kronshage and Elm Drive dorms, Holt commons dining facility now serves dorm residents from all the Lakeshore dorms.

1) *Regent's Minutes*, April 7, 1956, July 14, 1956, January 12, 1957, March 9, 1957, June 20, 1957, September 7, 1957;

2) *Regent's Minutes*, June 20, 1957, February 1, 1958, July 13, 1957; *Daily Cardinal*, February 8, 1958;

3) Teicher and Jenkins, *A History of University Housing at the University of Wisconsin*, p. 63; *Daily Cardinal*, Registration Issue September 1958, March 6, 1958, March 24, 1959; *Regent's Minutes*, April 11, 1959, December 6, 1958.

EAGLE HEIGHTS

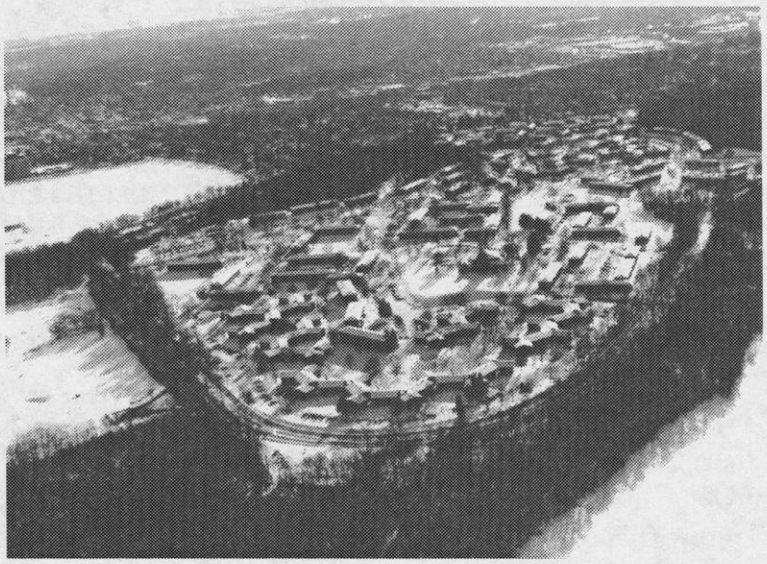


Fig. 1. Eagle Heights from the air 1997. [Del Brown photo jf-73]

Built in six stages (1956 through 1966) Eagle Heights provides housing for married students at low rental rates. Residents have access to community buildings, gardens and other cooperative ventures.

Even before WW II the need for improved housing for graduate students at the University was recognized. In 1939 President Fred appointed a committee to investigate housing conditions for graduate students. This committee recommended construction of housing projects by the University, the city of Madison, or the federal P.W.A. The outbreak of WW II eliminated any possibility of action at that time. In April 1946, the regents approved a 120 unit housing married student project, but high bids and higher priority projects caused them to postpone the project. At the end of WW II, the need for married student housing grew dramatically. There were increases in the numbers of graduate students enrolled in classes, teaching and research positions; in addition the large amounts of temporary housing for married students at Truax Field and Badger Village were closed.[1]

The regents began to investigate sites for housing developments in the fall of 1954. They hired Madison architectural consultants Weiler and Strang to investigate three sites: the Pharmaceutical Gardens in Eagle Heights (donated to the University by the Brittingham Foundation in 1951), the Spring Street neighborhood at the foot of Monroe Street east of Camp Randall, and the southeast corner of University Avenue and Midvale Boulevard. By February 1955 the regents had decided on the Pharmaceutical Garden (later called Eagle Heights) site for 100 units of married student housing. In its favor the Eagle Heights site had a large amount of expansion room, and was already owned by the University. The entire Eagle Heights area had been traded by the regents to E. J. Young when Picnic Point was purchased by the University. In 1951 the Brittingham foundation purchased the 28 acre Eagle Heights from the Young estate and donated it to the University.[2]

Final plans were approved by the regents on July 14, 1956. The plans were based on the

existing married housing units on Harvey Street. In October 1956 contracts were awarded for the construction of 100 housing units of married student housing in the total amount of $892,000. Financing for the project came not from the state but from the federal government who provided a loan through the College Housing Program of the Housing and Home Finance Agency. The general contractor was J. H. Findorff with a contract for $514,000. Work progressed throughout the winter of 1956, with all footings completed by mid-November. Despite a year of very treacherous construction weather, the first families moved into the Eagle Heights apartments the week of September 1, 1957, though the rest of the units, sidewalks and roads were not finished until October 1. There were nine buildings in the 100 group: two, 25 by 101 feet, with eight units each, and seven, 25 by 151 feet, with 12 units each. They were wood frame faced with brick, with hipped roofs of asphalt shingles.[3]

Acknowledging the enormous pent-up demand for married student housing, plans for the 200 group were well underway by December 1956. The design was almost identical to the 100 group; nine buildings located just north of the first group. Financing was also handled by the Housing and Home Finance Agency; total cost was not to exceed $850,000. Contracts for this group were let on December 14, 1957 in the total amount of $865,000. The $15,000 over the federal loan came from the Residence Halls Fund. The general contractor was Marshall Erdman of Madison at $442,800. Erdman began in late October 1957, just weeks after the first group was occupied. The construction of this group went smoothly, and was completed in time for occupancy in the fall of 1958.[4]

With the general success of the apartments in Eagle Heights, and the existence of a substantial waiting list of students wishing to move in, the regents raised their sights. Phase III consisted of 400 units in twenty six buildings. The Gausewitz and Cashin plans were used for this third building phase also, with a slightly different distribution of apartment sizes in the 36 buildings that made up the 300-600 groups. Preliminary plans and locations for the 300-600 groups were approved in December 1957, just as the 200 group was beginning construction. The general contractors were J. P. Cullen and Don Ganser and Associates. The $3.6 million cost was financed through the Housing and Home Finance Agency and sources arranged by the Wisconsin Building Corporation (WUBC). At some point in 1958 or early 1959 the development of the project came to include a school. This school was to provide kindergarten, first and second grades, for Eagle Heights children in a $100,000 one story building, and would be run by the school of Education. After bids came in at well over the $100,000 target, the school was dropped. The 300-600 groups were ready for occupancy by the fall of 1959. Rates were set at $72 for a single bedroom unit and $85 for a two bedroom.[5]

Even this very large increase in married student housing was insufficient to the demand, and the new apartments quickly filled. Another phase of construction was planned. Preliminary plans for the 700 group were approved by the regents January 5, 1962. There were to be 114 apartments in the new phase. Because of their experience with the previous projects, the planners eliminated single bedroom apartments from the 700 group. The estimated cost of the group was $1.2 million. The plans were Eagle Height's first departure from Gausewitz and Cashin's original design and are by Eugene Wasserman of Sheboygan. The new building has a distinctive pattern that became known as the 'snowflake' design which provided a sheltered center to each building for weather protection and children's play space. Construction contracts were awarded in October 1962, with the general contract going to John O. Dahl for $721,276. The project was briefly delayed in the spring of 1962 by political maneuvering by members of the state Building Commission. The 700 group was finished and occupied by the fall of 1963.[6]

The regents requested preliminary plans for the 800 group in September 1963. This group would include another 114 apartments in the same 'snowflake' style of the 700's. Projected cost was $1.4 million. Plans and specifications were approved in December 1963. Contracts were not awarded until May 1964, when the general contract went to John Dahl for $755,300. Funding was entirely

through loans arranged by the WUBC. All 114 apartments in the 800 group were two bedroom. By the fall of 1965 everything but landscaping was complete and residents moved in. The final cost was $1.48 million. The 800 group brought the total married student apartments to 876. Because the Eagle Heights real estate was starting to seriously fill up, the University began to consider building high-rise apartment buildings near the base of Picnic Point for married students. They also discussed increasing the rate of construction to finish 150 apartments per year for seven years.[7]

However, there was enough room to build another conventional group. The 900 group was approved in October 1965 at a projected cost of $ 3.84 million. This group again used Wasserman's snowflake design although some rectangular buildings were added also. The project was scaled back from 300 apartments to 246. Contracts were awarded in June 1966 with John Dahl getting the general contract for $1.78 million. This project was completed and ready for occupancy by fall 1967.[8]

Except for the Eagle Heights community building, first proposed in 1966, and finally built in 1970 by Dyson Construction at a cost of $300,000, the completion of the 900 group brought the Eagle Heights Community to its final configuration. The community center building provides recreational for Eagle Heights residents as well as a grocery cooperative and child care.[9]

No new construction is planned at Eagle Heights. In 1988 the regents approved a twenty year plan to renovate all the 1110 apartments in the complex at a cost of about $20 million. This is about 35% more than the estimated $13 million spent to build them originally. The project is scheduled to take until about the year 2000. These repairs were needed to overcome wear and tear, as well as faults in original design and construction. Costs were to be funded by increased rents. This plan was strenuously resisted by members of the Eagle Heights Assembly, who proposed a rent strike against the 24% increase. This action was abandoned within a few weeks. Current rents are from $333 to $723 per month. As with all University owned housing the Eagle Heights units are self-amortizing; that is construction loans and maintenance funds are paid off with rental income.[10]

Most residents have a high opinion about life in the Eagle Heights community. The relatively low rents, the community spirit and the unparalleled physical surroundings (including the lake, thick woods, Indian mounds, community garden plots, and orchards) make the community of 3000-4000 a very pleasant place to live.[11]

1) Teicher and Jenkins: *A History of Housing at the University of Wisconsin*, p. 54; Regent's Minutes, December 8, 1956.

2) *Regent's Minutes,* January 13, 1951, September 25, 1954, February 12, 1955; *Wisconsin Alumni Magazine*, February, 1951 p. 17.

3) *Regent's Minutes*, June 14, 1956, July 14, 1956, October 6, 1956; Plans held by University physical plant.

4) *Regent's Minutes*, March 9, 1957, October 17, 1957, December 14, 1957.

5) This would be the last time the WUBC would fund a University building project since the state changed the way in which the University could borrow money. Henceforth loans would be through the Wisconsin State Agencies Building Corporation; *Regent's Minutes*, June 20, 1957, December 14, 1957, May 9, 1959, June 17, 1958, September 20, 1958, February 7, 1959, March 7, 1959.

6) *Regent's Minutes* July 20, 1961, January 5, 1962, May 4, 1962, August 14, 1962, October 1962, March 6, 1964; *Daily Cardinal*, May 4, 1962, May 5, 1962, June 21, 1962; plans in the plans room of the department of the physical plant.

7) *Regent's Minutes,* September 6, 1963, December 6, 1963, May 8, 1964; *Wisconsin State Journal,* August 4, 1990 p. 8B.

8) *Regent's Minutes*, September 24, 1965, February 4, 1966, March 4, 1966, May 6, 1966, June 10, 1966.

9) *Regent's Minutes*, September 19, 1969, June 13, 1969, October 17, 1969, May 10, 1970.

10) *Regent's Minutes*, February 5, 1988; *Wisconsin State Journal*, August 4, 1990, March 22, 1991.

11) *Badger Herald*, November 30-December 3, 1972; *Wisconsin Alumni Magazine*, April 1954, p. 8, November 1972 p. 31.

BACTERIOLOGY

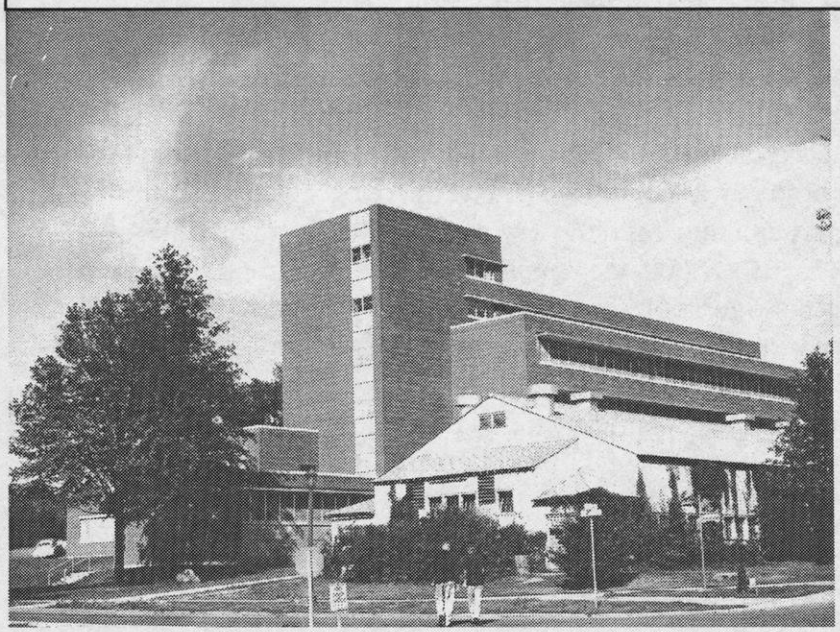


Fig. 1. 1956, bacteriology with T-16 still standing in front. series 9/3, Bacteriology, ns-564]

Built in 1953 to house a rapidly expanding and world renowned bacteriology department, the bacteriology building was named in 1977 for ex-President E. B. Fred, who had been a member of the bacteriology faculty. A major addition was built in 1979 on the south east corner.

Bacteriology at the University has had a long and distinguished history. The first class in the subject was taught by Dr. William Trelease in the period 1881-1883, and this may have been the first bacteriology course taught at any American University. When Trelease left in 1883, the courses were taken over by professor E. A. Birge, then later (1893) by his pupil, H. L. Russell. Because of the wide range of applications of bacteriology both in the fields of medicine and agriculture, the department grew rapidly. In 1914 it was decided that the department of bacteriology should be removed from the college of Letters and Science and attached partly to the college of Agriculture, and partly to the medical school. This division was partly due to the availability of laboratory space in those colleges that was lacking in L&S. The quarters of the bacteriology department began in South Hall (at that time called Agriculture Hall). In 1903, lab space was moved to the new agriculture hall while lecture space was still in south hall. These facilities were increasingly unsuitable, as enrollment, especially graduate enrollment grew. Early in the post WW II era the department had as many as 1600 students, and taught short courses as well.[1]

Planning for a new facility was begun in 1951. The regents decided on the location at Linden and Babcock Drives in July 1951. This location required that Babcock Drive be relocated about 150 feet farther west. At the same meeting, the regents voted to release funds for architectural services on the building. During late 1951 and early 1952 the constructional committee met with faculty and staff to plan the new facility. The regents voted to retain Brimeyer, Grellinger and Rose of Milwaukee as architects for bacteriology. After consulting with faculty and the planning committee during the rest of 1951, the architects began submitting plans in April of 1952. It was clear that the first proposals

were too large to be built with the $1.75 million appropriation, and several iterations of the design were done during the spring of 1952. The final version reduced the original size by 92 percent. Estimates made in July 1952 showed the cost to be just under the budget. In July 1952, the regents approved the preliminary plans for bacteriology and directed the architects to prepare final plans. The preparations of final plans and specifications took almost a full year. This was because the design of the building was modern, the equipment and furnishings complicated, and the utilities involved. Not until July of 1953 were contracts for construction awarded. The general contractor was J. P. Cullen & Son of Janesville for $812,494. Total contracts awarded came to $1,706,640.[2]

Groundbreaking took place on July 27, 1953, and included department chairman W. C. Frazier, professor Elizabeth McCoy and president E. B. Fred. Drawings and descriptions of the "strikingly modern building" had been published throughout the summer of 1953 and it was hoped that the building would be available by the fall of 1955. The site was difficult, due to the moving of Babcock Drive, which required relaying all basic utilities on that part of campus. The extreme complexity of the modern lab equipment caused many delays as specifications were altered and suppliers located. This was the first really modern laboratory building on campus for decades, except for the state lab of Hygiene, whose furnishings were used as a model for bacteriology.[3]

In August of 1955 building superintendent and professor E. M. Foster notified the faculty and students of bacteriology that the contractors had issued keys to staff for the parts of the building that were complete. This included floors two three and four. Gradually during the winter of 1955 the building was turned over to the department. 1956 saw a number of problems resolved that included defective equipment and leaking windows. The building was a four story 176 foot (E-W) by 61 foot (N-S) rectangle, with a basement and one story lab section to the north, and a five story tower section rose at the junction of the two rectangles.

The building was framed with steel reinforced concrete, and steel beams and columns in the northern lab section. Floors were of poured concrete. The International style was in large part a style of showing off the capabilities of the new construction materials. This is reflected in the entirely horizontal lines of the facades, and the unbroken runs of aluminum windows. There are no vertical components at all, thus demonstrating that the exterior walls were entirely non- load-bearing.

The north section of the building was comprised entirely of two very large (42 by 64 feet) undergraduate labs. The rest of the first floor contained classrooms, many smaller laboratories, and a lecture hall seating 175. On the second and third floors, were graduate and research labs, faculty and staff offices. And on the fourth floor were animal rooms and labs for investigation of animal infections. The entire building was faced with red brick to match nearby agriculture buildings, and the first floor entry lobbies were trimmed with cut stone and granite steps.

In July 1977 the regents voted to name the building after E. B. Fred, president emeritus, and ex-bacteriology faculty member.

Within twenty years of completion the bacteriology building was too small. The crowding was principally in the graduate office and lab areas. In 1979 a three level, 63 by 200 foot addition by Bowen Kanazawa partnership was built on the south east corner of the building. The lowest level is mechanical space, while the upper two levels are entirely labs and offices. The addition includes a new entrance on the northeast side, whose windows extend around an exterior corner in the best International style tradition.

1) Curti and Carstensen: *The University of Wisconsin*, A History, v.1 p. 360; University directories; *Wisconsin Alumni Magazine*, October 1914 p. 14. Oral History, E. B. Fred.

2) *Regents Minutes*, July 21, 1951 p. 26, January 12, 1952, July 12, 1952, July 11, 1953, *Wisconsin Alumni Magazine*, October 1953, p. 17.

3) *Daily Cardinal*, July 30, 1953, *Wisconsin Alumni Magazine*, June 1953, p. 14; *Wisconsin Country Magazine*, May 1953 p. 9, October 1955, p. 4,

GENETICS RESEARCH BARN

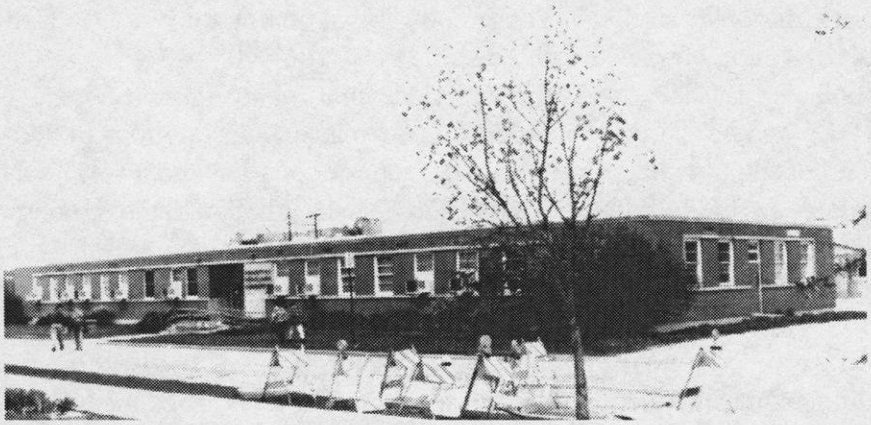


Fig. 1. Genetic research building, 1994, from southeast. It is a 53 by 180 foot one story reinforced concrete building, faced with brick. [Author Photo, AP-37]

On July 22, 1955, the genetics barn on Linden Drive burned to the ground in a fire which killed hundreds of birds and small animals used in genetics experiments. This was the last straw for a department housed in quarters so cramped that the teaching of basic laboratory courses had been discontinued for lack of space in the genetics building on Henry Mall (now Agricultural Journalism). About one quarter of the animals had been saved from the fire, and were moved to the basement of the stock pavilion, and the old dairy barn. Within a week of the fire, dean of agriculture Rudolph Froker wrote to president E. B. Fred, with a proposal for a new building to house genetic research. The proposed prefabricated metal structure was to cost about $130,000. The insurance on the old barn was $25,000, leaving a need for about $100,000. The same day, president Fred wrote to governor Kohler, outlining the problem and asking him that the state building commission appropriate up to $104,600 for Froker's plan. A week later, the regents approved the use of the insurance money and a requested $104,600 to build a new genetics barn.[1]

Late in 1955 the need for new facilities for the poultry department and a $222,000 appropriation, caused the university, at the request of governor Kohler, to combine the two building projects (the genetics and the poultry barns). This would save money on the architects and contractors, and utility hookups. The sites of the buildings were to be back to back between Linden and Observatory Drives, just east of the agronomy seed building.[2]

Rough plans and estimates were sent to the University by the architects, Law, Law, Potter and Nystrom in August of 1956. On October 6, 1956 the regents approved final plans and called for bids on the combined project; in January of 1957, the contracts were awarded. The general contractor was the J. R. Sutton Construction Company of Madison for $249,313. The total of all contracts for the combined project was $436,074. Ground was broken in late January 1957. By May 29, 1957 the buildings were 95 per cent complete. The genetics department occupied the new building in the fall of 1957. It contained cages, animal pens, a few small labs, and one office. Not until the new Henry Mall genetics building was erected in 1962 did the department finally have enough office and lab space.[3]

1) *Daily Cardinal*, July 26, 1955; Fred to Kohler, July 27, 1955, series 4/0/3 box 182; Froker to Fred, July 27, 1955, series 4/0/3 box 182. *Executive Committee Minutes*, July 29, 1955; *Regent's Minutes*, July 29, 1955, November 12, 1955.

2) Muckinhirn to Kirchhoff, December 15, 1955, Kirchhoff to Muckinhirn, December 8, 1955, series 24/ 9/ 2 box 8.

3) *Regent's Minutes*, November 10, 1956, October 6, 1956.

POULTRY RESEARCH LAB

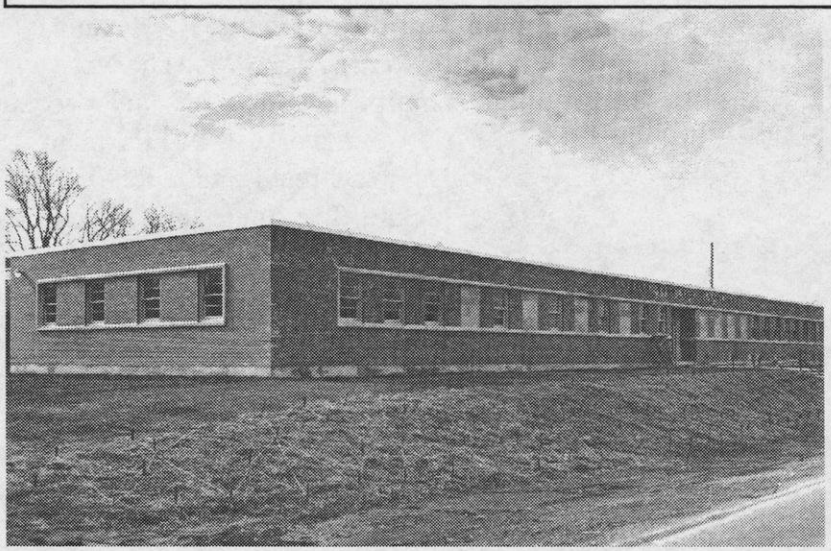


Fig. 1. Poultry Research, just after completion 1957. The building is a one story 43 by 182 foot concrete structure faced with brick. [series 9/3, Poultry Research Lab, ns-2372]

The department of poultry science was founded in 1910 by professor James Halpin under Dean of Agriculture H. L. Russell. At that time, the house at 1800 University Avenue was built to house the new department's labs and offices. Halpin and his students built the "long houses" next to the new building which housed the chickens. After WW II, Halpin, and dean R. K. Froker, lobbied the legislature for new facilities for the poultry department. In 1955, the state building commission appropriated $220,000 for "poultry barns". At this time the faculty of the poultry science department began to move into Hiram Smith Hall.[1]

In December of 1955 governor Kohler asked the University if the poultry barn project could be combined with the planned genetics research building to form a single construction project (though separate structures). The faculty of both poultry and genetics agreed to this combination, which would save architect and utility costs. The architects for the buildings were Law, Law, Potter and Nystrom of Madison. Final plans were approved by the regents in October 1956, and contracts were awarded in January 1957. The general contract went to the J. R. Sutton Company of Madison for $249,313 (for the combined project). The cost of the poultry building was about $208,000. $33,000 was donated by the Central Retail Feed Association in honor of professor James G. Halpin, with the understanding that the building would be named Halpin Hall.[2]

Groundbreaking took place in January 1957, and the poultry research laboratory was occupied in October of 1957. This main building contains batteries, incubators, live bird rooms, and coolers. To the rear (south) of this building is a corridor separating the main building from four metal prefabricated sheds, each 32 by 100 feet. These metal sheds contain pens for laying hens, chicks, and cages for roosters. Office and lab space for the poultry department was still at Hiram Smith Hall. In 1972 these facilities were moved to the new Animal Science building.

1) Glover W. H., *Farm and College*, p. 270; *Wisconsin Country Magazine*, November 1950, p. 5; Archives department of Poultry Science departmental folder, series 9/20.

2) *Regent's Minutes*, November 17, 1955, October 6, 1956, November 10, 1956, May 28, 1943; Executive Committee Minutes, September 8, 1956; Muckinhirn to Kirchhoff, December 15, 1955, Kirchhoff to Muckinhirn, December 8, 1955, series 24/9/2 box 8, genetics and poultry folder University directories.

CHARTER STREET HEATING PLANT

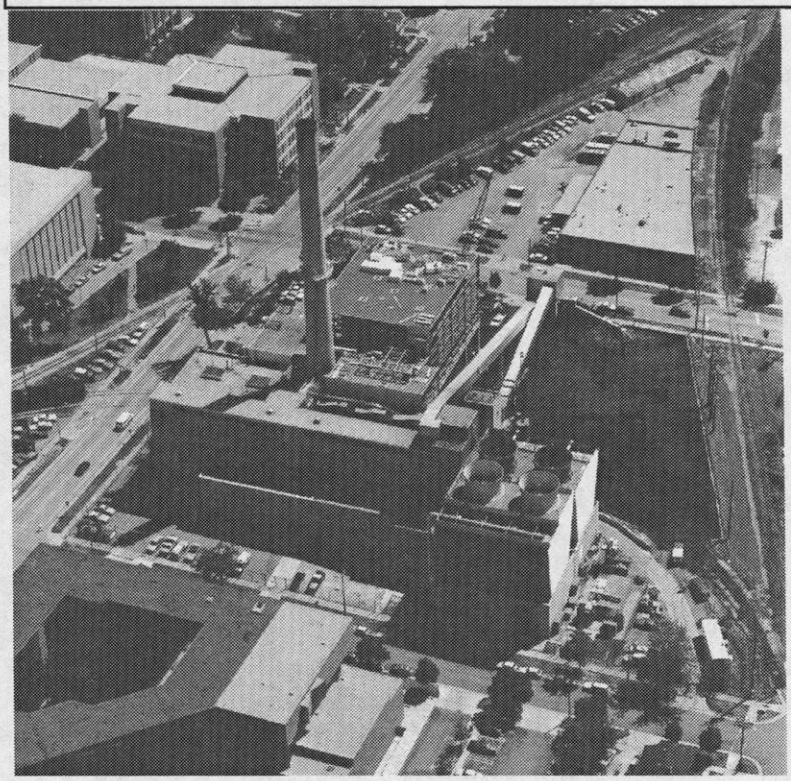


Fig. 1. The Charter St. Heating plant looking east c. 1985. The emission control "bag house" is under construction on the east side of the plant. Dayton Street is at the left of the picture. The single smokestack was built in 1963 to replace the original three shorter stacks, which were too low to prevent soot in the neighborhood. [series 9/5, Charter Street Plant, jf-74]

Purchased second hand from a Michigan firm, the Charter Street heating plant came on-line in September 1959. It has been expanded many times since its erection.

In 1951, faced with unprecedented growth of the University physical plant, the regents commissioned an engineering study of the University heating system. The engineers, Sargent and Lundy, reported in October 1951 that "the present heating plant has reached its capacity."[1]

In 1955 a planning committee was appointed to plan a new heating plant. The committee, which had Sargent and Lundy update their study concluded that the campus could no longer afford to grow in the east west direction, and would have to expand into the area south of University Avenue. The committee selected a site that would be approximately central to the heating plant's load, the block bounded by Mills, Charter, Dayton and Spring Streets. The state allocated $200,000 for studies and plans for the project.[2]

The next year was taken up by investigating various technologies for the new plant. The old plant was coal fired, but coal was expensive dirty, and clumsy to store. The committee looked at natural gas, but found that the gas company had no delivery line nearly large enough to supply the plant. They had also considered, in 1954 the construction of a nuclear power plant. The idea of replacing 40,000 tons of coal with 40 pounds of uranium had obvious appeal. The committee asked the chairman of the chemistry department, Farrington Daniels to act as technical consultant. The federal AEC and many other technical experts were consulted. Daniels finally recommended against the idea in April 1954. He pointed out difficulties: the production of 40 pounds of fission products

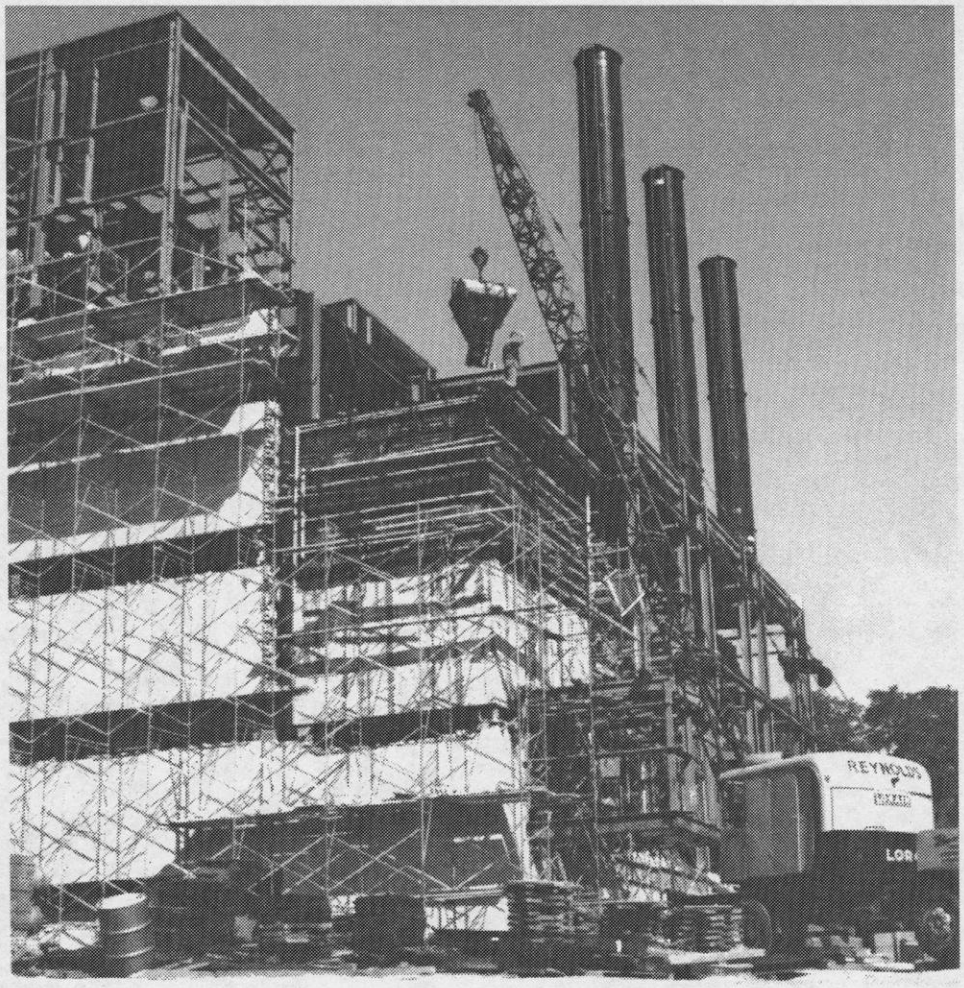


Fig 2. The erection of the American Motors heating plant, summer 1958. [series 7/4 folder #2, jf-99].

per year was "an imposing problem". "I am still worried about the hazards. If we took a-one-to a thousand chance and the reactor did blow up ... we'd be less popular than skunks and I suppose there could be terrific damage suits." The nuclear option was dropped on March 7, 1956. After more investigation it was concluded that coal was still the best alternative.[3]

Although the Charter Street site was the best location, it was not owned by the University and this meant that the appropriation for the heating plant had to be used to buy land. This limited the money that could be spent on the plant itself. The committee struggled with this difficulty through most of 1956 and early 1957. Several plans were rejected because of their inefficiency and stopgap nature. President Fred continued to lobby the legislature for additional funds.

Into this difficult situation, in October 1957, came a letter to the state engineer, from the Michigan firm of W. Hawley and Company, an industrial salvage firm. The letter offered for sale a large and nearly new steam generating plant, built for the recently abandoned American Motors plant in Detroit. The cost was $2.5 million. The offer included the erection of a suitable building to house the plant at the site selected by the University and an array of modern equipment to boost the efficiency of the plant. Hawley's offer would give the University a better and larger power plant than they had been contemplating, and at a cost saving of approximately $1 million. University representatives travelled Michigan to examine the plant, and discuss plans for the building and were impressed. Business manager Peterson inquired, with good results, into the reputation of the Hawley company. It

seemed like a miracle.[4]

The only hurdles to be cleared were land purchases and state approval for funding. Hawley's offer was presented to the state building Commission on November 8, 1957. The state agreed to fund the purchase if the University would agree to defer the expenditure of $1.8 million on new construction and maintenance. At their November 1957 meeting, the regents agreed to this arrangement. In December 1957 Hawley was notified that their offer had been accepted. The funding issue was resolved. Land purchases began immediately. Total property cost was about $340,000. On April 29, 1958 the daily Cardinal reported the groundbreaking for the new heating plant by president Fred and governor Vernon Thompson. Projected completion date of the project was set at September 1959. In March 1959 the construction contract for the steam tunnels which would connect the new plant with the network of steam lines to the campus was awarded to J. P. Cullen and Son for $156,000.[5]

In September of 1959, the new plant was successfully test fired. It was in full operation by October 15. The plant took over full heating load for the University in time for the winter of 1959. The plant was design to be expanded. It was originally a 63 by 260 foot structure faced with brick and having three boiler of 100,000 pounds of steam capacity each.

The first addition came in 1965 when a 98 by 80 foot section was added to the north side of the plant. The design was by state architect Werner Guenther. The addition was faced with brick. Into this addition went boilers 4 and 5. In 1966, a chilled water facility to provide air conditioning for the University. This facility was 54 by 76 feet and built onto the south side of the original plant. The chilled water facility was expanded in 1973 with another south addition of 70 by 70 feet, The plant is now more than twice as large as when it opened in 1959. It also contains a 3000 kilowatt-hour electrical generator connected to the MG & E power grid. The later construction of the Walnut Street heating and chilling plant has reduced the total load on the Charter Street plant, and any further expansion needed will probably occur at Walnut Street. But the second hand "Rambler heating plant" still carries the bulk of the load for heating the campus.[6]

1) Archives series, 24/9/2 box 8;

2) Heating Plant Building Committee minutes, March 7, 1956, January 16, 1956, series 24/9/2/ box 8. *Regent's Minutes*, November 1955.

3) Daniels to Gallistel, November 16, 1955, series 24/9/2 box 8. Peterson to Morrow, August 6, 1954, series 24/9/2 box 7.

4) Executive Committee Minutes, October 23, 1957; *Regent's Minutes*, November 12, 1955, October 5, 1957, November 16, 1957, May 3, 1958.

5) *Daily Cardinal*, October 31, 1957, November 9, 1957, April 29, 1958, May 1, 1958, September 22, 1959, ; *Wisconsin Alumni Magazine*, January 1960 p. 13.

6) *Daily Cardinal*, February 8, 1964; Badger Herald, February 6, 1970; *Regent's Minutes*, July 12, 1963. Plans in the plans room of the physical department.

ELM DRIVE DORMS

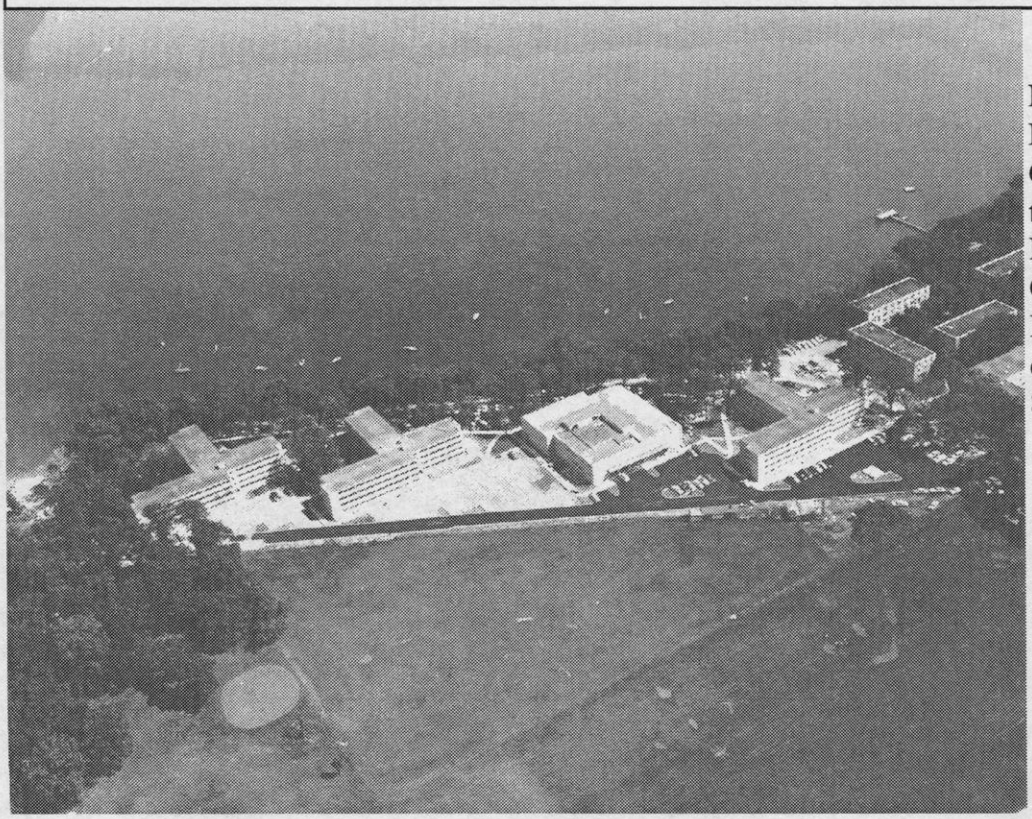


Fig. 1. Elm Drive Dorms c. 1959. Current names, left to right: Goodnight, Friedrick, Elm Drive Commons, Bradley. Elm Drive is at the extreme right. [Series 8/8 ns-1699]

Erected in 1959 as undergraduate dormitories, the Elm Drive Dorms were converted to other uses as dorm occupancy declined in the 1970s. They now comprise one dormitory, the Friedrick Center of the Extension, Food Research Center, and Communicative Disorders.

The Elm Drive dorms were built during the burst of undergraduate housing construction in the mid 1950s. The University planned for thousands of dorm rooms at sites at Chadbourne Hall, to the south and west of the Kronshage units, and to the east of Tripp Hall. The Holt dorms to the south of Kronshage were the first finished (fall 1958) but the dorms west of Elm Drive had been in the planning stage since the fall of 1957. The regents approved the site for the dorms west of Elm Drive, consisting of three or four four-story dormitories and a two story dining hall and kitchen facility, the dorms to house up to 1000 men. Authority was granted for the preparation of plans.[1]

This site had been allocated as dormitory space on campus master plans for years, and was reaffirmed as a suitable location by a study in June 1957. Funding for the project came through the Wisconsin University Building Corporation (WUBC), with help from the Federal HHFA. By April 1958 the funding was available and final plans were approved. Estimated cost was $3.5 million.[2]

In June of 1958, a little over a year since the first studies of the project, construction contracts were awarded; the general contractor was J. H. Findorff & Son for $1.78 million. The scope of the project had been reduced to three dorms to house 812 students. Construction began in late June

1958. By the fall of 1959 the dorms known as Elm Drive A, B, and C, were open and occupied, A by women and B and C by men. A formal dedication was held on April 10, 1960. Initially they had been intended as men's dorms, but the cancellation of a women's dorm project near Liz Waters, and delays in the construction of the new Chadbourne Hall made the modification necessary. It had already been demonstrated in the Holt dorms, opened the previous year that men and women students could successfully share a commons.[3]

Although the group was never given a formal name, the regents did assign names to the individual houses in the dorms: William Bleyer, Charles Cool, James Elsom, Louis Kahlenburg, Wakeline McNeel, Daniel Mead, Adam Millar, James Phillips, J. F. A. Pyre, Oliver Rundell, and William Steve. The dorms were commonly called the Elm Drive Dorms.[4]

The three dorms were virtually identical 'T' shaped units with the stem pointed toward Lake Mendota. They were 184 feet wide east to west and 120 feet north to south. The were a basement and four stories of concrete block sheathed with brick. They held 250 students each in double rooms. The two story with basement commons building was 139 feet square, in the same style as the dorms, and contained kitchen facilities, dining rooms, recreational space and a residence halls store.[5]

They were immediately popular with students as were all the lakeshore dorms. However their use as housing lasted less than twenty years. As the 1960s wore on and the growing pressure from students to relax the rules regarding where and how undergraduates could live began to take effect, the dorms began to empty, and since small dorms are easier to close than large ones, the dwindling enrollment in the dorms led the Division of Housing in 1970 to close Elm Drive B and C.[6]

Elm Drive A stayed open as a dorm and remains so today [1994]. The other three buildings were immediately modified for other purposes. Elm Drive B became part of the University Extension program to provide rooms and office space for continuing education programs, and was known as the University Bay Center. In 1972 the department of Communication Disorders moved from rented quarters on University Avenue to new offices and labs in part of Elm Drive C. Also in 1972 the Elm Drive Commons became the home of the Food Research Institute which had been housed for years in cramped offices in bacteriology; the Elm Drive A residents take their meals at Holt Commons. In 1973 the Water Resources Center, founded in 1965 moved into Elm Drive C.[7]

Along with new tenants, the buildings acquired new names. In August 1973 the regents named Elm Drive C after the recently deceased Scott Goodnight, long time dean of men. In February 1976, the regents renamed Elm Drive A after the late professor Harold Bradley. Elm Drive B was already known as the University Bay Center but was officially named the Friedrick Center after ex regent and labor leader Jacob F. Friedrick. There are 75 hotel type rooms at Friedrick, each made from several original dorm rooms, quality food service and several large conference rooms.[8]

The Elm Drive Dorms were the last low rise dorms built on campus; the same year they opened (1959) new Chadbourne Hall also opened and demonstrated the wave of the future in University Housing. Elm Drive was also the end of undergraduate housing development in the Mendota Lakeshore area, the proposed site of student housing since 1908. The switch to high rise housing would necessitate a radical rethinking of the location of new student housing.

1) Teicher and Jenkins, *A History of University Housing*, p. 61-64; *Regent's Minutes*, September 1957;
2) *Regent's Minutes*, June 20, 1957, September 7, 1957, April 10, 1958;
3) *Regent's Minutes*, June 17, 1958, September 7, 1957; *Daily Cardinal*, February 19, 1959. *Wisconsin Alumni Magazine*, November 1959 p. 14. Teicher and Jenkins, *A History of University Housing*, p. 63.
4) *Regent's Minutes*, April 11, 1959.
5) Plans in the plans room of the physical plant.
6) *Daily Cardinal,* Aug 7, 1970.
7) University directories; *Regent's Minutes*, July 15, 1983, December 7, 1973, July 14, 1972; *Wisconsin Alumni Magazine*, October 1965 p. 6.
8) *Regent's Minutes*, August 3, 1973, February 6, 1976, February 8, 1980,

NEW CHADBOURNE HALL

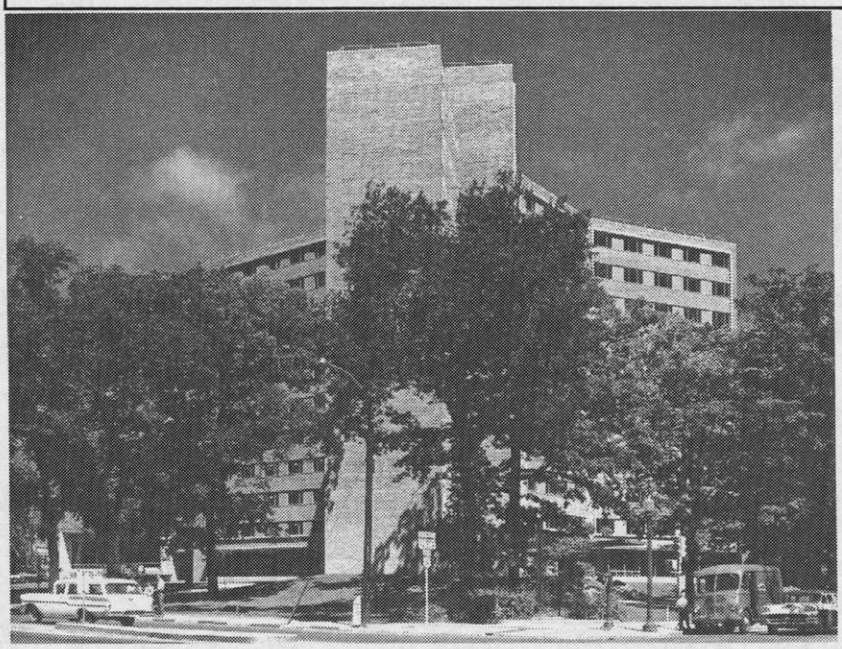


Fig. 1. New Chadbourne Hall in July 1959, just after opening. [series 26/1, Chadbourne Hall, jf-75]

Built in 1958 to replace the old Chadbourne Hall at the same site, Chadbourne was the University's first high rise building. It was originally women's housing but became coed in 1995.

The construction of the new Chadbourne Hall was significant for a number of reasons. It was the first planned and last built of the 1950s housing boom. It was the last undergraduate housing unit constructed on the campus north of University Avenue. And most significantly, new Chad was the University's first high-rise building. After Chad nearly every new building project was pre-supposed to be a high-rise.[1]

Plans began in 1952 to replace the ageing, and low capacity Chadbourne Hall. In the fall of 1952 Residence Halls announced the closure of old Chad, and the imminent construction of a replacement. Within a month the announcement was rescinded, due to an increase in enrollment. Difficulties with funding delayed progress until 1955.[2]

In February 1955, the regents voted to use the site of old Chadbourne Hall for the new dorm. In September 1955, funding problems were resolved when the regents applied for funding through the federal government's HHFA, in the amount of $2.4 million for a dorm that would house 600 women. Three months later, the regents approved the preliminary plans for the new dorm as prepared by Stanley Nedrum of the state architect's office. The regents requested that a larger dorm be considered, since 600 now seemed too small. At the same meeting, the news arrived that the HHFA loan for $2.4 million had been approved. The project seemed at last to be on the way. This impression was shaken when two months later in February 1956, the regents rescinded their approval of the plans in favor of a new plan by Nedrum, which changed the original pair of six story towers and a connecting dining facility to a single eleven story tower with a dining facility connecting to Barnard Hall. This new plan was approved unanimously. Old Chad was razed in February 1957. In April 1957 the

Fig 2. Spring 1958, the Chadbourne tower, up to level four, from the corner of University and Park. [series 26/1, Chadbourne Hall, ns-1664]

regents approved the final plans and specifications for the new dorm. The plans were for a one story dining hall and an eleven story tower housing 678 students in double rooms. The following month the regents obtained from the HHFA an increase in funds to $2.9 million.[3]

In July 1957 the regents awarded construction contracts for the project. The general contractor was J. H. Findorff for $1.55 million. Total contracts amounted to $3.16 million. Construction began immediately. By spring of 1958, the tower was well under way (see Fig. 2). Target date for completion was September 1959. The regents accepted the completed building July 10, 1959. Students began moving in September 17, 1959. A formal dedication was held in December 1959.[4]

The finished building was an eleven story 'Y' shaped structure of reinforced steel and concrete, faced with brick. The central core of the Y contains utilities and the first elevators in a University dormitory, and the three wings contained 31 double rooms per floor. The unusual shape of the building meant that every room in the dorm had a wall of windows. The dorms was divided into houses, as was customary with dorms, each floor of the building making up a house of approximately 62 students. A touch of continuity with the old Chadbourne Hall (in addition to the name) was provided by the sandstone entry-ways salvaged from the old building's walls from old Chad. The new building immediately earned the nickname of "the Chadbourne Hilton" (see Fig. 1).[5] Its location and amenities made Chad popular from the beginning. The dorm remains at capacity, although to maintain that popularity, it became co-ed by floor for the 1995 school year.

1) Teicher and Jenkins, *A History of Housing at the University* of Wisconsin, pp. 61-64.
2) *Regent's Minutes*, October 24, 1953, November 14, 1953; *Daily Cardinal*, September 1952, Registration issue, *Wisconsin Alumni Magazine*, October 1952 p. 11, 14. The Alumni Magazine announces the demise, p. 14, and the reprieve, p. 14 of old Chad in the same issue. *Daily Cardinal*, February 15, 1955, December 13, 1955, September 1956 Registration Issue, May 16, 1957, August 20, 1957, ;
3) *Regent's Minutes*, August 7, 1954, February 12, 1955, June 16, 1955, September 10, 1955, December 10, 1955, February 11, 1956, November 10, 1956, December 8, 1956, April 6, 1957, May 11, 1957;
4) *Regent's Minutes*, July 13, 1957; *Daily Cardinal*, July 16, 1957; Dedication pamphlet, series 24/9/2 box 12, Chadbourne Hall folder.
5) *Daily Cardinal*, February 27, 1957, July 10, 1959, September 16, 1959; *Wisconsin Alumni Magazine*, November 1959, p. 9; The houses are named for notable Wisconsin women: Zona Gale Breese, Ruth Campbell, Abby Marlatt, Christina Murray, Lois Rosenberry, Gretchen Schoenleber, Almere Scott, Ruth Wallerstein, and Julia Wilkinson.

AGRICULTURAL ENGINEERING SHOP

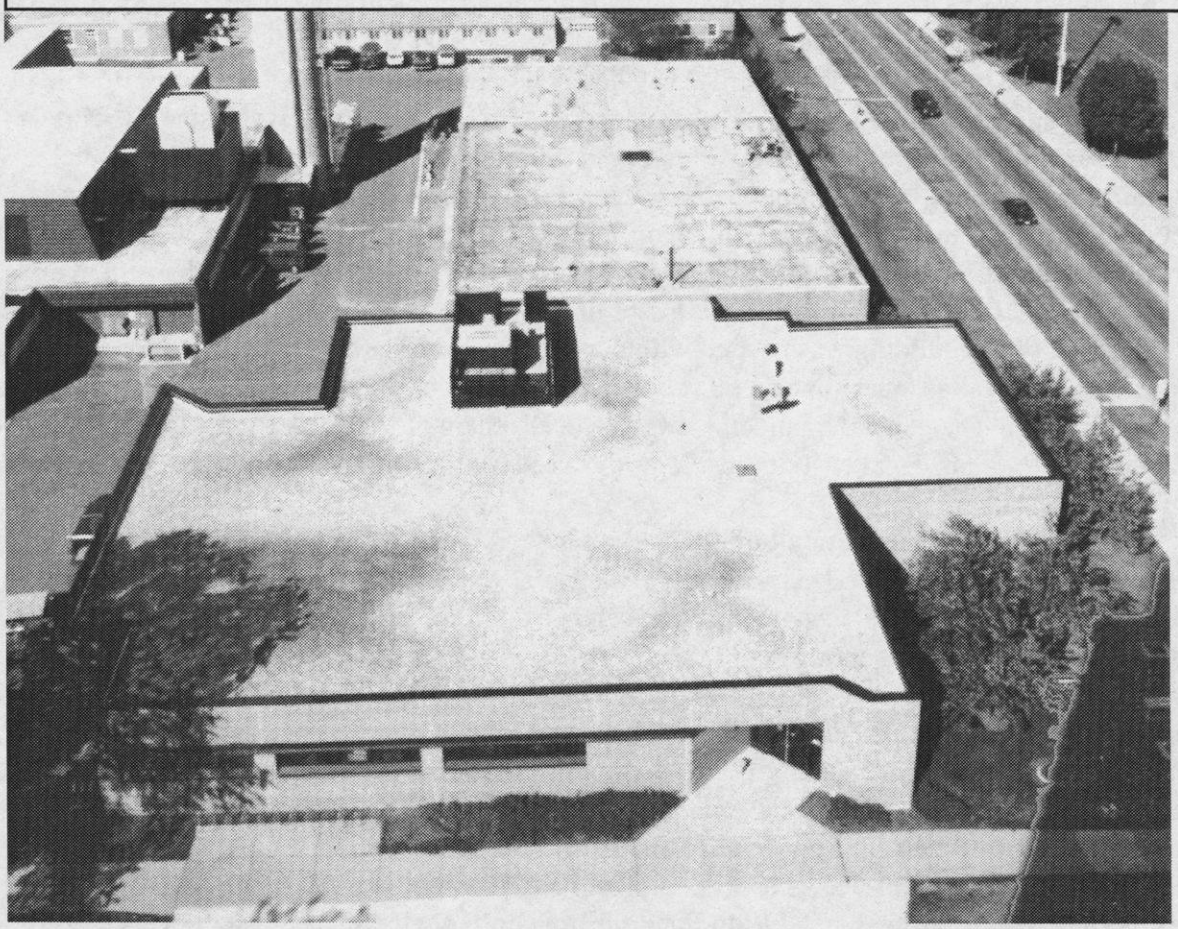


Fig. 1. The agricultural engineering shop. The first (1958) section is farthest from the camera. The second (1968) section is in the center of the building. The last (1981) addition is in the foreground. [Author Photo AP-84]

Built in stages beginning in 1958, the Agricultural Engineering laboratory provides lab and classroom space for a department housed until 1959 in the tiny Agricultural Engineering building on Henry Mall.

The department of agricultural engineering had been in the same tiny building on Henry Mall for almost 50 years when they began to agitate for new quarters. Although the old building had been designed for expansion, the space for additions had gradually been usurped for other buildings, notably Horticulture and Biochemistry. Even though the early faculty and students in ag engineering had performed remarkably well in the old facilities. Among the developments of the first agricultural engineering department in the country were: the 1927 forage harvester, the seed corn dryer, hemp harvesting equipment, and a 1945 farm safety program. In spite of this preeminence in

the field, the steady rise in the scale of farming and its attendant machinery after WW II, quickly made the old shops completely obsolete. In 1955 the chairman of the department F. W. Duffee began to lobby president E. B. Fred directly for a new facility. He complained but that the facility was "very inadequate". A lot of departments were feeling that way in the post WW II student flood.[1]

Funding for the shop building was obtained in August 1957, from the state building commission. In February 1958, the regents agreed to locate the new shop building at Linden and Elm Drives. When initial estimates came in, the department was forced to scale back on what they had believed was a modest sized building to begin with. They decided to present the plan as being buildable in stages, so that space could be added as more funds were obtained. Contracts for stage 1 were approved on June 9, 1959, with H. A. Sylvester Co. getting the $70,546 general contract. Total cost for the building was $125,000. Construction got under way immediately, and except for landscaping, the finished building was inspected and accepted on June 21, 1960. The building was 141 by 81 feet of concrete block faced with brick, aluminum window and a flat roof. It comprised a basement and one story. The architect was S. A. Witzel, a professor of agricultural engineering.[2]

Phase 2 of the building was needed within a decade. The architect for the addition was Kurtz Architects of Milwaukee, who added a 60 foot extension without windows or basement to the west end of the original. The general contractor was Vogel Brothers of Madison for $51,030. It was completed July 9, 1968. Total cost of the addition was $104,000, and was paid from receipts of the sale of Hill Farms land.[3]

In the late 1970s the Agricultural School intended to erect a $13 million building for agronomy, soils, and agricultural engineering. This plan eventually failed through lack of state and University support. It was replaced by the plant science addition to horticulture and by a third addition to the agricultural engineering shops.

This third and final section of the building was designed by Miller-Waltz-Diedrick of Milwaukee in September 1980. This addition was originally intended to be a two story structure capable of holding all faculty and departmental offices. However the estimates of the cost of the project led the planners to divide it into two phases. Phase I was the first floor only. It was 125 by 140 feet added to the east end of the building. The general contractor was Anthony Grignano of Madison for $682,295. Total cost was $1.09 million. Phase I was completed in the winter of 1981, and was ready for use in the spring of 1982. Because of lack of funding, it is now unlikely that phase II will ever be constructed. This forces the department to occupy a split facility with labs and classrooms in the new building, but departmental and faculty offices in the old building on Henry Mall.[4]

1) *Wisconsin Country Magazine*, October 1938, p. 12; *Wisconsin Country Magazine*, December 1937, p. 9; *Wisconsin Engineer*, May 13, 1913. vol. 17:388; *The Work of the Agricultural Engineering Department*, series 4/0/3 box 177 "Agricultural Engineering folder". Duffee to Fred, September 29, 1955, series 4/0/3 box 177 "Agricultural Engineering" folder.

2) *Regent's Minutes*, February 1, 1958, July 11, 1958, June 9, 1959; Duffee to Elvehjem, June 3, 1959, series 4/0/3 box 177, "Agricultural Engineering" folder; Small to Ahearn June 27, 1960, series 24/9/2 box 12 "Agricultural Engineering" folder; plans in the physical plant plans room.

3) Agency Request for State Building Commission Action, Gordon Orr to Knowlton Levenick, November 14, 1966, Gordon Orr to Jim Edsall, August 17, 1966, Culbertson to Lorenz, December 8, 1966, series 24/9/3 box 8; *Regent's Minutes*, September 15, 1967.

4) *Regent's Minutes*, December 14, 1979, December 5, 1980 exhibit B; Program Statement, July 1988, Converse to Shalala, May 22, 1990, series 4/31/9-3 box 1, "Agricultural Engineering" folder; interview Dr. James Converse, December 1995. Departmental files in the office of Dr. James Converse.

MATHEWS CHEMISTRY LABORATORIES

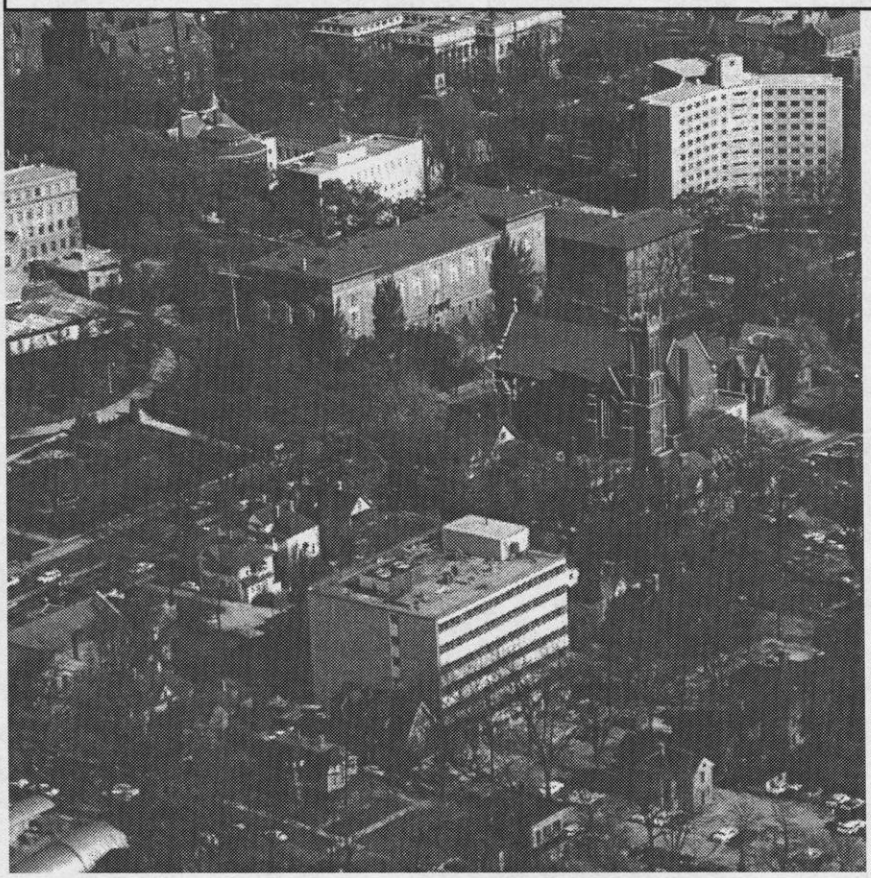


Fig. 1. The Chemistry Research building (now Mathews) looking northeast c. 1963. This photo was taken several years before the Daniells chemistry building was erected attached to Mathews. Visible above the chemistry building are Lathrop Hall, Chadbourne Hall and the Methodist church on University. [Series 8/3, jf-104]

The post WW II enrollment surge made chemistry's quarters in Chamberlin Hall inadequate. To alleviate the crowding as much as possible a chemistry research unit was built in 1960 on Johnson Street. It was finished in July 1962 and in 1972 was named for ex-chairman J. H. Mathews.

In the 1950s both the Pharmacy and Chemistry departments were approaching a crisis level of crowding. They shared the chemistry building (now Chamberlin Hall) at the corner of University Avenue and Charter Street. That building had been designed with expansion in mind, but even after all of the envisioned expansion had been carried out, the building was still too small. Great strides in the field of chemistry and the growth of the sciences, all of which required chemistry as a support course, combined to crowd the chemistry department to a critical point.

In the post WW II era plans for further expansion were made by chemistry chairman J. H. Mathews, his successor, Farrington Daniels and dean of pharmacy Arthur Uhl. These plans called for either expanding old chemistry to the east, or building entirely new facilities across University Avenue to the south. In the 1950s legal restrictions interfered with the southern expansion plans, so most effort went into planning an eastern expansion. In 1956 the University asked the state for $6 million for a new chemistry building. At this time a decision had not been made as to which plan to pursue.[1]

By 1958 it was decided to expand across University Avenue and build and entire new chemis-

try facility. Chairmen Uhl and Daniels agreed that rather than wait for the state to put up the whole amount for the entire complex envisioned, they would try to build in stages. The first stage would be a purely research unit. Two reasons for this choice were first it would free up the maximum amount of the old building for pharmacy and second since it was a research project they could ask Wisconsin Alumni Research Foundation (WARF) for funding (WARF would generally fund research facilities, but not general classroom ones). The estimated cost of the research building phase was $1.75 million. By October 1959, enough money was promised that the regents moved the chemistry building from 10th to 6th on the building priority list. WARF would contribute $1.45 million, the Nation Institute of Health $497,000, the Nation Science Foundation $97,000, and the state was asked for $562,000. This made a total of $2.61 million.[2]

Most of the fall of 1959 was taken up with finishing the details of the planning, and the purchase of land on the Johnson Street site. Much of the state appropriation was used for land acquisition. Planning and funding included the alteration of the old chemistry building, especially the west wing for use by the pharmacy department. In October 1959 the regents approved the preliminary plans and specifications for the first unit of the new chemistry building Final plans were approved in March 1960. Construction contracts were awarded for Chemistry first Unit, on August 8, 1960. The general contractor was the Walch Construction Company of Chicago, for $904,648. Total of all contracts was $2.83 million. The state had increased the amount of their funding to $777,000.[3]

Demolition on the Johnson Street site began on July 6 1960. Groundbreaking took place on August 3, 1960. Completion was projected for July 1962, the first time the University had planned for a two year construction project. There were no major difficulties. In the winter of 1961, the Badger Chemist reported that the building shell was completely enclosed. On schedule the Chemistry Research Building was completed and occupied by the department in early July 1962. Into the news building moved all the research labs and offices from the old chemistry building, the instrumental analysis group, and the Theoretical Chemistry Institute under professor Hirschfelder (housed since 1962 in the old Naval Research Lab on Babcock Drive). The pharmacy department relaxed gratefully into the vacated space in old chemistry.[4]

The new building is a rectangular sub basement, basement and six stories of 92 by 117 feet and 97 feet high. The construction is steel reinforced concrete, with brick sheathing on the east and west faces, the front (south) side being window-wall construction with some brown precast concrete panels to relieve the extreme regularity that is a hallmark of this building style. The new Chemistry Building was one of the first University buildings to be built with air-conditioning. Plans were already being advanced to complete the chemistry complex, which was intended to take the entire block except for the Methodist Church. This expansion would not be complete until the late 1960s. In 1972 the regents voted to name Unit I the "Mathews Laboratories for Chemistry Research."[5]

1) Aaron Ihde, *Chemistry as Viewed from Bascom's Hill*, pp. 625-627; Daniels to Ingraham, June 24, 1955, series 24/9/2 box 7; Pharmacy-Chemistry Building plans, by Arthur Uhl and Farrington Daniels, October 29, 1957, series 24/9/2 box 10.

2) *Regent's Minutes*, November 8, 1958, October 12, 1959 exhibit E; For real estate transactions see *Regent's Minutes*, February 7, 1959, September 12, 1959.

3) *Regent's Minutes*, March 12, 1960, July 8, 1960 exhibit D; *Daily Cardinal*, October 24, 1959, January 12, 1960, *The Badger Chemist*, Fall, 1960, series 7/6/00/3.

4) *Daily Cardinal*, July 7, 1960, August 4, 1960, *The Badger Chemist*, Winter 1961, Spring 1963, series 7/6/00/3.

5) Plans in the physical plant plans room, Aaron Ihde, *Chemistry as Viewed from Bascom's Hill*, pp. 635; *The Badger Chemist*, spring 1963, series 7/6/00/3.

LOWELL HALL

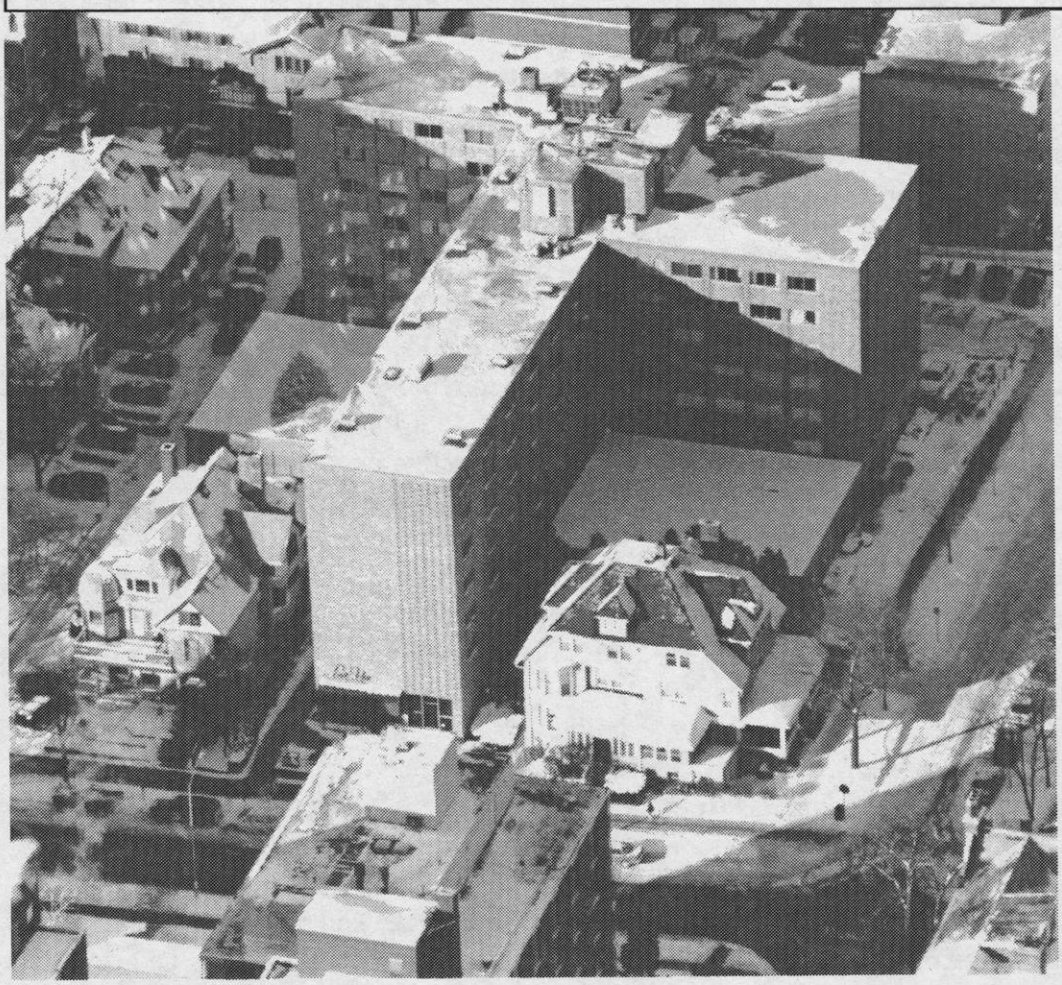


Fig. 1. Lowell Hall February 1997. The stem of the 'T' and the right half of the crossbar are the original buiulding. The left crossbar is the 1966 addition. [Del Brown Photo, AP-66]

In 1970 the University purchased Lowell Hall, a private dormitory built in 1960. It was intended to provide housing and meeting rooms for the undersized Wisconsin Center. A question about the appraisal of Lowell Hall cause a short-lived scandal, during which no wrong doing was found. The building now functions as guest rooms and a convention center for the UW extension program.

When the Wisconsin Center was built in 1957, the design was stripped of its guest rooms and many large conference rooms because of funding limitations. Through the late 1960s, the increasingly successful extension programs used local hotels as guest rooms, and rented or improvised conference space. Finally in 1969 the state legislature approved an appropriation of $2.7 million for the construction of an extension guest house. Two main plans were considered, the demotion of the red gym, and the construction on agricultural land west of campus. Neither of these plans were particularly popular, but the high cost of real estate in the campus area made alternatives difficult to find.

Then in the fall of 1969 president Fred Harvey Harrington was approached by Robert Levine, the owner of Lowell Hall on Langdon Street. Lowell Hall had been constructed in 1960 as a private

women's dormitory. Levine was in financial trouble due to changes in the living habits of the student body, and University enrollment regulations. The building originally held 298 students, but because of falling occupancy Levine had converted much area to conference rooms and was using the building like a convention center. He offered to sell Lowell Hall to the University for $3.55 million. This seemed to the regents like a perfect solution to the extension's building problem, and on April 10, 1970 the regents agreed to meet Levine's price. The funding came from the State appropriation and the University added $770,000 in funds to be amortized by user fees of the guest house. The Extension moved into and began using the building immediately and found it highly satisfactory. The dilemma seemed to have been nicely solved.[1]

Then the dam broke. A reporter for the Green Bay Press- Gazette, Tim Wyngaard, wrote a story that alleged that the University had bought the building without getting a fair market appraisal, and had simply accepted Levine's word for the building's value. The state attorney general, Robert Warren investigated the charges and revealed that Levine had been close to bankruptcy and that president F. H. Harrington had "pushed" the regents into the purchase. Warren also found an appraiser who was willing to say that the building had been overpriced. He concluded "It is an inescapable conclusion that Lowell Hall was purchased calculated to remove Mr. Levine from his financial difficulties." As a result of this report, in June 1971 new governor Lucey appointed a commission, headed by retired supreme court justice George Currie to investigate the deal. The Currie report concluded that no wrongdoing was found, and that although better safeguards against poor appraisals had to be taken, in this case the University had gotten a good deal. The state's newspaper blazed brightly for a few weeks, but eventually the scandal died out. By that time president Harrington was gone from the scene, having resigned in May 1970. It is likely that the uproar was part of a partisan political effort to remove Harrington, who was under fire from legislators and regents alike for not cracking down on student demonstrations.[2]

The building the regents had bought was built during the summer of 1960 by Lowell Associates, a family business represented by Robert Levine. It was intended as a luxury dorm, and appealed especially to well to do women students from the east coast. It was a seven story tower of reinforced concrete faced with brick, and aluminum windows. The original plans by Eugene Wasserman of Sheboygan are dated 3-23-1959. The building covers an area of about 17000 square feet. It is 120 feet from north to south, and 160 feet east to west, and 97 feet high. The basement contains a full food service and dining rooms, as well as a 35 by 45 foot swimming pool. In 1966 the Lowell corporation built a 65 by 50 foot seven story addition on the Frances Street side that added 28 more double rooms. This addition was also designed by Wasserman.[3]

Lowell Hall was so ideally suited to use as the Extension Guest House, that in 25 years little more than cosmetic changes have been made. The current configuration includes 72 guest suites with air conditioning, and private baths. Eight large conference rooms accommodate groups of 10 to 200 people. The food service is capable of serving up to 400 people. Guest can use the swimming pool and sauna in the basement. The north wing of the building has been converted to offices for the extension and some University departments.

1) Report to President Kopp, from Charles Stathas and Wallace Lemon, June 23, 1972, series 40/1/13/1 box 21. Regent's Minutes, October 16, 1970,

2) *Daily Cardinal*, November 30, 1972, March 1, 1973; *Badger Herald*, October 9-11, 1972; *Beloit Daily News*, June 28, 1972; *Milwaukee Sentinel*, February 13, 1973; *Milwaukee Journal*, February 13, 1973, February 14, 1973, June 20, 1973; *Wisconsin State Journal*, October 13, 1972, February 1, 1973; *Green Bay Press Gazette*, September 21, 1972; *Appleton Post Crescent*, June 21, 1972; *Capital Times*, October 27, 1972; The Curry Report, May 8, 1973, series 40/13/1 box 21.

3) *Daily Cardinal*, September 30, 1959, March 29, 1960; *Wisconsin Alumni Magazine*, October 1961, p. 23; Analysis of and appraisal of Lowell Hall by the department of space management, January 30, 1970, series 4/31/9-1 box 5. Plans at the department of planning and construction.

EXTENSION BUILDING

Fig 1. Extension building, from Lake Street, 1962. [series 9/2, Extension, jf-76]

The University Extension Building was erected in 1961 to provide consolidation of extension services. Until that time extension had been housed in the home ec-extension building on Linden Drive and many rental locations around campus.

The University Extension was housed in the old home-economics extension building on Linden Drive beginning in 1914. They were quickly and chronically out of space. The moved into abandoned buildings all over campus and rented auxiliary quarters in the campus area. In 1958 they were occupying all or part of 14 buildings. The time had clearly come for a new building for the Extension.[1]

Planning began on May 1, 1958, with the appointment of an Extension Building committee. With rough estimates of space requirements and input from the physical plant office, this group tentatively planned for a $1.3 million building at the corner of Johnson and Brooks. The University planners began to discuss the construction of a new administration building in the same area and connecting it to the proposed extension building. By the end of the summer they decided that a better site for both buildings was the block bounded by State, Lake University and Murray Streets. Principal among the reasons for the change were the simpler connection to utilities, a more centralized location, the rehabilitation of an increasingly blighted area of campus, the proximity to existing extension facilities, and the desire to reserve the Johnson Street site for classroom buildings. Also in the summer

of 1958 the state architects office appointed as architects for the project the firm of Brust and Brust of Milwaukee. The committee had planned from the beginning that the building would be expandable. In January 1959 the regents formally changed their choice of location to the north Lake Street site.[2]

By February 1959 Paul Brust had made preliminary drawings acceptable to the building committee, these plans utilized the Lake Street site. Throughout 1959 the committee under chairman Paul Grogan, questioned, refined and corrected the plans. Considerable effort was spent on deciding exactly what functions should be housed in the new building. It was clear that the available funds would not put up a building that could house all functions of the Extension. Some of the largest, and heaviest (which could not easily be housed on upper floors) were BAVI (Bureau of Audio Visual Instruction), and the multigraph (copying) department, were selected to be eliminated from the new building. In January 1960, the regents approved the preliminary plans for the Extension building. A change of management in the state architects office, and disagreement over space allocation slowed progress during 1960. The land at the Lake Street site was purchased and demolished.[3]

In January 1961 bids were opened for construction of the Extension building. At their February 10, 1961 meeting the regents awarded contracts for the project. The general contract went to Precour Construction of Oshkosh for $823,900. Total costs were $1.85 million, chargeable to the state appropriation of 1959.[4]

Groundbreaking was held on February 10, 1961. The project encountered no particular problems and was accepted by the University on July 16, 1962. In August 1962 the extension music department became the first of thirty departments to move to the new building from their old quarters at 548 State Street. They were followed quickly by the myriad of outlying departments from all over the campus and city. After them the offices under Camp Randall stadium were moved. By the dedication in October 1962, all the Extension offices, except photomedia, BAVI, and duplication services were housed under one roof for the first time in the history of the oldest University Extension department in the country.[5]

The new building was an eight story tower of steel and concrete. Plans for potential expansion involved adding a second tower to the south of the first one, but there are at present (1994) no plans to do so. Although the first tower is filled to capacity, the pressure on extension has been relieved by again renting small retail space outside the building, and by moving some functions to offices in other Extension facilities (the Wisconsin Center and Lowell Hall).

1) Curti and Carstensen, *The University of Wisconsin*, vol. 1, pp. 711-714, 721-728.
2) Summary Statement of Extension Building Committee Findings, September 8, 1958, Grogan to Brust and Brust, September 30, 1958, Grogan to Wendt November 25, 1958, Paul Brust to Gallistel, February 19, 1959, series 24/9/2 box 11. Paul Brust to Stanley Nerdrum, October 22, 1959, series 24/9/2 box 12.
3) Paul Brust to Gallistel, February 19, 1959, series 24/9/2 box 11; Regent's Minutes, January 17, 1959, January 9, 1960.
4) *Regent's Minutes*, January 6, 1961, February 10, 1961.
5) *Daily Cardinal*, August 3, 1962. *Wisconsin Alumni Magazine*, January 1962, November, 1967 p. 10; *Wisconsin State Journal*, June 16, 1961;

SUSAN B. DAVIS HOUSE

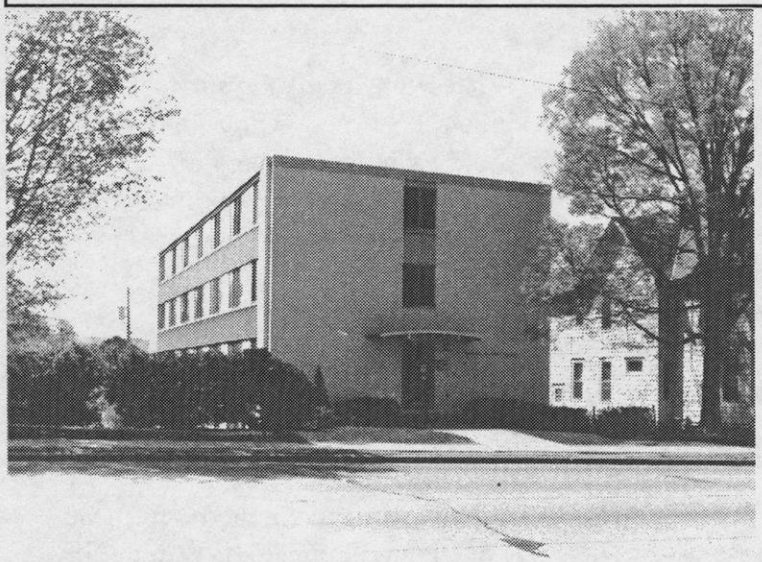


Fig. 1. Davis House 1993. The building is 33 by 91 feet of concrete block, three floors and a basement. [Author Photo, AP-38]

The quick success of the first two cooperative dormitories, Bayliss and Schreiner, was followed by a period of five years when all attention and funding for housing was absorbed by "regular dorms", the Elm Drive dorms, the Holt dorms, and new Chadbourne Hall.[1]

Then in October 1960 the regents authorized the planning of a new women's cooperative. It was to be built west of Bayliss, to cost $212,000 of residence halls revolving account with borrowing by the Wisconsin University Building Corporation. The new dorm was to be identical to Bayliss house and to hold 50 women on a cooperative basis. In November 1960, the University department of planning and construction discussed the project with the state architect Karel Yasko, and agreed that the cost projections were accurate. The project was speeded by the fact that the University already owned the land on the site.[2]

Preliminary plans were approved January 18, 1961. In February, architects Weiler and Strang were hired to oversee the project. Their final plans were approved by the regents on February 10-11, 1961. In March, 1961 the regents voted to name the dorm after Susan Burdick Davis, after the woman who had been come to the University in 1925 as a lecturer and until her retirement in 1941 was dean of freshman women.

Contracts for construction were let in April 1961, with Vogel Brothers of Madison getting the general contract for $107,805. Construction began immediately, and proceeded through 1961 and the spring of 1962. The finished dorm was dedicated May 13, 1962. The twenty six double rooms were 12 by 14 feet. All 52 women in residence were state residents, and were selected based on financial need and academic status. Davis House was a successful coop house for fifteen years until it could not be kept full, and was changed to graduate housing in 1989.[3]

1) The 1956 Board of visitors report says "The board can only sing the praises of ... Bayliss and Schreiner ... 'Please give us more'". *Regent's Minutes*, May 12, 1956;
2) *Regent's Minutes*, October 7-8, 1960; February 10-11, 1961;
3) *Regent's Minutes*, January 6, 1961, March 10, 1961, April 7, 1961; *Daily Cardinal*, April 19, 1962; For Miss Davis, see archives biographical file.

HIGH ENERGY PHYSICS

Fig. 1. The High Energy Physics lab in 1994. The building is 'L' shaped, with a 44 by 104 foot shop wing, and a 45 foot one story office wing on the east side. The shop section has a steel frame, while the rest of the building is of concrete block. [Author Photo, AP-39]

In response to a talent drain in physics to the coasts, several Universities combined to form the Midwestern University's Research Association (MURA). MURA was intended to combine resources and personnel to provide a nuclear physics study center in the Midwest. An early accomplishment of MURA was the securing of a contract with the Argonne National Laboratory in Illinois for a bubble chamber of a new design. This bubble chamber was a very large magnet with a liquid hydrogen chamber in the gap of the magnet. The size of the device, a ten foot cube weighing 180 tons, meant that it required a separate building for its assembly.[1]

In December 1960, the University's department of planning and construction produced a specification for a "temporary building to adequately permit the assembly of a Hydrogen Bubble Chamber." The size of the bubble chamber to be assembled defined the design of the building. It was to have a shop wing of 50 by 80 feet, with twenty feet of head room, a floor capable of 10,000 pounds per square foot, and explosion proof electrical systems (because of the use of liquid hydrogen), and an office wing. Preliminary and final plans were combined into one presentation, which the regents approved on March 3, 1961.[2] Construction contracts were let by the regents on April 7, 1961, with the general contract going to Crissinger Construction of Madison for $65,185. The total cost of the building was $145,000 including a $22,000 crane. The $145,000 cost was evenly split between an NSF grant and a WARF award. Construction began immediately, and on November 20, 1961, the University accepted the building as "substantially complete".[3]

The bubble chamber went to Argonne Labs in 1963, and later to Fermi Labs, where it is still used. The high energy physics department used the building until the renovation of the center section of Chamberlin Hall, which was taken over by physics in 1973. In 1974 through 1988 the building became the home of various programs in the Environmental Studies department. In 1989 the building became the home of the department of grounds.[4]

1) *Wisconsin Alumni Magazine*, June 1961, p. 14; Bill Winter of MURA, and Bob March of physics, interviews fall 1994; MURA consisted of Wisconsin, Northwestern, Illinois, Michigan, Indiana, Notre Dame and Purdue.

2) Proposed High Energy Physics Laboratory, series 24/9/2 box 12; *Regent's Minutes*, November 4-5 1960, March 10, 1961.

3) *Regent's Minutes*, April 7, 1961; Small to Ahern, November 20, 1961 series 24/9/2/ box 13. Plans at the physical plant plans room.

4) *Daily Cardinal*, December 5, 1963, October 6, 1966; Records of the office of Space Management.

SOCIAL SCIENCE

Fig. 1. Social Science c. 1980. The 1966 addition is at the left, and the auditorium section at the bottom. The street in the foreground is Observatory Drive. The sail boats are off the union terrace. [Series 9/1, Social Science, jf-77]

The Social Science building was erected in 1962 to provide an enlarged home for Sociology, Anthropology, and Economics. Controversy arose over the siting of the building in the thick woods east of Elizabeth Waters Hall. An addition was built on the north side in 1965.

The social sciences, Anthropology, Sociology and Economics, were housed mainly in Sterling and South Halls in the first half of the twentieth century. Their need for more space was recognized in 1953 when the regents planned a joint building for law and Sociology (which then included Anthropology). This plan was discarded in 1955, when enough money became available for a separate law building. At that time it was decided that the Sociology department would have a wing built on the recently (1954) erected Commerce building, which had originally been known as Social Science-Unit 1. But the addition for Sociology never got past the planning stage. The plan was for a single six story tower section to be added to the west end of commerce, and rerouting of Charter Street to make more room. The more the planning commission looked at this idea the less they liked it. Finally in September

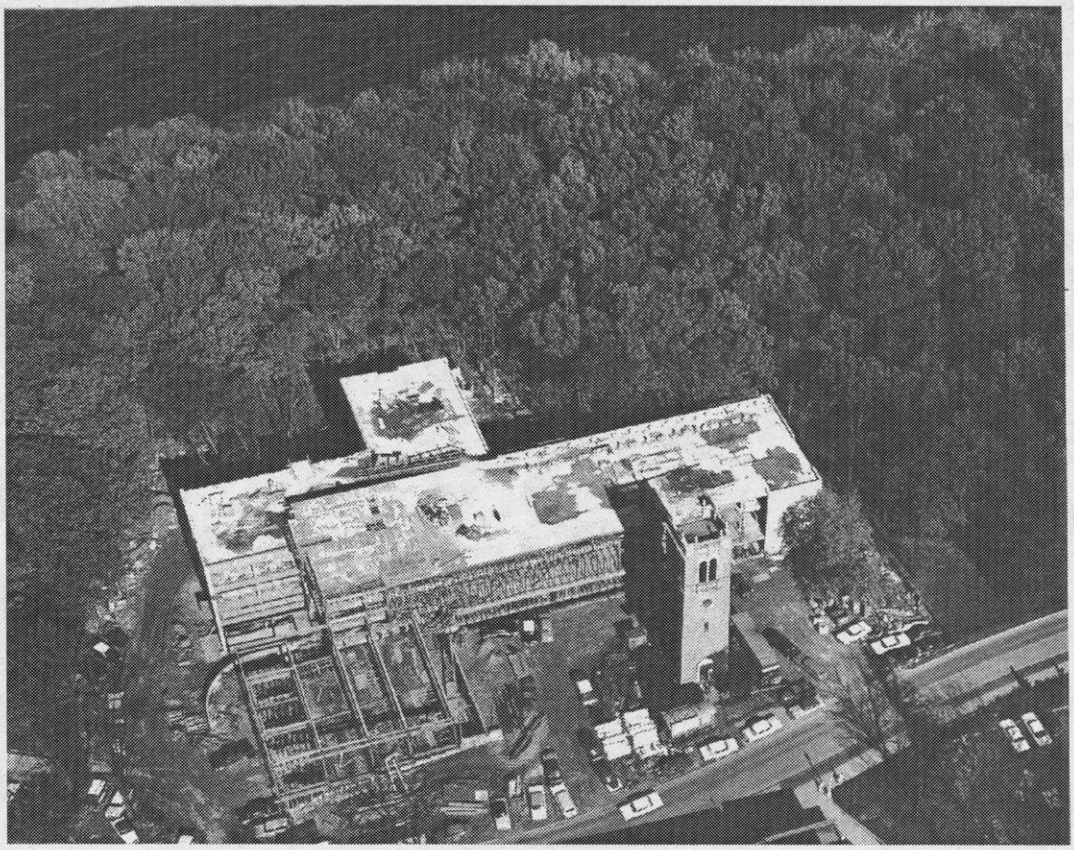


Fig. 2. October 27, 1961. Social Science under construction. Note the density of the wooded area to be developed to the north of the building. This is the Bascom woods that was so heavily defended by the Capital Times and others. [Series 9/1, Social Science, ns-2949]

1958, the University instructed the architects of the commerce addition to cease work. An entirely new plan was needed.[1]

Building sites on the central campus were getting scarce and the planning committee made what seemed like the only available choice, the western end of Bascom Woods, the heavily wooded area of about 8 acres north of Observatory Drive between the Memorial Union and Elizabeth Waters Hall. The regents approved this site in February 1959, designating the rest of Bascom Woods as John Muir Park, an outdoor laboratory. This choice ignited a storm of protest against the University, led and orchestrated by the Capital Times. Editorials decried the plan to "despoil woods", "Regents set Precedent for Total Campus Beauty Destruction", and warmly supported a faculty group (led by professor Einar Haugen) who opposed the plan, until the faculty arrived at a compromise with the regents, at which time the group became "chiefly distinguished by their naivete". More fur flew in May 1959, when state legislation was introduced to prevent construction in the woods but was amended to allow the Social Science building.[2]

Architects Law, Law, Potter and Nystrom had preliminary plans drawn for the approval of the regents in June 1960. The budget was $2.46 million in state funds. Final plans were approved January 6, 1961. Contracts were let on March 2, 1961, with Orville E. Madsen & Son getting the general construction contract for $1.35 million, Total contracts were for $ 2.6 million.[3]

The building was completed in time for classes in the fall of 1962. It houses Anthropology, Economics and Sociology. It is a seven level building of steel and reinforced concrete, faced with brick and precast panels. The 64 by 86 foot two story southern section contains two lecture halls, 250 and 500 seats, while the 265 by 90 foot main section has a basement, and four floors of offices and classrooms, and a library. These two sections enclose a pedestrian plaza to the south in which the carillon tower is framed.[4]

Three years later in March 1965, the regents approved the preliminary plans for the north

addition, which had been deleted to meet the original budget. The architects were Graven, Kennedy and Iverson. The 72 by 111 foot addition was eight levels high and went as far toward the lake as the north wing of Elizabeth Waters Hall. The wing was to be a research lab facility using computers, and was funded with grants and state matching funds. Contracts were let on August 20, 1965, with the general contract going to J. P. Cullen and Son of Janesville for $1.6 million. Total contracts were for $2.0 million. Completion was in the fall of 1966. The air-conditioned structure housed research labs, offices, and the new Poverty Institute under a grant from the federal Office of Economic Opportunity. To prevent confusion, the floors and rooms of the whole building, including the original sections were renumbered.[5]

A complete asbestos abatement project was carried out in 1994, with each department in turn moving into the old Commerce Building during the work. As of 1994 the John Muir Woods to the east of the Social Science Building remain intact.

1) University directories; Wendt to Culbertson, May 9, 1958, Executive committee of law school to Fred, December 10, 1957, Law-Sociology Building Committee minutes, October 28, 1957, Law, Law Potter and Nystrom to Wendt, March 21, 1958, Kirchhoff to Gallistel, March 17, 1958, Wendt Memorandum, March 26, 1958, series 24/9/2 box 10; Regent's Executive Committee minutes, July 26, 1957; Regent's Minutes, September 6, 1952; April 11, 1953; Gallistel to Law, Law, Potter and Nystrom, September 12, 1958, series 24/9/2/ box 11.

2) *Regent's Minutes*, February 7, 1959; *Capital Times*, December 18, 1958, January 10, 1959, February 3, 1959, February 4, 1959, February 5, 1959, February 9, 1959, February 17, 1959, February 12, 1959 (Frank Lloyd Wright takes another crack at the University), April 4, 1959, May 20, 1959, March 11, 1960, June 7, 1960, March 12, 1960, May 26, 1962; *Wisconsin State Journal*, February 4, 1959; *Daily Cardinal*, March 15, 1960;

3) *Regent's Minutes*, March 12, 1960, April 9, 1960, May 14, 1960, June 7, 1960, December 9, 1960, January 6, 1961, March 10, 1961;

4) Daily Cardinal, November 10, 1961, October 24, 1962.

5) Regent's Minutes, January 8, 1965, February 5, 1965, August 20, 1965; *Daily Cardinal*, March 7, 1964, March 24, 1966.

VAN VLECK HALL

Fig. 1. This photo shows the three story base with roof plaza, the tower section to the east (right). Sterling Hall is in the foreground. Bascom Hall and the Commerce building are in the background. [Del Brown photo, AP-76]

Built in 1961 to provide a home for the mathematics department, Van Vleck Hall was the first high rise building on Bascom Hill. It is named for Edward Burr Van Vleck, a member of the mathematics faculty from 1906 to 1929.

The mathematics department moved from Bascom Hall into north hall in 1919. In north hall were all the faculty offices, the departmental library, and as late as 1930 all the lecture rooms. In the 1930s, as enrollments grew, mathematics lectures began to be held in nearby buildings. Each year this trend, exacerbated by the growth of the sciences which required math background, deepened, until after WW II, mathematics classes were being held in nearly every University building that had a lecture hall. By this time north hall was used only for departmental offices, and was inadequate even for that. In June 1956, the regents first addressed the issue when they voted to approve the Mathematics-Psychology building, either separately or jointly to be located south of University Avenue, in the block bounded by Johnson, Mills, Dayton and Charter Streets. This recognition of the problem encouraged the department to hold meetings to discuss the site and nature of new facilities[1].

By mid 1958 the department had decided against a site south of University Avenue. The distance from the central campus, and from the new Army Math Research Center (AMRC) then under construction as a wing to Sterling Hall were the main objections. The math department believed that the most appropriate idea was to complete the quadrangle of Sterling Hall. This plan would allow the department to stay on the middle of campus, close to the AMRC, and allow the physics department

access to the math library. This plan was well received by the Physics department, and in January 1959 the regents rescinded their previous action and recommended the addition of a mathematics wing to Sterling Hall. Then in November 1959, the physics department voted to withdraw its "conditional" approval of the plan. The mathematics department had been so convincing in its presentation of Sterling Hall as an ideal site that physics decided it should retain rights to it. This disagreement was resolved in March 1960 when the regents voted to reaffirm the general site of the mathematics building. The physics department gave its approval on two conditions, that the new building be constructed adjacent to and connected to Sterling Hall, and that the remodelling of the old chemistry (Chamberlin) Hall be given a high priority and that space be reserved for physics expansion. In April 1960, the state's department of engineering assigned architects J. J. Flad and Associates to the project.[2]

Flad had preliminary sketches ready by October 1960. The regents had voted at the previous meeting to name the building after Edward Burr Van Vleck, professor of mathematics from 1906 until 1929. Funding was to come mainly from state appropriations, and grants from the NSF and from WARF. The initial budget was $2.25 million. Early estimates showed a deficit of about $220,000. Candidates for elimination were one or two floors of the tower section, and the physics lab area. The preliminary plans were approved by the regents in November 1960. The regents were amazed that Flad's design seemed to have created usable space from nowhere, which actually came from extending the slope of the hill outward with the building's walls. They wanted to know if there were other spaces on campus that could be so developed. Dean Wendt suggested building under Bascom Hill, at the social studies site, and the 600 N. Park site.[3]

The final plans were approved by the regents in February 1961. Funds for the full project ($3 million) were now available thanks to an increase in the amount from the state. When bids were opened in April 1961, they were about $400,000 over the expanded budget. The regents asked the state to make up the difference. This request was granted in May 1961. Construction contracts were awarded on June 6, 1961. The general contractor was Orville E. Madsen & Son of Minneapolis for $2.09 million. Ground-breaking took place that same day, attended by J. Flad, mathematics chairman professor Kleene, A. W. Peterson and Dean Mark Ingraham, an ex-mathematics professor. As construction progressed during late 1961 and early 1962, some complaints were heard about the design, and the "defacing" of Bascom Hill. By late 1962 when the size and appearance of the building were obvious, the complaints became louder. An editorial in the Daily Cardinal referred to it by saying "my God! What's that huge eggcrate doing on Bascom Hill"[3] In 1964 the huge eggcrate was given a prestigious state architectural award. The building was dedicated on May 13, 1963.[4]

The building, constructed of steel and reinforced concrete, consists of two main parts. One is a three story lower section (underground except for the roof) 180 by 130 feet, tucked into and connected to the 'L' of Sterling Hall for 32 classrooms, the library and reading rooms. The other section is an eight story 44 by 104 foot, 108 foot high, tower section containing 96 departmental and faculty offices and meeting rooms. The top floor of the tower is a large and spectacular conference room containing an oil portrait of Van Vleck painted by his cousin Howard Van Vleck. The room was furnished with gifts from Edward's son John Van Vleck a professor and Nobel Laureate of physics at Harvard.
The roof of the lower section is at ground level and provides a pedestrian plaza and building entrance on Bascom Hill. The lower section is faced with cut stone and brick, while the tower is sheathed in precast concrete panels. Rumors of tilting and settling of Van Vleck have been current on campus since its construction and are uniformly false.[5]

1) University Directories; *Regent's Minutes,* June 1956; The most active faculty members were professors R. C. Buck, R. E. Langer, C. C. MacDuffie, P. C. Hammer and S. C. Kleene.
2) As part of its agreement with the Army the AMRC had to be housed near the central part of the campus, and could not be moved away to a south campus site; Gallistel to Wendt, December 18, 1958, series 24/9/2 box 11; Rolefson to Ingraham November 17, 1959, series 24/9/2 box 12; *Regent's Minutes*, January 17, 1959, March 12, 1960, it is highly unusual to include the requests of departments in the minutes of the regents when a decision has been affirmed.
3) *Regent's Minutes*, September, 1960, October 1960;
4) *Regent's Minutes*, February 10-11, 1961, April 1961, May 1961, June 1961; *Daily Cardinal*, September 13, 1960, June 16, 1961, September 19, 1962, July 10, 1962; Executive Committee minutes, June 2, 1961. *Capital Times*, May 6, 1963;
5) Plans at physical plant plans room; Daily Cardinal, April 11, 1963, *Daily Cardinal*, September 19, 1962 p. 2.

GENETICS

Fig. 1. Genetics building c. 1965. 72 by 128 feet, five stories of precast concrete curtain wall panels, face brick and a gross size of 53,000 square feet. The 1995 biotechnology center connected at the right of this picture. [series 9/3, Genetics, jf-78]

Built in 1961 to provide unified space for the division of genetics, this building remained the home of both medical genetics and agricultural genetics, until 1994 when the new biotechnology building, with its attachment to the genetics building opened.

Two major factors caused the construction of the genetics building on Henry Mall. The first was the fire in the old genetics research barn in 1955, the second was the founding of the medical genetics department in 1957.

The genetics barn fire demonstrated that the genetics department was extremely crowded, and had done great work in poor conditions for a long time. The paper written by Agricultural dean Rudolph Froker to justify the replacement of the barn, was used with only slight updating to explain the need for the construction of the new genetics office and research building. The response to the barn fire had also demonstrated that the University and the state were ready to recognize the increasing importance of genetics to the University.

Until 1957, all genetics at the University was agricultural genetics and the department was under the jurisdiction of the School of Agriculture. Then in 1957, the department of medical genetics was organized. Its early staff included Joshua Lederberg, James Crow, and Dr. Demars. While the medical group maintained an independently administered and staffed department, it continued to meet regularly with the staff of agricultural genetics, and indeed formed an informal and administratively nonexistent "Division of Genetics".[1]

In November 1958, professor Irwin, chairman of the genetics department, sent to dean Froker a document entitled "Plans for sustaining and developing genetics at the University of Wisconsin.", that laid out the shape of the program to come. It pointed out the inadequacies of the physical facilities, which had been occupied essentially unchanged since 1932, and urged that a new building be erected that would house both the department of Genetics and medical genetics, in both teaching and research. Dean Froker put his support behind this project, and in September 1959, the regents decided to locate the genetics building on Henry Mall, between the Hygiene Laboratory and the Wisconsin High School. At this time neither firm plans nor funding had been arranged for the building. That month dean Froker applied to the National Institute of Health (NIH) for a grant of $850,000, representing half the cost of erecting a building of 60,000 square feet to house the departments of Genetics and Medical Genetics. Froker and Irwin proposed that this $1.7 million facility be funded half by the NIH grant and half by the Wisconsin Alumni Research Foundation (WARF).[2]

Most of 1960 was taken up by the arrangements for funding the project. By May 1960 WARF had authorized $850,000 of which $35,000 was to be spent on planning the building. With this money the building committee got an estimate from architect Mark Purcell of Siberz and Purcell, who had been assigned to the project in August 1960, of $1.68 million for the building. In September 1960, in response to a reduced award from the NIH, the Campbell Soup Company offered to contribute to the building fund, in the amount of $189,000. This money was to be used primarily for equipment and specially equipped laboratories. By the end of 1960, the $1.7 million in funding was ready: the NIH grant of $638,225, WARF grant of $850,000, and gifts of $189,000. The regents had approved the preliminary plans. The approval of final plans came in May 1961.[3]

Contracts were awarded for construction of the genetics building on June 20, 1961 with J. H. Findorff & Son getting the general contract for $609,170. Total contracts awarded were $1.79 million. Construction began in June 1961. Construction was delayed for a considerable period in 1962 by a strike of the Teamsters Union over wages and working conditions. The building was ready for occupancy in the fall of 1963, when the bulk of the genetics staff moved across Henry Mall from the old genetics building. The finished building (see Fig. 1) was 72 by 128 feet, five stories of precast concrete curtain wall panels, face brick, matching the Hygiene Lab next door; gross size was 53,000 square feet. Each floor contained five principal laboratories. In later times the inadequate nature (some were without gas supply or running water) of these labs would require constant remodelling and updating.[4]

On January 6, 1965, the faculty of genetics and medical genetics, voted to seek administrative approval for uniting the two departments into the "Institute of Genetics". With the approval of the chancellor and the regents, the two departments became one as of July 1, 1965. The genetics department has remained united in the new building since that time. In 1994 during the construction of the new biotechnology building that replaced the Wisconsin High School, the genetics building was attached to the new building on its south side.

1) R. A. Brink, Early History of Genetics at the University of Wisconsin, p. 16-17, manuscript at Memorial Library Archives, in genetics departmental file 9/17.

2) M. R. Irwin, *Plans for sustaining and developing genetics at the University of Wisconsin*, November 1958; Regent's Minutes, September 12, 1959, series 4/0/3 box 182.

3) *Regent's Minutes*, November 4, 1960, December 9, 1960, April 7, 1961, May 12, 1961; *Daily Cardinal*, October 7, 1960; Peterson to Irwin, July 26, 1960, Muns to Peterson August 17, 1960, Peterson to governor Nelson, September 20, 1960, series 24/9/2 box 12.

4) *Regent's Minutes*, July 20, 1961; Findorff to Regents, April 17, 1962, series 24/9/2 box 13; *Daily Cardinal*, May 13, 1961. Plans in physical plant plans room.

LIMNOLOGY

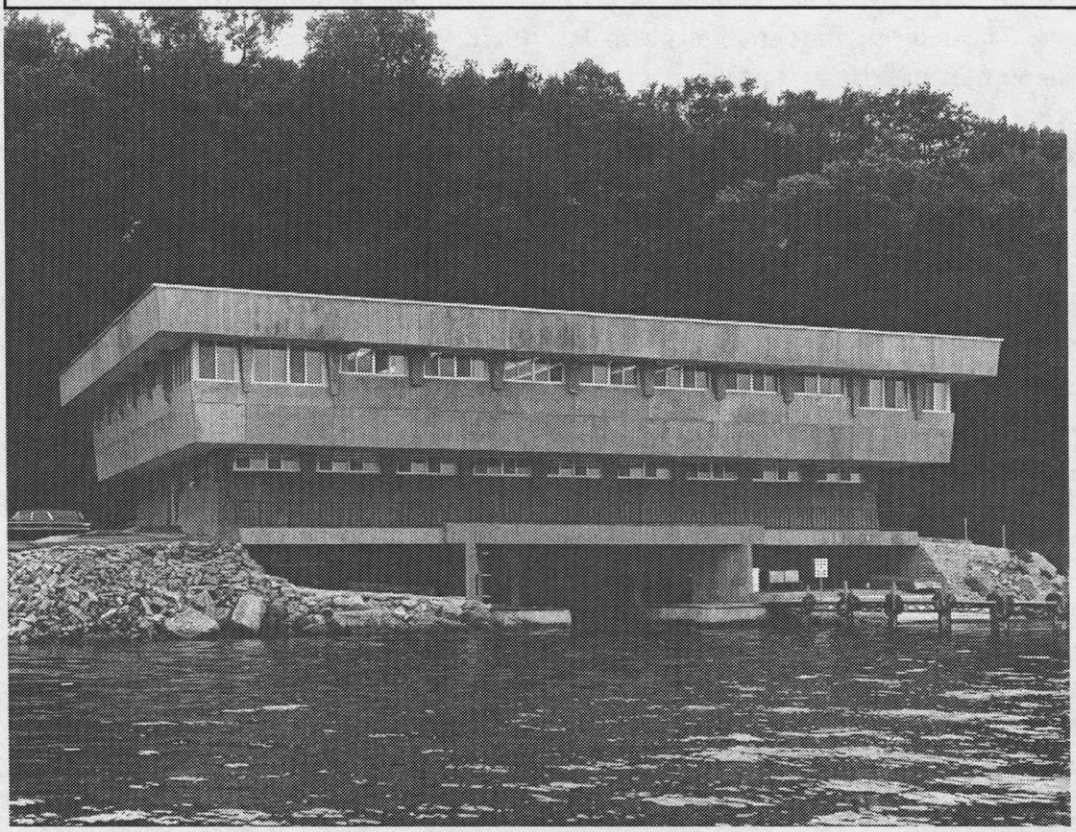


Fig. 1. Limnology lab from Lake Mendota, c. 1964. [series 9/1, Lymonolgy [sic], jf-79]

The limnology building was built in 1961 mainly at the instigation of Professor Arthur Hasler. Limnology is the study of lakes.

Professor Arthur D. Hasler, who joined the University zoology faculty in 1937 and became department chairman in 1953, is largely responsible for the existence of the Limnology laboratory building. Hasler began studying freshwater lakes very early in his career. He was the first scientist to use the old lake lab (under the end of Park Street), and continued to lobby for expansion of lake lab facilities, throughout the 1940s. Finally in the late 1950s, when Hasler was a consultant to grant committees at the Office of Naval Research (ONR) and the National Science Foundation (NSF), he was able to obtain a non-matching grant of $480,000 for the University to build a new lake lab facility. The regents had voted in November 1958 (at the time of Hasler's proposal to the NSF) to authorize a site for such a building.[1]

In August 1960 at Hasler's request the state assigned to the design project, the architectural firm of Kaeser and McCloud of Madison. Hasler gave them a preliminary idea for the building which had been developed by a German architect who was married to a colleague of Hasler's, Holger Jannasch. The cantilevered inverted-pyramid nature of the building (see Fig 1) was Mrs. Jannasch's idea. Kaeser and McCloud made quick progress, and in February 1961, the regents approved preliminary plans for the new building. McCloud's estimate was for $502,000. Hasler's goal was to have the building finished in time to host the 15th International Congress of Limnology to be held in Madison in August of 1962. In March 1961 the State Building Commission approved the plans. In April 1961, the required public hearing to present the plans was held and there were no appearances in opposition. Planning continued through the summer, and

final plans were approved by the regents on June 5, 1961.[2]

On July 13, 1961 the bids for construction were opened and it was discovered that cost estimates had been nearly $200,000 low . On July 20, 1961 the regents voted to reject all bids and to have the building redesigned to fit in the available budget. According to a memo from the architects, the largest item in extra cost was the poor soil conditions encountered in cutting into the hillside where the building would rest. These conditions required moving the building toward the lake, increasing the difficult and expensive underwater work. The failure of the University to make up the difference of the bids and the NSF grant was a bitter disappointment to Hasler and the others involved in planning the project. Hasler argued that he had declined offers for directorships of other institutions based on his hopes for the department at the University. He urged president Elvehjem to expedite the project, and began to pursue other avenues for increasing funds. The redesign was approved by the regents on September 15, 1961. And in December 1961 revised final plans were approved. The new building was considerably smaller, but had lost no essential functions. Hasler maintains that most of the grace and beauty of the first design was lost.[3]

New bids were opened on January 23, 1962, and bids exceeded the grant funds by only $14,423. Hasler had rounded up $5000 in other grant money and asked the Graduate Research Committee for the $9400 balance. This request was granted, and construction contracts were awarded on February 9, 1962. The general contractor was E. C. Knuth of Milwaukee with a contract of $238,000. Total contracts were for $494,423. Funds came from the NSF grant of $480,000, the Research Committee grant of $9423, and Hasler's $5000 in gifts. The schedule for completion was set as November 30, 1962. Construction began with excavation of footings in the first week of April 1962. A Teamster's Union strike that prevented concrete delivery halted work on a large number of construction projects on campus in April 1962.[4]

The building was completed and occupied by August 1963. Hasler had by that time been appointed director of the laboratory of limnology. On April 5, 1963 the regents voted "that the new hydrobiology building be designated as the Laboratory of Limnology." It was explained that limnology refers to the study of lakes and was a more inclusive term than Hydrobiology which relates only to the biological aspects of lakes. The new Laboratory of Limnology was formally dedicated on May 9, 1964, nine months after it went into use.[5]

The building is an 86 by 81 foot rectangle of a basement and two stories of steel and reinforced concrete. It is the first building erected at the University to have no sheathing over the exterior walls, the exterior is concrete textured by the forms. The basement level contains a boat slip, boat and gear storage, lockers and fish holding tanks. The first floor holds offices, laboratories, and the main entrance on the east side. On the second floor are more offices and laboratories, a library and aquariums. As part of the agreement that the lakeshore path not be disturbed, the path continues through a covered walkway across the front of the building.

1) Oral History, Arthur Davis Hasler, 1977; *Wisconsin State Journal*, November 14, 1965.
2) Oral History, Arthur Davis Hasler, 1977; Muns to Peterson, August 17, 1960, Peterson to Elvehjem April 15, 1961, Peterson to Culbertson, March 26, 1962, Kaeser and McLeod, Proposed hydrobiology laboratory, February 2, 1961, series 24/9/2 box 12; *Regent's Minutes*, November 8, 1958.
3) Memo from Kaeser and McLeod, "Some Factors in the increased cost over estimate", Hasler to Elvehjem, August 23, 1961, Hasler to Willard, January 25, 1962, progress reports, March 27, 1962, April 10, 1962, April 24, 1962, series 24/9/2 box 13; *Regent's Minutes*, February 10-11, 1961, July 10, 1961, July 20-21, 1961, September 15, 1961, December 8, 1961 ; Hasler to Wendt, February 7, 1961, series 24/9/2 box 12.
4) *Regent's Minutes*, February 9, 1962.
5) Hasler to Young, February 5, 1963, series 24/9/2 box 13; *Daily Cardinal*, May 1, 1964.

HENRY RUST HOUSE

Fig. 1. Rust House, 1995. The central wing is the kitchen addition connecting Rust and Schreiner houses. The building is a 30 by 91 foot three story concrete block housing approximately 55 students in 10 by 12 foot double rooms. [Author Photo, AP-40]

The cooperative dorms, the first of which were built in 1955, were well received by students, and the University board of Visitors recommended that more be constructed. In 1960 the University arranged for the construction of Davis House, a companion to Bayliss for women students.

In the summer 1961, during the construction of Davis House, it was decided by the regents to use the accumulated funds in the Henry Rust Memorial fund to pay for half of the estimated cost of a new men's co-op. Henry Rust was a longtime resident of Eau Claire who was killed in a rail accident in March 1955, and who left his estate to his brother Thomas Rust. In Thomas Rust's will he left 65% of the estate to the University of Wisconsin with the hope that it could be used to build a dormitory for men students to be named for his brother Henry.[1]

Once funding was available the project proceeded quickly. Land purchase at 117 N. Orchard was approved in May 1961. The site next to the existing Schreiner House was based partly on the fact that Schreiner had been built without kitchen facilities, because so many men students had jobs with eating privileges. By 1961 this situation had changed and Schreiner needed a kitchen. The regents hoped that the whole project could be completed by August 1962. During the rest of 1961, estimates were gotten ($260,000) and financing arranged. Preliminary plans were approved by the regents in December 1961. The final plans were approved by the regents in February 1962. Construction contracts were awarded in March 1962, with the general contract going to Blase and Kammer of Madison, for $105,100. Construction began that same month. In May the regents voted that the new dorm be named Henry Rust House. Construction was completed in August 1962. The first students moved into Rust House in September 1962. Although successful for several years as a co-op, Rust gradually succumbed to the same forces that killed most of the other co-ops and in 1986 Rust and Schreiner became graduate student housing.[2]

1) *Regent's Minutes*, April 16, 1955, May 12, 1961, June 5-6, 1961; Smith to Sites, June 8, 1961, Peterson to Culbertson, June 13, 1961, series 24/9/2 box 12; Clark Smith to Newell Smith February 26, 1962, series 4/0/3 box 111.
2) *Regent's Minutes*, December 8, 1961, February 9, 1962, March 9, 1962, exhibit D, May 4, 1962; *Daily Cardinal*, September 18, 1962.

HI RAY HALL

Fig. 1. Hi-Ray Hall from the corner of Orchard and Dayton Streets, 1994. The building is a basement and three stories, 90 by 24 feet. Construction is of concrete block faced with brick, cast concrete and ceramic tiles. [Author Photo, AP-41]

Hi Ray Hall was built as a low cost dormitory in 1962 by the Hi Ray corporation, organized in March 1962 by regent Maurice B. Pasch. It was touted by the company as luxury accommodations (carpet, air-conditioning, and an intercom), at budget prices ($865 per year). Unfortunately for the company it opened during an enormous expansion of University housing. Although it was used as a dormitory for a year or two, by 1965 its owners offered to lease the building to the University as office space. This was a welcome offer to the University since they had decided to raze the old wood frame houses on Linden Drive to make way for the new medical library (Middleton medical library). These houses were home to the departments of occupational therapy (O.T.) and physical therapy (P. T.), which could be conveniently moved to the Dayton Street location. The regents agreed to pay the Hi Ray corporation $1900 per month in rent for the building.[1]

The O.T. and P. T. departments stayed in the old dormitory through the 1960s as renters. Then in June of 1972 the regents agreed to buy the building from Hi Ray for a total of $169,050. This price included the building and the 7,640 square feet of land including the abutting parking area.

After the purchase the building remained the home of O.T. and P.T. until 1980 when the bulk of those departments moved to quarters in the medical science complex on University Avenue (the old hospital). At that time the old Hi Ray building became a kind of catchall for overflow offices. It housed at various times Computer Science, grad student offices in languages, and storage space. In 1992 it became the home of the Center for Mathematical Sciences (the new name for the old Army Math Research Center) which remains there until this day (1994). Hi Ray Hall is expendable enough that when and if the proposed second phase of the Wendt Library is built, Hi Ray will be demolished.[2]

1) *Daily Cardinal*, April 14, 1962; *Regent's Minutes*, January 8, 1965; Dane County Register of Deeds, articles of incorporation, March 28, 1962, volume 374 of miscellaneous, p. 33.
2) *Regent's Minutes*, June 9, 1972 exhibit A; University directories. Records of the department of space management.

VETERINARY SCIENCE

Fig. 1. Veterinary Science from Linden Drive c. 1972. [series 9/3, Vet Science, jf-80]

Designed to hold the departments of virology, veterinary bacteriology, immunology, and pathology, housed at that time in makeshift facilities around campus, the veterinary science building was opened in January 1965. The building was funded with donations, state and University funds.

In February 1959, dean of Agriculture R. J. Muckenhirn, asked the University administration for support of an application to the National Institute of Health (NIH), for an $800,000 construction grant for a Veterinary Science Research Building. Strong support was promised by president Elvehjem. The application to the NIH shows that the department of Veterinary Science under professor and chairman Carl Olson had already done a great deal of planning for the new facility. The department, which included the disciplines of virology, veterinary bacteriology, immunology, and pathology, had been housed since 1953 in the old dairy annex, a small two story building behind Hiram Smith Hall. The crowding was severe. Undergraduate work was done in the basement of the stock pavilion. The grant application proposes a site fronting on Linden Drive, to hold a concrete and steel basement and three story building containing almost nothing but laboratories and their support functions. It was scheduled to cost $2 million and be ready for occupancy by February 1962. Much of this planning was done by Dr. Arlie Todd.[1]

Planning and need were not problems, but funding was. The University was having difficulty obtaining enough state support to keep up with classroom demand for its burgeoning enrollment, and the state was not a likely source of funds for the veterinary science building. The planners decided to

try to raise the funds outside the state appropriation route. The NIH grant application was the first step in this campaign. The NIH responded by making a grant of $694,000 in matching funds.

The next step was to convince the Wisconsin Foundation to run a campaign to solicit donations for the vet science building. President Elvehjem headed this request, and the foundation began its drive in early 1960, with Mr. James Bie in charge. The campaign aimed to raise $500,000 by June 1961. They solicited from individuals and from corporations with a stake in the animal food industry. The Foundation published a fund-raising brochure and placed articles in the Wisconsin Alumni Magazine. This drive gained a $50,000 grant from Eli Lily, $21,000 from the Schering-American Scientific Laboratories, as well as many smaller donations.[2]

In May 1961 the regents voted to donate $100,000 from proceeds of the sale of University Hill Farm land to the construction of the vet science building fund. The regents discussed whether this meant that the University would have a School of veterinary medicine; it did not. Regent De Bardeleben asked why the building could not be placed on the outlying Arlington farm, and opined that it was unfortunate to use campus land for animals when there was need of it for students. In July the state building commission approved the preparation of preliminary plans for the building, using $25,000 in Hill farms receipts to pay for the plans. Madison architects Ames Torkelson and Nugent were retained for the building in November 1961.[3]

The funds from the NIH were delayed in early 1962 and the construction schedule was slipped to start in September 1962 and finish in March 1964. The preliminary plans were approved by the regents at their April 1962 meeting. The expected gift fund were not yet available and the regents considered increasing the Hill Farm donation.

At their August meeting the regents approved the final plans for the veterinary science building, noting that a $475,000 grant had been obtained from WARF, and that the gift drive was now expected to net about $130,000. More discussion was heard regarding the relatively high cost of research facilities compared to classroom buildings.

Construction contracts were let by the regents on January 11, 1963. The general contractor was Blaser & Kammer Incorporated of Madison for $590,700. Total costs were $1.4 million. The sources of funds were: NIH $694206; WARF $475,000; Hill Farms receipts $140,000; and gifts $90,794. Construction was now underway.[4]

Two years later on January 25, 1965, the College of Agriculture held an open house dedication of the veterinary science building, with a keystone address by Dr. Willard Eyestone of the NIH. In April 1965 the Wisconsin Chapter of the American Institute of Architects presented an award to Ames Torkelson and Nugent for the design of the vet science building.[5]

The building is a 60 by 162 foot rectangle, basement and three stories. It is reinforced concrete faced with brick, and precast concrete panels. It sits nearest the corner of Linden and Elm Drives.

1) University directories.
2) *Wisconsin Alumni Magazine*, July 1960, *Regent's Minutes*, February 8, 1963.
3) *Regent's Minutes*, May 12, 1961, June 6, 1961, July 20, 1961, April 6, 1962, August 14, 1962.
4) *Regent's Minutes*, January 11, 1963.
5) Torkelson to Leonard, April 30, 1965, series 4/0/3 box 188.

A. W. PETERSON BUILDING

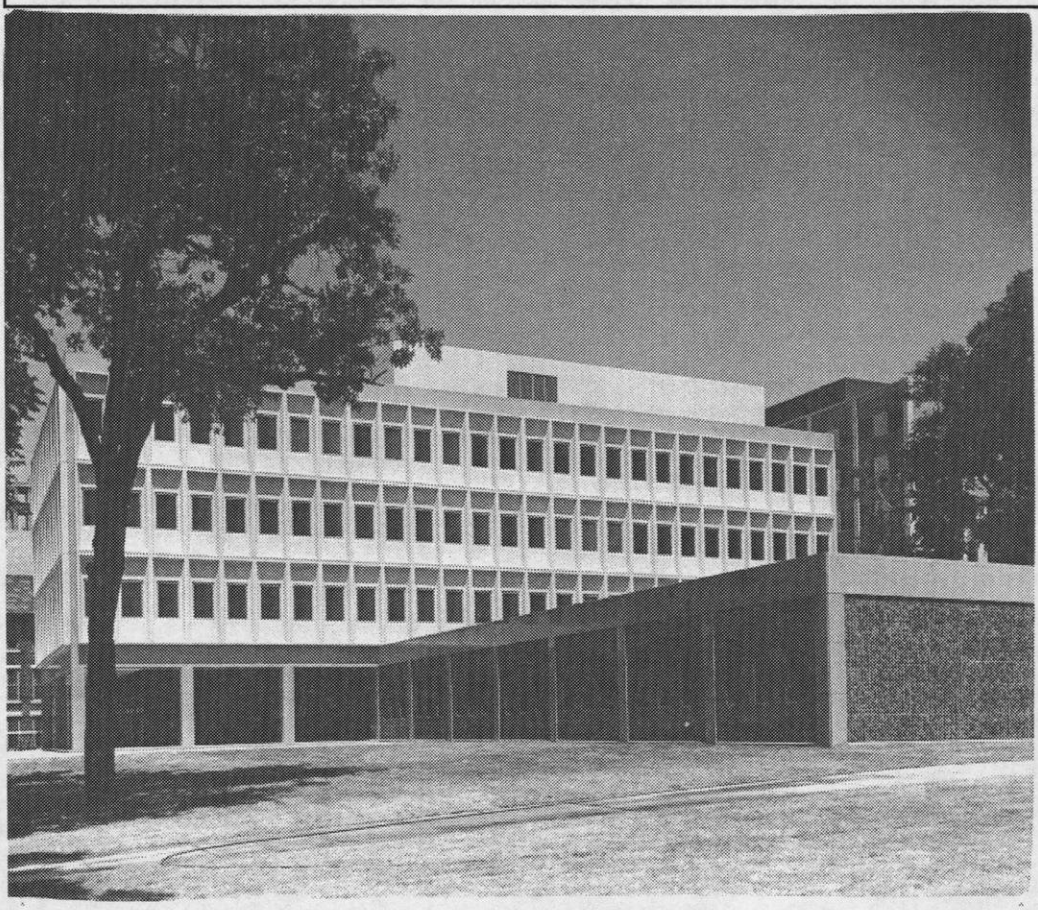


Fig. 1. The A. W. Peterson Building, 1964. [series 9/2, Peterson Building, ns-261]

Built in 1963 to provide consolidated quarters for the University's scattered administrative offices, the Peterson Building is named for Alfred Walter Peterson, a lifelong manager (1924-1966) for the University who died just before retirement in 1965.

In late 1958, business manger A. W. Peterson informed president Elvehjem that the first unit of the proposed administration building had been approved by the state for the 1961-63 biennium, and suggested the appointment of a building committee, to be headed by Mr. Neil Cafferty. At this time the administration of the University was housed principally in the old stone building at State and Park Streets, with departments in twelve other buildings, from Bascom Hall to old wood frame residences around lower campus. This scattering was bad for organization and for efficiency. A new building that would house all of administration was a badly needed solution to this scattering problem, and additionally would free up a large amount (an estimated 20,000 square feet) of academic space, mostly in Bascom hall.[1]

The state appointed architects Frelich, Angus & Associates of Janesville to the administration building project in September 1960. By this time analysis sketches had yielded an estimated cost of $1.5 million. In December 1960, the state building commission approved financing of $1.8 million for

the project. The building committee and the architects agreed on a site on Murray Street, near University Avenue. This site was central to the University as its expansion was planned, and the University owned most of the land on which the building would stand, in fact many of the old houses on this property were being used as housing for administration.[2]

By March 1962, the architects had completed preliminary plans for the administration building. It had an estimated cost of $1.9 million. The regents approved the preliminary plans as presented by dean Wendt and the state architect Karel Yasko. The plans were for a four story tower section with a basement and one story wing to the south. The regents discussed parking for the building, and the plan of building the structure in two phases, the first phase a four story unit, with a one story extension, and a later phase two section that would be a tower extension toward University Avenue. The final plans for the administration building were approved by the regents on November 9, 1962. The planned exterior had now been altered so that it matched the recently erected Van Vleck Hall, with its "egg crate" pre-cast concrete panels. It was reiterated that this was only the first unit of the building, and that a tower section (of perhaps fifteen stories) would be built at a later date.[3]

Bids were opened on December 11, 1962, and construction contracts were let by the regents on January 23, 1963. The general contractor was J. H. Findorff and Son for $885,111. Total contracted costs were $2.2 million. The entire cost, including the $340,000 for land and utility extensions was paid for by a bond issue arranged by the state Agencies Building Corporation. Estimated completion was April 1, 1964. Construction began immediately, although the purchase of land was not completed until February 8, 1963, when condemnation awards were made for the three final parcels.[4]

In March, 1963 after the building was begun, the University Faculty Credit Union successfully petitioned the state to be housed in the new building, after agreeing to pay the cost of adding the required space onto the building about $31,000. By May the building was emerging from the ground. In July 1963, the contractor informed the University that the supplier of concrete panels could not deliver because of a wildcat strike, and that a delay of unknown length would ensue. On April 1, 1964 exactly on the date originally targeted, the University inspected and accepted the basement and all four floors of the building. The budget had also been met. There was in March, 1964, an unexpended balance of $96,800 in the contingency account which was used to acquire for parking purposes the home and lot at 433 Murray Street, a small boarding house occupied by professor Helen C. White and others. In early May 1964 the administrative occupants of the old administration building began to move from the old building to the new one. Space at the University was so tight that several departments (student loans and student housing among them) began to move into the old building, even though it was scheduled for demolition in less than a year.[5]

The grand opening and open house at the new administration building was held on June 12, 1964. The new work space of the three hundred employees of the bursar, admissions, registrar, personnel, and business manager's offices was shown off. Problems surfaced within a week when the air-conditioning unit failed to cool the building and leaked condensate water through the ceiling of the 4th floor. These problems and others were solved in the next two years. The building was reinforced concrete, a 'L' shaped basement and first floor section 160 by 190 feet, with three upper floors over the north wing. This tower is 70 by 160 feet. The high traffic areas, the lobby, the registrar, and student records are in the low section, while the tower contains offices and conference rooms.[6]

In the next year an extraordinary sequence of events took place. In August 1965, Alfred Walter Peterson, the University business manager who had begun his career at the University in 1924 as an assistant accountant announced his retirement as of July 1, 1966. At a testimonial dinner on October 22, 1965, president Fred thoroughly recounted the career of the great administrator. The following day, October 23, 1965 at the University homecoming game at camp Randall, A. W. Peterson suffered a heart attack, and died at 66. Three years later, after various suggestion to honor the well loved

Peterson, the regents voted on June 14, 1968 to rename the new administration building "the Alfred Walter Peterson Office Building".[7]

The Peterson Building continues to house most of the University Administration functions, but the plans to expand the building have never been realized, mostly due to the introduction of computers in record keeping which dramatically reduces space needs for record storage. These computers caused their own problems, since the buildings air-conditioning had to be remodelled to handle the cooling load of the computers. Some University business functions which can find no space in Peterson are housed outside the Peterson building in nearby buildings in the 700 block of University Avenue.[8]

1) Peterson to Elvehjem, November 24, 1958, series 4/0/3 box 180; Elvehjem to Cafferty, Gallistel Luberg, Trump and White, November 25, 1958, series 24/9/2 box 11;
2) Sites to Peterson, August 31, 1961, series 24/9/2/ box 13. *Regent's Minutes*, December 9, 1960, February 8, 1963.
3) *Regent's Minutes*, March 6, 1962, April 6, 1962, November 9, 1962;
4) *Regent's Minutes*, November 9, 1962, December 11, 1962, February 8, 1963 ;
5) *Regent's Minutes*, April 5, 1963. *Wisconsin State Journal*, May 10, 1963; *Capital Times*, May 25, 1964, March 31, 1965;
6) Open House announcement, series 4/0/3 box 180.
7) *Regent's Minutes*, June 14, 1968; State of Wisconsin Joint Resolution, 131. Peterson biographical file, University Archives.
8) *Regent's Minutes*, December 9, 1966.

MCARDLE LABORATORIES

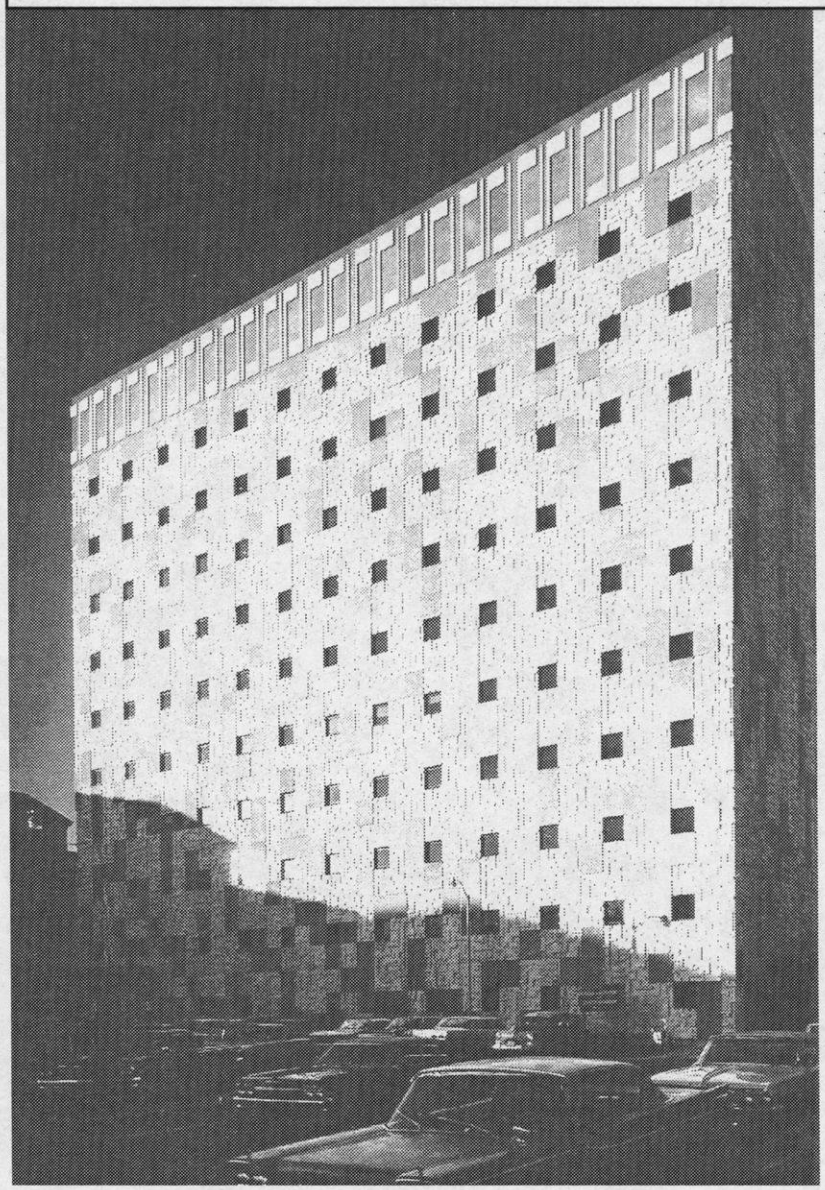


Fig. 1. The south face of McArdle Labs c. 1965. The decorative facing has no deliberate significance except for the stylized Cancer symbol that runs along the cornice; the standard myths that it represents a punch card or the look of cancer itself are false. The tiny windows were a result of an attempt to maximize wall space in the labs. [Series 9/4, McArdle Labs, jf-81]

Built in 1962, this building provided additional research space for the McArdle cancer research laboratory, located until that time at 420 N. Charter Street. The unusual appearance of the building has no particular artistic significance.

As early as 1951 it was clear that the McArdle cancer research labs would need more room. Their success in obtaining grants, top flight researchers and their growing reputation, made the original quarters at 420 N. Charter Street increasingly cramped. This remained true even after the expansion made possible in the early 1950s by the enlargement of the Wisconsin General Hospital. The director of McArdle, Dr. Harold P. Rusch, obtained permission to remodel and occupy the space

in the attic of the old student infirmary building as supplementary space.[1]

But even while planning this expansion Dr. Rusch had begun the process of seeking funds for a completely new building. The Administration had made it clear that it would not provide any matching funds for construction, since all available money was needed for classroom expansion. Rusch spent 1958 and 1959 working on obtaining federal funding, which included lobbying Melvin Laird, the ranking Republican on the House Appropriations Committee, and Congressman Fogerty, the chairman of the Appropriations Committee. Dr. Rusch emphasized to the congressmen that the appropriation for cancer research should not require local matching funds. In March of 1960, Laird notified Dr. Rusch that a non-matching funding bill had been passed. In August 1960, Dr. Rusch submitted a grant request to the NIH for $2.75 million to build a new building for cancer research. The request estimated that the building could be completed by February 1964. The entire amount of the request, $2.475 million was accepted by the regents on June 5, 1960. At the same meeting the regents granted authority to prepare preliminary plans for the new building. At this time the location was already decided.[2]

Late in the summer of 1961 the state appointed architects Schutte-Phillips-Mochon of Milwaukee to the project. By September 1, the architects had with the help of Dr. Rusch and his assistants Roswell Boutwell and Helen Baldwin, prepared an outline specifications for the building. It's cost was estimated at $2.7 million and it's scheduled completion as August 1, 1964. Rusch says that it was intended to be as austere a building as could be built, with corridors and stairs as narrow as allowed by law, and without frills, like lobbies. This was in an effort to get the maximum possible floor space for the money available. The regents approved the preliminary plans except for the exterior design on March 9, 1962.[3]

The exterior design of this building needs some explanation (see Fig. 1). According to Dr. Rusch, the first plan for the exterior was done by architect Mochon early in 1961. This design which featured various medical symbols impressed in the exterior concrete and embedded with colored glass, was pleasing to Rusch who describes it as Aztec-style but was rejected as too gaudy and conspicuous by the committee of Building and Grounds. The architect was asked to work with Mr. Frank Boggs, an art professor at Beloit College. The second attempt produced results acceptable to the University. There is no deliberate significance to the pattern on the building, except the stylized Cancer symbol on the cornice. How this exterior design could have been regarded as not gaudy or conspicuous is not recorded. But it is the only known example of the regents taking a separate vote on the external treatment of a building. The regents approved the exterior treatment as reworked by professor Boggs on June 4, 1962 after recessing to Bascom Hill to look at some scale models of the exterior panels. The lot 20 parking ramp erected in 1995 has masked the starkest view of McArdle.[4]

Two months later at their August meeting the regents approved the final plans for the building. They noted that the entire cost of the project would come from the NIH grant and University trust funds set up for cancer research. Construction contracts were let on November 9, 1962. The general contractor was the J. P. Cullen and Son Corporation of Janesville, for $1.3 million. The total cost of $2.852 million was divided between the NIH grant of $2.475 million, and trust fund principal and income in the amount of $188,733. A ceremonial ground-breaking had already taken place on October 13, 1962. The building began to rise in the spring and summer of 1963. Rusch says that he was "dismayed after the fist few slabs of the exterior were attached ... I wished I had objected to Bogg's model". He further says that his wish for small windows to save energy and maximize wall space was a disappointment, that the windows looked like gun ports. Rusch says that many negative comments were heard about the building and that he felt apologetic.[5]

Regardless of the feelings about the looks of the new McArdle lab building, the occupants were pleased when they moved in September 1964. A formal dedication was held on October 17, 1964. Parts of the fourth and fifth floors were left unfurnished to provide later expansion space. This

extra space later became a point of contention between Rusch and other medical department heads, whose quarters were severely cramped. The finished building was 76 by 134 feet of steel reinforced concrete, a basement and eleven stories high, connected at floors 1-3 with the Orthopedic Hospital building to the north. There are no windows in the east or west faces of the building.[6]

Over the years the McArdle lab has been the site of many significant discoveries in the war on cancer. 1975 Nobel Prize winner Dr. Howard Temin, worked here. The name was transferred from the old building, to avoid confusion and to take advantage of the world wide reputation identified with the old McArdle lab. The word memorial was dropped, and the official name became "McArdle Laboratory for Cancer Research."

1) *Something Attempted, Something Done*, Harold P. Rusch M. D. p. 82-90. Much of this article's background was extracted from Dr. Rusch's book, found on the shelves at the University Archives.
2) *Something Attempted, Something Done*, Harold P. Rusch M. D. p. 119-120; Peterson to Meader, October 19, 1960, series 24/9/2 box 12; *Regent's Minutes*, June 5-6 1961 exhibit A item 20.
3) Peterson to Culbertson, June 13, 1961, series 24/9/2 box 12; Postweiler to Schutte, Phillips, Machon September 1, 1961, Rusch to Elvehjem August 22, 1961, Outline Specifications Cancer Research Building series 24/9/2 box 13; *Something Attempted, Something Done*, Harold P. Rusch M. D. p. 123-124.
4) *Something Attempted, Something Done*, Harold P. Rusch M. D. p. 125-126. *Regent's Minutes*, March 9, 1962, June 4, 1962;
5) *Regent's Minutes*, August 1962, November 9, 1962; *Something Attempted, Something Done*, Harold P. Rusch M. D. p. 127-128.
6) *Something Attempted, Something Done*, Harold P. Rusch M. D. p. 129-132. Plans at the physical plant plans room. *Badger Herald*, November 9-12, 1972.

EXTENSION SERVICES

Fig. 1. The Extension Services Building 1994. [Author Photo, AP-42]

When the regents approved the location of the new Psychology building in 1960, they took no action on the matter of what to do with the small buildings already on the site. Two of those were the extension duplicating department and photographic laboratory, which had been excluded from the new extension building on Lake Street for budgetary reasons. To provide a location for these two departments, the regents added $300,000 to the 1959-1965 building priority list. A plan in 1961-62 to house them in an old building at 114 North Murray Street was abandoned due to excessive remodelling costs. In April 1962 the state assigned architect William Horne of Madison to design the new project. Planning continued into the spring of 1962. In May the state building commission approved the building at an estimated cost of $326,000. Final plans for the building were approved by the regents on July 13, 1962. Construction contracts were awarded later that summer, with Crissinger Construction of Madison getting the general contract for $167,400. Total contracts awarded were for $302,000. The building was completed in May of 1963.[1]

The building located at the corner of Charter and Spring Streets, is a basement and single story with penthouse, 71 by 145 feet, built of concrete block with concrete slab floor and roof.

Financing was from a loan arranged by the Wisconsin University Building Corporation (WUBC). The loan was to be amortized from rents paid by the photo and duplicating businesses with fees charged by them for their services. In 1985 most of the extension duplicating department which had expanded enormously moved out of the building for new and much larger quarters in the new Stores/Extension Services building on Murray Street. Photomedia occupied the entire building, but was disbanded in 1996. A new occupant has not been selected.[2]

1) Postweiler to Peterson, April 2, 1962, series 24/9/2 box 13; *Regent's Minutes*, May 14, 1960, January 5, 1962, April 6, 1962, May 6, 1962, June 5, 1962, July 13, 1962.

2) *Regent's Minutes*, July 13, 1962, exhibit E; *Daily Cardinal*, July 19, 1963; Cost and Outline Specification, March 27, 1962, series 24/9/2 box 13.

NEW LAW BUILDING

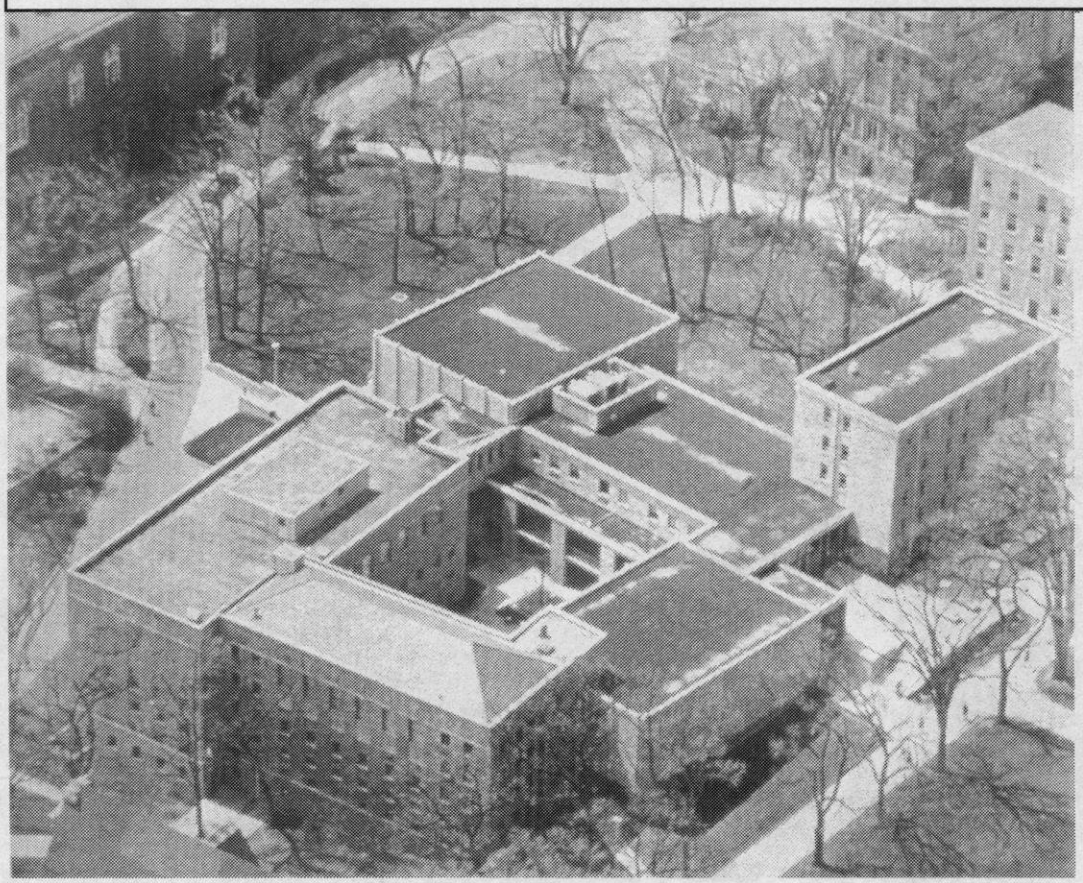


Fig. 1. The law complex c. 1989. The empty area in the center is the location of the original brownstone law building. The 1939 library wing is the L-shaped section in the foreground. The 1959 library addition is the section on the left end of the library. The 1963 construction removed the brownstone, and added classrooms and auditorium around the quadrangle and the 6-story office section at the right. The 1995 construction removed and expanded the auditorium and classroom sections, leaving the office building and library intact. [Photo courtesy of Ed Riesner, copy in Author's collection]

The current law complex was built as a series of additions to the original brownstone law building. These additions were a library in 1938, a library addition in 1958, and classrooms and offices in 1963. The 1963 construction also removed the old brownstone building.

The law school waited more patiently for modern quarters than the cynical might expect. The original sandstone law building was built in 1891 and was still in daily use until 1963. This in spite of the fact that the teaching of law had altered radically in terms of the teaching facilities required.

The only significant change in the old law school in the first half of the twentieth century was the addition of a library wing to the old building. This library wing became a necessity after structural

engineers forbade any more expansion of the library (originally 4000 volumes) in the old wood-framed structure. The library addition was proposed in September 1938, when the federal Public Works Authority appropriated $79,000 for the library, provided that the University raise an additional $100,000 within eight days. The University had access to a borrowing entity for such purposes, the Wisconsin University Building Corporation (WUBC), formed to help finance the Van Hise dorms in the 1920s. The architect for the new wing was Wisconsin State Architect Roger Kirchhoff. It was built in the then modern method of steel and reinforced concrete, and faced with Mankato sandstone to harmonize with other Bascom Hill buildings. The new library wing was finished and dedicated in May 1940. Enrollment in the law school stood at 418 that year. The five story, 40 by 94 foot addition had a capacity of 125,000 volumes, a 150 seat reading room, and a few faculty offices. This reading room was decorated with a huge mural, the Emancipation Proclamation, by John Stuart Curry, originally intended for the Federal Justice Department but rejected as too controversial. The library addition was viewed by the faculty of the law school, the University and the campus planners as a first section in an all new facility that would replace the 1893 sandstone building. No further steps along this path would be taken for 13 years.[1]

In 1955 the state legislature appropriated $2 million for a building that would house both the law school and the Sociology department. The planning of this joint Law- Sociology project proceeded throughout 1955-57. The site selected was the law building site, since it would be central to the colleges of Letters and Science, and could incorporate the 1940 library structure. Preliminary plans for this joint building were approved by the regents on July 26, 1957. Preparations of final plans began in the state architect's office. However by the fall, cracks began to appear in the coalition of law and Sociology faculty on the planning committee. The law members went on record at the October 1957 meeting as supporting a separate building for law. In March 1958, the regents decided that unless the campus planning commission made a contrary recommendation within 30 days, the original combination building would proceed. In late March the law school faculty agreed that they could live with only the library part of the project for a while. At their meeting on April 10, 1958, the regents did something that they have rarely done (or had to do), they reversed themselves on a decision after money had been spent. Acting on the recommendation of the planning commission, they decided to abandon the combined law-sociology building, and use those plans to build only the library wing section to be used by law, to defer the construction of the balance of the law building, and to add a wing to commerce for the use of sociology. All this could be funded from the appropriation for the combined building. Considerable muttering was heard about the $25,000 already spent on plans, and about the future credibility of the planning commission.[2]

In July 1958 architect Kirchhoff had completed preliminary plans, and they were approved by the regents. Final plans were approved in December 1958. Construction contracts were awarded November 14, 1959, with the general contract going to J. P. Cullen and Son for $393,624. Total contracts were for $800,000, with funds coming entirely from state appropriations. The new library wing went into use in the fall of 1960. It was a 50 by 120 foot, five story wing of steel and concrete, faced with brick, protruding to the west of the 1940 section. It had room for 200,000 books and 248 students. It alleviated current crowding and provided a modest amount of expansion space. It was hoped at that time that the balance of the law building could be built within 2-3 years.[3]

The Annual Report of the Board of Visitors in 1960-61 said
" CONSTRUCTION OF A NEW LAW SCHOOL BUILDING SHOULD BE GIVEN TOP PRIORITY." [emphasis original] They went on to enumerate the inadequacies of the 1891 building. The law department estimated they needed space for a projected student body of 800. Part of the plan was an entire structure dedicated to faculty offices, a faculty library, and administrative offices. The plans were drawn by state architect Karel Yasko. Cost estimates were about $1.55 million. Planning contin-

ued through 1961, and on December 7, 1962 the regents approved the final plans.[4]

Contracts were awarded on February 8, 1963, with the general contract going to Precour Construction of Oshkosh for $841,200. Total contracts came to $1.56 million. The entire amount came from state appropriations. Groundbreaking took place in the spring of 1963 with the demolition of the ancient sandstone building, and completion was scheduled for August 1964. This schedule was met and classes began in the new building in the fall of 1964. The cornerstone and a gargoyle from the 1891 building decorate the main entrance to the new building.[5]

The finished complex includes a six story office wing on the uphill (west) side, a three story classroom building on the south side, and a two story lobby and corridor section linking the two new buildings with the existing library (see Fig. 1). The traditional stone for Bascom Hill buildings was abandoned for economy (and lack of stone), giving the law building an unfortunately stark look. A reconstruction of the middle section begun in the fall of 1994 will help to alleviate the effect. There are now 925 students using the facility designed for 800.

1) *Wisconsin Alumni Magazine*, April 1929 p. 217, July 1939 p. 392, July 1940 p. 340; Plans for financing law school addition, September 28, 1938, series 4/15/1 box 32.
2) *Wisconsin Alumni Magazine*, December 1952, p. 23; Memorandum, Law school building committee to Dean Rundell, February 13, 1952, series 24/9/2 box 5; Dean Ritchie to Gallistel, August 6, 1953, Rowland to Runge, September 28, 1953, series 24/9/2 box 6; Memorandum, committee on Law- Sociology Building to Ira Baldwin, November 18, 1955, Kirchhoff to Dean Ritchie, November 28, 1955, Kirchhoff to Peterson, March 19, 1956, series 24/9/2 box 8; Gallistel to Kirchhoff July 18, 1957, Law-Sociology Building Committee minutes, October 28, 1957, Executive Committee of the Law School, to President Fred, December 10, 1957, (This letter to Fred is the final statement of the law faculty regarding their opinions and position on the joint law-sociology project), Wendt to Culbertson, May 9, 1958, Clarke to Wendt, March 18, 1958, (This is the thirty day ultimatum), Memorandum, Law School staff meeting, March 26, 1958, Gallistel to kirchhoff, march 10, 1958, series 24/9/2 box 10; Gallistel to Dean Ritchie, April 8, 1957, series 24/9/2 box 9; *Capital Times,* April 11, 1958, December 6, 1958; Regent's Minutes, November 12, 1955, December 10, 1955, July 26, 1957,
3) *Regent's Minutes*, April 10, 1958, July 11, 1958, December 6, 1958, October 24, 1959, November 14, 1959.
4) *Regent's Minutes*, May 14, 1960, May 12-13, 1961, December 7, 1962.
5) *Regent's Minutes*, February 8, 1963; *Daily Cardinal*, January 5, 1961, December 8, 1962, March 6, 1963, July 19, 1963; *Wisconsin Alumni Magazine*, December 1964, p. 9.

NEW GYMNASIUM

Fig. 1. The new gym from the air 1997. The pyramid shaped section is unit I, everything else is Unit II. Observatory Drive runs in front of the building. [Del Brown photo, AP-77]

The gymnasium was built to replace the outmoded facilities in the red gym and Lathrop Hall. It was designed to be built in three stages. The first stage, the natatorium was built in 1961; the second stage in 1965. The third stage became the Southeast Recreational Facility (SERF).

After the Memorial Shell was opened in 1955, the pitiful state of the athletics department's physical plant became clear. The studies that were done for the shell and afterwards showed a major school with more than 14,000 student hours per week in gym facilities built in 1892 (the red gym) and 1909 (Lathrop Hall). The requirement that all students pass a swimming test further pointed out the deficits in facilities called "easily the worst in the Big Ten" and "that bathtub in the red gym". Among the issues to be solved were where to put the gym, what to put in it, and how to pay for it.[1]

The first and easiest problem to solve was the site. There were two possibilities, the west end of campus past the new Elm Drive dorms or in the designated expansion area south of University Avenue near Camp Randall. The cost of the land in the area near Camp Randall would have made the cost of the project prohibitive. On September 15, 1958 the regents approved the site selected by the planning commission: west of Elm Drive between the new dormitories and Observatory Drive.[2]

Facilities and funding considerations went hand in hand. Planning meetings through late 1958 and early 1959 worked on the assumption that the gym would be built in three stages. Phase I would

include new pool facilities, crew, fencing and gymnastic areas, and would be funded with loans to be paid off by athletic department income. Phase II would be general gymnasium facilities for student use, and as a classroom building would be funded by the state. The original Unit I plan had a racing pool and a diving pool, seating for 2000 spectators for intercollegiate events, and rowing facilities for crew. It was estimated that this first unit could be built for $2 million, the amount that could be safely funded by intercollegiate athletic receipts. Consternation was general in January 1960, when preliminary estimates came in at about $2.6 million. The planners went back to work, armed with a priority list of features from Ivan B. "Ivy" Iverson, the athletic director. What Iverson wanted were swimming facilities. The committee, with the architects Grassold and Johnson, cut and cut more. In summer 1959 they presented the revised plans to the regents. On July 11, 1959 the regents approved the preliminary plans for Unit I of the gym, there was almost nothing left but the two swimming pools.[3]

Another 10 months passed filled with discussion, debate, and revision. The final plans for Unit I were approved on June 7, 1960. Within a week the state had disapproved of the project (or more accurately the funding of the project) on the grounds that athletics were being overemphasized at the expense of academic programs. The governor and building commission members had specific complaints. The planning committee took them under advisement, and reduced the amount of seating around the pool from 2000 to 500, and eliminated some lockers and the crew facilities. These changes allowed some general purpose facilities to be included in Unit I.[4]

In September 1960, the state reversed itself based on the new plans and approved the first Unit of the gym, and its financing by the athletic department. Just when the project looked like it was on the way, the regents began again to debate the location. In the fall of 1960, regents Werner, Konnak, and Gellat brought a motion to restudy the location of Gym Units #2 and #3. After long discussion this motion passed, and the project was back in jeopardy. This question was deferred several times in the next few months as various regents requested new studies of the problem.[5]

Then in December 1960 the business manager reported that bids for Unit I had come in at $2.4 million, and recommended that all bids be rejected. Within a few months the architects and planners had further reduced the cost of the Unit I plans. Now most of the general gymnasium space was dropped, more seats removed, and steel framing replaced the reinforced concrete roof. This reduced unit could be used on its own or as a core facility to be expanded later, depending on the resolution of the regent's debate over the site of Units 2 and 3. The regents approved these new preliminary plans in April 1961. Final plans were approved on September 20, 1961. Contracts were awarded on December 8, 1961, with the general contract going to Kenneth Sullivan of Madison, for $587110. Total contracts were for $ 1.25 million. Funding was by $300,000 from the athletic departments funds, and $950,000 in loans to be repaid by the athletic department from intercollegiate receipts. Construction began immediately. Delayed only slightly by a Teamster's strike in 1962, the Gymnasium Unit I or the Natatorium as it was now known was opened for use in the fall of 1963.[6]

The Gymnasium Unit I was a pyramid shape 150 feet wide and 200 feet deep, of steel and concrete sheathed in two contrasting brick colors. It contained a 60 by 75 foot racing pool, a 43 by 50 foot diving pool, a 140 by 41 foot gymnasium, classrooms, and offices. It was a Spartan building, with painted cement block walls on the interior. Bleachers were available for about 500 spectators at poolside.[7]

The construction of unit II went much more smoothly, because much planning had already been done, expectations were more reasonable, and because it was funded by the state. The discussion of a new site for units 2 and 3 had died away. On August 14, 1964 the regents approved preliminary plans for unit II at an estimated cost of $3.8 million. Final plans were approved on August 20, 1965. It was estimated that the building would be ready for use by July 1967. Funds had been allocated by the state in the 1965-67 building budget. Contracts were let on October 22, 1965, for a total of $3.14 million.

General contractor was Anthony Grignano of Madison for $1.63 million. Opened for use in the fall of 1967, the gym unit II is a huge 250 by 300 foot structure that wraps around Unit I on the east, west and north sides. It is two levels high containing 8 gymnasiums, squash and racquetball courts, enormous amounts of locker room facilities, classrooms and a library. The exterior is entirely sheathed in brick. Unit III plans were subsumed into the construction of the Southeast Recreational Facility (SERF) on Dayton Street. The University had its new modern gymnasium. The red gym, whose destruction was widely expected still stands.[8]

1) Need for Adequate Indoor Facilities ... At the University of Wisconsin, 1956, Lindley J. Stiles, dean school of Education, series 24/9/2 box 11; *Daily Cardinal*, February 28, 1956.
2) *Regent's Minutes*, September 20, 1958, December 6, 1958; Daily Cardinal, April 16, 1958, July 24, 1958, September 20, 1958, November 8, 1958; Minutes of Gymnasium sub-Committee Meetings, February 19, 1958, November 12, 1958, Jakobson to Peterson, July 22, 1958, series 24/9/2 box 10; *Wisconsin Alumni Magazine*, November 1958, p. 24.
3) Minutes of Gymnasium sub-Committee Meetings, January 23, 1959, February 17, 1959, April 24, 1959, May 27, 1959, memo, Ivan Williamson to Gymnasium sub-Committee, May 1959 series 24/9/2 box 11; *Regent's Minutes*, July 11, 1959, January 1960.
4) *Regent's Minutes*, June 7, 1960, October 7-8, 1960, ; *Daily Cardinal*, June 17, 1960, March 12, 1960, July 19, 1960, September 9-10, 1960.
5) *Regent's Minutes*, May 14, 1960, exhibit C, July 8, 1960, September 9, 1960, October 7-8, 1960 exhibit B, November 4-5, 1960 exhibit D.
6) *Regent's Minutes*, December 9, 1960, January 6, 1961, April 7, 1961, May 12, 1961; *Daily Cardinal*, January 7, 1961, May 3, 1961, May 4, 1961, July 20, 1961, October 20, 1961, November 17, 1961, December 8, 1961; *Wisconsin Alumni Magazine*, June 1961, p. 30;
7) Plans in plans room of physical plant.
8) *Regent's Minutes*, August 14, 1964, August 20, 1965, October 22, 1965; *Daily Cardinal*, March 4, 1967, March 2, 1968.

MIFFLIN ST. WAREHOUSE

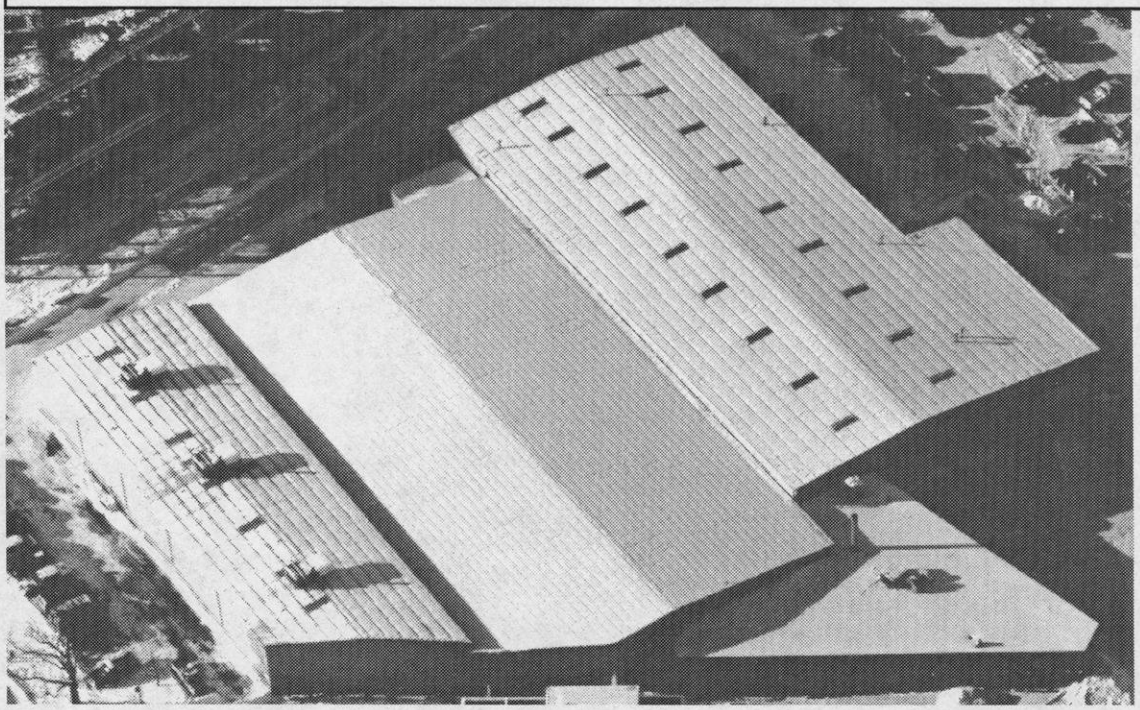


Fig. 1. The Mifflin Street Warehouse, February, 1997. [Del Brown Photo, AP-73]

The University warehouse was originally the Wisconsin Supply company warehouse. It was traded in 1989 for a group of real estate parcels scattered around Madison. Remodelled and extended the warehouse provides bulk storage, and a home for some business office operations.

The opening of the Stores/Extension Services building in 1985 led to the dramatic expansion of services provided by the Business Services operation. Among these expanded services were the Surplus Property Store (organized in 1986) to provide for the public sale of surplus equipment and supplies, and the Office Machine Repair Service charged with the upkeep and repair of equipment for University departments. These new and expanded services, as well as bulk storage (necessitated by the relatively small warehouse area in the new stores building) were housed in scattered locations around the campus area. These locations included warehouses on Gerry Court, the old Soya warehouse on Orchard Street, and a more distant warehouse on Fish Hatchery Road. These scattered buildings were generally old and in poor repair. The difficulties in maintaining good services with such inadequate facilities, led the University to seek a central and consolidated facility.[1]

Into this situation came an offer in October 1988 from Executive Management Incorporated, a commercial and industrial real estate developer. EMI was relocating the Wisconsin Supply Corporation to new and expanded facilities on the west beltline, and was about to become the owner of the old Wisconsin Supply facility at 630 West Mifflin Street. EMI informed the University that as of December 1989 the West Mifflin Street property would become available for lease (at $300,000 per year) or resale (for $2.2 million). It was the opinion of the department of planning and construction that "because of the available space as well as its location we cannot afford to pass up this opportunity..."[2]

There were two problems, summed up in a note from Len Van Ess on the Fulop letter " This is outside the Universities declared boundary. How would we deal with that even if $s dropped from the sky?" During the first half of 1989 the University examined the issue of what use could be made of the property, with space management and Business Services very enthusiastic. Not until the fall of 1989 was an idea floated for the funding of the warehouse. This took the form of an appraisal of University properties that would become disposable if the warehouse was acquired. The estimated money raised was about $1.5 million. Discussion with EMI continued through 1989. In November the idea of exchanging the warehouse for the surplus University properties is first discussed. EMI's intent was to acquire the University's properties in order to sell them to housing developers.[3]

The details of this transaction took up the spring of 1990. The state building commission approved the land exchange in January, 1990. The arrangement at that point was that the University would transfer to the owners of the warehouse six parcels, totalling 5 acres, and receive in return the ownership of 2.7 acres of the 3.5 acre warehouse site, including two storage buildings. The rest of the warehouse site and buildings would be leased for twenty years with an option to buy after the second year. The owners would undertake remodelling and improvements in the amount of $300,000. The lease with Frances-Mifflin Partners was made on February 5, 1990. The University properties were: two warehouses at 111 Gerry Court, a warehouse at 27 North Orchard Street, a warehouse at 2534 Fish Hatchery Road, a vacant lot at 1006 Spring Street, and three properties at 15,24 and 27 North Randall Street. The University would take occupancy of its part of the Wisconsin Supply property after the owners completed the $300,000 remodelling agreed upon. This work consisted mainly of the construction of mezzanine areas. Plans began immediately to move into the new warehouse. The complicated move took all of October and November 1990.[4]

The property consisted of about 3.5 acres with three buildings, the main warehouse, a smaller warehouse, and a third storage building across Frances at 106 N. Frances (since demolished). The main warehouse was built in 1963 by the Wisconsin Supply Company as a warehouse and showroom. Additions to the main building were made in 1972 and 1976, bringing it to its final dimensions of 275 by 210 feet, with a triangular projection that originally housed offices and showroom space. The steelframed with metal walled main building is all one level except the triangular part which has a basement. The second building of cement block was built by Wisconsin Supply in 1980, and is known as Warehouse II. In September 1991 the University exercised the purchase option of the remainder of the property on April 1, 1992. The buy-out cost was $1.02 million. State permission was granted March 18, 1992.[5]

As of April 1, 1992 the warehouse property became the property of the University, and has been completely and heavily in use since that time. The building is operated by the space management department and leases storage space to University departments.

1) Notes for Members Joint Committee on Finance, April 25, 1990, Joe Szwaja to Paul Soglin, August 30, 1989, Memorandum, Don Miner to Laszlo Fulop, March 15, 1989, Memorandum, Wayne McGown to John Torphy, December 20, 1989, series 4/31/9-2 box 17.

2) Gregory Rice (Executive Management, Inc.) to Don Gerhard and Laszlo Fulop, October 7, 1989, Laszlo Fulop to Rose Barroilhet et al, Mar 7, 1989, series 4/31/9-2 box 17.

3) Laszlo Fulop to Rose Barroilhet et al, Mar 7, 1989, Memorandum, Wayne McGown to John Torphy, December 20, 1989, Wisconsin Supply Justification, Robert Hendricks, January 23, 1990, Memorandum, Barroilhet, to Laszlo Fulop, March 24, 1989, Don Miner to Laszlo Fulop, March 15, 1989, Douglas Rose to Don Gerhard, December 29, 1989, Gregory Rice to Don Gerhard, November 3, 1989, Alan Bessey to Robert Hendricks, August 30, 1989, Gregory Rice to Don Gerhard, December 13, 1989, Laszlo Fulop to Len Van Ess, March 30, 1989, series 4/31/9-2 box 17.

4) Building Commission Requests/Items, January 24, 1990, Lease Purchase and Trade agreement, February 5, 1990, Regent's Minutes, February 2, 1990, Don Miner to Rose Barroilhet, February 13, 1990, Request for Improvements, September 26, 1990, Tentative schedule for 630 W. Mifflin Street moves, October 2, 1990, series 4/31/9-2 box 17.

5) Maps of Wisconsin Supply Property, January 1990, Regent's Minutes, March 6, 1992, Warehouse policy, May 22, 1990, Building Commission Requests/ Items, March 18, 1992, series 4/31/9-2 box 17; *Daily Cardinal*, January 30, 1990; *Wisconsin State Journal*, January, 26, 1990.

RUSSELL LABS

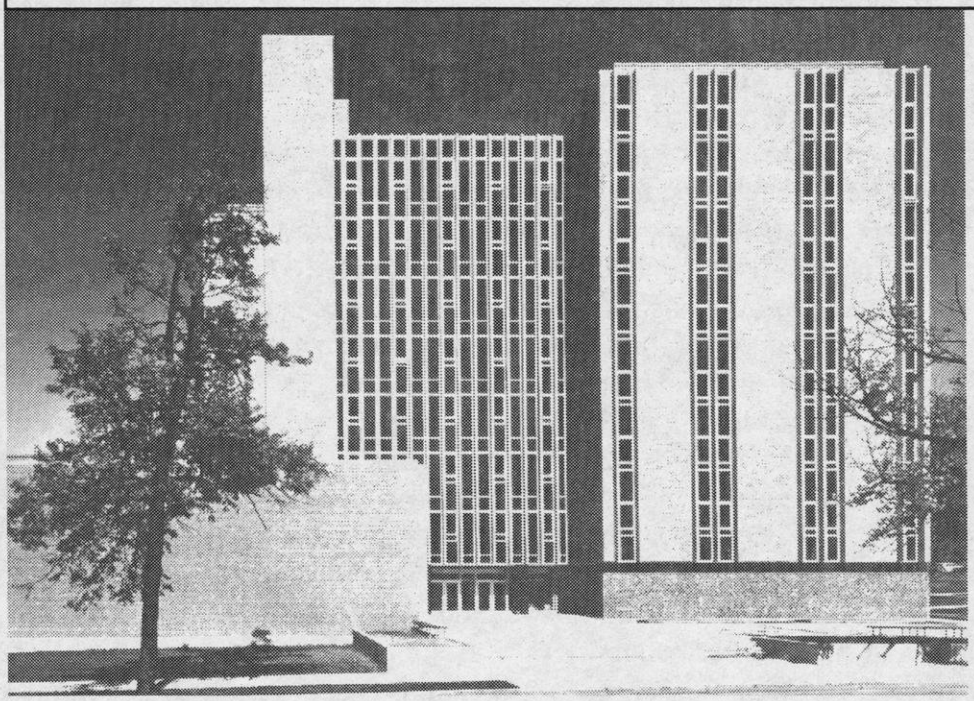


Fig. 1. Russell labs, from the south, c. 1965. [series 9/3, Russell Labs, ns-2833]

Russell Labs was built in 1962 to provide space for Entomology, Plant Pathology, Forestry and Wildlife Ecology. A major addition in 1989 provided space for the rapidly growing Forestry and Wildlife Ecology programs. The building is named for Harry Lumen Russell, long-term dean of the College of Agriculture.

In the 1950s the disciplines involved in studying insect-borne diseases of trees were scattered across the agricultural campus in a variety of facilities, all of them inadequate. The department of Forestry was housed in a few upstairs rooms in the old soils building (King Hall); the department of Wildlife Management was in an old frame house at 424 Farm Place (the former home of Dean H. L. Russell, since demolished); Entomology had parts of five buildings, including two temporaries, the old poultry building on University Avenue, and no greenhouse space at all. Plant Pathology in the Horticulture building was also cramped for space.[1]

This state of affairs was exacerbated when the increasingly significant lumber and paper industry began to ask the University to solve some of their problems, which included oak blight, maple dieback, jack pine budworm, and Dutch Elm disease. It was pointed out that the lumber and paper industries were nearly as economically important to the state as agriculture. With gentle direction from president E. B. Fred, and dean of Agriculture R. K. Froker, these captains of industry began to lobby the state for new facilities, both personally and through the Trees for Tomorrow organization. They pointed out that alone among states in the area, Wisconsin had no forestry school.[2]

As a result of these pressures, a building for Entomology, Forestry and Wildlife, was placed on the University building priority list. This good news for the departments involved was modified by the fact that it was placed in 38th position. In tenth place was a plant pathology addition to the horti-

culture building. This placement would typically mean many years before the building was built. Throughout 1959 the departments continued to operate out of their inadequate facilities, and in fact took on even more work as well as an increased student load. Then in the spring of 1960 at the suggestion of the state department of administration, the University decided to combine the needs of Entomology-Forestry-Wildlife Management, with those of plant pathology. This effectively combined the Entomology-Wildlife-Forestry building and the addition to Horticulture into one request. This alteration resulted in a substantially higher priority.[3]

By the end of 1960 the building committee, appointed in September and chaired by professor R. J. Muckenhirn, had developed a plan acceptable to the school of Agriculture, and to president Elvehjem. The building would be located directly west of bacteriology across Babcock Drive. It was planned so that each of the three departments would retain separate identities. Estimated cost was $4.3 million. In September the state appointed architects J. J. Flad and Associates to the project. During 1961, the committee had two major tasks. They proceeded with the planning of the building, and uncertain of sufficient state support, tried to raise funds to pay for it. They unsuccessfully asked for funds from the NIH, and the NSF. A tentative schedule was drawn up, which called for completion by August 1, 1964, then revised to February 1965.[4]

On February 9, 1962, the plans were presented to the regents by Dean Wendt and state architect Stanley Nerdum. The regents voted to approve the preliminary plans, at an estimated cost of $4.6 million. They also named the building the "H. L. Russell Laboratories", after Harry Lumen Russell, dean of the college of Agriculture from 1907 to 1930. A month later the regents changed the name to "Harry L. Russell Laboratories", and shown on the building as "Russell Laboratories."[5]

On August 14, 1962, the regents executive committee voted to approve the final plans for Russell Labs. The building was to be a twin eight story tower, with a two story base section. Construction contracts were let on November 11, 1962. The general contractor was Anthony Grignano of Madison for $1.4 million. Total cost was $4.66 million, with $4.5 million coming from state funds and $145,000 from a federal grant. Construction began immediately. Official notification of the funding from the state did not arrive until February 1963.[6]

Dedication took place on January 28, 1965. The public was invited to tour the building, and a formal symposium was held in the Memorial Union Theatre. By the time of this dedication, many research projects were already under way, including insecticide research, studies on Dutch Elm disease, and sex attractant pesticides.[7]

The building is of reinforced concrete, sheathed with brick and precast panels. It is composed of a two story base, and two connected eight story towers. The base section's basement and two floors house Forestry, Wildlife Management, lecture halls and classrooms. The northern tower section holds departmental offices, labs and facilities for Entomology. The eastern tower contains the department of plant pathology. The base is 50 by 80 feet, and the towers are roughly 100 feet square. The top of the building is 123 feet high. Russell Labs was the first high rise building on the Agricultural campus. The only significant problems with the building were with the air-conditioning, a perpetual sore spot with modern lab buildings and a tendency for the basement to leak. These complaints were repaired in the mid 1960s. Russell Labs has been full for many years, and some departments had again begun to spread into small temporary quarters around the campus.

By the mid 1980s this piecemeal housing of the departments led to attempts to expand Russell Hall. The particular victims of the space squeeze were Forestry and Wildlife Management. Both had been very small and required little space when Russell Hall was opened. Forestry had taken over space in the Stock Pavilion which was constantly disrupted by large scale events, such as registration and rock concerts, held in that building. Wildlife Ecology had some substandard space in the basement of Steenbock Library. Both were growing quickly and attaining national significance in spite of poor

facilities. The proposed solution to these problems was a two story and basement wing added to the west side of the original west wing. By mid-1984 a plan had been developed. State money for the project was not available until November 1988. The regents approved a budget of 2.4 million in state funding. Construction was begun in October 1989 and completed in July 1990. At the urging of Dean Leo Walsh of the College of Agriculture and Life Sciences (CALS), the regents named the new addition "the Aldo Leopold Wing". Leopold was a faculty member at the University from 1928 to 1948. He founded the department of Wildlife Management, and was heavily involved in forestry.[8]

1) *University directories*; Conference with Administration on need for Entomology-Forestry and Wildlife Management Building, August 25, 1956, Clark to Verhulst, December 22, 1960, series 4/0/3 box 177.

2) Minutes of special meeting of Trees for Tomorrow, December 27, 1956, Memorandum of conversation with M. N. Taylor, December 17, 1956, T. C. Allen to E. B. Fred, February 21, 1957, Minutes of meeting, Trees for Tomorrow and E. B. Fred, March 14, 1957, John Beale to Noble Clark, December 9, 1957, Conference related to facilities for forestry research, December 11, 1957, Memorandum re: Facilities for Forestry Research, December 27, 1957, Beale to Froker, March 28, 1958, Schorger to Fred, March 31, 1958, Froker to Elvehjem, July 12, 1958, Elvehjem to Klip, May 19, 1959, series 4/0/3 box 177.

3) Elvehjem to Klip, May 19, 1959, series 4/0/3 box 177; Froker to Elvehjem August 5, 1960, series 24/9/2 box 13.

4) Froker to Muckenhirn et al, September 13, 1960, Dietrich to Dorman, December 19, 1961, Yasko to Flad, August 31, 1961, Sites to Kozlowski, February 16, 1961, Sites to Froker, June 19, 1961, series 24/9/2 box 13.

5) *Regent's Minutes*, February 9, 1962; Wildlife Research Newsletter, June 11, 1962, series 4/0/3 box 177; *Daily Cardinal*, Fall Registration Issue, section II p. 13, 1962.

6) *Regent's Minutes*, August 14, 1962, November 9, 1962 exhibit H. *Daily Cardinal*, July 19, 1963.

7) *Wisconsin State Journal*, January 24, 1965; Dedication booklet and dedication in Archives Russell Hall subject file.

8) Russell Laboratories Addition program statement, July 1984, Giese to Shain, April 8, 1983, Giese relates a story of a professor finding urine running down his walls due to spectators at a "punk rock" concert using the room above his for a toilet, and one of the band members using his phone to call London, Building Commission Requests/Items, November 10, 1988, Ward to Brown, June 18, 1990, series 4/31/9-3 box 7; Regent's Minutes, October 7, 1988, September 7, 1990. In an interview with the author October 1994, building manager Chuck Kovall stated that the addition had originally been intended to be a vertical addition to the original west wing of Russell Hall, but the economies of the original construction had made that plan impossible, and the expansion was outward instead of upward.

BROGDEN HALL

Fig. 1. 1994, Brogden Hall from Johnson and Charter Streets. [Author Photo, AP-43]

Built in 1962 to house the scattered psychology department, Brogden Hall is named for Wilfred J. Brogden, the psychology professor who was instrumental in having the building erected.

In the mid 1950s psychology was housed mainly in the old and decrepit chemical engineering building at 600 North Park Street, with annexes in the Journalism building, Bascom Hall and old houses on University Avenue. The first plan for a psychology building was to build a single building to house both psychology and mathematics. This 1956 plan was an early part of the University's plan to expand across University Avenue to the south. This plan was discarded when the mathematics department approved a plan to build what became Van Vleck Hall. Not until 1959 would any further action be taken regarding a building for psychology.[1]

In February 1959, the building committee of the department of psychology, chaired by professor W. J. Brogden unanimously recommended that the psychology building be located at the northwest corner of Linden Drive and Charter Street, pointing out the value to the department of its central location. This recommendation was rejected by the campus planning Commission. This, the last buildable site on Bascom Hill, later became the site of Van Hise Hall. Also in the spring of 1959, word came of a small grant from the NIH to help fund construction of a psychology laboratory. In January 1960, the regents approved a new site for psychology. It would be on the west side of Charter Street between University Avenue and West Johnson Street. It was explained that the building would come up soon on the building priority list. Preliminary sketches were made in early 1960 and showed a building that was estimated to cost about $3 million. The state building commission recommended funding of $2.25 million for the psychology building. In mid-1960 professor Brogden began to apply for grants from the NIH, the NSF and WARF. These federal agencies would support research facilities, while the state was inclined to fund only classrooms.[2]

In September 1961 the regents approved the preliminary plans for the psychology building. At that time the estimate of the cost was $3 million, and the status of the grants from federal sources were still not known. The building was designed to accommodate an addition on its northern side. The architects for this project were Shattuck, Siewert & Associates of Neenah. Late in the September the NSF granted $350,000 for the building. After further grants were received from the NIH, a schedule was set up that called for the building to be completed by February 1964. In January 1961 the state building commission authorized the preparation of final plans at a cost of $48,000 in state funds. In March 1961 the commission arranged the bond sale to raise the authorized $2.25 million.[3]

Final plans for the psychology building were approved by the regents on July 13, 1962. The budget was $3.04 million, the architect noted that considerable difficulty was had with the exterior treatment of the research tower section. This was due to the disapproval of the state architect of the large blank, windowless mass on the plans. An artist was hired to develop a pattern in the brick facing of this section. There is no intended significance to these patterns, beyond their use in decorating the building. The building plan was a six story tower for research and administration, with a one story classroom and lecture hall wing. Construction contracts were let by the regents on September 14, 1962. The general contract went to the Siesel Construction Company of Milwaukee for $1.2 million. Total cost was $3.04 million. The source of funding was $2.29 million from the state; $350,000 from the NSF, and $400,000 from the NIH. In the next three weeks the site for the building was vacated by the University Photo Laboratory, who moved into temporary quarters while waiting for completion of the new Extension Services Building on Spring and Charter Streets. Construction on the Psychology Building began in September 1962. By mid November 1962 the foundations were mostly completed. Construction continued without difficulty through 1963. The building was substantially completed in July 1964, when researchers began moving in.[4]

Dedication ceremonies were held on September 19. The public was shown a building that would accommodate 400 undergraduates, and 200 graduate students. The first floor with its entrance plaza at the corner of Charter and Johnson Streets, holds four large lecture rooms, five classrooms, and undergraduate laboratories. The building included closed circuit television wiring, and a large anechoic (soundproof) chamber in the basement. Above the classroom area is the office and administration tower with 41 offices, storage rooms and special purpose rooms. Connected, but structurally separate from the office wing is the six story research wing on the north side, nearest University Avenue. The first five floor of the research wing have identical floor plans with subject waiting rooms, and the rest filled with 9' by 13' and 13' by 18' labs. The north half of the fifth floor and all of the sixth floor are for animal research, rats rabbits and cats. In the late 1960s a plan was broached to relocate Charter Street and add to the building on the north to provide more space for clinical and animal research. This plan failed due to lack of funding.[5]

The dedication handbook says "The department is deeply grateful to Professor W. J. Brogden, who

in the capacity of Chairman of the Building Committee, carried most of the workload in planning the construction and outfitting the building." After the death of Professor Brogden on February 22, 1973, the regents voted to rename the Psychology Building the "W. J. Brogden Psychology Building".[6]

1) University directories; *Regent's Minutes*, June 14, 1956;
2) Memorandum to Steering Committee of Campus Planning Commission from Building Committee, Department of Psychology, February 2, 1959, series 24/9/2 box 11; *Regent's Minutes*, January 9, 1960; Brogden to Peterson, May 20, 1960, Peterson to Schmehl, May 25, 1960, Psychology Building Committee to Willard, December 5, 1960, series 24/9/2 box 12; telegram Allen to Peterson March 5, 1959, series 24/9/2 box 13.
3) *Regent's Minutes*, September 15, 1961; Peterson to Waterman, November 3, 1961, Sites to Nerdrum, December 18, 1961, Holt to Bradford, November 6, 1961, Sites to Nerdrum, October 24, 1961, Peterson to Hudson (NSF), September 22, 1961, series 24/9/2 box 13.
4) *Regent's Minutes*, January 5, 1962, March 9, 1962, July 13, 1962, September 14, 1962; Peterson to Dorman, March 22, 1962, series 24/9/2 box 13; *Daily Cardinal*, September 21, 1962, July 24, 1962; *Wisconsin State Journal*, November 13, 1962;
5) *Daily Cardinal*, September 18, 1964; *Wisconsin Alumni Magazine*, May 1965, p. 12.
6) Faculty Document 143, May 7, 1973, Archives W. J. Brogden biographical file; *Regent's Minutes*, January 11, 1974.

BIOTRON

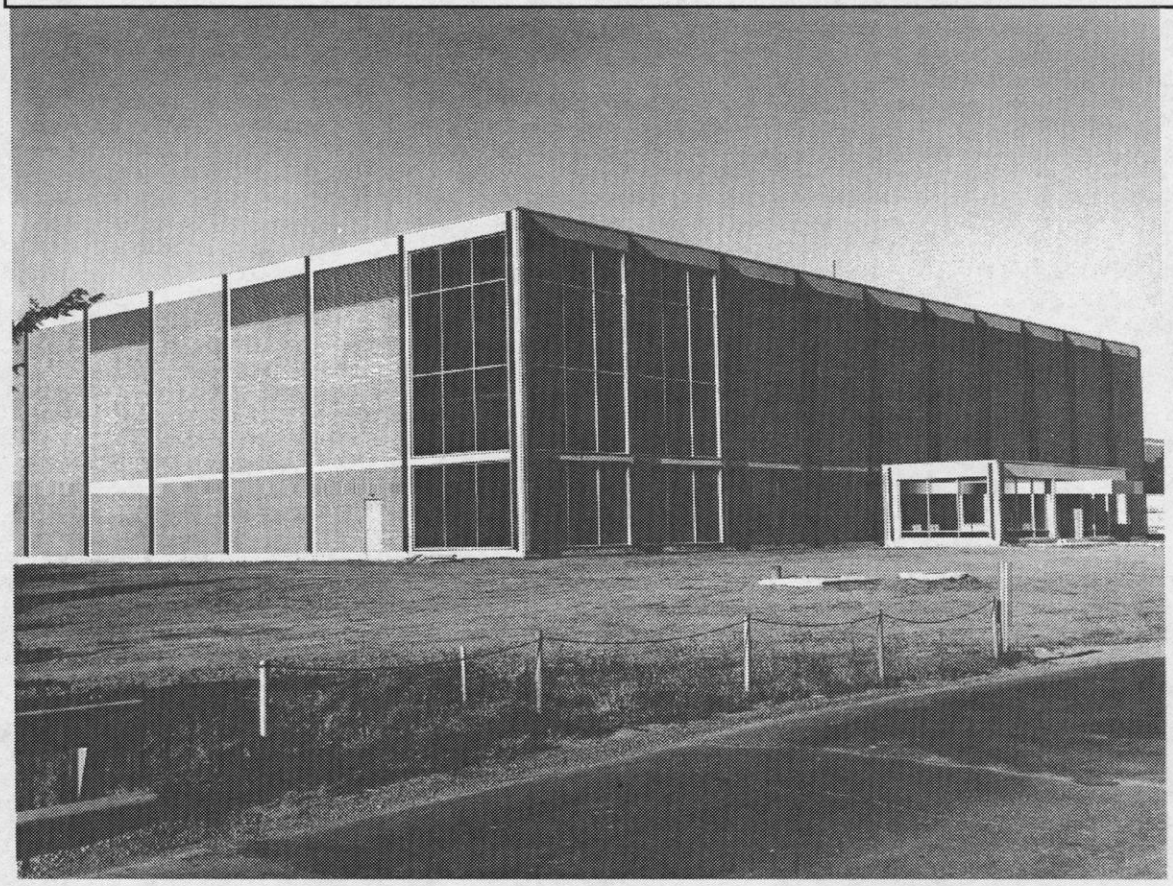


Fig. 1. Biotron c. 1965. [series 9/ 3, Biotron, ns-701]

The biotron was erected in 1964 to provide a laboratory in which plant and animal experiments could be done which required close control of climate, disease and other environmental factors.

The Biotron is unique on the University campus in several ways. Its origins were entirely off campus. It is not the exclusive domain of any one department, and when it was built it was the only facility of its kind in the world.

The genesis of the biotron came from the report of a study internal to the National Science Foundation (NSF) in 1959. This study, conducted by the Botanical Society of America, stated the need for a facility devoted to controlled-climate experimentation on both plants and animals. Subsequent to this report the NSF invited institutions including UW to submit research proposals relating to such a facility. The University appointed a committee to develop a proposal. The Biotron committee was made up of botanists, zoologists and biochemists. It was chaired by Folke Carl Skoog, professor of Botany. After considering all proposals the NSF in June 1959 selected the University of Wisconsin as the recipient of the $1.5 million grant for the construction of the Biotron.[1]

The purpose of the Biotron was to provide scientists a way to study plants and animals in environments that could be controlled accurately with respect to temperature, humidity, disease, insect

population and other environmental criteria. The facility would be open to qualified researchers from institutions other than the UW. At that time (1959) there were a few limited facilities scattered around the world (including at the UW) for climate-controlled experimentation on plants (phytotrons), but there were no facilities that combined such labs for both plants and animals. The design and construction of the Biotron would be a voyage in largely uncharted waters.

By the end of June 1959 the Biotron construction committee (chaired by professor Robert A. Burris of biochemistry) had selected a site between the creek and the Walnut Street greenhouses, and south of Observatory Drive. In September 1959 the regents approved this choice. A meeting of world leaders in the controlled environment field was held in December 1959, and many ideas and directions were discussed for the Biotron. The next major decision of the committee was the appointment of a director of the Biotron. The choice went to Dr. Harold Senn of Ottowa, where he headed the Canadian government's plant research laboratories. Dr. Senn came to Madison September 1, 1960. He would prove to be a dynamic and highly effective leader of the Biotron effort.[2]

When Dr. Senn came to the project, the building committee had already developed the basic form of the building and its contents. It was to be a one story building of about 21,000 square feet, split nearly equally between plant and animal labs. The initial goal was to be able to mimic any environment on earth, including the extremes of the poles, but estimated costs were so high that the range was restricted to central Canada to the Argentine. It was assumed that the real extremes could be added later if needed. Animal sizes from mice to giraffes were discussed. In May 1960, architects Grassold and Johnson were chosen, along with several specialty contractors for mechanical and electrical systems, which were anticipated to be outside the normal range of sub-contractors.[3]

Serious reservations were already heard about the budget. The 1960 estimate of utility hookups to the relatively remote site was about $160,000, or more than ten percent of the total available budget. In November 1961 the planners estimated that the cost of the facility if built to fully realize the vision of the NSF and the Biotron committee would be $5.3 million. They further estimated that with all nonessentials removed the basic facility would cost $4 million. The NSF approved the plans but would offer no further grants. However the NSF agreed to regard the original $1.5 million as a contribution toward the project, which allowed the committee to seek other sources of funding. This drive for additional funding became the central difficulty in the entire project. Some attempts were made to design the facility in stages, a technique that had worked with more conventional University buildings, but which proved unwieldy with the complex high-tech Biotron. As Dr. Senn said it will be "more like a machine than a building".[4]

In May 1962 the National Institutes of Health (NIH) granted a $1 million matching grant for the Biotron. But by July 1962 the regents were informed that approximately $4 million was committed for the project and approved the preparations of preliminary plans for a building to cost an estimated $4.2 million. The official notification of the bulk of the money came in January 1963 when the Ford Foundation contributed $1.7 million. Construction was now estimated to start around July 1963. The NSF warned the University that further delays might jeopardize the original grant. Throughout late 1963 the planners struggled to master the technical problems in time to prepare final plans for construction. They were now aiming for spring 1964 as a starting date.[5]

A budget of $4.2 million was approved by the regents in May 1964. When bids were opened on June 25, 1964 they were $775,000 over budget. Director Senn immediately applied to the Ford Foundation, the NSF, and NASA, who all responded negatively. The Wisconsin state building commission agreed to match up to $500,000 of private funds. The Biotron committee made some reductions in the plan, and took alternate bids to reduce costs by $178,000. In August Dr. Senn was notified that the NSF could supply $300,000 to match the state money. This grant at last provided the total necessary to let contracts for construction.[6]

Construction contracts were let by the regents in August 1964. Total contracts were for $4.8

million. The general contractor was J. H. Findorff & Son for $857,227. The funds were obtained as follows: the NSF, $1.5 million, the NIH $1 million, the Ford Foundation $1.7 million, the state building commission and the NSF supplemental grant $613,000. During the frantic efforts to complete funding, a groundbreaking ceremony had been held on August 27, 1964. Estimated completion was for fall 1966. The shell of the building was completed and the roof installed by July 1, 1965. The difficult and complex mechanical and electrical systems were begun the same month. Heating and ventilating work was begun in September 1965. Dr. Senn began to escort visitors and distribute users manuals to potential researchers.[7]

By May 1, 1966 mostly air-conditioning work remained. In late 1966 as the completion deadline was missed again, most delays were caused by the non delivery of U. S government surplus equipment that had been utilized during the cost reduction efforts. December 1967 saw the testing of major mechanical systems, with failures of a water supply main, and the nonperformance of some environmental controls. Although some systems were still under test, first plants were grown in March 1967, and the first formal research project was initiated in May, 1967. The official dedication was not held until September 18-19, 1970, nearly twelve years after the start of the project.[8]

The finished structure was a windowless rectangle of 151 by 209 feet 46 feet high sheathed in face brick with some cut stone trim over concrete block walls and reinforced concrete frame, a small first floor entry way on the north side allows entrance from Observatory Drive. The labs are on two floors, with a third level containing the maze of pipes and wiring of the mechanical systems. A bank of greenhouses was added to the back of the building in 1996. There are 48 climate controlled labs.

Notable experiments in the Biotron include the 1977 hatching of 4 eggs of the nearly extinct Siberian Crane. This and research on the effects of air-pollution and pesticides on rhesus monkeys have brought international attention to the Biotron. Animals from mice, to pigs, have been accommodated. Director Dr. Theodore Kozlowski says that in a pinch an elephant could be handled. Proposals for Biotron experiments can be submitted by anyone holding the rank of assistant professor or above. Since the Biotron is the domain of no single department, it is administered by the graduate school and its committee. The remarkable biotron is a jewel in the crown of Wisconsin's great University.[9]

1) *Regent's Minutes*, July 11, 1959, exhibit A, September 12, 1959; Research Proposal to the National Science Foundation for construction and equipping of a biotron, Burris to Wendt, October 6, 1959, Biotron building committee meeting minutes, December 21, 1959, NSF to Elvehjem, June 30, 1959, series 24/9/2 box 12; The Biotron, c. October 1961, series 54/0/3 box 188. *Capital Times*, August 14, 1959.
2) Froker to Elvehjem, June 22, 1959, series 4/0/3 box 188; Biotron building committee meeting minutes, June 22, 1960, series 24/9/2 box 12; *Wisconsin State Journal*, August 19, 1960; *Regent's Minutes*, September 12, 1959.
3) *Wisconsin Alumni Magazine*, June 1961, p. 16.
4) Burris to Wendt, June 13, 1960, series 24/9/2 box 12; Waterman to Elvehjem, August 11, 1961, Memo, July 18, 1961, Moseman to Senn, October 10, 1961, Review of the Biotron Project by Harold Senn, April 30, 1962, Notes on Conference Re Biotron, November 6, 1963, series 4/0/3 box 188; *Wisconsin State Journal*, August 26, 1964;
5) Peterson to Schmehl, May 22, 1962, Review of the Biotron Project by Harold Senn, April 30, 1962, Peterson to Schmehl, January 30, 1963, Stamberg to Peterson, February 4, 1963, Memorandum, Sites to Kinne et al, November 5, 1963, series 4/0/3 box 188; *Regent's Minutes*, July 13, 1962;
6) Senn to Harrington, August 14, 1964, Harrington to Senn, July 14, 1964, Peterson to Wisconsin State Building Commission, July 27, 1964, Biotron Construction Budget, April 1964, series 4/0/3 box 188.
7) *Regent's Minutes*, August 14, 1964, exhibit G; Wisconsin State Journal, August 26, 1964; Daily Cardinal, September 28, 1964; Biotron Progress reports, October 1964, July 1965, October 1965, November 1965, series 40/1/7-1 box 53;
8) Biotron Progress reports, October 1, 1965, November 1, 1965, January, may, June, October and November 1966, series 40/1/7-1 box 53; Biotron Progress Reports, March, April and May 1967, series 24/9/3 box 8; *Capital Times*, July 21, 1966; History of the Biotron, Dedication brochure, Archives Biotron subject file.
9) *Wisconsin State Journal*, July 3, 1978; *Madison Press Connection*, November 14, 1979;

PHYSICAL PLANT GARAGE

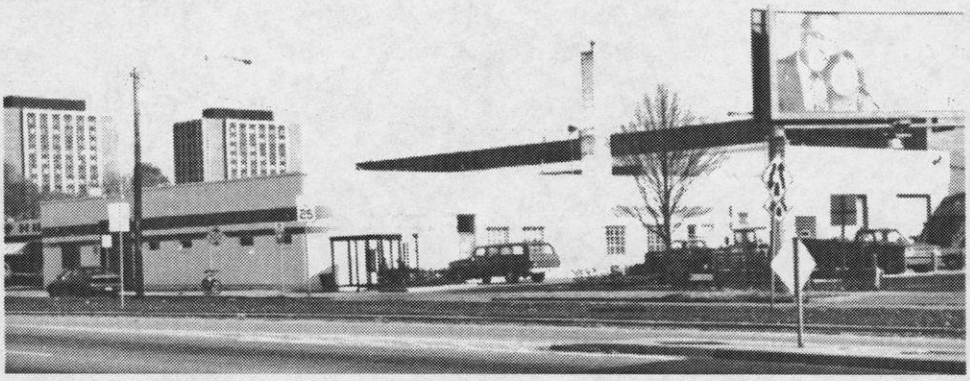


Fig. 1. Physical Plant Garage 1995, a one-story 78 by 52 foot structure of concrete block; the raised section is visible at the right of the picture. The Stores/Extension-Services building is visible in the background, as are the towers of Ogg Hall. [Author Photo, AP-44]

Starting in 1970 the physical plant rented garage space at 111 Gerry Court for servicing of University owned vehicles. This space was generally unsuitable. Additionally the lease contained an escalation clause that brought the rent to more than $44,000 per year. The regents authorized a physical plant as part of the 1977-79 building program at an estimated cost of $540,000.[1]

The original plan was to construct a new building for the garage near Brooks Street and College Court, but by May 1980 the University and the city of Madison had agreed that this area should be reserved for future housing development. The regents then approved the purchase and renovation of an existing facility, and since the new Stores/Extension Services building was already approved to be located at 30 North Murray Street, the planning committees agreed that the garage at 21 North Park Street would make an ideal location for the servicing of University vehicles. At their May 1980 meeting the regents approved the purchase and remodelling of the Park Street garage at a total budget of $540,000. Included in the purchase was land behind the Park Street lot on Murray Street. The purchase of the garage and adjoining property was closed on July 1, 1980 at a cost of $300,000 from the Roy A. Ward trust. As later became clear the building had been built on swampy land and its footings had been sinking and settling since construction.[2]

The building was built in 1945 by Fritz Construction at a cost to the owner Ace Buick of $45,000 and had spent almost its entire life as a garage, first as Ace Buick, then Caves Buick, Ehler's Buick, and Zimbrick Buick, and in the 1970s storage for the telephone Company. In June 1980 the state building commission approved a request to remodel the building at a cost of $24,000. The main part of the remodelling, by Krueger and Shutter, was the raising of the roof of a 53 by 36 foot section of the garage to provide 20 feet of headroom for large vehicles and for an overhead hoist. The remodelling work was done by the late summer of 1981 and in the fall of 1981 the University operation moved in. The concrete block structure has large glass block windows in the north and east walls. The garage houses mechanics who perform service on all UW vehicles.[3]

1) University Directories; Building Program, Garage Building, series 4/31/9-3 box 6.
2) Memo for regent's meeting, May 1980, Edsall to Shain, June 19, 1980, Roy Ward Trust to Regents, March 28, 1980, series 4/31/9-3 box 6; *Regent's Minutes*, May 9, 1980, October 10, 1980.
3) City Directories; Title records in Regent's vault, Roy Ward Trust file; Agency Request for State Building Commission Action, October 1980, series 4/31/9-3 box 6.

PRIMATE CENTER

Fig. 1. Primate Center, 1993, from Orchard and Capitol Court. [Author Photo, AP-45]

The primate center was built in 1962 with grant money from the National Institutes of Health. It houses research labs and offices and provides interdisciplinary primate research facilities.

In June of 1961 the regents accepted a grant of $1.29 million from the National Institute of Health (NIH) for the construction of a Wisconsin Primate Center. The stated purpose was "to provide an optimum environment wherein resident and visiting scientists, representing a breadth of disciplines, may actively pursue research ... on rhesus monkeys". A supplementary grant provided $367,000 for operating expenses for June 1961 through May 1962. Within broad limits, the center would be open to any Midwestern scientist who desired to use the facility. It would be directed by Dr. Harry Harlow and guided by the committee of the Graduate School under dean John Willard.[1]

These grants was mainly due to the work of professor Harry Harlow, who was the founder and director of the primate research program at the University. Harlow's research results had attracted national attention, and were a principal reason that the University was chosen by the NIH as a regional site. At the same (June 1961) meeting the regents approved a site for the Regional Primate Center, directly west of the existing primate Laboratory on Coyne Court. It was stipulated that the cost of the land at this

site would be borne by the NIH grant. In September the regents approved the seeking of other outside funding to cover expenses not allowed by the NIH grant, such as utility extensions, and site demolition.[2]

In July 1961 the state building commission approved the preparation of preliminary plans. 1961 was taken up with planning the facility, mostly by Dr. Harlow and the architects of Herbst, Jacoby & Herbst of Milwaukee. In January 1962, the negotiations for the land were completed, but cost $93,500, including razing instead of the appraised $65,000. This extra expense required some reductions in the building plan to stay within the budget set by the grant.[3]

The preliminary plans were approved by the regents in March 1962. At that time, the construction schedule called for construction to begin in September 1962 and to be completed in November 1963. The regents were also informed at this time that off campus facilities for a primate holding, might be necessary. The regents approved final plans for the Primate Center on July 13, 1962. Construction contracts were let on September 14, 1962, with the general contract going to the Siesel Construction Company of Milwaukee for $389,000. Total costs including construction, land and utilities was $1.217 million, the exact amount of the NIH grant. Construction began immediately.[4]

The formal opening of the Primate Center took place on April 27, 1964. The building is a basement and four story 120 by 40 foot windowless research tower, flanked on the north and west by a 60 by 60 foot basement and two story administrative wing. Construction is of reinforced concrete with brick sheathing, and precast panels on the two story section. The research section contains mainly animal cages, laboratories, nurseries, and a few offices.[5]

In 1966, with mounting problems in the areas of animal housing, research, and office space, Dr. Harlow began planning a $1.2 million addition to the Primate Center, which would extend from the north side of the research tower section onto land then used by some businesses and the Headquarters of the Wisconsin State Selective Service System. This scheme failed because of a lack of funding. Years later, the University did buy the property occupied by the Selective Service, and remodel the building to be used as the Primate Annex. The proximity of these buildings led to a strange incident in January 1970, when radical activist Karleton Armstrong in an attempt to bomb the draft board, mistook the Primate Center for the Selective Service office (which had removed it's identifying sign as a precaution) and firebombed the Primate Center. Damage was minimal, and confined to an office on the first floor.

Well known users of the Primate Lab, besides Dr. Harlow, include Dr. Konrad Akerty of the anatomy department, and Dr. Harry A. Waisman, whose research on mental retardation eventually led to the construction of the Waisman Center on west campus. The center still regularly hosts visiting scholars in primate research.

1) *Regent's Minutes*, September 9-10, 1960, June 5-6, 1961, exhibit A-1, July 20, 1961, exhibit B; *Daily Cardinal*, June 16, 1961.
2) *Regent's Minutes*, June 5-6, 1961.
3) Dietrich to Dorman, November 24, 1961, Peterson to Eyestone, January 11, 1962, Sites to Yamamoto, February 2, 1962, Primate Center outline specification, Herbst Jacoby& Herbst, February 21, 1962, series 24/9/2 box 13.
4) *Regent's Minutes*, March 9, 1962, July 13, 1962, September 14, 1962; *Daily Cardinal*, July 19, 1962.
5) Photo caption, NS-2508. Plans in physical plant plans room.

SOUTH EAST DORMS

Fig. 1. The Southeast dorms from the southwest, February 1997. Sellery at the left, Ogg's twin towers in the center, and Witte on the far right. Gordon Commons is in front of Ogg near the top of the picture. Serf is visible at the lower right. [Del Brown Photo, AP-70]

The southeast dorms were built in three stages in 1961, 1962 and 1963. They provide housing for 4000 undergraduate students. The dormitories are named for George Sellery, Edwin Witte, Frederic Ogg, and the food facility for Edgar Gordon.

The most remarkable thing about this, the largest housing development in University history is how smoothly it went. From concept in February 1959, to the opening of Gordon Commons in 1965, there were no serious difficulties.

In response to the general University expansion "sketch plan", approved by the regents in February 1959, the Division of Residence Halls drew up a Ten Year Housing Plan. This plan, drawn up by Newell J. Smith of Residence Halls, is dated May 1959, but was not presented to the regents until July 1959. The preliminary plan, covering years 1960-1970 called for reserving the 16 acre area bounded by University Avenue, Park, West Dayton and Frances Streets, for expansion of fireproof University housing facilities, to house up to 4000 undergraduate students. It asked that provisions be

made for recreational land, adequate parking and the same kind of social programs that existed at other residence halls. Interestingly this initial proposal does not contain a request for food service facilities. There were requests for other kinds of housing in that and other areas, including graduate student apartments and cooperative housing, which plans were later abandoned.[1]

The plan was presented to the regents by president Elvehjem and Smith of Residence Halls on July 8, 1960. They pointed out that even with the opening of Chadbourne Hall and the Elm Drive dorms the previous fall, the dorms were full and an estimated 300 women had been turned away for lack of accommodation. The plan was geared to provide University housing for half of the projected enrollment increases for the decade. Regent Rennebohm complained that he had heard from private landlords who had been unable to find tenants, and cast doubts on the projected housing shortage. Rennebohm was of the opinion that the planned dorms were too nice. "Places that are better than 80 per cent of them are used to at home." Others questioned whether or not the University would be unfairly competing with the private rental market. But after discussion the regents passed a resolution to allow the preparation of analysis sketches for the first stage of the project to house about 1000 undergraduates.[2]

Following this initial approval, the project began to progress quickly. On February 1, 1961 Residence Halls obtained a preliminary study of the project by the architectural firm of J. & G. Daverman of Grand Rapids Michigan. It outlined five possible layouts for dorms in the area. These plans included one that proposed a cluster of 'Y' shaped dorms like Chadbourne Hall, another that featured dorms straddling Dayton Street. All the proposals now included construction in three phases, dining facilities and recreational areas One reason for now including dining facilities was that lending agencies were unwilling to loan on large dorms without them. In that same month, the regents approved the funding of land purchase in the dorm area from a revolving Residence Halls account, with the loans guaranteed by WARF.[3]

Further discussion of the dorm project was held by the regents in March 1961. As presented by dean Wendt, the project now consisted of four dorms eight story high holding 500 students each and one fourteen story dorm holding 1000, and a food preparation and dining facility for 3000. The regents asked why the dorms could not all be fourteen stories, and were told that it would raise the density of students in the area passed the design limit of 4000 students on 16 acres. In April 1961 the purchase of land in the area of phase one began, with purchase prices coming in at or below appraised value. One of the reason this site had been selected was that it was a rundown older neighborhood, judging from pictures and descriptions it was very like the current state of the West Mifflin Street area. The removal of the old houses in the area would displace an estimated 900 students. In May 1961 the regents voted on the architect's plans for the Southeast dorm #1 project for submission to the Housing and Home Finance Agency, a Federal lending agency. The estimated cost of the dorm was $6.8 million. When some regents remarked that this compared unfavorably with the cost of the recently completed Chadbourne Hall, they were reminded that the southeast dorms were the first University dormitories whose cost would include the expense of real estate. That cost was about $1 million per block. It was estimated that rates in all dorms would have to rise about $100 per student to pay for the new dorms. Regent Jensen said that it seemed to him that the dorm would be more of a "club" than a dormitory for a serious purpose, he was outraged by the presence of parking spaces, provision for television, and suggested eliminating elevators from the first four floors to encourage student exercise. The regents continued to debate the merits of the project for most of the morning but this meeting saw the last serious opposition to the southeast dorm project.[4]

On July 20, 1961 the regents approved without discussion the preliminary plans for southeast dorm #1. At the same meeting they raised the credit limit of the revolving fund, used to purchase land, from $4 million to $5 million. The final plans and authority for bids were approved on December 8, 1961. The contracts were let on February 9, 1962, with the general contract going to the J. L. Simmons Company of Chicago. Total cost was $4.3 million of which $1.1 million was land cost. A month later

the financing was finalized with interest rate between 3 and 4 per cent on bonds running until the year 2001. Construction was under way on the first southeast dorm.[5]

In the May of 1962 while the construction of dorm #1 was going on, the regents approved without dissent the general plan for the rest of the project. The regents were now in a hurry for housing as enrollment was rising faster than had been predicted. There would be two more dorms and a food service building, the dorms to hold 1130, and 1000 students respectively to be finished in 1964 and 1965. This was essentially the rest of the original ten year plan. The second dorm would be identical to the first, then under construction. This would save time in plan preparation. In January 1963 the financing of the second dorm was completed, and contracts were let on February 8, 1963 with J. P. Cullen and Son the general contractor for $2.3 million. Total cost of dorm #2 was $3.53 million.[6]

The preliminary plans for southeast dorm #3 were approved on May 10, 1963. Financing was again at 3.5 per cent for 50 years. Dorm #3 was designed for 960 men students, 480 in each of the two towers. Estimated cost was $4.5 million for dorm #3 and the food service building. On June 10, 1963 the regents voted that the dorms be named as follows: the commons building be named Edgar B. Gordon Commons; southeast dorm #1 be named George C. Sellery Hall; that southeast dorm #2 be named Edwin E. Witte Hall; that southeast dorm #3 be named Frederic A. Ogg Hall.[7]

The final plans for Ogg Hall were approved on September 6, 1963, and the contracts were let on November 11, 1963. The general contractor was J. H. Findorff and Son with a contract of $2.2 million. Total cost for dorm #3 was 4.5 million. The final plans for Gordon Commons were approved on March 6, 1964, and the construction bids were let on June 8, 1964. The general contractor was J. P. Cullen and Son of Janesville for $1.1 million. Total costs were $3.8 million. This part of the project was paid for by state funds.[8]

Dorm #1, Sellery Hall, opened in the fall of 1963 with room for 1100 students. Dorm #2, Witte Hall, opened in the fall of 1964, for another 1100. Dorm #3, Ogg Hall, and Gordon Commons opened in the fall of 1965 with space for 960 students. The ten year plan's vision of housing for almost 4000 undergraduates was complete. The formal dedication of the Southeast dorms was held on May 8, 1966, almost seven years to the day from the initial design of the dorm project by Residence Halls.[9]

All three dorms are of reinforced concrete construction faced with brick and of similar design. Each of the three took the form of two tower sections rising from a common base section. In the case of Sellery and Witte which are identical except for the relative spacing of the towers, the towers are 40 by 200 feet, ten floors high, and the common base is a basement and one story, holding utilities, activity rooms, laundry and luggage rooms. The towers are arranged with a house per floor, with each house having a lounge, lobby and common rooms. They were designed to be used as a women's wing and a men's wing. Overall height is 92 feet. Ogg Hall is slightly different, with two symmetrical 66 by 110 foot towers 12 floors high over the basement and first floor shared section. Total height is 127 feet. Ogg was designed to be used by men only. All three dorms are now co-ed by floor. Gordon Commons is a basement and one floor rectangle 209 by 250 feet, containing six large dining rooms and kitchen facilities for 3000. It is connected by tunnel to Ogg Hall, and by elevated foot bridge to Witte Hall.

The total cost of the huge project had been about $24 million, financed through bond issues that would not mature until about the turn of the century. But in the 1980s when interest rates approached 15 per cent, the holders of these bonds were willing to cash them in at 50 cents on the dollar, and the debt load on the dorms was completely liquidated. Even the impersonal forces of the market place went easy on this project.[10]

The student community of 3200 undergraduates has been operating at capacity since 1965. The Southeast Recreational Facility (SERF) built in the 1980s added considerable attraction to the dorms.

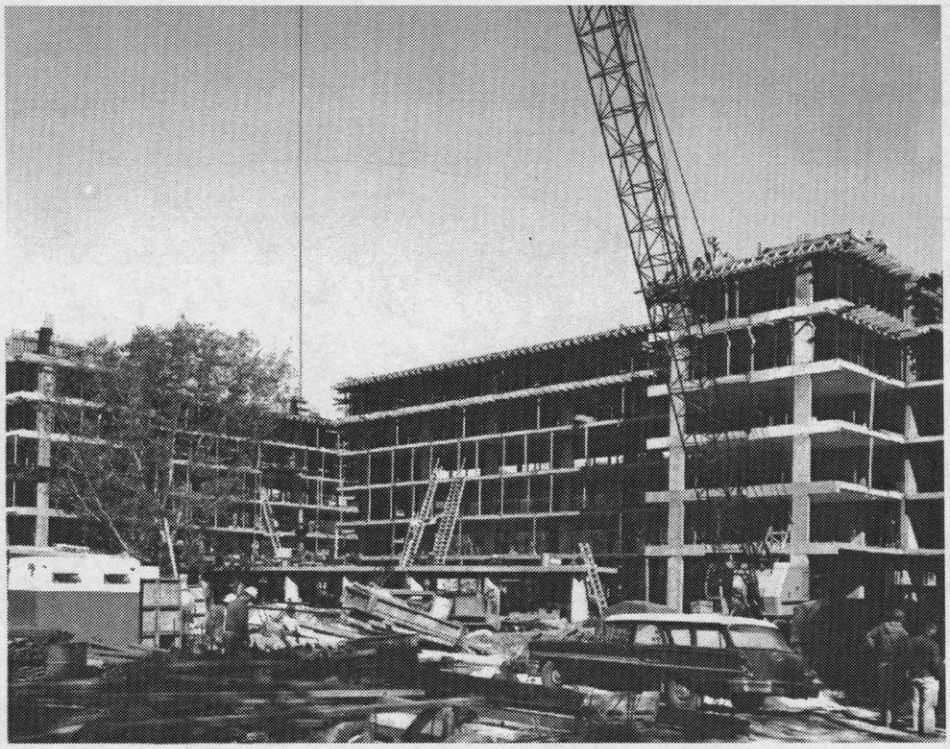


Fig. 2. The first of the southeast dorms going up: Sellery Hall Under construction, September 24, 1962. [Series 26/1, Southeast Dorms, ns-1734]

As the University expands to the south and east of Bascom Hill, the southeast dorms are more and more in a location central to the campus.

1) Residence Halls Ten Year Construction Program, May 10, 1960, Transcription of Notes from Regent Meeting, July 8, 1960, series 1/1/3 box 89 folder July 1960.
2) Transcription of Notes from Regent Meeting, July 8, 1960, series 1/1/3 box 89 folder July 1960. *Regent's Minutes*, July 8, 1960, September 9-10, 1960.
3) *Regent's Minutes*, February 10-11, 1961; The Daverman Architectural Report, February 1, 1961, series 24/9/2 box 15.
4) *Regent's Minutes*, March 10, 1961, April 7, 1961, May 12-13, 1961; *Daily Cardinal*, January 10, 11, 12, 1961.
5) *Regent's Minutes*, July 20-21, 1961, December 8, 1961, February 9, 1962, exhibit G., March 9, 1962, May 4, 1962.
6) *Regent's Minutes*, July 13, 1962, January 11, 1963, February 8, 1963, April 5, 1963.
7) *Regent's Minutes*, June 10, 1963, the individual houses were also named at this meeting.
8) *Regent's Minutes*, May 10, 1963, September 6, 1963, December 6, 1963 exhibit I, March 6, 1964, June 8, 1964.
9) Dedication Brochure, Archives Sellery Hall subject folder.
10) Plans in the physical plant plans room; Interview spring 1994 with Charles Stathas, University legal counsel.

SCHUMAN SHELTER

Fig. 1. The Schuman Shelter, 1995. [Author Photo, AP-46]

It has not been exactly determined when and why this building was erected. The only known plans are dated in November 1962 and describe it as a garage. It is listed as an existing garage on a University map in 1963. The University Fact Books, lists its occupancy as 1963. It is assumed then that construction took place in 1962-63. It is a 24 by 40 foot wood-framed structure, sided in T-111 redwood plywood. The plans show the west end used as a garage, with a roll up door (since removed), and the east end as a warming area, with two bathrooms in the center.[1]

The earliest assignment of the building by the department of space management is in 1963 to what was then the department of physical education for women. By 1967 it is being referred to as the Intramural Warming Shelter in the University fact book, having presumably given up its use as a garage about that time.

In December 1978, the regents, acting on the recommendation of chancellor Irving Shain, officially renamed the building "now known as the Elm Drive Warming House, the Carl Schuman Shelter".

Carl Schuman worked as a maintenance man in the Department of Physical Education for women from 1945 until 1971. He worked under every Chairperson of that department all of whom had uniformly high opinions of him.[2]

The Schuman Shelter is currently assigned jointly to Kinesiology for storage, and to the physical plant for the restrooms.

1) Planning and Construction hanging files. Map of area, series 4/18/1 box 41, Intramural folder. Records of the department of space management.

2) *Regent's Minutes*, December 8, 1978; Regent's Papers, series 1/1/3 box 204, folder December 1978, item I.3.h.

GLASS LAB

Fig. 1. The glass lab, 1995. The building is a single story, 44 by 92 feet of metal siding over a steel frame with a slab floor. It was probably erected in 1963 by the United Builder's Corporation to be used for lumber storage. [Author Photo, AP-47]

The first development of the land at Randall and Monroe Streets took place in 1914 by the Yawkey-Crowley Lumber Yard. The company went out of business in 1930 and the property was sold to the Gateway Lumber Company, organized in 1908. This company also failed (in 1963) and the property was sold to the United Building Center (UBC) of Winona Minnesota.[1]

The United Building Center Corporation approached the University in 1968 about the purchase of the property. The University sought permission from the state to purchase the property in August 1968 for $264,000. The property changed hands on October 31, 1968. Of the old buildings only the "steel clad warehouse" was recommended for retention. That building was probably built shortly after the UBC arrived in 1963. The other buildings were demolished for the construction of the new police and security building in the 1980s.[2]

Professor Harvey Littleton arrived at the University in the early 1950s with an established reputation as a potter. Littleton had grown up in Corning New York, and worked summer jobs at the local glass factories, and considered the possibilities of glass as an artists material. In 1957 after a visit to Europe he set up a small studio on his farm in Verona, and began to practice his technique. In 1962 with grants from the University Littleton began the formal teaching of art glass techniques as part of the art department. This was the first college course in glass blowing in the United States. The success of the course and the inconveniences of having the teaching facilities on a private farm outside Madison led the art department in the summer of 1970 to obtain the use and remodelling of the old lumber yard warehouse for Littleton's use.[3]

The building now abuts on its west end to the new police and security building. Its original address was 1429 Monroe Street, but after the construction of the new Police and Security building at that address, the glass lab's address was changed to 46 North Randall Street. Many Universities now teach glass blowing, and most have at least one ex-student of professor Littleton or his successors at the UW. The current professor of art glass is professor Stephen Faren.

1) City Directories; Dane County Register of Deeds.

2) Purchase papers in regent's vault, United Builder's Center file.

3) *Wisconsin State Journal*, November 25, 1962; *Wisconsin Alumni Magazine*, December 1966, p. 8; *Badger Herald*, March 18, 1971.

ZOOLOGY RESEARCH

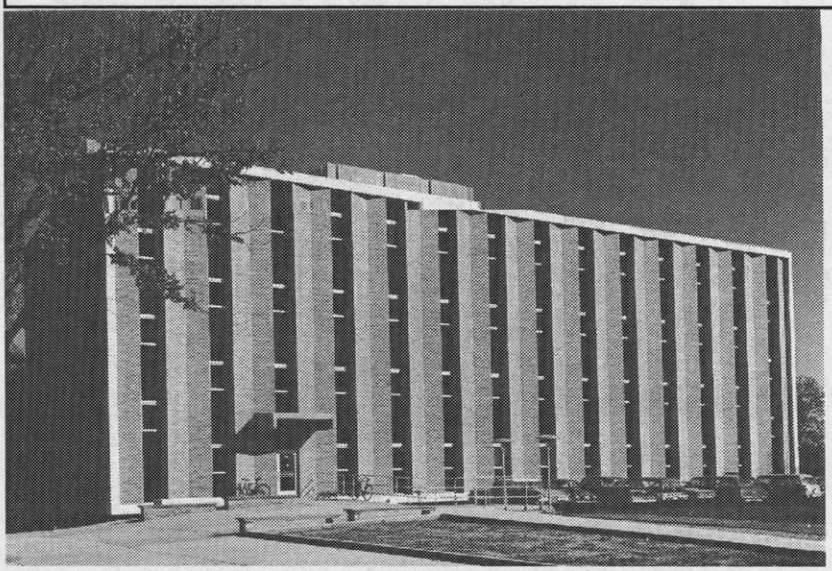


Fig. 1. Zoology Research c. 1965. [series 9/5, Zoology Research, ns-3148]

In a September 1959 grant application to the National Institute of Health (NIH), department of zoology professor and chairman Lemuel Fraser explains the need for new research facilities. The zoology department was housed in Birge Hall, sharing that building with the department of Botany. Birge was built in 1911 with a large wing added on the west side in 1957. Both departments were severely crowded. There was some discussion of an east wing, but the terrain precluded this option. The proposed building would house all the researchers in Zoology, since that option would free up a great deal of space in Birge Hall. Undergraduate work would remain at Birge. The proposed building would cost about $1.5 million, and be funded from the $750,000 being requested from the NIH and an equal amount from WARF. The result of this proposal was the eventual award of $381,500 from the NIH. In January 1960, the regents voted that the new zoology Research Facility would be located in the block bounded by North Charter, West Johnson, North Mills Streets, and the railroad. They understood that the building would be entirely financed by gift funds. In June 1961 the regents approved the authority to prepare preliminary plans.[1]

Planning by Fraser and the architects Kloppenberg & Kloppenberg proceeded through early 1962. In May 1962 the University began to buy land on the site for Zoology Research. The final plans for the building were approved by the regents on October 5, 1962. The regents and the architect commented on the expense and mechanical complexity resulting from the need to house large numbers of animals in the building.[2]

Construction contracts were let on January 11, 1963, with the general contract going to Anthony Grignano of Madison for $529,000. Total cost was $1.5 million, with funding coming from WARF $750,000, NIH $381,500, and the NSF $368,500. Construction took until mid 1964. The department stayed in Birge Hall for only eight years, when the Noland Zoology building was constructed next to the research building.[3]

1) *Regent's Minutes*, January 9, 1960; Application for Research Grant, September 28, 1959, series 24/9/2 box 13.
2) *Regent's Minutes*, June 6, 1961; *Daily Cardinal*, October 6, 1962.
3) *Regent's Minutes*, May 4, 1962, July 13, 1962, October 5, 1962, January 11, 1963.

DANIELS CHEMISTRY BUILDING

Fig. 1. The new Chemistry complex c. 1968. The Mathews research building is at the left of the building, and the Daniels building is the base and tower section at the right. In the background is the old chemistry building. [series 9/1, Chemistry Building (new), jf-82]

Built in 1965 as the completion of chemistry's move from their old quarters, the Daniels Chemistry building provided lecture halls labs and office space for undergraduate chemistry education. It is named for Farrington Daniels, a long-time chairman of chemistry.

The basic idea for the new chemistry building had been around since 1957, when deans Daniels and Farrington planned for the department's exodus from the crowded and inadequate old chemistry building at Charter and University (now Chamberlin Hall). Because the whole project was estimated to cost more than six million dollars in the late fifties, the deans decided to press for building the complex in sections. They first built the research section (Unit I), now called the Mathews laboratories in 1960, principally funded by WARF. Planning for the expansion was pursued simultaneously. It was understood that the expansion would be a very large addition to Unit I, that could encompass the whole block bounded by University Avenue, Johnson, Mills and Charter Streets, except for the Methodist church in the northwest corner of the block. Funding for this classroom

building could not come from WARF, who only funded research facilities.[1]

The building committee was headed by professors Holt, Larson and Ferry. In May 1963 the regents voted to allow the preparations of plans and specifications for Chemistry Building Units 2 and 3. It would take more than a year before the preliminary plans were approved. Much of this time was taken up by the tedious job of arranging funding from a number of different sources. The total estimated cost was $7.3 million. Of this amount the state provided $5.71 million, the NSF 1.2 million, and NASA $442,000. Final plans were approved by the regents on March 5, 1965. Several months of revision, adjustments and bids followed. The architects for the building were Grellinger and Rose of Milwaukee.[2]

The regents let construction bids on August 20, 1965, with the general contract going to J. H. Findorff for $2.719 million. Groundbreaking took place immediately. It was estimated that the building would be completed by February 1967. This timetable was not met. The building was first ready for classes in the fall of 1967. Some professors and researchers were not moved in until the spring of 1968. After ten years the chemistry department was again completely under one roof.[3]

The building was constructed of brick faced prefabricated concrete and steel. It is a subbasement, basement and three stories 278 by 147 feet, and a nine story tower rising to 111 feet. The general idea of the design is that very large traffic flow through elevators cannot be done, so large gathering places like lecture halls and large undergraduate labs should be on floors reachable by foot. Thus the base section of only three stories but covering a very large area. The lecture halls have capacities of 150, 300, and 400 students. The labs in the base section are 40 by 45 feet. The base area also contains stockrooms, the library, and the lobby (on the Mills Street side). In the tower section are offices and smaller labs, utilities and instrument rooms. The chemistry building was the first attempt by the University to build a high rise classroom building, and it was quite successful. There were long term difficulties with the ventilation system, a problem that appeared in every building ever occupied by chemistry. Some problems appeared with non-standard desks in some lecture halls. Most of these difficulties have been ironed out and the building is an excellent home for the department. At this time, 1994, there are plans to complete the entire structure, by adding section 5 to the south-east corner of the block, in the space where two old houses are now in use as tutoring facilities.

The history of the University had seen chemistry migrate from North Hall, to University Hall (Bascom), to the old Science Hall (burned 1884), the chemistry building at 600 N. Park, to the chemistry building at Charter Street and University Avenue, and now to a large and permanent home in the Mathews Research Building and the Daniels Chemistry Building.[4]

1) Aaron Ihde, *Chemistry as Viewed from Bascom's Hill*, p. 633-636;

2) *Regent's Minutes*, May 10, 1963, August 14, 1964; *Daily Cardinal*, January 23, 1964; *Wisconsin Alumni Magazine*, October 1964, p. 23. Final drawings, February 1965, series 24/9/3 box 5

3) *Regent's Minutes*, August 20, 1965; Aaron Ihde, *Chemistry as Viewed from Bascom's Hill*, p. 633-636; *Daily Cardinal*, March 11, 1965; *Badger Chemist*, winter 1966; Progress reports, August ,September, October, November, 1965, January 1966, series 24/9/3 box 5.

4) *Regent's Minutes*, June 9, 1972.

ALUMNI HOUSE

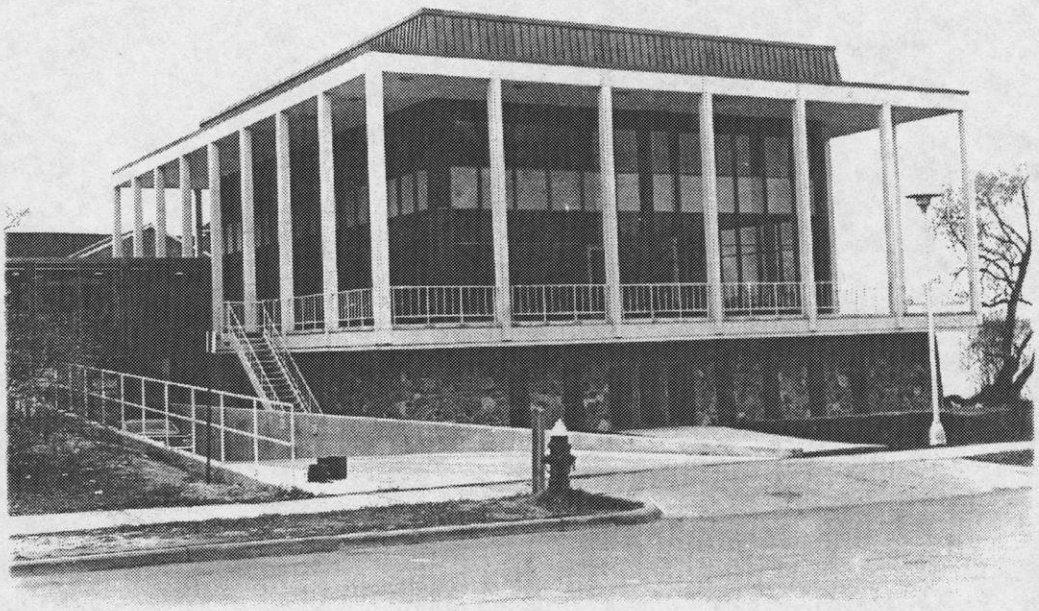


Fig. 1. Alumni House from Lake Street c. 1967. It is a three story building of steel and reinforced concrete, with Wisconsin field-stone sheathing on the lowest level. At left is the connecting link to the Wisconsin center. [series 9/2, Alumni House, jf-83]

The Alumni House was built with donated fund in 1965 to house the Wisconsin Alumni Foundation's offices and records. A major addition, the Below Alumni Center was begun in 1994.

The Wisconsin Alumni Association had its modern genesis in the great fund-raising drives of the 1920s for the memorial union. A list of alumni was laboriously assembled from the registrar's records by Porter Butts and his assistants to raise pledges for the union. From 1923 to the early 1950s the Alumni Association, was housed in small offices in the union, and other spaces. In 1930 at the request of the University, the Alumni Association became official supervisors of the "Bureau of Graduate Records", and the Bureau became a University department.

The Association first started a building fund in 1953 with a $7500 donation from the class of 1903. The campaign was handled by the Association in cooperation with the Wisconsin Foundation. In September 1956 the regents voted that the old Washburn Observatory building could be remodelled for use as an alumni house. The Alumni Association threw themselves wholeheartedly into a fund-raising drive to remodel the observatory, which was estimated to cost $225,000 and to take until the fall of 1959. In June 1959 Thomas Brittingham Jr. offered $33,000 in matching funds, and the target was reached in November 1959.[1]

On June 6, 1959, a month before construction was to start, the directors of the Alumni Association voted to abandon the observatory hill site. The impetus for this change was a report by the consulting architects which said that the building was too old and too small to be reasonably turned into the alumni house.[2]

Fig. 2. The demolition of the Sigma Chi fraternity house April 24, 1965. The site of the new alumni house.

The most sensible site turned out to be near the recently erected Wisconsin Center building on Langdon and Lake Streets. In August 1959 the Wisconsin Foundation began to bargain with the Sigma Chi fraternity for the purchase of their chapter house that stood at 630 N. Lake Street, on the land between the Wisconsin Center and Lake Mendota (see Fig. 2). In June 1961 the University decided to bring condemnation proceedings against the owners. The property was finally acquired by the Foundation for $178,000 on December 26, 1961.[3]

In 1962 the architects Foeller, Schober, Safford and Jahn of Green Bay were selected to do the design. In 1963 the regents gave the Alumni Association permission to build on the Lake Street lot, with the understanding that when complete, the building and land would be donated to the University. Preliminary plans from the architects were approved by the regents in June 1964. The building was estimated at that time to cost about $500,000.[4]

In February of 1964 bids came back from builders about $300,000 over budget. This was a serious setback, for which the architects took the blame. The committee quickly decided that they could cut the deficit to $200,000 by reducing certain features of the building (such as granite trim), and decided that they would go back to the alumni for more funding, despite the fact that they had publicly announced the end of that fund-raiser. The new budget was set at $740,000. The second round of bids were opened September 23, 1965, and were $32,000 over the new budget, but with strenuous negotiating were reduced to the required level. The general contractor was Vogel Brothers Building Company of Madison for $464,347. Scheduling called for completion by the fall of 1965. In keeping with the stormy nature of the project, during the groundbreaking ceremony on October 23, 1965, a storm suddenly blew up off of Lake Mendota and drove participants (including governor Knowles) and spectators indoors to the Wisconsin Center auditorium. The building was formally dedicated on May 13, 1967 at which time it was presented as a gift to the University.[5]

The Alumni House is connected to the Wisconsin Center by a second floor corridor (see Fig.

1.) The first floor holds the main entrance from Lake Street, reception areas, offices and the Bureau of Graduate Records. On the second floor are the alumni lounge, and some offices, The third floor is designed as an addition to the Wisconsin Center contains the Lakeshore Meeting Room intended for lectures in the continuing education programs. A twelve foot wide walkway encircles the building at the second story level. The walkway and the Lakeshore Room provide unparalleled views over Lake Mendota.

In October 1994, groundbreaking was held for the Below Alumni Center addition. The Below Addition will provide a conference room, a library, and office space. A parking lot at the end of Lake Street will also be constructed.[6]

1) Berge to Fred, June 24, 1953, series 4/0/1 box 180; Rennebohm to Peterson, March 5, 1959, series 24/9/2 box 11; *Regent's Minutes*, September 8, 1956; Wisconsin Alumni Magazine, October 1956 p. 6; Wisconsin Alumni Magazine, October 1958, November 1958, December 1958, March 1959, April 1959.

2) *Wisconsin Alumni Magazine*, July 1959 p. 20;

3) Peterson to Rood, August 22, 1960, June 7, 1961, Peterson to Elvehjem, February 16, 1961, Memo, AWP, November 20, 1962 series 4/0/1 box 180; *Wisconsin Alumni Magazine*, January 1962, February 1962.

4) Peterson to Culbertson, January 12, 1963, series 4/0/3 box 180; *Regent's Minutes*, January 11, 1963, June 8, 1964. *Wisconsin Alumni Magazine*, July 1964.

5) Sites to Peterson, March 30, 1965, series 40/1/7-1 box 56; Building Committee Meeting, May 4, 1965, series 40/1/7-1 box 56; Rennebohm to building committee, September 24, 1965, Alumni House Meeting, April 6, 1965, Alumni House Reports, series 4/0/1 box 180; *Wisconsin Alumni Magazine*, August 1965, November 1965. *The Daily Cardinal*, November 3, 1966; *Wisconsin State Journal*, November 28, 1966.

6) Plans in physical plant plans room; Ceremony pamphlet, Archives Alumni House subject file, *Daily Cardinal*, October 26, 1994.

PRIMATE HOLDING

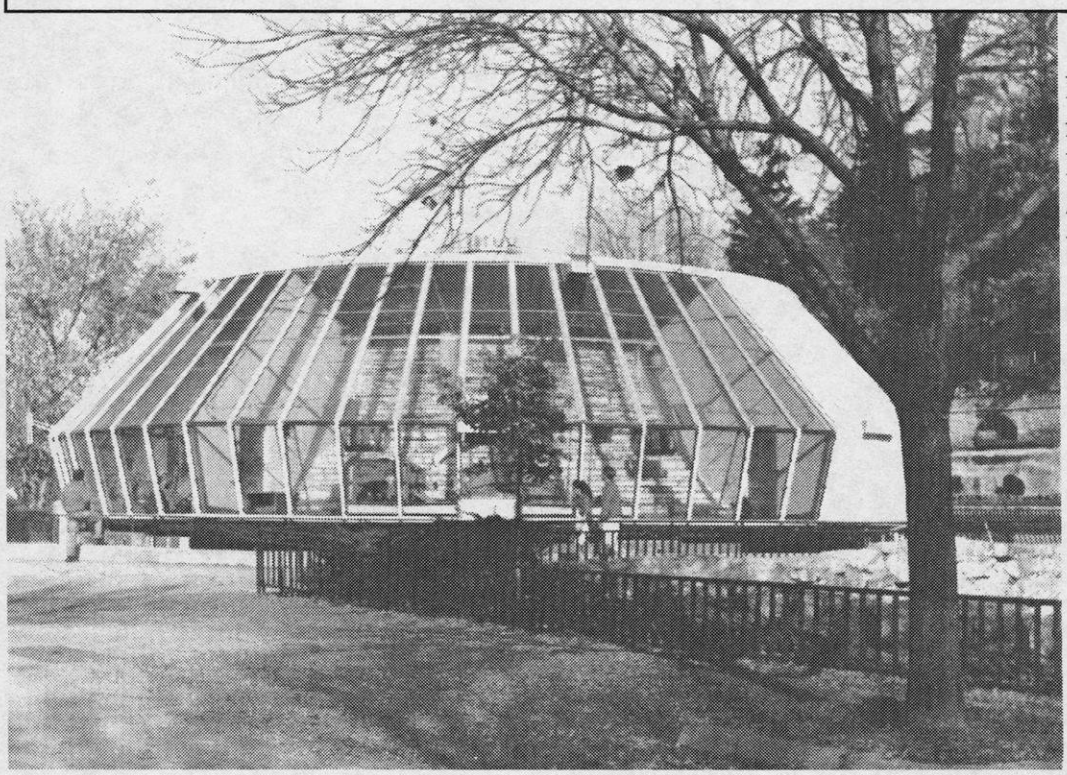


Fig. 1. The Primate Holding Facility at Vilas Zoo, 1994. [Author Photo, AP-48]

The primate holding center, built in 1963, holds research animals for the University's primate research program. Its location in the Wingra Park zoo enables the public to observe the animals. The building belongs to the University, which leases the land from the city of Madison.

The $1.29 million NIH grant of 1961 that allowed the University's Dr. Harry Harlow to build the Regional Primate Center was large enough to also build an off-site facility to house research animals. This was done in large part due to the space limitations of the Coyne Court site selected for the Primate Center.

Negotiations for a site for a monkey house at the Vilas zoo began in the winter of 1963, and in May 1963 the Regents of the University entered into a lease agreement with the city of Madison for the lease of land at the zoo for the construction of a primate holding facility, that would also serve as a monkey house for the zoo. This lease called for the University to entirely bear the cost of the construction, staffing, legal liability and upkeep of the building. The lease was at no cost to the University, and would run for twenty years from completion of the building, with three successive ten year extensions. The city reserved the right to review the plans for the building. Harlow notified the NIH in November 1962 that arrangements had been made for the site of the holding facility, and asked that permission to begin be granted, as well as a transfer of funds from the construction budget of the Primate Center, which had come in under budget, to the holding facility

budget.[1]

In April 1963 the regents approved the preliminary plans for the building, as prepared by architects Herbst, Jacoby and Herbst, the same architects designing the Primate Center. The regents were informed that the entire cost of the building would be borne by the NIH grant. In June the board voted that the final plans be approved, with the estimate that construction would begin in August 1963 and be completed by February 1963. These date coincided roughly with the construction dates of the Regional Primate Center building. Construction contracts were let on September 6, 1963. The general contractor was the Jenness Construction Company of Madison, for $146,253. Total contracts were for $208,000, with funding coming from the NIH grant. Construction began immediately. The location is between the buffalo yard and the bear pens. The final inspection of the building by NIH officials was on October 4, 1965.[2]

The building is a two story circular structure, forty-eight feet in diameter and twenty one feet high, of reinforced concrete sheathed with limestone and concrete. Around the outside of the central building are monkey cages, that add seven feet to the radius of the structure. The cages are wire mesh on the outside for viewing by patrons of the zoo, and accessible from the inside second floor, for feeding and observation. The first floor contains cages, a staircase and food preparation facilities. The second floor contains some office space.

1) Lease, May 13, 1963, City of Madison and the Regents of the University, Harlow to Eyestone, November 2, 1962, files of Helen Le Roy, Harlow Primate Laboratory; *Daily Cardinal*, June 27, 1963;

2) *Regent's Minutes*, January 11, 1963, April 5, 1963, June 10, 1963, September 6, 1963; *Daily Cardinal*, April 10, 1963; Eyestone to Davenport, September 14, 1965, files of Helen Le Roy, Harlow Primate Laboratory.

BOCK LABS

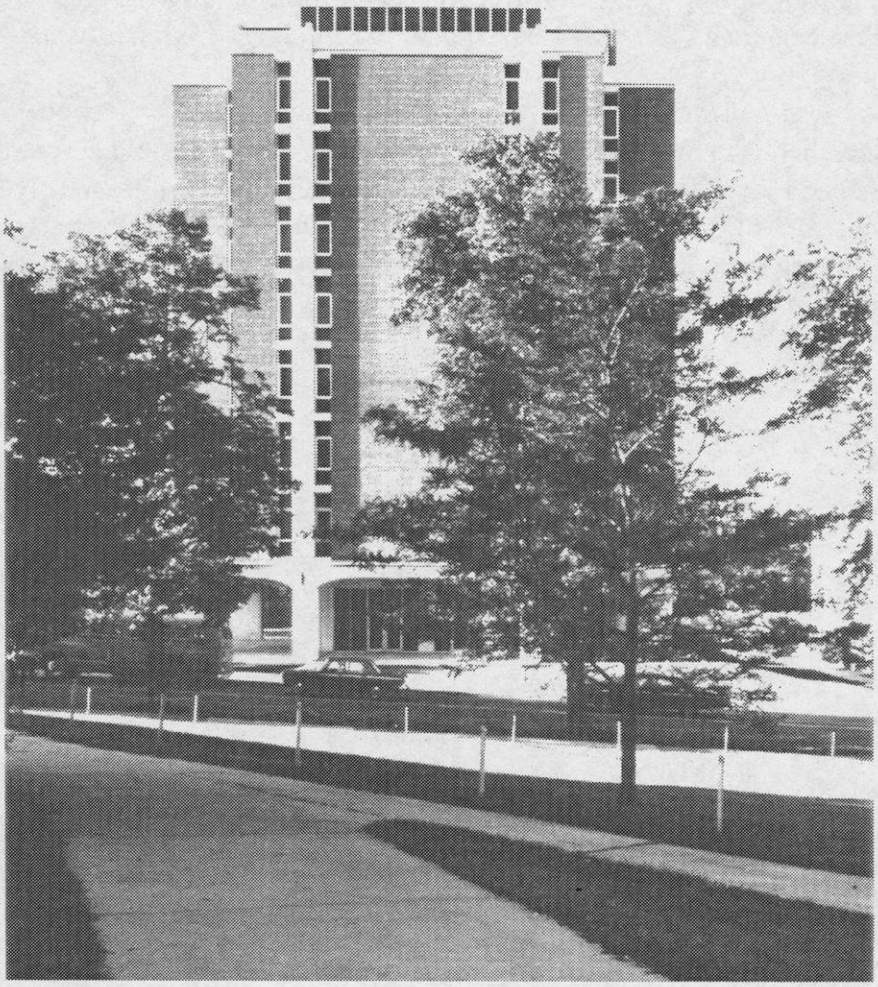


Fig. 1. Bock Labs from Linden Drive c. 1968. Forty feet from Agricultural Engineering on the east, and 55 feet from Moore Hall on the west, Bock Labs is connected by tunnel to the Biochemistry building to the south. Bock Labs has two levels below ground and seven stories above ground. [Series 9/3, Biophysics - Molecular Biology, jf-84]

Bock Labs was built as an interdisciplinary research lab in 1965. It houses research labs in molecular biology and molecular virology, and is named for longtime dean of the graduate school Robert Bock.

In an application to the National Science Foundation (NSF) dated September 1, 1961 the University in the persons of Drs. H. O. Halverson of Bacteriology and Robert M. Bock of Biochemistry requests $1.97 million to construct a Laboratory of Molecular Biology. The proposed lab was to be an interdisciplinary research facility housing 90 investigators, from Bacteriology, Biochemistry, Genetics, Medical Genetics, Oncology, Physiological Chemistry and Zoology. The site was to be on Linden Drive between Moore Hall and Agricultural Engineering. This site was desirable because of its proximity to the departments whose faculty would be using the new lab. The proposal emphasizes

the large number and scattered nature of research programs in molecular biology, and the need for a centralized center to house such research. The lab would be administered by the graduate school, and function not only as a center of research but as a center of interdisciplinary graduate and postgraduate training. The structure in the proposal is a 'T' shaped building with the stem connected to the north end of the biochemistry building, and the crossbar along Linden Drive. It was to be two basement levels and three floors above ground. This building was divided into two discrete sections, Molecular Biology and Biophysics. The proposal notes that application for funding the Biophysics section has been made to the NIH.[1]

Although the structure proposed in this application was not built, many of the ideas outlined in it survived into the next round of planning. The major change in thinking after this period was the realization that Molecular Biology and Biophysics shared many requirements, and that much time, money and real estate could be saved by combining the two centers into one building. As planning along these lines proceeded, with the help and guidance of the architects Durrant and Bergquist, during 1962 and 1963, the concept of a low-rise building was abandoned to the realities of space requirements and the shortage of real estate on the central campus gradually gave way to a high-rise plan.

By late 1962, the NSF was informed that the combined laboratories would cost an estimated $2.2 million. The NIH had granted $500,000 for the project, and the University asked the NSF for 790,000 with the understanding that WARF would also be asked for funds. These requests were successful. In March 1963, the regents accepted $600,000 from the NSF for the Laboratory of Molecular Biology. In May 1963 the regents accepted $1.1 million from WARF to construct and equip the Molecular Biology and Biophysics labs. Most other likely sources of funding were being absorbed by the Biotron project, then under development. In March of 1963 the regents approved the area bounded by Moore Hall, Agricultural Engineering, Biochemistry, and Linden Drive as the site for Molecular Biology. The only use of the site at that time was as a parking lot.[2]

State approval for the project was sought beginning in May 1963 and after various delays was gained on August 17, 1964. The building committee (Drs. Bock, Beeman, Halverson and D. C. Buchholz) headed by Dr. Robert Manley Bock, spent 1964 refining the plans. Preliminary plans were approved by the regents in August 1965, Final plans were approved on February 5, 1965.[3]

On March 9, 1965 bids for the building were opened. They were $200,000 over the budget. For months Bock searched for additional funds to add to the project, petitioning the college of Agriculture, asking the federal agencies to increase their grants. But even after all possible cutbacks, there were not enough funds. One of Dr. Bock's fears was that building costs were rising so fast that further delays would lead to more erosion of his budget. Eventually with a few cost reductions, small grants from various sources, and a large appropriation from the state, enough funding was found to let building contracts. Contracts were let by the regents on May 13, 1965 with the general contract going to Vogel Brothers of Madison for $1.08 million. Total contract costs were $2.37 million (WARF $1.1 million, NIH $500,000, NSF $600,000, state funds $141,000, and departmental and gift funds $30,000). Groundbreaking took place on June 1, 1965. By March 3, 1966 the building was up to the penthouse level. The building was first occupied by researchers in November 1966. In 1987 the Biophysics laboratory changed its name to the Institute for Molecular Virology. In May 1992, after the 1991 accidental death of Robert Bock, one of the original planners and dean of the graduate school for 22 years, the building was renamed the Robert M. Bock Laboratories.[4]

The building is 91 by 91 feet, of steel and reinforced concrete with two levels below ground, and seven stories above ground with an entry plaza at ground level. The building is sheathed in cut stone, precast concrete and face brick. Floors two through five are occupied by Molecular Biology, and floors five through eight house Molecular Virology. The building is 100 per cent research, there are no classrooms.

After serving its intended purpose as a interdisciplinary research center for almost thirty years, the Robert M. Bock Laboratory building is scheduled for a major remodelling project. The $5.8 million project will be funded by WISTAR, and will completely renovate and upgrade the heating ventilation and air-conditioning systems, scheduled to be finished by August 1997. This project will not close the labs, the 132 workers in the building will relocate as their floors are reconstructed.[6]

1) Application to The National Science Foundation, September 1, 1961, Developments in Molecular Biology and Biophysics, undated, series 24/9/2 box 13;
2) *Regent's Minutes*, March 8, 1963, May 1963, Exhibit A;
3) *Regent's Minutes*, August 14, 1964, October 16, 1964; Agency Request for Action, April 1965, series 4/0/3 box 190; *Wisconsin Alumni Magazine*, October 1964.
4) Bock to Fleming, March 15, 1965, series 40/1/7-1 box 53; *Regent's Minutes*, June 11, 1965; *Daily Cardinal*, March 3, 1966; *Wisconsin Week*, September 9, 1992; Program for Bock Lab renaming, September 10, 1992, offices of Bock Labs, *Regent's Minutes*, May 8, 1992.

COMPUTER SCIENCE

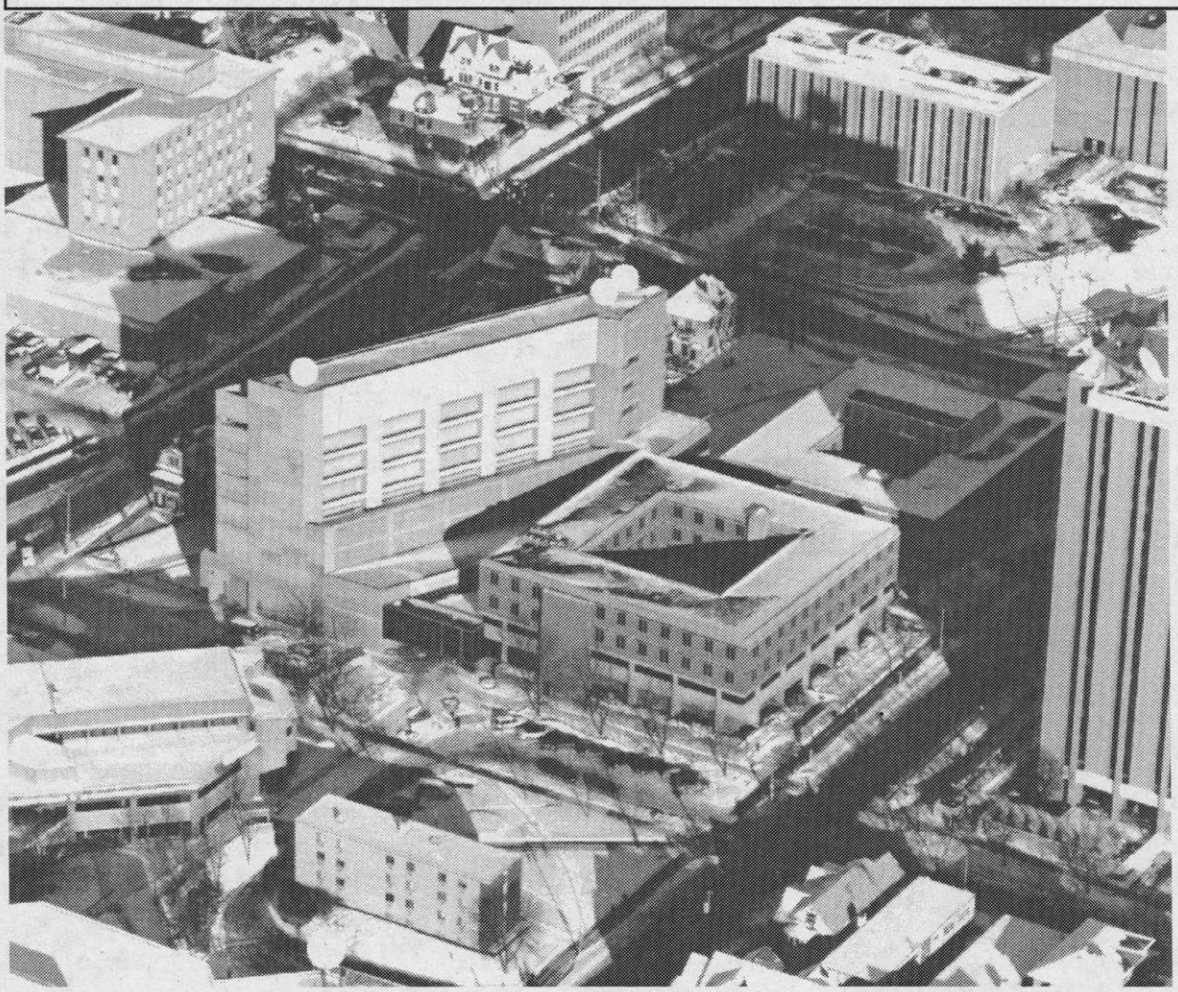


Fig. 1. Computer Science and Statistics, February 1997. Stage I (half in shade) is at right center, stage II center, and stage III (the tower) at left. The intersection in the foreground is West Dayton Street and Orchard Street. [Del Brown Photo, AP-64]

Reflecting the very fast growth of the computer science department, the computer science complex was built in three major stages, in 1965, 1970 and 1986. It houses not only the faculty, classroom and laboratory facilities, and departmental offices of the Department of Computer Science, but other campus wide computer facilities, such as the Department of Information Technology (DoIt), and the MACC.

No department in the modern history of the University appeared and grew as quickly as the computer science department. Only eight years elapsed from its beginnings as the department of numerical analysis with a 1961 enrollment of 290, to its acquisition of its own building with an enrollment of more than 2000 in 1969. The department of statistics was formed in 1960-61,

with a single staff member (George Box). The establishment of the department of numerical analysis in July 1961 completed the forerunners of the computer science department.

In April of 1963, the respective heads (George Box and Stephen Kleene) of these two fledgling departments wrote an application to the National Science Foundation (NSF) requesting $1.1 million in matching funds for a Numerical Analysis-Statistics building. The application notes that while the two departments would operate most efficiently in close cooperation in a single facility, they are "...presently housed separately. In the case of statistics its quarters are so woefully inadequate that it is a euphemism to say that they are 'housed' at all." At the time Numerical Analysis was in Sterling Hall, and statistics was in a Johnson Street house, and two rentals on University Avenue. The proposed new building would provide space for 197 faculty, grad students, lab personnel, for research labs and some undergraduate work.[1]

By late 1963, unofficial word had been received that the NSF would supply matching funds for the building, but the amount available to the NSF was sharply reduced by congressional action. The total amount available for the grant was only $600,000. In December a building committee was appointed (Box, Kleene, Dean Hugh Richards, Mr. Thomas Dyckman and Mr. Donald Sites). This committee, working with Madison architects Weiler and Strang, decided to erect the building in two phases. The first phase was to cost $1.3 million.[2]

Nothing official was done by the University on this project until August 14, 1964 when the regents granted authority to prepare preliminary plans for the "Numerical Analysis Building ... to be located at the southwest corner of West Dayton Street and North Charter Street." The regents were told that the total budget was $1.32 million, with the NSF providing about half the funds. The state would be asked to pay for the other half and the cost of land to be purchased at the site.[3]

Shortly after the approval to make preliminary plans for phase one, the building committee began to lobby for the construction of phase two. They told dean of L & S Edwin Young in October 1964 that "based on experience of the last eighteen months, it becomes evident that this plan and schedule would provide an inadequate facility even if we went ahead with the original project (Stage I plus Stage II)." [emphasis original]. They estimate that Stage I will be inadequate when opened. In December 1964 the regents voted to change the funding of the Computer Science-Statistics complex to $1.52 million, with the new funding to come from the state. This funding was approved by the state in December 1964. The reason for the increase was to provide for housing centralized computers. The combined statistics and numerical analysis departments possessed a total of one computer, a CDC 1604 with card equipment.[4]

In January 1965 the regents heard Mr. Sites present the two phase concept of the Computer Science-Statistics complex. Sites explained that there might also be a high-rise third section. A month later the regents approved the preliminary plans for Computer Science-Statistics Unit I.[5]

Final plans for Unit I were approved by the regents in May 1965. The estimated completion date was September 1966. Construction contracts were let on August 20, 1965, with the general contract going to John Dahl of Madison for $694,000. Total contract amounts were $1.63 million. Construction of stage I was completed in the summer of 1967. Stage I is 118 by 121 feet, with basement and three stories, located at the extreme east part of the site, immediately adjacent to the small grocery store at Dayton and Charter Streets. Stage I held only office and research space, no instructional space. In June 1967, the new building was named the " Computer Sciences-Statistics Center."[6]

As suspected earlier by the building committee, the project had been "overwhelmed by events". The name of the Department of Numerical Analysis was changed to the Department of Computer Sciences in 1964, and in November 1968, dean of the graduate school Robert Bock wrote to now chancellor Edwin Young: "The center building was not adequate to house the staff even when it was built, and is now... grossly inadequate and requires a great deal of additional outside space."

Planning for stage II, again designed by Weiler and Strang, was pushed as quickly as possible during 1969, with the hope that it could be finished by November 1971. The estimated $3 million was not available in late 1969 and the addition was reduced by eliminating the part that was to replace the grocery store at Charter and Dayton Streets. This reduced the cost of the addition to $2.4 million which was available entirely from state funds, as federal grant money had become unavailable. The state approved the funding in December 1969.[7]

In February 1970 the regents approved preliminary plans for stage II (also known as IIA). Land acquisition and more planning took the spring of 1970. The final plans were approved on June 12, 1970. On September 11, 1970 the construction contracts for stage II were let. The general contract went to J. H. Findorff & Son for $1.3 million. Total contracts let were $2.42 million, with funding entirely from state funds. Stage II was completed in December 1971. Stage II is a 130 by 170 foot, four story with basement structure to the west of stage I, and connected to it by a three story bridge. Stage II contained labs and classrooms as well as more office space. The computer science department was still growing at a rate unforeseen by the planners.[8]

As computers became smaller, cheaper, and easier to use, they became increasingly important to various disciplines. Engineering, business, medicine and other realms of study began to require that students learn at least the rudiments of computer use. The computer science building was increasingly unable to handle this demand. The University's 1983-85 project priority list, published in late 1982, has Computer Sciences Unit III in eighth position, at an estimated cost of $9.9 million. In July 1983 the regents increased the funding to $11.7 million. $1.2 million of this increase was to correct deficiencies in stages I and II. The money for this project would come from the state. The stage III plans were drawn by architects Bowen, Zimmerman, and Strang, and called for a seven story tower section bounded by the stages I and II building on the south and east, the railroad tracks on the north, and Orchard Street on the west. Bids for stage III were opened and rejected in August 1985. After re-planning, new bids were accepted February 5, 1986, and the general contract was let to Kraemer Brothers for $5.44 million. Total contracts amounted to $9.55 million. Ground-breaking took place April 1, 1986 and was finished in the summer of 1987. Stage III added an entry-way and plaza on the west side of the complex to provide a traffic path from Union South. It also closed Orchard Street.[9]

1) University directories and Instructional reports; Application for Nation Science Foundation Grant, April 1, 1963, series 40/1/7-1 box 29.
2) Wendt to Box et al. December 4, 1963, series 4/0/3 box 191; Box et al to Young, October 21, 1964, series 40/1/7-1 box 123;
3) *Regent's Minutes*, August 14, 1964;
4) Box et al to Young, October 21, 1964, series 40/1/7-1 box 123;
5) *Regent's Minutes*, January 8, 1965, February 5, 1965;
6) *Regent's Minutes*, May 7, 1965, August 20, 1965, exhibit F, June 9, 1967; Rosen to Clodius, April 11, 1967, series 40/1/2-1 box 38.
7) Bock to Young, November 8, 1968, series 40/1/7-1 box 123; Young to Clodius, May 1, 1964, series 40/1/2-1 box 12; Lemon to State Building Commission, November 24, 1969, Concept and Budget Report, Computer Sciences-Statistics Unit IIA, December 1, 1969, Minutes of Planning Committee Meeting, November 11, 1969, Lemon to Atwell, December 10, 1969, series 40/1/7-1 box 123.
8) *Regent's Minutes*, February 6, 1970, June 12, 1970, July 27, 1970, September 11, 1970 schedule III; Comments on the need for Stage II of the Computer Science..., undated, Department of Planning and Construction, Computer Science and Statistics-Unit IIA, January 28, 1970, series 40/1/7-1 box 123, Dietrich to Dorman, September 30, 1970, series 4/31/9-3 box 3.
9) *Regent's Minutes*, December 10, 1982 exhibit E, April 6, 1984, July 13, 1974, February 7, 1986; State Budget Letters, *Wisconsin Alumni Magazine*, May/June 1986 p. 18, Regent Request, July 1984, Van Ess to Lobe, June 7, 1988, Fulop to Waack, October 28, 1987, Agency Request for State Building Commission Action, February 1986, Fact Sheet, Computer Science and Statistics Building - Phase III, undated, UW news Release, March 27, 1986, series 4/31/9-3 box 3.

VAN HISE HALL

Fig. 1. Van Hise Hall from Van Vleck Plaza, c. 1967. Although slightly shorter than the capitol building, Van Hise's site on a hill gives it the distinction of being the highest structure in Madison. [Series 9/1, Van Hise, jf-86]

Van Hise Hall was built in 1965 to house the scattered language departments, and to provide them with classroom and laboratory space. Van Hise also houses the offices and meeting rooms of the regents of the University.

There is no "language department" at the University; each foreign language or group thereof is a separate department. In the early days of the University, these various departments were all housed in Bascom Hall. But the growth of enrollment, the introduction of more and more languages coupled with University-wide language requirements for all students, soon made this centralization impossible.

As early as 1960, some languages began to move to spaces off Bascom Hill; Hebrew and the Slavic languages took up residence in a building on Irving Place Throughout the 1960s this process of diffusion continued, as Chinese and other Asian languages moved to the State Street area. Linguistics was housed in the new psychology building, and Scandinavian in the law building. This scattering was unwieldy because of the need to share resources, including lecture halls and tape recorded learning

Fig. 2. This photo, taken at the beginning of excavation for Van Hise Hall in May 1965, shows the steep and wooded site that was the last large building site available on the central campus. This site between the Home Economics Building and Charter Street was approved as the site of the Classroom #1 Building in May 1963. The first plans for the site were modest, but at the suggestion of the state building Commission, plans for the site were dramatically expanded. This picture was taken from the Van Vleck Plaza, and is almost the identical position to Fig. 1. [Series 9/1, Van Hise, ns-108]

labs.[1]

A language building first appears on the regents building priority list in late 1958 in 58th position at an estimated cost of $2 million. The earliest plan called for a building of 96,000 square feet to hold only the language departments. Little was done to advance the project until 1963, when the state building commission approved $164,000 to prepare plans for several buildings, including $35,000 for "Classroom Building #1". On May 1963, the regents voted to approve the preparation of preliminary plans for "Classroom Building #1".[2]

In April 1964, at the suggestion of the state building commission, the regents voted to increase the funding for the Classroom Building #1 from $2.7 million to $4 million, with the additional money to come from the federal government under a new Educational facilities Act. This version of the plan called for a two story base section and a fourteen story tower. Four months later the regents were informed that the University planning committee, with permission of the state building commission, had decided to enlarge the language building still further, and the estimated cost had grown to $5.5 million. It was also now believed that federal funds were not going to be available.[3]

Since the University had to stay within the total amount appropriated by the state for all buildings in that biennium, this meant that some other project on the building list had to be deferred. They decided that the second stage of the gymnasium could be deferred until the next biennium's appropriation. The regents were told that projections for space required for the language departments had been far too low and that classroom space was crucially low. At the end of the discussion the regents approved the "preliminary plans and specification for the Classroom #1 (the Language Building) at Madison at an estimated cost of $5.5 million." The new plan called for three levels of classrooms in

the base, and 18 stories in the tower. The top four floors were devoted to University administration. It was scheduled to be completed by February 1967.[4]

The plans for this new enlarged version of the building proceeded throughout late 1964, and the architects, Frelich-Angus & Associates of Janesville, came up with another major alteration. At their December 1964 meeting, the regents voted to add underground parking facilities for about 35 cars, under the west classroom wing at a cost of $100,000. This extra cost to the project would be self-amortizing through University parking fees. Also by this time the tower had been extended to 19 floors, with the nineteenth floor being designed for mechanical systems and a regents meeting room. Except for changes in the parking area, and some fiddling with the uppermost floors, this brought the plan to its final stage of expansion.[5]

In February 1965 the regents approved the final plans for the "Madison Classroom Building #1 (Languages)". The exterior would be faced with tan stone and precast concrete panels. The schedule called for completing the base section containing the classrooms by September 1966, and the office tower by January 1967.[6]

Construction contracts were let by the regents on May 7, 1965, with the general contract going to J. P. Cullen and Son of Janesville for $3.5 million. Total contracted costs were $5.65 million. The source of funds was entirely state money. Later that month the University received word that $1.1 million in federal money might be available after all. At their June 11, 1965 meeting, the regents voted to discontinue the name of Charles R. Van Hise to designate the refectory at the Lakeshore dorms, and that the Madison Classroom Building #1 (Language Building) be named Charles R. Van Hise Hall. In September art professor James Watrous tracked down a bronze bust of Van Hise that had been donated to the University by Thomas Brittingham , but had been on display at the Van Hise school in Madison, and arranged for its return to be placed in the new building. The University department of Civil Engineering sought and obtained permission to attach strain measurement gauges to the structure of Van Hise. A December meeting between the University and the contractor determined exactly which parts of the building were supposed to be finished by September 1966.[7]

In February 1966 the University received notification that 1.4 million in federal money had been approved. On February 15, 1966 the contractor stated that "barring strikes or acts of God", the west classroom wing would open in September 1966. Some minor strikes in the summer did not seriously affect the project. In June the University showed a financing summary included $4.27 million in state funds, and $1.47 million in Title I and Title II federal funds.[8]

On September 8, 1966 the University and the State inspected Van Hise Hall and accepted for occupancy 50 classrooms, the lobbies, and facilities on floors 1 through five. The most critically needed part of the building was completed, except for certain mechanical systems that were not accepted. Construction continued on the tower section, with great care and trepidation on all sides, regarding safety and security. Landscaping estimates were higher than expected and all bids were rejected.[9]

In October 1967 the regents (still housed in Bascom Hall) began to discuss the plans of the regents section (floors 18 and 19) of Van Hise. In November they appointed a small committee to investigate obtaining furnishings through gifts instead of spending state funds. This in part reflected the growing realization that the size of the building had grown so large that the original budget for furnishing the building had been spent on construction costs and that the project was now almost $500,000 short of money needed for furnishing the tower section. The regents appealed to the state for the additional $490,000 for furnishings, and the state granted this request in March 1967.[10]

Fifteen more classrooms were accepted by the University on January 26, 1967. Contracts for the revised landscaping plans were let to L. H. Bruce and Son of Middleton for $24,000 in May 1967. A steam fitters strike in April 1967 made it impossible to install the air-conditioning system, making

the use of the building "unbearable" during the summer months. During August disagreement arose over the use of the parking facility in Van Hise. The $120 per space cost led professor William Cleland to charge that the central administration had feathered their own nest with the parking garage, by pricing out faculty members in the new building. The main result of this controversy was that the regents voted in October to raise the fee to $140. On October 4, 1967, the University space management department issued a schedule to the University administrators for the move to floors 15-19 of Van Hise. The move was completed by October 14, 1967. By the 1967-68 school year all the scattered language departments had moved into Van Hise. An additional $75,000 air-conditioning project in 1969 corrected deficiencies in the tower section. By 1972 in spite of reduced language requirements by most degree programs, so many students were enrolling in foreign language classes that the classroom and lab facilities were overtaxed.[11]

Van Hise is a 160 by 205 foot, classroom base, the west wing of five stories with a 45 stall garage underneath. The east classroom wing is only three floors with a plaza on the roof. There are fifty classrooms in these sections. To the north of the east wing is the nineteen story 40 by 140 foot tower section with the language department offices on floors one through fourteen. University Administration occupies floors 15-19. The structure is of steel and reinforced concrete, sheathed with stone and precast concrete panels. The steeply sloping site means that the several entrances to the building are on different levels; the Linden Street main entrance is at the first floor, while other entrances are at levels four and five. This layout is responsible for one of the oddest elevator services ever seen. The elevators at floors 2 3, 4 and 5 require a key. A casual visitor who enters on levels four or five must either hook a ride with a key holder or walk those levels down to level one. This arrangement provides some minimal security to the administrative offices on the highest tower levels. Van Hise is the tallest structure in Madison with a height above sea level of 260 feet.[11]

1) University directories.
2) *Regent's Minutes*, November 8, 1958 exhibit C, October 24, 1959 exhibit E.
3) *Regent's Minutes*, May 10, 1963, April 10, 1964, August 14, 1964.
4) *Regent's Minutes*, September 25, 1964, October 16, 1964.
5) *Regent's Minutes*, December 11, 1964; *Wisconsin State Journal*, August 18, 1964; *Capital Times*, August 14, 1964; *Wisconsin Alumni Magazine*, October 1964; Harrington to Rothwell, September 9, 1964, Harrington to Coordinating Committee, August 19, 1964, series 4/0/3 box 192.
6) *Regent's Minutes*, February 5, 1965.
7) *Regent's Minutes*, April 9, 1965, May 7, 1965, June 11, 1965; du Von to Harrington, May 28, 1965, series 40/1/2-1 box 131; Watrous to Chaffee, September 28, 1965, series 40/1/4/1-3 box 78; Brittingham to Watrous, June 1, 1962, series 40/1/4/1-3 box 78; Orr to Culbertson, September 23, 1965, series 24/9/3 box 7; Meeting Held on Classroom Areas..., December 1965, series 24/9/3 box 7; *Daily Cardinal*, March 3, 1966.
8) Bruder to Doremus, January 26, 1966, Buelow to Edsall, undated, Orr to Bruder, June 29, 1966, Edsall to Fleming, June 6, 1966, series 24/9/3 box 7.
9) Buelow to Cafferty, September 9, 1966, series 24/9/3 box 10; *Regent's Minutes*, September 9, 1966.
10) |*Regent's Minutes*, October 20, 1967, Memo re: move to Van Hise, October 4, 1967, series 40/1/2-1 box 131; *Regent's Minutes*, November 4, 1966, December 9, 1966; Lorenz to State Building Commission, December 1996, Report of Meeting of Special Regent Committee, January 13, 1967, series 24/9/3 box 10.
11) Buelow to Cafferty, January 30, 1967, Landscape work - Classroom building #1, May 19, 1967, series 24/9/3 box 10; *Regent's Minutes*, June 9, 1967; Cleland to Clodius, August 9, 1967, series 40/1/3/2 box 32; *Capital Times*, August 8, 1967; *Janesville Gazette*, August 12, 1966; Memo for presentation at December Meeting, State Building Commission, November 20, 1969, series 40/1/7-1 box 126, *Daily Cardinal*, October 24, 1972.

MIDDLETON MEDICAL LIBRARY

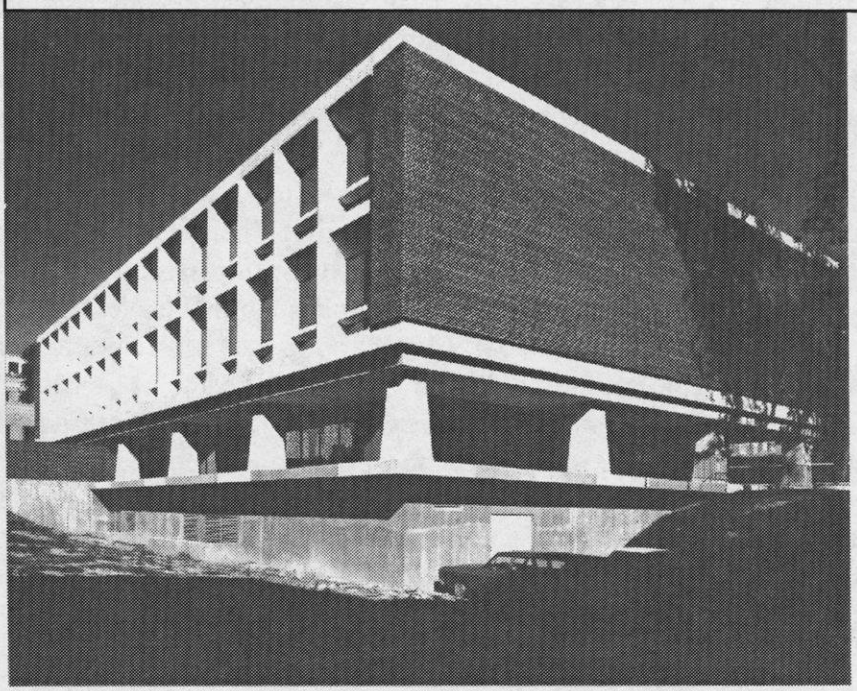


Fig. 1. Middleton Medical Library c. 1970. It is 136 by 82 feet, sheathed in brick on the east and west faces, and concrete panels on the north and south sides, with windows on the north and south sides. [Series 9/4, Middleton Library, jf-85]

Built in 1965 to house the medical school's growing and rootless library, the Middleton medical library is named for William Shainline Middleton, the dean of the medical school from 1935 to 1955.

Like many of the specialized libraries at the University, the medical library had a precarious and nomadic history. This journey roughly parallels the history of the medical school itself. Begun by Drs. Bardeen and Erlanger, who collected current periodicals and journals, and donated texts and journals of their own, the library of medical works was housed variously in the old Olin house on Langdon Street, in the north stacks of the Historical Society Library, in the Service memorial building, and other opportunistic locations. The collection continued to grow throughout these wanderings. From 1930 onwards it was housed in the basement and first floor of the Service Memorial Institute. Since no state appropriations were ever made specifically to support a medical library, the collection grew at the whim of private donors. Chief among these were Dr. William Snow Miller, whose large and significant collection was purchased by the regents after his death in 1940. The constant support of the ad-hoc collecting and operating of the "library" by Dr. Paul F. Clark and his wife, by Dr. W. S. Middleton, and others, made the collection a valuable resource to the medical school, in spite of its haphazard development.[1]

In the late 1950s, the alumni of the medical school organized a fund drive to build a medical library. By the end of 1959, the alumni group had collected $189,000 for the project, in a fund which had been begun by a small donation to the school during the administration of dean Middleton, and the regents had approved a site on the "west side of Randall Avenue, north of the nurses dorm". A few weeks later the University planning commission reversed themselves and that site was given to the new genetics building, and the site of the medical library was left undecided for a time. By mid-1960

it was clear that because of rising building costs and lagging fund-raising, that outside money would be needed. In January 1961, the regents approved a new site, the southeast corner of Linden Drive and Randall Avenue extended. The regents were told that the alumni had collected about $500,000. The department of planning and construction estimated (and the state approved) the cost of the project at $550,000, and recommended that it be built in two stages. The planning for the library was considerably complicated by the fact that the University was planning an entirely new hospital structure, and was unsure of where it was to be built.[2]

In January 1962 the regents approved the preliminary plans for the medical library. These plans were for the first unit of the library, with the second unit to be built as more funds became available. In April 1963 in hope that more money would become available, the state building commission authorized the project to cost as much as $1.1 million. Planning went on through 1963 and early 1964, with the building committee and architects Iverson, Kenney and Graven.[3]

When the additional funds had been raised, the preliminary plans of the complete project were presented to the regents and approved in October 1964. The estimated cost was $1.1 million, to be comprised of $800,000 in gifts, and $300,000 in state funds. In February 1965 the regents approved the final plans without changes in funding or design.[4]

Construction contracts were awarded for the medical library on April 9, 1965. The general contract went to J. H. Findorff of Madison for $527,533. Total contracted costs were $877,198. The contracts for the tunnel and plaza were let in November 1966 to Vogel Brothers of Madison for $81,414. Ground-breaking took place on May 3, 1965, and with the cooperation of an open winter, the building was turned over to the University for use on April 15, 1966. The tunnel and plaza were finished in the spring of 1967.[5]

The building is a basement and three floors of reinforced concrete. There are book stacks on all levels; checkout area, offices, reading rooms, reference and conference rooms are scattered on levels one through three. The intended expansion space was to the east, toward the Bradley memorial. This expansion has not proved necessary, because of the book storage space in the basement of Bradley, accessible through a tunnel between the buildings.

The earliest records of the project mention the intention to name the building after Dr. William Shainline Middleton, one of the best loved personalities of the medical school. Dr. Middleton came to the University in 1912 as an assistant of Dr. Evans. He became dean of the medical school in 1935, he took a leave from the deanship to serve eight years as head of the Veteran's Administration. After his death, he was honored for his work there when, the U. S. Senate renamed Madison's V. A. hospital the William S. Middleton Memorial Veteran's Hospital. This is one of only six VA hospitals named for an individual. In 1963 Dr. Middleton at age 73, returned to the University as dean, where he served until 1974. Dr. Middleton died on September 9, 1975 at age 85, after serving the University for 63 years. The University had already put aside a long-standing (though not inviolate) tradition of not naming University buildings after living persons. In March 1967 the regents voted to name the Medical center library, the "William S. Middleton Medical Library".[6]

1) Paul F. Clark, *The University of Wisconsin Medical School*, pp. 156-159, University directories.
2) *Regent's Minutes, October 24, 1959, January 6, 1961, December 8, 1961, ; Capital Times*, January 23, 1959; Peterson to Culbertson, November 6, 1959, series 24/9/2 box 12.
3) *Regent's Minutes*, January 5, 1962, May 10, 1963.
4) *Regent's Minutes*, September 1964, October 1964, February 1966; Lorenz to State Building Commission, June 2, 1966, series 24/9/3 box 6.
5) *Regent's Minutes*, May 9, 1965 exhibit J; Buelow to Edsall, April 18, 1966, series 24/9/3 box 6; *Wisconsin Alumni Magazine*, February 1965, p. 13.
6) *Regents Minutes, March 10, 1967; The Capital Times*, September 1, 1976. Other individuals so honored include Franklin Roosevelt, Harry S. Truman, and Audie Murphy. The William Shainline Middleton biographical file in the University Archives.

ELVEHJEM ARTS CENTER

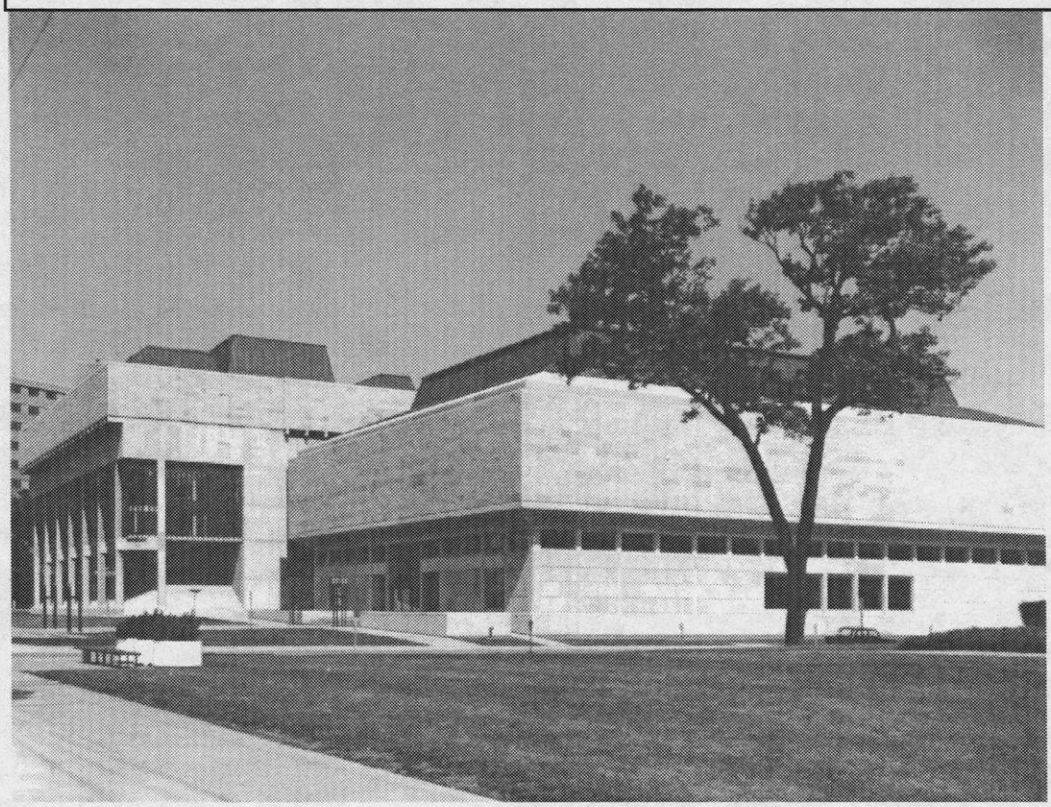


Fig. 1. The Elvehjem Arts Center, from the east 1971. [series 9/2, Elvehjem Art Center, jf-86]

Planned and championed for thirty years by Professor James Watrous, the Elvehjem was built in 1968 to house the permanent and travelling art of the University. It is also home to the University's art department. At the behest of the Brittingham foundation, which made the original $1 million grant, the art center is open to the public at no charge.

The first start of an art museum at the University came in 1876, when the fourth floor of the old science hall was dedicated to the University art collection. The art works displayed in this space constituted the entire art collection until 1884 when science hall burned to the ground with the loss of all art. After the fire a pattern appeared that would persist for almost a century, the university would encourage and accept donations of art works, lament the lack of display facilities, and consign the art to random and scattered campus locations or long term storage. Remarkably, even though this pattern of acceptance and neglect was widely known, the University continued to accumulate significant art works. These included the Reinsch collection of European masters donated by Charles Crane and William Brumder in 1912, and hung in physical education rooms in Lathrop Hall. By 1937 only 48 of the 67 works in this collection could be found, and many of them were in "deplorable condition." The situation did not materially improve for decades. Professor James Watrous took over unofficial stewardship of the University collection in 1939 as a new instructor in the department of Art

History. Watrous found dozens of significant works of art stored without any care in a unventilated concrete room in the basement of Bascom Hall. The art was inconveniently available to art students, and not at all to the general public. Watrous began a thirty year campaign to obtain a facility suitable to the stature of the University's collection. For 15 years there was neither support nor progress. A temporary display facility opened in Memorial Library for a few years, and storage racks were installed in the Bascom store room. During this period the University continued to accept significant donations of art and consign them straight to storage.[1]

At the regents board meeting, at which president E. B. Fred was replaced by Conrad Elvehjem in February 1958, Fred said: "In my judgement there is no other building which could be given by private generosity that would more enhance the cultural influence of the University than an art center and gallery." At new president Elvehjem's first Administrative Committee meeting, he requested a priority list of projects which could be funded by gifts. The result of this campus wide poll was that an art center and gallery was at the top of the priority list. Four years without progress, but with many more art donations, followed this poll. It was clear that with the burden of providing more and more instructional buildings, the state would not be able or willing to fund an art museum. The money would have to come from donations. The outlook did not look promising. An early attempt at a museum design was executed in 1958 by Watrous and Leo Jakobsen. According to Watrous it was strictly a fund-raising device. It consisted of a series of hexagonal rooms in a honeycomb layout. It's cost was estimated at $1 million and was intended to be placed on the lower campus.[2]

Then in May 1962, at the urging of president Elvehjem and E. B. Fred, the Brittingham family foundation donated one million dollars toward the construction of art galleries to be open to the public free of charge at all times. Two months later on July 24, 1962, president Elvehjem was struck with a fatal heart attack at work in his Bascom Hall office. He was succeeded by Fred Harvey Harrington who recommended at his first meeting with the regents in September 1962 that the art center be a memorial to Elvehjem.

The University community was galvanized into action by the Brittingham donation. Watrous had been given a preliminary estimate of $3.3 million from Dean Wendt of the University planning commission. It was decided that the center should be located as part of the lower campus development, then in the planning stages. In November a faculty planning committee was appointed by president Harrington. Architect Harry Weese of Chicago was selected to design the lower campus structures. The decision was made, in agreement with the Brittingham family, to incorporate the art galleries and the art center into a single building.[4]

1963 saw a continuation of this high level of activity. In February 1963 the Wisconsin Foundation, a channel for private donations to the University, undertook to raise the $2.5 million needed for the arts center. The first stage of the Wisconsin Foundation's fund-raiser in 1963 was to solicit large donations. The search for large donations was successful. $300,000 was donated by the Kohler Company and Trust to fund the art library. $175,000 was received for the large auditorium from L. E. Phillips; the Oscar Meyer Company contributed $100,000; an anonymous $75,000 gift for the sculpture garden. $75,000 was donated by friend and colleagues of Winifred and Del Page, art patrons who were killed in a plane crash in Atlanta in June 1962.[5]

By October 1963 the Wisconsin Alumni Magazine reported that the Elvehjem fund had surpassed the $2 million mark. But the fund-raising effort began to stall, and doubts were raised that the job could be accomplished. A strong show of support by the faculty in a fund raiser helped. Then in July 1964 with the help of a brief from Dr. Watrous and the strong support of president Harrington, a $400,000 grant was obtained from WARF. This large gift rejuvenated the campaign.[6]

The architect and the planning committee worked on the design of the building through 1964. Their sixth plan was developed and given preliminary approval by the regents in October 1964. At

this time the regents were told that $3.05 million had been raised by the foundation. The Elvehjem project was presented as an integral part of the lower campus development. Completion for the Elvehjem was now estimated as August 1967.[7]

When ground-breaking was scheduled for October 23, 1965, the fund-raiser was still $73,000 short of its goal. The official ground-breaking ceremony took place as scheduled, the same day (October 23, 1965) as ground-breaking for the Alumni House on the shore of lake Mendota, though no building contracts had yet been awarded. In March 1966, the regents were told that the bids for the lower campus project were almost $2 million over estimates. By May 1966, the state had allocated an extra $400,000, and some cuts were made on the Humanities building, and authority to let contracts was granted.[8]

Building contracts were let by the regent's executive committee on May 6, 1966. The general contract went to Corbetta Construction Company of Des Plaines, Illinois for $7.78 million. Total contract amounts were $13.7 million. Sources of funds were the state $10.3 million, gifts and grants $3.1 million. Construction work on the Elvehjem began in spring 1967; by August the building was emerging from the ground.[9]

In May 1967 the art history department selected a director for the museum. The choice fell on Millard Rogers the former curator of the Toledo Museum of art. In July of 1967 the art center became a separate administrative unit in the University. Construction progressed to the point of installing the roof in July 1968. A series of labor strikes, material shortages, and the priority given to the Humanities building combined to delay construction of the Elvehjem seriously through late 1968 and early 1969. Opening dates were constantly pushed back, first to November 1968; then January 1969 and May 1969. The Humanities building was finished and accepted in late October 1967. After a few more short delays over fire codes and furnishings, Rogers and his staff began to move art work and books into the museum in the summer of 1970.[10]

The grand opening of the Elvehjem art center was held on September 12, 1970. Master of ceremonies Robert Rennebohm (of the Wisconsin Foundation) observed "this whole thing really started with Jim Watrous in the basement of Bascom Hall in 1939." The grand opening was a glorious success, 400 people turned out in formal dress to see the new building, and the 185 works of art selected from the permanent collection, and borrowed especially for the occasion. The library was so sparsely filled that Watrous remembers that they were afraid that a representative from the Kohler foundation would come and see the paltry library. Notable guests included governor Warren Knowles, dairyman W. D. Hoard, Irwin Mayer of the State Journal, Dr. Watrous, Mrs. Harry Steenbock, and Mrs. Conrad Elvehjem. The general public was invited to the public opening the following day.[11]

The building is 195 by 122 foot rectangle of steel and concrete. There are six floors: the lowest level holds four auditoria, classrooms, storage and conference rooms. The second, ground level floor, is taken up by the Kohler art library; the third floor is dominated by the sculpture court, which is open clear to the skylights on the roof, offices and galleries surround the central sculpture court. More galleries are arranged around the open court on the fourth and fifth floors. A partial sixth floor hold the mechanical equipment for the building. The ground was judged to be too swampy to build a full basement. The building is sheathed with Wisconsin lannon stone, with copper roof and trim. Most of the roof is skylights over the central area and the lower gallery wings.

Because the demolition of the University Club to the north, which was intended to provide expansion room for the museum, has not happened, new plans are currently being developed for expansion. Storage space is a particular problem since donations increased sharply after the museum was opened. Gallery space is also limited. One plan would build underground to the north, another would move the Kohler library, freeing up considerable space in the building.[12]

The Elvehjem has met its highest expectations for 25 years. The constant stream of travelling

exhibits, special events, and the rotating displays of the permanent collection make it a magnet not only for the University community but the for residents of the city of Madison and the state of Wisconsin. The Elvehjem regularly receives honors and grants from the federal Institute of Museum Services, and the National Endowment for the Arts. Director Rogers left shortly after the job of organizing and opening was finished. The current director is Russell Panczenko.

1) Watrous, James, *A Century of Capricious Collecting*, 1987
2) *Regent's Minutes*, February 1,1958; *Daily Cardinal*, February 25, 1958; Plans and explanations of the honeycomb design are in series 4/0/3 box 178. Text of remarks by James Watrous, February 24, 1963, Archives Elvehjem subject file.
3) *Regent's Minutes*, May 4, 1962, September 14, 1962; *Wisconsin Alumni Magazine*, June 1962; Fund-raising pamphlet, series 4/0/3 box 178; Proposal for the Financing and construction of the Elvehjem Art Center, September 1962, series 4/0/3 box 179.
4) Harrington to Fred et al, November 30, 1962, Watrous memo: Art Galleries and Art Center Group tentative estimates, June 20, 1962, series 4/0/3 box 179; Elvehjem Art Center newsletter, February-march 1963, series 4/0/3 box 178; enclosure #1 in Archives Elvehjem subject file.
5) R. C. Zimmerman to Harrington, February 4, 1963, Elvehjem Art Center newsletter, January 1963, October-November 1963, series 4/0/3 box 178;
6) *Wisconsin Alumni Magazine*, October 1963; *Capital Times*, February 25, 1963, May 29, 1963; E. B. Fred to faculty, February 25, 1963, series 4/0/3 box 178; Ingraham to faculty May 21, 1963. Archives Elvehjem subject file;
7) *Regent's Minutes*, October 16, 1964; *Wisconsin Alumni Magazine*, November 1964 p. 4; *Milwaukee Sentinel*, October 17, 1964;
8) *Daily Cardinal*, September 22, 1965, October 20, 1965, October 22, 1965.
9) *Regent's Minutes*, March 4, 1966, April 1, 1966, May 6, 1966; Elvehjem Art Center newsletter, First semester 1967-1968, second semester, 1967-1968, series 40/1/7-1 box 32;
10) *Wisconsin Alumni Magazine*, October 1967 p. 14; *Wisconsin State Journal*, October 27, 1968; Elvehjem Art Center newsletter, First semester 1968-1969, 40/1/1-1 box 37.
11) *Daily Cardinal*, March 25, 1970; *Wisconsin Alumni Magazine*, October 1970 p. 12; Elvehjem Art Center newsletter second semester 1969-1970, series, 40/1/8-1 box 9; Dedication pamphlet for the Elvehjem Art Center, September 12, 1970, series 40/1/2-1 box 32.
12) *Wisconsin Alumni Magazine*, October 1972, p. 4; *Wisconsin State Journal*, May 19, 1994; Interview with Dr. James Watrous, summer 1994.

LIFE SAVING STATION

Fig. 1. The Lifesaving Station 1970. The breakwater is at the left; the observation and mechanical decks cantilever towards the lake. [Series 9/2, Lifesaving Station, jf-105]

The lifesaving station at 130 E. Gilman Street was built in 1965 to replace the facilities lost when the old boathouse behind the red gym was demolished.

The planning of the alumni house in 1959 caused a kind of chain reaction in the University's building plan. The alumni house site required the demolition of the old University boathouse, which required a new crew house, and a new swimming beach at Picnic Point; and because the old boathouse had contained the lifesaving facilities for Lake Mendota swimmers and boaters a new lifesaving station needed to be sited and built as well.

In August 1965 the regents approved 130 East Gilman Street as the site of the University Lifesaving Station complete with lookout tower and boat storage. The regents were told that the department of planning and construction spent a "great deal of time" selecting the best site. Among the arguments in favor of this site were a good view of the Mendota shoreline and a large area of the lake, including the area "behind" Picnic Point, that is to the north of the point. Also in its favor was the fact that it was already owned by the University, since it is the lot containing the Knapp Graduate Center. The new lifesaving station would be located at the rear of the Knapp lot, where an existing old frame boathouse could be removed. The outing director of the Union, Gilbert Peters, raised the objection that the Gilman Street site reduced "proximate control" since it was removed from the boat piers of the

Memorial Union, where most Mendota boat traffic originated.[1]

In October 1965 the state appointed architects Law, Law, Potter, and Nystrom to the project. The building program prepared by the building committee (A. F. Ahearn, J. B. Bower, and Donald Sites) was ready for the architects use. The University asked for state building commission approval in October, describing a building to cost not more than $200,000, the amount appropriated for the purpose by the legislature.[2]

The final plans for the lifesaving station were approved by the regents in March 1966. In May 1966 the city of Madison granted a permit to build a breakwater at the site. After rejected bids in April 1966, and a round of cost cutting, construction contracts were awarded by the regents on July 13, 1966. The general contract went to Vogel Brothers of Madison for $139,912. Total contracted costs were $200,000. The source of funds was entirely the state appropriation.[3]

Construction was begun on July 13, 1966, to be completed by July 1967. Excavation was completed by September 9, and foundation work begun in October. By December 1966 the project was a month behind. It slipped further during the winter. In May 1967 the building was 98 per cent complete, but halted by a strike. By late summer of 1967 the building was finished and in use by the University.

The lifesaving station is a 96 by 43 foot concrete structure on four levels set into the steeply sloping bank on the lake shore. The lowest (lake) level holds the wet boat slip and storage. On the second level are a dry slip with winch, and a workshop. The third level houses the mechanical systems, and the fourth level is the observation level. The top two levels are cantilevered out toward the north (see Fig. 1). An elevator services all levels. The total height of the building is 55 feet. The grade level roof can be used as a parking space. The 6 foot wide breakwater that protects the boat slip area is 56 feet into the lake and 85 feet long. This breakwater caused some concern because of its potential for causing pollution.[4]

1) *Regent's Minutes*, August 8, 1965; Peters to Edsall, August 17, 1965, series 24/9/3 box 6.
2) Postweiler to Peterson, October 22, 1965, Agency Request for State Building Commission Action, October 4, 1965, Building Program-Lifesaving Station, series 24/9/3 box 6.
3) *Regent's Minutes*, March 4, 1966, July 13, 1966; University Life Saving Station, Law, Law, Potter & Nystrom, February 21, 1966, Orr to Jardine, March 16, 1966, Before the Public Service Commission of Wisconsin, May 2, 1966, series 24/9/3 box 6; Sites to Lorenz, July 15, 1966, series 24/9/3 box 9.
4) Hasler to Edsall, December 15, 1966, Tipple to Edsall, December 22, 1966, series 24/9/3 box 9.

METEOROLOGY

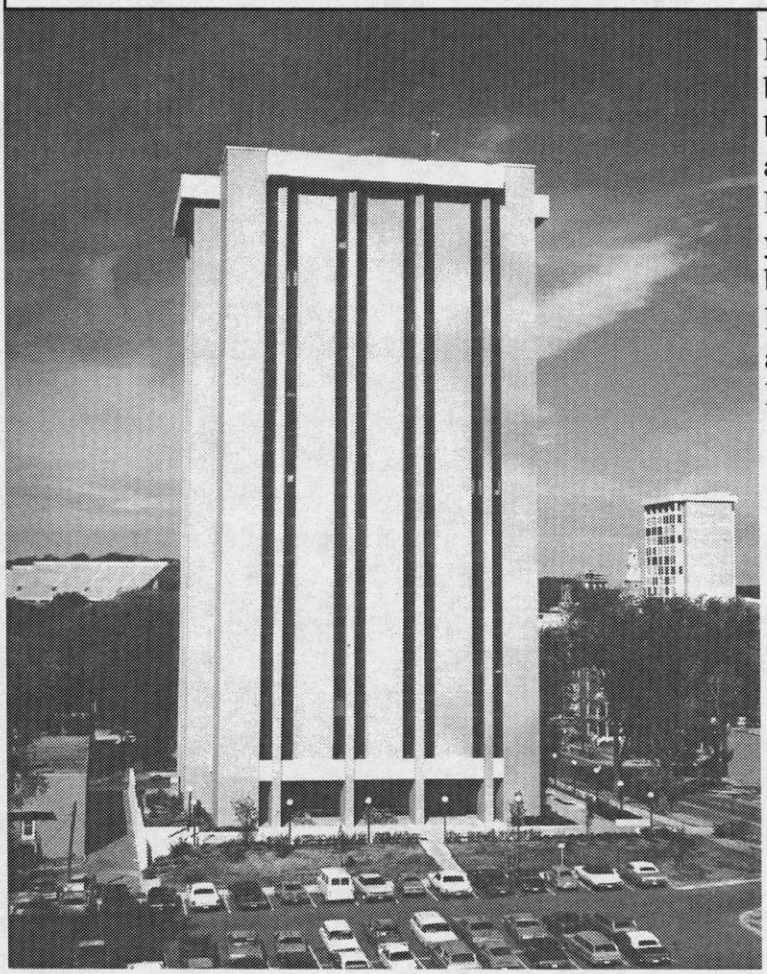


Fig. 1. Meteorology and Space Science building 1972. Fifteen stories of cement block and face brick. Schreiner house at left, Camp Randall and Engineering Research in the far background. In later years the roof of meteorology would become the site of several large satellite dishes, making the building identifiable from miles away. [Series 9/5, Meteorology, jf-87]

Meteorology was the first stage of an envisioned earth science complex. Erected in 1966 it houses meteorology, space science and engineering, the state climatologist and several related projects.

Meteorology had put in their time. In the honored tradition, they were first (1946) housed in a couple of small rooms in Science Hall, quickly outgrew them, and were given rented quarters ever farther away from the center of campus. But by 1964, the other half of the tradition was due to be honored; since they had produced significant scientific results, and lots of graduate students they would be considered for a building of their own.[1]

A December 7, 1964 request to the state for funding for an Earth Science Complex, reflects these considerations. Stage I of the complex would provide space for graduate research and science facilities for the department of Meteorology and the Space Science and Engineering Center (SSEC), a graduate school affiliate. The request describes the existing facilities: "The present space in Science Hall, patently crowded and inadequate, must now serve an academic staff of 12, 7 post-doctoral researchers, a secretary and a technical staff of twelve, and 55 graduate students." Rented research

space on Regent Street and University Avenue was equally inadequate. Another concern is reflected in that post-Sputnik panic period: "It is paramount that this country recruit, motivate and train sufficient personnel capable of taking a leading role in such research in time to ensure that our long term national interests are not jeopardized by unilateral action." The application asked for $4.4 million.[2]

The regents in December 1964 approved as the site for the "Earth and Space Science Complex" as the south side of the 1200 block of West Dayton Street, between North Charter and North Orchard Streets. This had formerly been discarded as the site for computer science on the ground that it was too small for that instructional program. It would be large enough for a basically research oriented program. Funding was to come from the state and from federal funds (NSF and NASA). 1965 was occupied with initial planning stages in conjunction with architects Grassold, Johnson, Wagner, and Isley of Milwaukee. In February 1966 the regents authorized the preparations of preliminary plans for a 15 story for Meteorology and Earth Sciences.[3]

Reflecting the high degree of advance planning in this project the preliminary plans were approved by the regents only two months later in April 1966. Funding was to be by the state, NSF and NASA. In June 1966 the University purchased the land at the proposed site. By August 1966, after examination of soil conditions at the site, and escalating construction costs in the Madison area, the budget was increased to $4.7 million. The final plans for the building were approved by the regents in September 1966. Scheduled completion was July 1968.[4]

Construction contracts were let November 17, 1966. The general contract went to the Anthony Grignano Company of Madison, for $1.85 million. Total contract costs were $4.2 million. These bids were so favorable that some previously deleted trim items were restored to the design, and some funds were returned to the state. Funding breakdown was: state funds $1.6 million; NSF grants $1.2 million; NASA grants $1.7 million.[5]

Construction began with the demolition of seven houses at the site in December 1966. In January 1967 the contractors began to have problems sinking the pilings for the foundation. After some investigation (and extra cost) the problems were settled, although the pilings at the northwest corner do not extend all the way to bedrock. Except for some labor strikes and shortages, construction went on without serious difficulty. In November 1968 the regents voted to name the new building "Meteorology and Space Science". The building was first occupied in the fall of 1969. A formal dedication was held on October 20, 1969; featured were speeches by governor Knowles, and a symposium on the "Future of the Weather." The departments of meteorology, the SSEC, space medicine, and the center for climatic research, were under one roof for the first time.[6]

The building is 92 by 121 feet, and fifteen stories (238 feet) high; it is faced with brick and precast concrete panels. Unusual in University high-rise buildings, it has openable windows, and the mechanical equipment is on the seventh floor, instead of the usual roof penthouse. This is because the roof was needed for meteorological experimentation space. The building contains no classroom space, but is entirely filled with faculty and staff offices and laboratories.

1) University directories; Gisela Kutzbach, *125 Years of Meteorology at the University of Wisconsin*, Archives departmental file series 7/24. *Milwaukee Journal*, October 14, 1959; *Wisconsin State Journal*, October 15, 1959.

2) Agency Request for State Building Commission Action, December 7, 1964, series 24/9/3 box 8.

3) *Regent's Minutes*, December 11, 1964, February, 4, 1966; Estimated Budget, September 15, 1965, series 24/9/3 box 5. *Daily Cardinal*, May 12, 1965.

4) *Regent's Minutes*, April 1, 1966, September 9, 1966, November 4, 1966; The building committee comprised, Reid Bryson, Robert Alberty, R. A. Ragotzkie, Verner Suomi, Eberhald Wahl, A. H. Robinson, Robert Gates, Robert Bock, Donald Sites and alternates.

5) *Regent's Minutes*, December 9, 1966; Redfern to Holmes, December 8, 1966.

6) Edsall to Riley, January 20, 1967, Sorensen to Holmes, February 8, 1967, Anhalt to Grassold et al. January 30, 1967, Edsall to Risser, February 23, 1967, Sorensen to Smith, May 12, 1967, series 24/9/3 box 8; *Badger Herald*, October 17, 1969; *Daily Cardinal*, October 18, 1969.

HUMANITIES

Fig. 1. Humanities, February 1997, Humanities shares its block with the Elvehjem and the University Club. [Del Brown Photo, AP-65]

Humanities was built in 1966, and opened in 1969, as the home of History, Music, Art and Art Appreciation. The architect was Mr. Harry Weese of Chicago, working in the so-called Brutalist style.

Between the end of WW II and 1959 the University had spent tens of millions of dollars on construction, mostly on housing, and on the sciences. This was first, the result of the influx of students into Madison, and second the influx of federal money into science education. At Wisconsin, the second effect was amplified by the presence of the Wisconsin Alumni Research Foundation (WARF), which also assisted in the construction of scientific facilities. The upshot of these

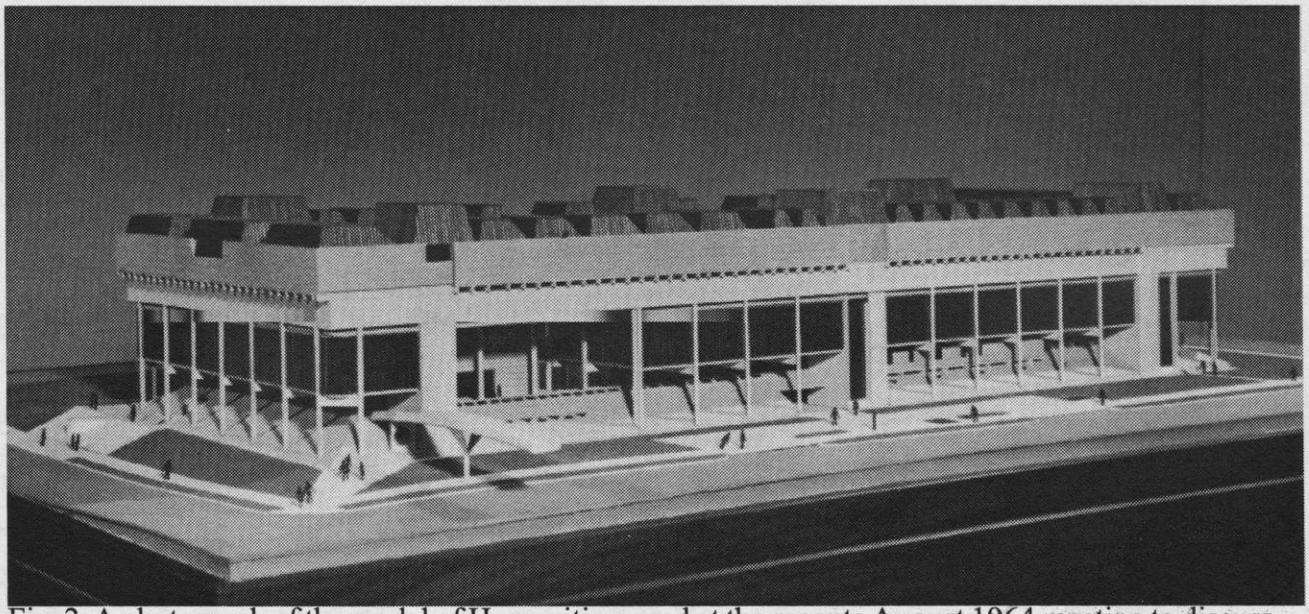


Fig. 2. A photograph of the model of Humanities, used at the regents August 1964 meeting to discuss the concept. [series 9/2, Humanities, ns-1747]

trends was that by the late 1950s some of the traditional core subjects of the University found themselves in the position of the poor stepchild. These departments were mainly in the humanities area of the college of L & S. They included history, music and art.

History was housed in Bascom Hall, with 16 offices for 23 professors and 34 T. A's. The requirement that all students take American History had boosted their teaching loads enormously. Music had two main buildings, the eighty year old Assembly Hall (now old music Hall), and the music annex, a converted commercial building on Park Street. Art and art history had offices and classrooms in the old engineering building (now old education) on Bascom Hill. The old journalism building (now demolished) on Observatory Drive, was the main location for art studios. This studio building was regarded as a fire hazard, a judgement that was proven sound when it burned in 1965, reducing the already inadequate space for art.[1]

In 1962, building committees were appointed from these three departments, history, music and art, to prepare plans. At that time the 1959 "sketch plan" was still the main touchstone for development of the lower campus (Park Street to Murray Street, and from Lake Mendota to University Avenue). This plan assumed that the area would be gradually developed for a wide range of uses, leaving large open formally landscaped areas. The committees began with this plan in mind which allowed for three separate buildings for the departments. Early in 1962 there was proposed an architectural competition for the lower campus area. It was recognized that the area would have to carefully and sensitively designed to provide a unified design approach to provide a suitable transition between the city and the University. A committee for the competition decided that such a contest would be desirable but not feasible, because of difficulties in coordinating several different projects, with different purposes, funding and time periods. The committee recommended rather that the "area in question, and all of its buildings, should be designed as a whole." Late in 1962 the architect for the lower campus was selected, apparently by University planner Leo Jacobson and state architect James Gailbraith. This architect was Harry Weese of Chicago.[2]

Weese's first report, dated September 1963, covers the needs of Art, Art Education, History, Music, the establishment of an Art Center and a Center for Communication Arts. The estimated cost is about $15 million. All these departments were to be located in the lower campus area. In this plan Weese is already thinking in terms of a single structure for Art, Music and History, although the

accompanying sketch shows a building with considerable open area around it for landscaping and pedestrian circulation. As the numbers came in from the various departmental planning committees, the building began to grow larger and larger.[3]

The regents took up the design issue at their meeting in August 1964. A model of the building was shown (see Fig. 2). At this meeting the regents mainly discuss financing of the lower campus building. They had already decided to combine all three projects (History Art, and Music) into one, and additionally had used all the money available for a communication arts building, which was deferred until the next budget biennium. The estimated cost was now $9.9 million. Regent Debardeleben asked a question regarding the combination of the buildings into one, and the planners explain that separate buildings would require high-rise structures which would conflict with the style of existing buildings in the area. High rise structure would also be more expensive, and inefficient in handling the estimated 7000 student station in the building. It was pointed out that the building would give better land utilization than the Bascom Hill buildings even considering the amount of open area inside the building (which was necessary for pedestrian traffic circulation for those 7000 students). Regent Debardeleben also asked if anything could be done about the design of the skylights, which gave the building "the appearance of a factory." He was told that a proper treatment would be developed. After more than two hours of discussion the concept of the building was approved. It was pointed out that the building could not be expanded; if the building and the lower campus became saturated (estimated to occur at a student enrollment of 40,000 maximum), a west campus would be needed.[4]

The next step was taken at the September 1964 regents meeting, when the preliminary plans were approved. The cost estimate had risen to $9.9 million, due to land costs in the area. The preparation of final plans took all of 1965. Dr. James Watrous, who was involved with the project as a planner of the Elvehejem, says that the personnel of the building committees was in constant flux, and that this caused much planning difficulty. The final plans were approved in August 1965. The planners were becoming worried about the delays because of a very tight labor market, and conflicts with other building projects. In January 1966 the project was put for bids; the project was so large that several bidders asked for an extension until February, which was granted.[5]

The regents discussed the bids at their March 1965 meeting, and the news was all bad. There was only one contractor who bid the entire job, and that bid was almost $2 million over the budget. The regents were faced with delaying or eliminating other building projects, or delaying this project for redesign. After a very short discussion, the regents decided to let the Executive committee handle the problem. What followed was a round of cost cutting that eventually determined what the building would be like.[6]

The architect and building committees developed independent lists of features that could be altered to reduce the cost of the building. The University complained that the architect seemed ready to sacrifice anything except items that would produce some architectural effect. These lists show the wholesale removal of trim and decoration items, including plastering bare concrete, stone entrances, carpet in offices and other items that would have made the finished building a great deal more attractive. Some idea of what the original plan would have produced can be gotten by examining the Elvehjem, which was nearly immune to the budget cuts because its funding was privately raised. A major casualty of this cost cutting was the interior courtyard, which was to be developed as a sculpture garden, but became an unused space known by building users as "the gravel pit." The replacement of stone facing by brick was avoided by moving $350,000 from the next biennium's budget.[7]

In April 1966 the regents approved the schedule of costs and financing developed by the Executive Committee, which had gotten the State Building Commission to add $400,000 to the project, and had reshuffled other construction budget money, without delaying or dropping any other projects. The regents also authorized the Executive Committee to award contracts. On April 18, 1966, the general construction contract was let to Corbetta Construction of Des Plaines Illinois for $7.49 million. Total

contracts for the project, which included the Elvehjem, were $13.7 million. Construction began on May 17, 1966, with an estimated completion date of August 1968.[8]

Strikes and shortages delayed the project for a year. The building went into use in September 1969. In January 1969 the regents voted, in what may stand as the greatest unintentional sarcasms in University history, to name this stark, graceless, and unadorned building "Humanities Building".[9] A more charitable view holds that whatever the actual result, Humanities was at least an attempt to deviate from the truly ugly high-rise boxes (e. g. Meteorology and Engineering Research), then commonly being built.

The grand opening of Humanities, dedicated in the words of vice president Robert Clodius to "beauty, harmony and grace" , took place the week of November 17, 1969. Two dedicatory concerts in Mills hall, by the University Orchestra, and the Pro Arte Quartet, were seriously marred by acoustical problems that would not be worked out for years. The three main music halls are named for long-time music faculty members: Charles H. Mills (#2340), Edson W. Morphy (#2330), and Irene B. Eastman (#2320). In the fall of 1969 both the Music and History departments registered complaints about excessive sound transmission between their respective areas. These problems have never been adequately solved. The University suggested that the state have the attorney general try to recover expenses from the architect for design errors. The art department is now overcrowded and badly ventilated, exactly their position in 1959 when planning for the building began.[10]

The building is 532 by 164 feet of concrete, seven stories (92 feet) high, with two auditorium blocks inside its perimeter. The exterior is concrete and lannon stone. The exterior walls slope inward over the first and second floor to provide a break from flat walls on such a huge structure, and to provide some natural light on those levels through small triangular skylights.

Music has 127 practice rooms on the first floor, and staff offices on the second. History occupies the third floor, with art on floors five through seven. The top floor studios are lit by the huge skylights that makes the building look "like a factory". The sixth and seventh floors have a connecting link across the open inner court yard areas.

1) University directories; Proposal of the History Building Committee, May 18, 1959, series 24/9/2 box 12.
2) *Regent's Minutes*, November 14, 1959 Lower Campus Area Plan, exhibit C, May 4, 1962; Architectural competition: series 24/9/2 box 13 "Art Center Complex" folder; Calls for committees: Wendt to Burns et al. February 6, 1962, series 24/9/2 box 13, "Music, School of" folder; Wendt to Logan et al. undated, Wendt to Jensen et al. undated, series 24/9/2 box 13.
3) Building Program Analysis, September 11, 1963, Harry Weese and Associates, series 40/1/7-1 box 24.
4) *Regent's Minutes*, August 14, 1964, September 25, 1964.
5) *Regent's Minutes*, September 25, 1964, August 20, 1965; Preliminary Budget Estimates September 25, 1964, series 4/0/3 box 189; Fleming to Harrington, August 16, 1965, series 40/1/7-1 box 125; Orr to Gilbert et al. September 9, 1965, Peterson to Culbertson, July 7, 1965, series 24/9/3 box 7; Interview with Dr. James Watrous, summer 1995. Orr to Edsall et al. January 27, 1966, series 24/9/3 box 7.
6) *Regent's Minutes*, March 4, 1966, April 1, 1966.
7) Orr to Yamamoto, March 10, 1966, Orr to Gilbert et al., March 10, 1966, Orr to Wenning, March 8, 1966, series 24/9/3 box 7, Engman to Debardeleben, April 7, 1966, Fleming to Harrington, April 8, 1966, series 40/1/7-1 box 125.
8) *Regent's Minutes*, April 18, 1966; Wisconsin State Journal, June 6, 1966.
9) *Regent's Minutes*, January 10, 1969 (presumably unintentional); I thank Steve Masar for the counter-argument.
10) *Capital Times*, November 17, 1969; *The Daily Cardinal*, January 28, 1969, October 30, 1969; *Wisconsin State Journal*, November 16, 1969, January 28, 1973; *Capital Times*, November 17, 1969; Gilbert to Young, August 15, 1969, Rothstein to Powers, October 21, 1969, series 40/1/7-1 box 125;

CREW HOUSE

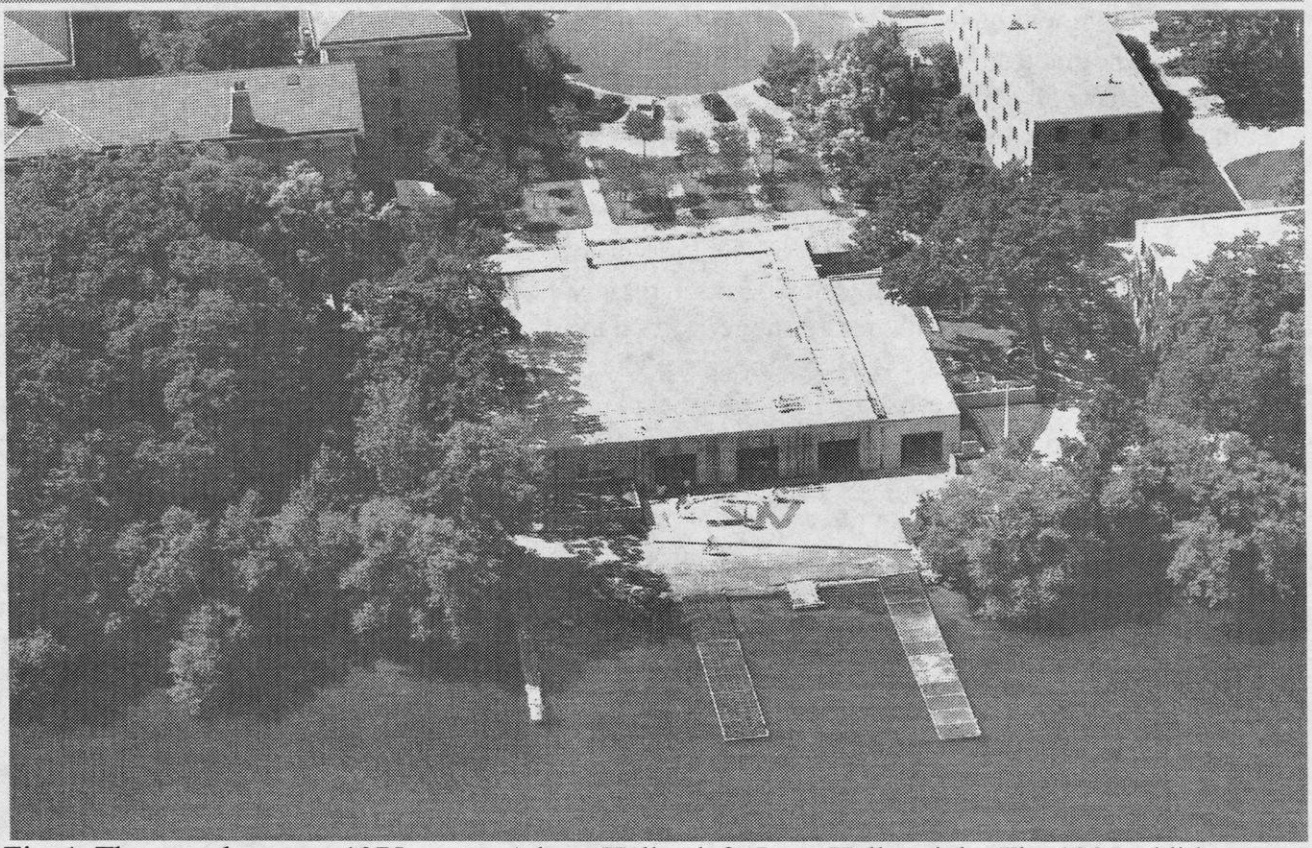


Fig. 1. The crew house, c. 1975 center, Adams Hall at left, Jorns Hall at right. The 1985 addition to the crew house is at the right of the building. This photo comes from the back of the Wisconsin Intercollegiate Rowing brochure. [photo courtesy of UW athletic department]

The Crew house was built in 1966 to replace quarters behind the red gym, lost to the construction of the Alumni House. The site was originally at Willows Beach but was changed to the Babcock Drive site after objections by the city of Madison. The crew house was expanded in 1985 and may again become too small for the program.

There was no doubt that a new crew-house was needed. The one in back of old red gym was more than seventy years old, and was a wood-frame structure built with donated funds, and had seen very heavy use by both University students and the local public. Besides, it was due to be demolished to make way for the alumni house. In September 1963 the regents approved a plan to build a new boathouse with $250,000 of athletic departments revolving funds. The regents had decided to build at the Willows Beach, a small (85 feet) piece of Mendota lakeshore directly north of the Elm Drive dorms. In November 1963 the state approved the construction of a crew house to be financed from athletic receipts and gifts.[1]

This building was to contain not only varsity and intramural crew equipment, but student

recreational swimming facilities. This plan seemed to be on the fast track, with funding, location, and design all selected and agreed to. Haste was needed since the plans for the alumni house were nearly ready, and they called for the removal of the old boat-house. In January 1965 the regents examined the preliminary plans for the crew house developed by architect John J. Flad. By this time the recreational facilities had been deleted and public toilets added.[2]

At this regents meeting were Mrs. Richard Bardwell, Mrs. Milton Leidner, and Mr. Kenton Peters, representatives of the Capitol Community Citizens, Madison alderman Goulette, and Alicia Ashman of the league of Women Voters. They had serious objections to the plan for the crew house. In forty five minutes of presentation, they made several points about the crew house: any construction on the beach would detract from the environment; it would destroy the only beach available on the west side of Madison; the development would benefit only a handful of athletes, while depriving thousands of residents. The representatives displayed a petition against the project signed by 4000 residents, including many "signatures" that consisted of children's thumb-prints.

They pointed out that the Madison Common Council had passed a resolution that development at the Willows should be jointly studied by the regents and the City of Madison. When the regents asked Mrs. Leidner if she would object to the construction of a bath house on the site, she replied in the negative. A motion to restudy the plan and report at the next regent's meeting was voted down, 6-3. President Debardeleben and regent Cohen agreed that from the nature of the presentations there did not appear to be any room for compromise.[3]

Over the next few weeks this controversy raged back and forth. The regents resisted arguments that they did not have final authority over campus development. In vain the planners argued that the project would actually expand the beach, its public access and parking, and would be unavailable to the public for only short periods of crew use in the spring and fall months, and that five other sites had been examined before deciding on the Willows. The citizens followed the usual course of writing campaigns to the newspapers, and insisting that the city have joint authority over the project with the regents. The president of the City Employees Local 236 wrote a letter to president Harrington, and Madison newspapers, arguing that the cost of the crew house was too high, and that the Willows should remain "unmolested". Professor Roger Schwenn reversed his opposition to the plan because of "blind opposition, political gimmickry, obfuscation, and sappy sentimentalism abroad in Madison" and apologized to Harrington. The city registered its disapproval with the state building commission.[4]

By early March, 1965 the wrangling was beginning to tell on the University, president Harrington began to back away from support of the site, writing the new chancellor Robin Fleming that "we should look at new sites", while insisting that "we are not joining the Park Commission in looking at new sites, we absolutely must retain our full right to do these things ourselves." Harrington also insists that the University has not promised to keep Willows Beach open or to improve it at all. Fleming opined that the University should not take a major stand on the case even though it might "encourage citizen groups to attack us". Late in March the University informed the Madison Parks Department that they would welcome a commissioner to consult with the University on a new site, while insisting that the ultimate decision must remain with the regents. In March the regents decided to send the question back to the planning Committee.[5]

In October, 1965 a new study of sites for the crew house was made and recommended a site at the end of Babcock Drive. The regents approved the new site in their December 1965 meeting. Regent Greenquist smelled capitulation, and asked repeatedly if the new site was as good as the old one, or if it was being selected "just to keep peace with the city". Fleming replied that the site was entirely acceptable to the University. The controversy was over.[6]

By June 1966 Flad had altered the plans for the crew-house to fit the new site, and in July the regents approved the preliminary plans, with an estimated cost of $250,000. In November 1966 the

Executive Committee awarded contracts for the crew-house. The general contractor was General Lumber and Improvement Company of Madison for $170,300. Total contracts were for $280,000. The funds came from the athletic department ($207,000), gift funds ($43,000), and state funds for utilities ($30,000). Construction began November 8, 1966. Construction was 85 per cent complete, in June 1967, when work was stopped by a labor strike. About six weeks of work remained after the strike and the crew house was ready in the fall of 1967.[7]

The crew-house is a single story concrete building, 110 feet square, set deep into the lakeshore, with a sun deck on the roof, at street level. It contains storage for shells, a rowing tank, staff offices, a shop, and exercise equipment. The addition of women's crew to intercollegiate status in 1974, has more than doubled the number of athletes using the facilities, and even with another storage bay added in 1985, the building is overcrowded. Plans are being made to build a new crew-house, or expand the existing one. The Willows Beach is again being considered as a crew site. The objection this time is based on the possibility of disturbing an old anthrax disease pit. Current public use of the Willows is essentially zero, as is the use of its putative replacement, the beach and beach house on the north side of Picnic Point.[8]

1) *Regent's Minutes*, September 6, 1963, November 8, 1963, December 3, 1963; *Wisconsin Alumni Magazine*, December 1963 p. 8; As early as July 1964, there was resistance to the use of Willows beach: the Madison board of Park Commissioners recommended to the Mayor and common council that the Willows be designated a permanent public beach, Marshall to Harrington, July 9, 1964 series 24/9/3 box 5.

2) *Regent's Minutes*, January 8, 1965; *Wisconsin Alumni Magazine*, February 1965, p. 8; Peterson to Wisconsin State Building Commission, January 11, 1965, series 40/1/7-1 box 21.

3) *Regent's Minutes*, January 8, 1965;

4) Yanke to Harrington, February 17, 1965, Schwenn to Harrington, January 14, 1965, Harrington to Schwenn, January 26, 1965, series 40/1/7-1 box 21. Facts Concerning the Willows Beach, February 5, 1965, series 24/9/3 box 5.

5) Harrington to Fleming, March 3, 1965, Fleming to Harrington and Clodius, February 25, 1965, series 40/1/7-1 box 21; *Regent's Minutes*, march 5, 1965.

6) Memo Concerning Location for New Crew Facilities, October 25, 1965, series 24/9/3 box 5; Regent's Minutes, December 10, 1965.

7) *Regent's Minutes*, July 13, 1966, November 4, 1966, exhibit D; *Wisconsin Alumni Magazine*, January 1966, p. 18; Budget, Timetable, Space Summary and Outline Specifications, John J. Flad and Co., June 27, 1966. Halle to Tipple, April 28, 1967, series 24/9/3 box 8.

8) *Regent's Minutes*, March 8, 1985; Capital Times, November 15, 1994; Wisconsin Intercollegiate Rowing 1993-1994 Catalog (Athletic Department offices).

ENGINEERING RESEARCH

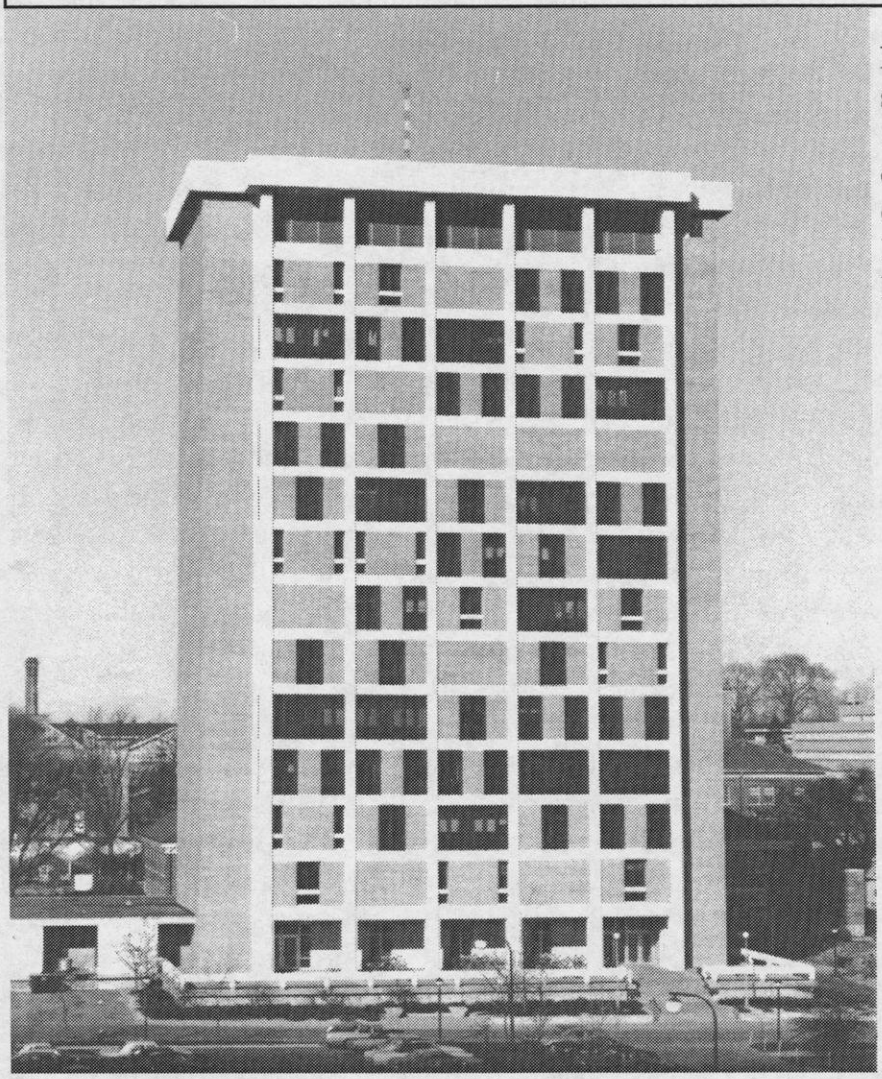


Fig. 1. The Engineering Research Building looking north, c. 1971. The two story base, connected to the mechanical engineering building is at the left. [series 9/6, Engineering Research, jf-90]

The Engineering Research Building filled a long-standing deficiency in research facilities in the Engineering department. It was erected in 1967 and opened in 1969.

The Engineering college at the University had been directed in its formative years (1902-1939) by Dean Frederick Turneaure who did not see research as a critical part of an engineering education. The dean believed instead that the school should produce experienced practicing engineers. As a result of this slant, the college of engineering did not develop the kind of facilities and reputation for strong basic research enjoyed by other parts of the University, such as the college of agriculture. Although some research did take place in engineering, the facilities were largely improvised and haphazard.[1]

Thus it was that in the early 1960s in the dawn of federal support for scientific and engineering

research projects, the college of engineering had only minimal research programs to point to. Most were housed in temporary buildings erected in the 1940s. In 1963 the University planned an eight story research building at the corner of Dayton and North Randall (the current site of Wendt Library). This building was never pursued, but started the process for such a facility.[2]

The regents in October 1964 approved the new site of the engineering research building as the parking lot "immediately east of the mechanical engineering building." This action was taken to hurry to the planning stage that the NSF required before committing funds. In December 1964 the NSF declined to support the proposal. It was the position of the NSF that the University was still not sufficiently advanced in their planning for the building. Planning proceeded through 1965, with architects Berners, Schober and Kilp of Green Bay appointed in April 1965, and weekly meetings were held through the summer. In January 1966 the regents approved the revision and expansion for three additional floors to the proposed building, and increased funding to $5.1 million in state and federal matching funds. The request to the state for these funds accentuated the rising graduate enrollment and the increasing importance of research, then housed in deteriorating temporary buildings.[3]

Included as programs particularly in need of space were: engineering plasma dynamics, computing and data processing, instrument engineering, nuclear waste disposal (later dropped when a critical faculty member was lost), air pollution, solar energy, and the automotive laboratory. The regents were shown a model of the building in February 1966. In March, the regents approved another expansion to $5.4 million to make room for plasma physics (then being carried on in the old high-energy physics building on the west ag campus). The extra money was to come from non-state money. This effort was eventually dropped, and the physics program was moved to Chamberlin Hall a few years later. Thus it was that well into 1966 the plans were not stable enough to say how many floors or square feet would be built, or who would occupy them. Some of this effect was the result of trying to design the most flexible research facility possible.[4]

In June 1966 the state was asked to increase the funding level again, this time to $5.7 million, the University citing the rising cost of construction. Also that month a completed proposal was made to the federal HEW's title II graduate academic facilities program for $727,000. The proposal estimated the NSF support at $1.7 million. The regents approved the preliminary plans in June 1966, funded with $3.1 million from the state and the rest from gift and grant funds. The state approval for the funding came in September 1966. Word came from the NSF of a reduction in available funds, and the University increased its request to the Title II program. September also saw another round of revisions of programs to be housed in the building. WARF made a grant of $185,000 for the building. Final funding was now nearly in place.[5]

The final plans were approved by the regents in March 1967. Utility costs had added another $301,000 to the total, now $5.8 million. Planned finishing date was September 1969. The state reapproved this funding in June 1967. Construction contracts were let by the regents on July 7, 1967. The general contract went to Orville E. Madsen of Minneapolis for $2.278 million.[6]

Construction began on July 17, 1967. Final funding breakdown was: NSF-$1.2 million; HEW-$1.1 million; state matching funds- $3.6 million. In September 1968, a separate contract for air conditioning the building was let for $190,000 to Bassett Inc. of Appleton. Progress on construction, unlike planning and funding, went smoothly and without major incident. The project was enough on schedule in March 1969 to allow the ordering of furnishings. The first occupants of the building began to move in during August 1969. Site development and landscaping was not finished for another year. In 1985 a major ($870,000) remodelling took place to increase the energy efficiency of the building.[7]

The building is a fourteen story tower 58 by 97 feet, over a 135 by 187 foot two level base, connected at both lower levels to the mechanical engineering building, and sharing its service entrances. The building is of reinforced concrete, on a ten-foot modular plan, faced with precast concrete panels on the north and south faces, and face brick on the east and west faces. The 274 foot tower is utterly

featureless on the east and west faces, making it one of the starkest buildings on campus.

The building has over the years served an ever changing array of research projects. Since the building is now severely cramped and not expandable, plans are underway to build the Engineering Center Building, which will add more space for research and existing programs.

1) Cronon and Jenkins, *The University of Wisconsin* vol. III pp. 724-727.
2) Engineering Research Building plans, October 29, 1963, series 24/9/3 box 6.
3) *Regent's Minutes*, October 16, 1964, January 7, 1966; Page to Harrington, November 25, 1964, Harrington to Page, December 10, 1964; series 40/1/7-1 box 22; Engineering Research Building, July 12, 1965, Revision to ... Portion of Engineering Research Building, August 9, 1965, Agency Request for State Building Commission Action, January 17, 1966, series 24/9/3 box 6.
4) *Regent's Minutes*, February 4, 1966, March 4, 1966; Agency Request for State Building Commission Action, January 17, 1966, series 24/9/3 box 6; Alberty to Harrington, April 11, 1966, series 40/1/7-1 box 22.
5) Agency Request For State Building Commission Action, June 13, 1966, Proposal Submitted..., June 30, 1966, series 24/9/3 box 6; *Regent's Minutes*, June 10, 1966, September 9, 1966; Lorenz to Stamberg, September 29, 1966, series 24/9/3 box 8.
6) *Regent's Minutes*, March 10, 1967, June 9, 1967, July 7, 1967, exhibit C; Lorenz to State Building Commission, February 28, 1967, series 24/9/3 box 8;
7) Roeber to Spuhler, January 2, 1969, Powers to Koch, March 13, 1969, Culbertson to Lorenz, June 19, 1969, series 24/9/2-1 box 7; Buelow to Edsall, October 3, 1969, series 24/9/2-1 box 14. *Regent's Minutes*, October 11, 1985.

PICNIC POINT BATH HOUSE

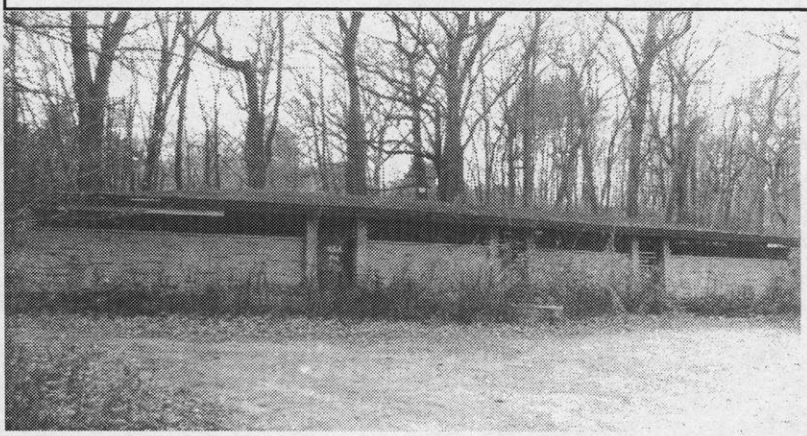


Fig. 1. Picnic Point change house 1994. One story, men's and women's dressing rooms and bathrooms: ready to go, never used. [Author Photo, AP-49]

This little building represents the only known example of a failure of the University's elaborate system of checks and balances that ensures that new buildings are needed, useful, and well built.

The 1965 public outcry over the plan that would have located a new crew house at the Willows Beach, north of the Elm Drive dorms, engendered a political compromise that led the University to establish a more permanent swimming facility at Picnic Point.

In June 1966 the University requested the state for permission to build a changing house and other swimming facilities on Picnic Point at a cost of $75,000 to be funded through athletic department revolving funds. As part of this request, the University pointed out that the relocation of the crew house had required dropping the swimming facility originally planned as part of the crew house. When the regents approved the preparation of plans in June 1966, they specified that no provision would be made for vehicular access to the site. Madison architects Kaeser and McLeod were selected in November 1966. Kaeser designed a low swooping building that nestles into the wooded site in a very unobtrusive way. Some minor objection about despoiling Picnic Point were aired.[1]

In May 1967 the regents approved the plans. Later that month the decision was made to abandon the idea of a septic system, and a fully sewered connection was designed at an added cost of $26,000. The building design was simplified to reduce its cost. By late June 1967 the project was ready for bids. Construction contracts were let March 4, 1968, to Gilbert Construction of Verona. Total cost was $75,000, paid from the athletic department's revolving fund. The building is wedge shaped, approximately 30 by 70 feet. The exterior is sheathed in rough stone.[2]

The swimming beach and the new change house were never used. Increased algae pollution in Mendota, lack of roads and parking, simply made it too inconvenient, and the beach and change house has stood idle and unused for 25 years. Periodic plans are examined to restart the project but none have borne fruit.

1) *Regent's Minutes*, June 10, 1966, September 9, 1966, May 5, 1967; Request for State Building Commission Action, June 13, 1966, series 24/9/3 box 7; Culbertson to Kaeser and McLeod, November 16, 1966, Osterbrock to Fleming, July 11, 1966, series 24/9/3 box 10. *Capital Times*, June 21, 1966.

2) *Regent's Minutes*, May 5, 1967, January 12, 1968, March 15, 1968 schedule L; Orr to Edsall, May 23, 1967, planning meeting minutes, January 27, 1967, series 24/9/3 box 10; Lorenz to Building Commission, November 1, 1967, series 40/1/7-1 box 33.

3) *Wisconsin State Journal*, July 21, 1994.

STEENBOCK LIBRARY

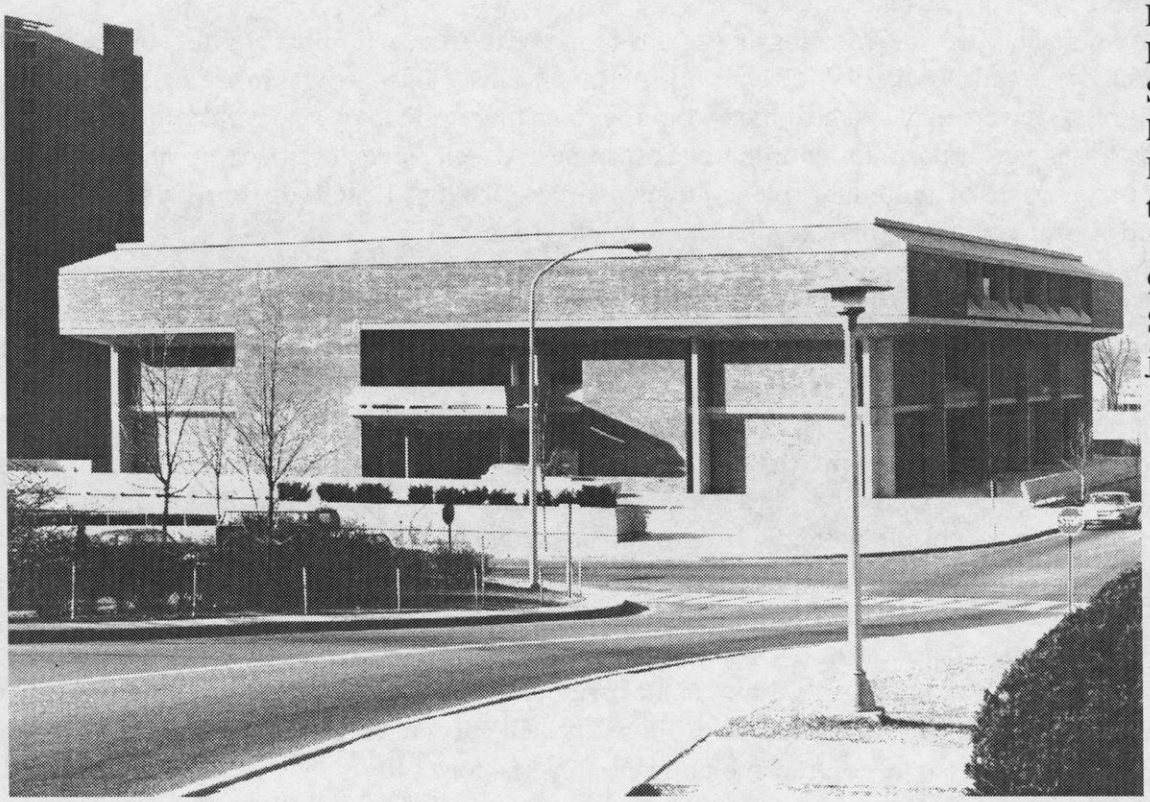


Fig. 1. The Harry Steenbock Memorial Library from the east, 1970. [series 9/3, Steenbock, jf-90]

The Steenbock Library was built in 1967 to house the libraries of the College of Agriculture, as well as those of botany, zoology, biophysics and biochemistry. It opened in January 1969. It is named for Harry Steenbock, renowned UW biochemist, professor and discoverer of vitamin D.

The planning, and construction of the Steenbock Memorial Library is an inspiring example of how well the University's building process can work. In short, the need was defined, a plan created, funding obtained, and the building erected, in a remarkably short time, and free of the delays, false starts and conflicts that typically marked similar projects of the time (e. g. Helen C. White Hall and Union South).

The need for the agricultural library was formally stated in 1964. A draft (by M. L. Redfern) of the need paper states that the old agricultural library (built in 1902) in Agriculture Hall had space for 177 readers and 80,000 books. 20,000 volumes were stored in the attic of the Stock Pavilion. It was estimated that by 1985 there would be a need to house 300,000 volumes and accommodate 1500 readers, and a growth of staff from five to twenty. The estimated cost was $3 million. The project appears on the 1965-67 building program. Building committee meetings began in July 1965. The committee consisted of chairman G. W. Sledge, E. M. Pittenger, A. D. Hasler, R. H. Burris, Louis

Kaplan, H. H. Nelson, R. D. Powers, M. L. Redfern and D. H. Sites. The presence of library personnel (Kaplan and Pittenger), scientists (Hasler) and building specialist Sites, was a key factor in the smooth progress of the project. A request for project approval was considered at the December 1965 meeting of the state building commission. This request emphasizes the difficulty that Memorial Library is having in coping with the huge enrollments and burgeoning collections. The new facility will relieve congestion from Memorial, while providing additional storage, research and study space and would house the libraries of botany, zoology, biophysics and biochemistry.[1]

At their October 1965 meeting the regents approved the site for the library as the southwest corner of Babcock Drive and Observatory Drive, north of Russell labs. This space was in use as a rugby practice field. The regents were told that the library would be about four stories high, and would provide study areas for students living in the dormitories on that end of campus. At their November meeting, the regents authorized the preparations of preliminary plans. Funds were described as $1.3 million from the state, and the balance to be provided from a private gift to be announced later.[2]

In January 1966 the committee asked the state to retain an architect at the earliest possible date. In early March the state selected Weiler, Strang and McMullin. Later that month the committee held its first planning meeting with the architects. They discussed the entire design and visited the site. These meeting continued on a monthly basis for the entire life of the project. By the meeting of August 1966 the preliminary layout and design of the library was approved by the committee. The regents at their September meeting voted to approve the preliminary plans. It was explained that the library would be on four levels (low enough to provide a good visual contrast with Russell labs and other proposed high-rises in the area, cost about $2.7 million, and be ready by September 1968. It was revealed at this meeting that the special gift fund for the project would come from WARF.[3]

The regents accepted the final plans for the library at their meeting of February, 1967. The estimated completion date was now December 1968, and cost estimated at $2.8 million, depending on the bids for an extra amount of excavation in the basement. On May 5, 1967 the regents awarded construction contracts for a total of $2.61 million. The general contractor was J. H. Findorff and Son for $1.5 million. The general contract included the construction of the extensive terracing and landscaping around the building. The source of funds was: state funds $1.39 million; gifts and grants: $1.21 million. The WARF grant for $1.21 million was formally accepted by the regents on July 7, 1967. WARF also agreed to fund additional items if reasonable bids were received. These included the additional basements space, snow melting equipment and a better quality of carpet. All these items were added and funded by WARF.[4]

In keeping with the fortunes of the project, construction sailed through without significant delays. The regents voted at their January 1968 meeting to name the building "the Harry Steenbock Memorial Library".[5]

The library was opened for use on January 6, 1969, although director Pittenger was not completely finished moving books from the old library. A faint odor of livestock was reported in the vicinity of some collections, which had been stored for years in the attic and basement of the stock pavilion.[6]

The building is 162 feet square of reinforced concrete. There are five full levels; a basement, the ground floor with reading rooms, study carrels, stacks and a lounge, both below street level. The three upper levels are reading rooms and stacks, with staff offices on the second floor. Main access is from the sunken plaza off Babcock Drive. The upper levels are sheathed in face brick to match the nearby Russell lab building. The library building was designed for maximum flexibility and the main areas contain no corridors. The library is an open stack design. It later received a prestigious design award from the Wisconsin Chapter of the American Institute of Architects. A small number of windows provide beautiful views from the upper reading areas. The carpet and open design do a remark-

able job of muting noise in the library.[7]

The formal dedication of the library took place on June 15, 1969, with tributes to Harry Steenbock, the scientist, teacher and citizen, from governor Knowles, vice-president Clodius, regent Renk, and WARF director Frautschi. Dr. Steenbock's widow unveiled a portrait of Steenbock by artist in residence Aaron Bohrod, which hangs in the memorial room on the first floor. In 1970 the basement was finished for use by the forestry department, the University archives, and landscape architecture.[8]

1) Need for expansion of the Agricultural Library, undated, Minutes of Agricultural Library Building Committee Meeting, August 13, 1965, Agency Request for State Building Commission Action, December 14, 1965, series 24/9/3 box 6.

2) *Regent's Minutes*, October 22, 1965, November 12, 1965; Daily Cardinal, October 23, 1965.

3) Pound to Edsall, January 4, 1966, Postweiler to Lorenz, March 8, 1966, series 24/9/3 box 6; Sledge to Building Committee, July 19, 1966, Building Committee Meeting #1 through #23, March 23, 1966 - August 31, 1966, series 24/9/3 box 9; Regent's Minutes, September 9, 1966.

4) *Regent's Minutes*, February 10, 1967, May 5, 1967, exhibit Q, July 7, 1967, exhibit A; Culbertson to J. H. Findorff & Son, May 18, 1967, series 24/9/3 box 9;

5) *Regent's Minutes*, January 12, 1968.

6) *Capital Times*, January 4, 1969, May 31, 1969; *Daily Cardinal*, January 7, 1969; UW Library News, volume XIV #6, June 1969.

7) *Milwaukee State Journal*, March 2, 1969; Badger Herald, March 16-19, 1972.

8) Dedication pamphlet, June 15, 1969, Archives "Steenbock Library" subject file. Lorenz to Lemon, March 22, 1971, series 40/1/7-1 box 126;

NIELSON TENNIS STADIUM

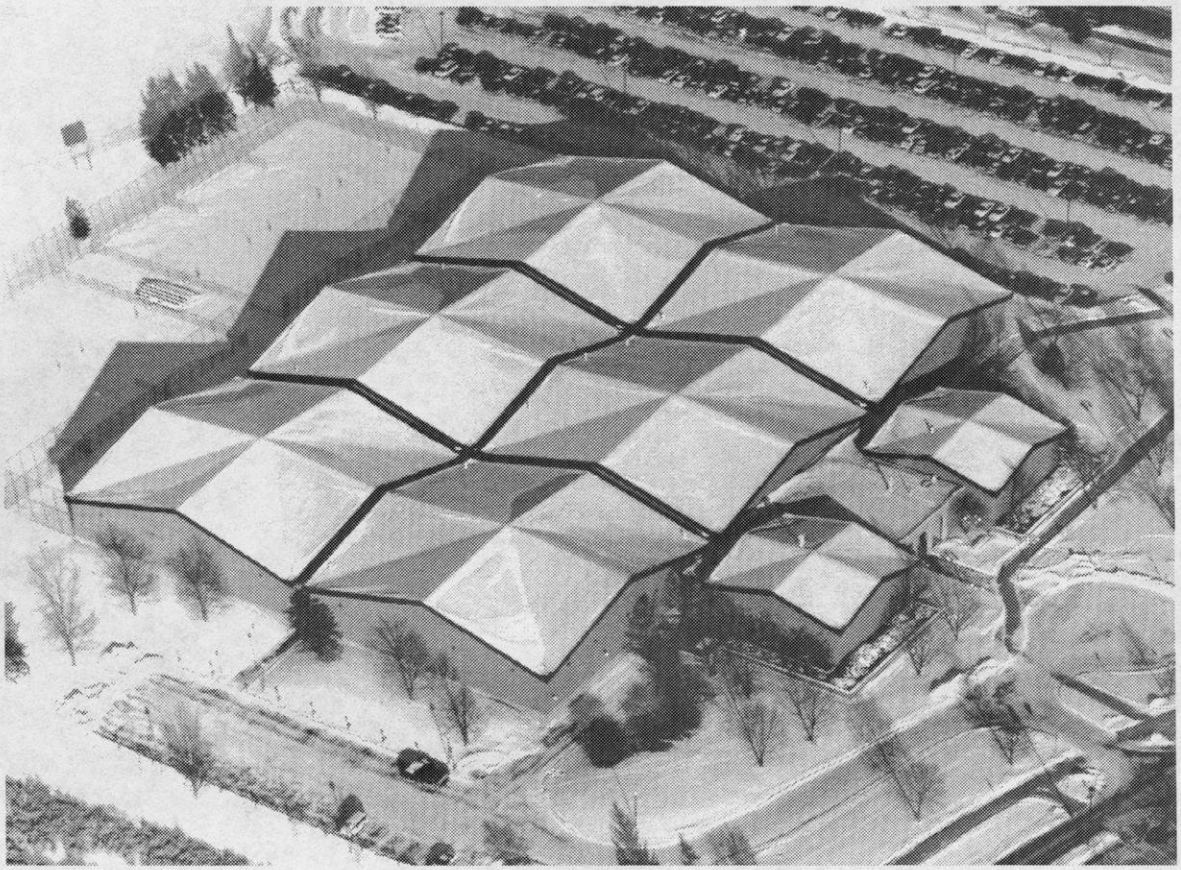


Fig 1. The Nielson Tennis Stadium from the air in February 1997. The two extensions at the right are the main entrance. [Del Brown Photo, AP-67]

The Nielson Tennis Stadium was built in 1967 as a gift of Arthur C. Nielson, class of 1918. It provides year around tennis, squash and racquetball courts to students, faculty and the general public a nominal charge.

The Nielson tennis stadium is unique among University buildings. Other buildings were built by private donations, (e.g. the Memorial Union, the Wisconsin Center, and the Elvehjem). But those donations were made by request for a specific project, as defined by the University. In the case of the tennis stadium, the donor had the funding and the idea for the building, with no previous discussion of need by the University.

In April 1966 president Harrington reported to the regents meeting on a proposed recreational facility for racquet sports, to be made possible by an expected gift in excess of seven figures from Mr. A. C. Nielson Sr. At that meeting the regents voted to accept the gift of 800 shares of the A. C. Nielson Company and voted authority to prepare preliminary plans for a tennis-squash facility at an estimated cost of $1.25 million. Of this money the state would provide $250,000. In April the state building commission approved the project and appointed architects Walton and Walton of Evanston, Illinois. They had been the architects of a previous tennis stadium built by Mr. Nielson for the town of Winnetka, Illinois.[1]

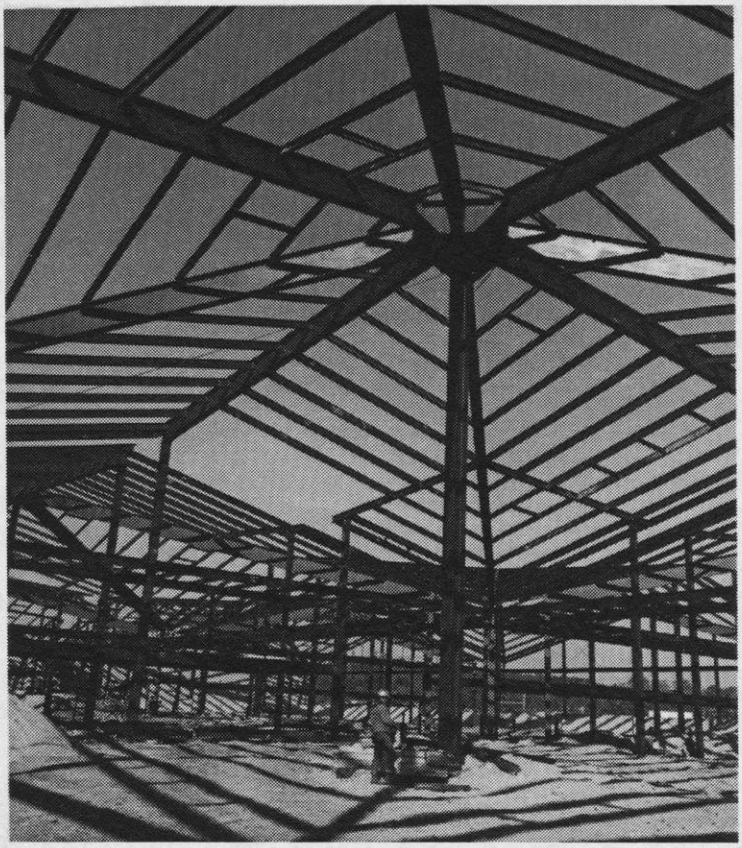


Fig. 2 Construction of the Nielson Tennis stadium, September 20, 1967. [series 7/4 folder #2, jf-100]

Mr. Nielson intended to take an active part in the realization of his dream. Nielson had come to the University as a member of the class of 1918, and became captain of the varsity tennis team. He was frustrated by the inability to play the game during nearly half the year in Madison's well known climate. Besides making a fortune in marketing research, he made tennis a lifelong passion, and collected information on indoor facilities throughout the world with the intent of donating such a facility to his alma mater. Nielson involvement was such that the University declined to appoint a building committee, noting that the donor would largely prepare the building program, and that the connections to the state committee would be handled by the architects. The proposed site was on the marsh on the far west end of campus. This marshy site would require special treatment to be suitable.[2]

In May 1966 the regents voted that the proposed tennis-squash facility be named the "Nielson Tennis Stadium". They explained that this name did not violate their informal rule against naming building after living persons, since the name referred not to Mr. Nielson himself but to his family. After an engineering company made a thorough study of the soil conditions at the site, the regents voted in June 1966 that the stadium be located north of March Lane, and west of lot 60.[3]

By mid September the state had approved a modification to the program that added 1500 square feet and $400,000 to the plan. The extra money would come from Nielson and from University funds earmarked for the maintenance of its many outdoor tennis courts which would be rendered unnecessary by the new facility. The University estimated that because of increased efficiency scheduling of use, an indoor court was the equivalent of two and a half outdoor courts. They planned for 10 indoor tennis courts and five squash courts. In September 1966, the regents approved Walton and Walton's final plans. The total estimated cost was now $1.83 million, to be funded by Nielson's gift and $400,000 of state funds. Completion was estimated for mid 1968.[4]

In February 1967 plans were developed to prepare the marsh site for construction. It was hoped by all concerned that the building could be completed by May 1968, the date of Mr. Nielson's 50th class reunion. In March 1967 the contract for filling and preparing the site was let to Madison

Crushing and Excavating for $104,450. This work was begun March 17, 1967. Construction bids received in April exceeded the budget by a $400,000, but Nielson informed the University that he was "obligated and fully prepared to contribute the entire cost (less the $250,000 contributed by the University) --*whatever it may be.*" [emphasis original][5]

At their May 1967 meeting the regents awarded construction contracts after reading a letter in which Mr. Nielson agreed to supply the additional necessary funds. The general contract was awarded to Orville E. Madsen and Son of Minneapolis for $1.48 million. The total contracted cost was $2.36 million. Gifts and grants totalled $2.1 million, and state funds $250,000. Construction began immediately in May 1967. By April 1968 the building was close enough to completion that the regents could arrange the grand opening. They noted that the Nielson Tennis Stadium was the largest gift by a living donor in UW history, and the stadium was the largest building in volume and area of any University building.[6]

The dedication of the Nielson Tennis Stadium took place on May 25, 1968, with a presentation by the varsity singers, remarks by president Harrington, A. C. Nielson, and governor Knowles. The speeches were followed by exhibition matches, one of which featured the seventy year old Nielson and his son losing to the captain and co-captain of the University tennis team in a "hard-fought" doubles match.[7]

The building, the largest indoor racquet sports center in the world, is 392 by 255 feet of structural steel under a single, multipitched roof. It has face brick and porcelain trim over concrete block walls. It contains twelve tennis courts, six squash courts, players lounges, seating for 1500 spectators, locker and dressing rooms, a pro shop, and offices. In 1970 six outdoor courts were added on the north side of the building. Operating capacity is 6160 players per week on a one hour fifteen minute session basis. The facility is open to students, faculty, staff and the general public in that priority order at very modest fees.[8]

The Nielson Tennis Stadium stands as a tribute to a man with a dramatic vision and the determination and will to attain it for his alma mater. The donation was made by Arthur C. Nielson (class of 1918) and his wife Gertrude B. Nielson (class of 1920) in the words of the dedication plaque "in grateful appreciation of the privilege of a good education".

1) *Regent's Minutes*, April 1, 1966; Agency Request for State Building Commission Action, April 11, 1966, Culbertson to Lorenz, April 28, 1966, series 24/9/3 box 10.

2) *Regent's Minutes*, June 10, 1966; *Wisconsin Alumni Magazine*, June-July, 1968, p. 8; Atwell to Mikol, April 27, 1966, series 24/9/3 box 10.

3) *Regent's Minutes*, May 6, 1966, June 1966.

4) *Regent's Minutes*, September 9, 1966; Nielson Tennis Stadium, Walton and Walton, September 1, 1966, series 24/9/3 box 10.

5) May to Western Builder, February 15, 1967, Sites to Nielson, February 14, 1967, Nielson to Fleming, April 28, 1967, Engman to Atwell, February 21, 1967, Edsall to Engman, February 28, 1967, Dietrich to Dorman, March 27, 1967, series 24/9/3 box 10.

6) *Regent's Minutes*, May 5, 1967. This remark was made before the construction of the University Hospital and Clinics complex.

7) *Regent's Minutes*, April 19, 1968; Dedication pamphlet, May 28, 1968, Archives Nielson Stadium subject file; *Wisconsin Alumni Magazine,* June - July, 1968 p. 8.

8) Plans in physical plant plans room; American School and University, May 1969, Johnson to Edsall, June 5, 1969, series 24/9/2-1 box 9; Regent's Minutes, January 16, 1970; Lemon to Wisconsin State Building Commission, January 6, 1970, series 40/1/7-1 box 125. Wisconsin State Journal, may 14, 1972; Nielson Tennis Stadium schedule handout, September 1994.

UNION SOUTH

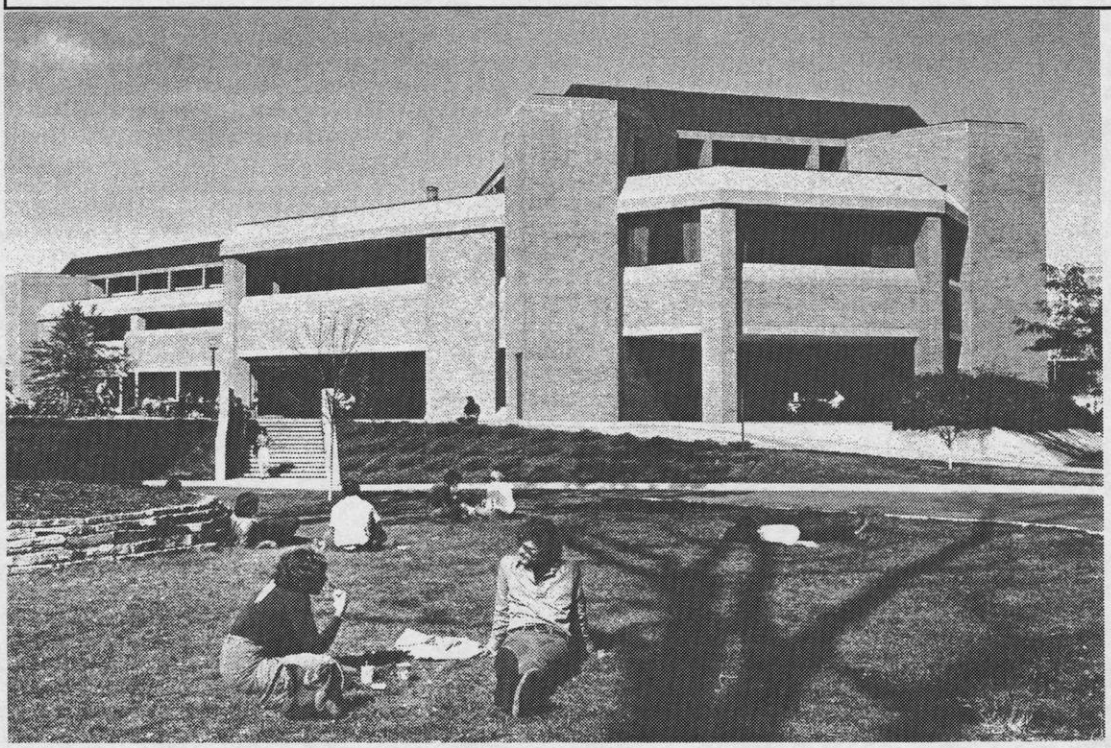


Fig 1. The Randall Street entrance to Union South c. 1976. [Series 9/5, Union South, ns-3060]

Union South was developed as a response to the movement of large numbers of students to the south and west end of campus. It was opened in 1971, and is operated by the Memorial Union. It contains game rooms, food service and hotel services.

The concept for a second building for the Memorial Union began around the time of WW II. A massive enrollment increase, and an associated shift from a mostly L & S student body to a large engineering and medical enrollment, both located west of the original campus, were the main factors in thinking about a second location. The destruction of a student neighborhood for the erection of Humanities, and the construction of several buildings along Dayton Street, also moved large numbers of students away from the old center. The heavily used Breese Terrace cafeteria showed the practicality of an eating facility on the west end of campus.[1]

A preliminary building committee in the early 1960s was chaired by Porter Butts, the designer and director of the original Memorial union. This committee developed a building program for the block bounded by Randall, Johnson, Orchard and Dayton Streets, to contain Union-South and a Physical Sciences library to be built later. The constant westward and southward expansion of the campus could be served from this location. This preliminary plan was finished in February 1966, and proposed the first stage of an expandable union building to contain game rooms, lounges, and food service.[2]

The regents at their March 1966 meeting granted authority to prepare preliminary plans and specifications for Union South. The regents used the committee's cost estimate of $2.7 million; they

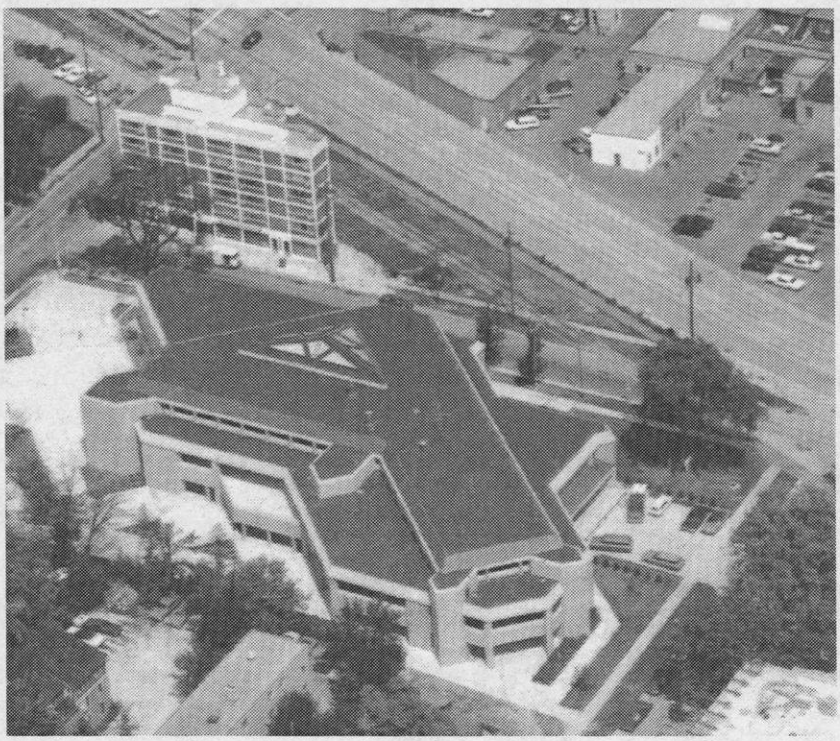


Fig. 2. The odd shape of Union South with its central light well and opening onto a nonexistent court in the back can be seen in this aerial photo. The building is a basement and three levels of concrete faced with concrete and face brick.

The basement holds game rooms, the first floor, lounges, and assembly hall, and food service; the second floor, more food service; the third floor holds mechanical systems, some office space and fifteen guest rooms. The light well runs through the center of all three upper floors. [Series 8/1/3, ns-336]

agreed with the committee's recommendation for the Randall Street site. The money would come from student fees and from revenue from operating the facility. Only a week later, Butts wrote to planning and construction's Don Sites that the building had to be expanded from 70,000 to 80,000 square feet and the budget from $2.2 million to $2.7 million. Butts blames "some seemingly emergency circumstances last week" for the increases, but does not elaborate. At this time Butts is trying to keep the cost of the project down to minimize its impact on the overall Union budget. He also is not happy with the Randall Street site, but is unable to get the committee to change it.[3]

March also saw unresolved discussion of the purchase of the land in the block for the union and library. Butts, other committee members, and chancellor Fleming believed that the state should purchase the land. In an oral history interview Butts later said that he was peremptorily told by the University that the Memorial Union surplus would be used to buy the land. Butts states that the state was never asked to purchase the land, although this is contradicted by the minutes of one committee meeting. Butts was now faced with "his" Union having to purchase a site that he didn't think was good to start with.[4]

In May 1966 the state appointed architects Weiler, Strang and McMullin to the project. Planning meetings were held roughly monthly through the summer of 1967. Much of the design during this period was concerned with an elaborate system of elevated walkways and light rail transit that was being proposed for the whole campus. This system required that the entrances to Union South be above ground level. Much later the whole elevated system was discarded for cost reasons, but some related features of various buildings from the period remained in their respective plans. The planning also had to accommodate the later construction of a physical sciences library on the same block.

By October 1966 there was a clear rift in the committee: Mr. Butts believed that the new union should be a "branch-union" limited to lounge, food and possibly games space, but not a replacement for the Memorial union as a central gathering place for students; faculty and staff. He also wished that the new facility not be a major financial drain on the existing Memorial Union. Chairman Myers, and

secretary Osterheld believed that this concept had been overtaken by events (rising enrollment and campus expansion) and should be replaced by a larger and broader plan for the new union. In December 1966 the regents approved the expansion of the scope of the Union South project desired by Osterheld and Myers. Butts had lost the war and by the time of the January 1967 meeting of the building committee he had resigned. Thus the Union South building committee went on without a nationally recognized authority on the establishment, operation and financing of student unions.[5]

The regents approved the preliminary plans in May 1968 at an estimated cost of $3.46 million, exclusive of land cost. Final plans were approved in December 1968. Bids were first taken in February 1969, but were all rejected. Building contracts were let in March 1969. The general contract went to Nelson and Son of Racine, for $2.08 million. Total contracted cost was $3.63 million. The source of funds was state building corporation loans, to be retired by Memorial Union revolving funds. Construction began in May 1969.[6]

Although budget commitments and the burning of the Breese Terrace cafeteria called for speed, the scheduled completion date of February 1971 was missed due to strikes, and weather delays; though the lowest level, containing the game rooms, opened on February 15. Two food service areas opened in March 1971. The grand opening of the entire building took place on November 10-13, 1971. The use of the building grew slowly, about 10 per cent per year in the 1970s. The use actually conforms fairly closely to the "branch-union" envisioned by Porter Butts ten years before. The building and its intent is very different from the older, well-worn, and familiar Memorial Union, in that it is considerably quieter, less crowded and more given to study and lounging areas. The food areas are serviced by Memorial Union food service.[7]

1) *Wisconsin Alumni Magazine*, June- July, 1971 p. 4; General Factors ... South side Union, Porter Butts, October 14, 1966, series, 24/9/3 box 9.

2) Building Program, February 1966, series 24/9/3 box 6.

3) *Regent's Minutes*, March 4, 1966; Butts to Sites, March 8, 1966, Orr to Maxwell, June 7, 1966, series 24/9/3 box 6. Archives Oral History, Porter Butts.

4) Archives Oral History, Porter Butts; Butts to Fleming, March 11, 1966, Fleming to Butts, March 15, 1966, Atwel to Butts, March 28, 1966, series 24/9/3 box 6. Minutes of Wisconsin South Building Committee, August 1, 1967, these minutes say "Professor Myer and Mr. Sites report that a request had been made to the State Building Commission for this purpose [land purchase]. The Commission turned down this request thus requiring the Union to pay for the land as well as the building.", Butts to Atwell, August 11, 1967, series 24/9/2-1 box 5.

5) Culbertson to Lorenz, May 2, 1966, Meetings #1-#7, Physical Science Library-Wisconsin Union South, May 18, 1966-October 5, 1966, series 24/9/3 box 6; West Side Union Building Committee Minutes, September 27, 1966, October 4, 1966, December 7, 1966, Minutes of West Side Union Building Committee, March 9, 1967, series 24/9/3 box 9; *Regent's Minutes*, December 9, 1966.

6) *Regent's Minutes*, May 17, 1968, December 6, 1968, February 14, 1969, March 14, 1969, exhibit L. *Wisconsin Alumni Magazine*, June - July, 1971 p. 4.

7) *Regent's Minutes*, June 12, 1970; *Daily Cardinal*, December 10, 1971, February 15, 1971, November 10, 1971, August 15, 1968; *Badger Herald*, November 8-10, 1971, January 31- February 3, 1974; *Milwaukee Journal*, February 7, 1971; *Capital Times*, November 12, 1971, February 12, 1976; *Wisconsin State Journal*, February 15, 1972; *Wisconsin Alumni Magazine*, June - July, 1971 p. 4; Sischo to Sorenson, October 30, 1970, Orr to Germanson, January 13, 1971, Murphy to Nelson Inc., February 3, 1971, memorandum on Union South Building delays, Sorenson to Edsall, January 26, 1971, series 24/9/2-1 box 24;

HELEN C. WHITE HALL

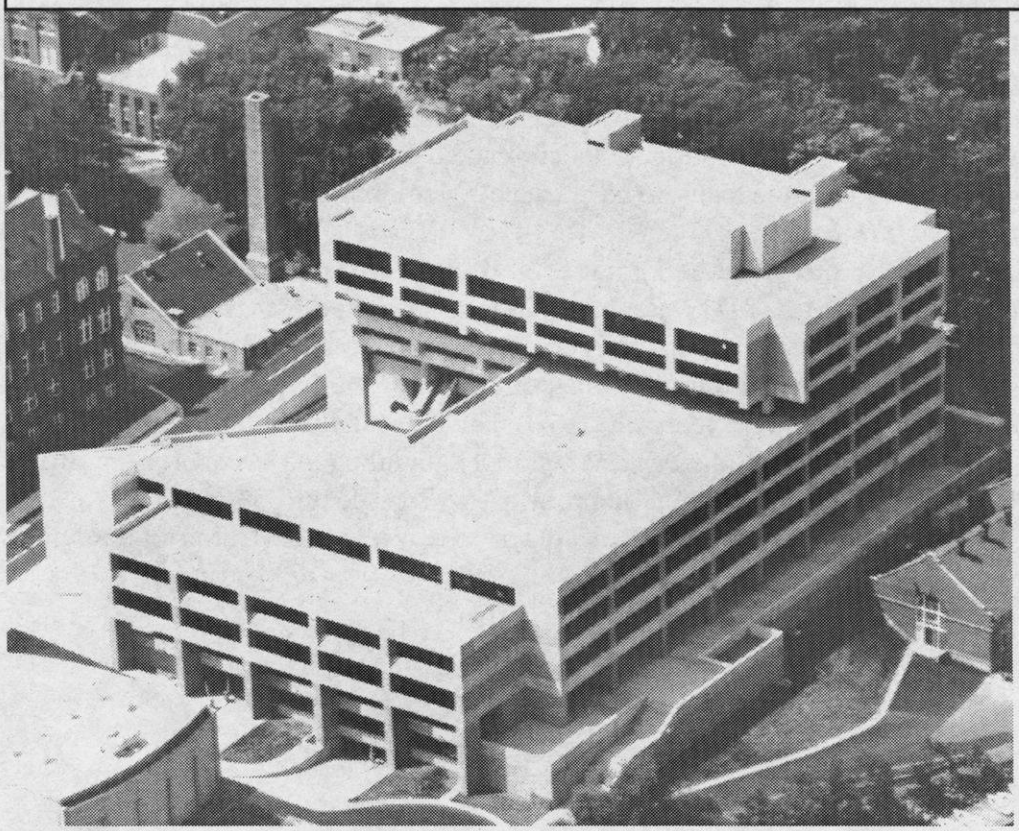


Fig. 1. Helen C. White Hall from the air, 1979. This view is of the lake side of the building. Other visible buildings are Radio Hall, Science Hall, the Union theatre wing, and the hydraulic laboratory. [Series 8/2, ns- 351]

Helen C. White Hall, named for a long time and much loved English professor, was built in 1969 to house the undergraduate library and the departments of English, philosophy, the library school, and other associated programs.

The building of Helen C. White is unusual in the history of the University building program, because the site was selected before an occupant. There were several candidates (communications, undergraduate library, and education) for the space at 600 North Park Street in the early 1960s. The space's occupants, the old chemical engineering building and the journalism building, were on their last legs. Both were built in 1888, poorly maintained and regarded as fire hazards, and in fact a serious fire in 1965 gutted parts of journalism. The regents discussed the 600 North Park project at their April 1964 meeting, with president Harrington referring to the needs of the communication departments in stating that a substantial building with considerable classroom and office space should be provided there.[1]

A June 1965 study refers to investigations into siting the library school, the undergraduate library, the education department and the communication departments. It concludes that because of its proximity to Memorial Library, and the central campus, the North Park Street site should be used for the undergraduate library and the library School. It also recommends that some other departments might be included in the new building. By October these questions were resolved when the regents approved the 600 North Park Street as the site for the undergraduate library building, to include the library

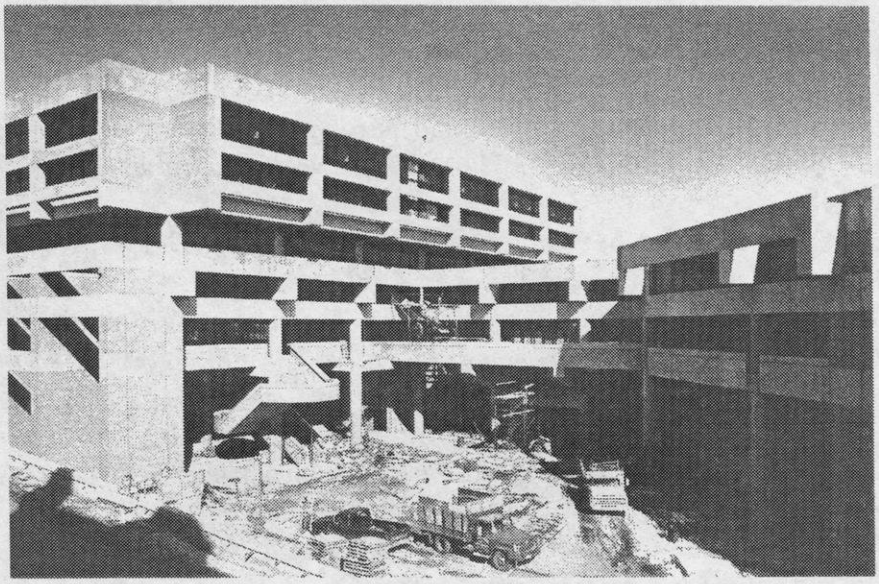


Fig. 2. The undergraduate library building under construction 1970. This view is toward the plaza, the office wing is at the left. [Series 9/1, White Hall, x25-2834]

school, a parking facility, and a high rise tower, including a faculty club. Since several building needs were being combined, the total available money was considerable.[2]

In November 1965 building committees for the several departments were appointed by chancellor Fleming. In December 1965 a building program was completed by the department of planning and construction. This initial plan called for a ten story tower section, large plazas on both the north and south sides, and an elaborate system of pedestrian overpasses from Bascom Hill and Park Street. The overpass would require the demolition of the old heating station (now Radio Hall). In December the state building commission approved a major academic facility at 600 North Park at an estimated cost of $7.56 million. At their December 1965 meeting the regents authorized the preparation of plans for the undergraduate library building, to include the undergraduate library, library science, a parking facility, an office tower, and a pedestrian overpass. A faculty dining club was added to the plan, to be revisited later.[3]

In March 1966 the architect Fitzhugh Scott of Milwaukee was appointed to the project. Late in March the first building conference with the architects and campus representatives (usually Louis Kaplan, Aaron Ihde, Arno Lenz, and Gordon Orr) was held. These meetings were held roughly twice a month through 1966. At this time it was still considered likely that a 2 level faculty club to replace the old and undersized University club would be added to the top of the tower section, although the architect expressed reservation about its advisability. In December the faculty club idea was finally dropped, a victim of ambivalence of the University about serving liquor on campus. At the end of 1966 the project was in good shape, and the schedule had slipped only three months.[4]

Then at the February 6, 1967 meeting, the architect presents the first cost estimates. They were more than $700,000 over the budget. The committee insists that this estimate must be in error. Architect Scott insists that the budget is insufficient. At the next meeting Scott comes armed with the estimate of a professional estimator whose numbers support his own. The University representatives ask for another meeting at which their own experts. That meeting, on March 2, 1967, has more horrors in store for the committee. Not only was Scott's estimate accurate, but to meet budget the plan will have to be gutted of nearly every feature (the lake plaza, stone work, half the parking) that made the design attractive.[5]

The committee at the last March 1967 meeting concluded that "the present plan is unsatisfactory both in cost and quality. The present architect has state that he cannot modify this building to remain within available funds and provide required space." At their April meeting the committee discarded the work of the previous year and started over. They held seven meetings that spring and in June 1967 the architects

presented a new plan that "comes closer to meeting our needs than any other proposal." This new preliminary plan was approved by the regents in September, 1967, with the condition that the state increase their share by $854,674. The final plans were approved by the regents in June 1968. Total estimated cost was $8.34 million. The pedestrian overpass idea had been eliminated, and the schedule called for completion in August 1970. A proposed tunnel from the new building to the Union theatre was funded, then later dropped.[6]

Construction contracts were awarded by the regents on December 6, 1968. The general contract went to Orville. E. Madsen and Sons of Minneapolis, for $4.1 million. Because funding was still uncertain the schedule of costs was not approved until February 1969. The state paid $6 million, federal HEW programs $1.1 million, and a self-amortizing parking loan $600,000. After fairly standard construction delays, including strikes, shortages, and campus upheaval, the building was opened in the summer of 1971.[7]

The building is a 300 by 200 foot structure of reinforced concrete. It's basic 'U' shape, open toward the south, is four stories high, with two levels of parking below the east end, and three extra stories above the west end. The exterior walls are faced with precast concrete panels and face brick. The appearance of the building, in and out, is consistent with the standard set by the humanities building for plainness and lack of ornamentation. In June 1970 the regents named the building for Helen Constance White, who had died in June 1967. White was one of the most honored, renowned and best loved faculty members in the history of the University. She was on the English faculty, from 1936 to 1965 and chairman of English 1955-58, and 1961-65.[8]

The occupants of the building are the undergraduate library, the library school, the departments of English, history of science and philosophy, and the cooperative children's book center. The main function is a very large and convenient study space, which is diffused through the lower three floors of the building. The parking below the building serves the Memorial Union for evening events.

1) *Regent's Minutes*, April 10, 1964.
2) Rough Draft of Statement, June 15, 1965, series 24/9/3 box 6; *Regent's Minutes*, October 24, 1965.
3) Fleming to Ihde, November 2, 1965, Ihde to Fleming, November 9, 1965, Building Program, December 1965, Agency Request for State Building Commission Action, December 14, 1965, series 24/9/3 box 6; *Regent's Minutes*, December 10, 1965.
4) Postweiler to Lorenz, March 8, 1966, Building Committee Conferences #1-20, March 24, 1966-December 16, 1966, series 24/9/3 box 6; Proposed Building Schedule, November 10, 1966, Fleming to Edsall, December 29, 1966, Ihde to Fleming, December 21, 1966, Early to Fleming and Harrington, December 5, 1966, series 24/9/3 box 9; *Regent's Minutes,* December 9, 1966, including exhibit H.
5) Building Committee Conferences #21-#35, January 18, 1967-June 29, 1967, series 24/9/3 box 9.
6) Building Committee Conferences #26-#30, March 2, 1967-April 6, 1967, series 24/9/3 box 9; Motion March 17, 1967, Sites to Yamamoto, April 10, 1967, series 24/9/3 box 9; *Regent's Minutes*, September 15, 1967, June 14, 1968, September 6, 1968. Lorenz to Building Commission, June 27, 1968, series 24/9/2-1 box 8.
7) *Regent's Minutes*, April 19, 1968, December 6, 1968 exhibit F, February 14, 1969.
8) Plans in plans room of physical plant; Archives biographical file, "Helen C. White"; *Regent's Minutes*, June 12, 1970; *Daily Cardinal*, June 25, 1971; *Wisconsin Alumni Magazine*, October 1971 p. 21. *Wisconsin State Journal*, November 14, 1971.

WARF BUILDING

Fig. 1. The WARF building from the north c. 1975. Fourteen stories of concrete and granite, with two triangular floors for WARF at the top. Note how triangular the whole building looks, although only the top two floors are actually triangular in plan. The building will be presented to the University when rents have amortized the costs of erecting the building. [Series 9/3, WARF, jf-91]

Constructed in 1969 by the Wisconsin Alumni Research Foundation, the WARF building houses WARF's offices on the top two floors, and University surge space on the lower 12 floors. The building will be donated to the University by WARF in 2002.

In 1967 the University was renting a million dollars worth of Madison real estate space and needed more. In a letter to Ward Ross, the Managing Director of Wisconsin Alumni Research Foundation (WARF), Vice President Robert Clodius asked if the Trustees could provide appropriate space "so that our grant and contract programs will not suffer." The necessary space was offices, conference rooms and dry labs, and Clodius estimated the ongoing space need as about 60,000 square feet.[1]

The trustees of WARF were already thinking about erecting a new building to house their own offices. Serious negotiations between WARF and the University went on in late 1967 and 1968 to determine the size, cost, location and financing of a "surge space" office building, for use by WARF and the University. In April of 1968, WARF engaged architects J. J. Flad and Associates, to produce a preliminary plan for a fourteen story rectangular building surrounded by a plaza, and a parking ramp for 264 cars. In May 1969 they hired J. H. Findorff as general contractor.[2]

An agreement was presented for approval to the state in May 1968. It outlines the University's rental problem, pointing out that the problem is growing and will be much worse by the time any building can be erected. The agreement proposes that WARF will erect a building (with its own or borrowed funds) of about 140,000 square feet on a three acre plot north of and across from the existing WARF offices (on Walnut Street). WARF will then lease to the University 89 per cent of the building,

part of the parking, and reserve two floors for its own use. Both the University and WARF would pay rent on the property in an amount that would reimburse WARF for maintenance, and amortize the cost of land and building at a rate of 6 per cent for thirty years. At the end of the thirty year amortization period, WARF will present the building as a gift to the University. Legal opinions were sought from the state and city regarding the tax status of the project.[3] The three acre parcel referred to for the site of the building did not actually yet belong to WARF, and the negotiations for the exchange of the property (owned by the University) for other land went on through the summer of 1968. In December 1968 the University regents authorized negotiation to trade the three acre building site for the land and building owned by WARF west of Walnut Street.[4]

A press release on April 1, 1969, announces the plans for the building. The site was the southwest corner of the intersection of Walnut Street and the proposed westward extension of Observatory Drive. The building was to be fourteen stories of triangular shape and 125,000 square feet. It is to have underground parking for 225 cars, with a landscaped plaza above the parking. The schedule now called for construction to start in May 1969 and be finished by fall 1970. The University, accustomed to a burden of state, regent and financial restraints, had reservations about the speed of this schedule, and the wisdom of the $5-$6 million cost (the cost would be reflected directly in the Universities rental expense which had to amortize the buildings cost). In May 1969 the Wisconsin State Journal reported that construction had begun on the WARF building. A formal ceremony was held a few days later. In October WARF informed the University that because of excessive costs, the two level underground parking structure was being deleted from the plans.[6]

Building proceeded without serious delay, and a "topping out" party was held August 5, 1970. In that same month the University was notified that the building would be ready for occupancy by December 1, 1970. The University began planning which programs would move into the new space. In December the University decided that the first occupants would be the Mathematics Research Center, Educational Administration, Planning and Construction, Rural Sociology, Space Management, and medical research and administrative programs. These tenants moved in during January 1971.[7]

The buildings is 'L' shaped, 126 feet on a side and 181 feet high. The triangular appearance of the building is caused mainly by the top two floors, which bridge across the opening of the 'L' to form a triangle, with the hypotenuse facing the view of Lake Mendota to the north. The basement and floors 1-12 are essentially identical spaces, partition for offices and dry labs. The top two floor are occupied by WARF's offices and a large conference room on floor 14, mechanical systems are also housed on the 14th floor. The exterior of the building is sheathed in granite panels and porcelain spandrel panels. In March 1971 WARF made a gift to the regents of the 2 acres surrounding the building so that the University could operate and maintain the parking facilities and grounds at the building site. The building is scheduled to be presented to the University in the year 2001.[8]

1) Edsall to Lemon, August 25, 1967, Clodius to Ward, August 17, 1967, series 40/1/7/1 box 126; Engman to Atwell, January 30, 1967, series 40/1/4/3-1 box 95.

2) Todd to Atwell, February 24, 1967, series 40/1/4/1-3 box 95; Lemon to Clodius, February 1, 1968, New WARF Office Building, September 10, 1968, Memorandum, Lemon to Exo, September 23, 1968, Agreement for Construction, May 14, 1969, series 40/1/7/1 box 126.

3) Proposed New Office Building ... undated, Conrad to Ross, June 20, 1968, series 40/1/15-1 box 12.

4) Sites to Atwell and Lemon, November 18, 1968, series 24/9/2-1 box 11; Lemon to Kellett, July 25, 1968, Kellett to Lemon, July 17, 1968, series 40/1/7/1 box 126; *Regent's Minutes*, December 6, 1968.

6) Draft of New Release, April 1, 1969, Exo to Lemon, April 10, 1969, Ross to Lemon, October 31, 1969, series 40/1/7/1 box 126; *Wisconsin State Journal*, May 28, 1969; Harrington to Frautschi, June 3, 1969, series 40/1/4/1-3 box 96.

7) Hastings to Harrington, July 29, 1970, series 24/9/2-1 box 24; Rosten to Sites, August 3, 1970, series 40/1/7/1 box 126; *Capital Times*, December 29, 1970.

8) Certification, June 16, 1971, series 40/1/13/1 box 30; plans in the plans room of the University physical plant.

VILAS HALL

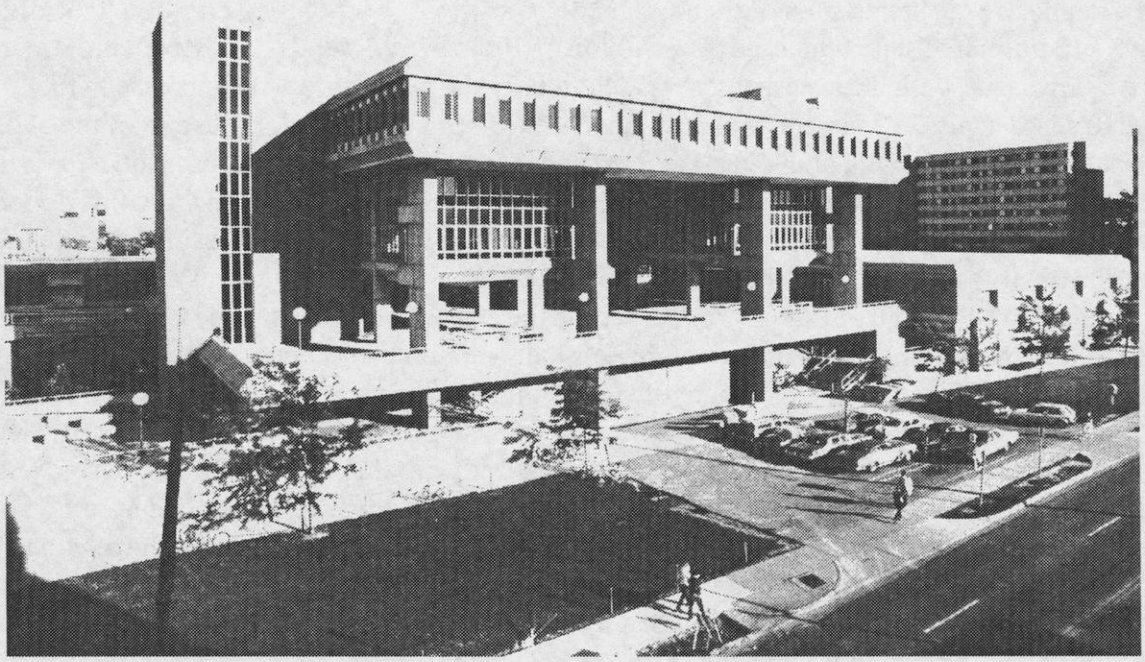


Fig. 1. Vilas Hall, taken from Chadbourne Hall, 1975. [Series 9/2, Vilas, jf-92]

Vilas Communication Hall was built in 1969 to house speech, journalism, theatre-drama and WHA radio and television. It is named for the family of William Freeman Vilas, whose estate provided last-minute fund to advance the project. It was not formally completed until 1974.

At the regents meeting on April 4, 1964, the regents discussed the advantages of building the communication arts building at 600 North Park Street. They included on site parking, and the construction of single story auditoriums into the steep grade. Apparently the site had long been assumed to "belong" to the communication arts building. An informal building committee worked on the design for such a building as early as 1957. The facilities for journalism (the Wisconsin High School), drama (the Memorial Union), and broadcast (Radio Hall), were long since obsolete and inadequate.[1]

By summer of 1965 the University had decided that the undergraduate library should be built at 600 North Park, and that another site should be chosen for the communication arts project. Among the sites examined were the corners of Lake and Langdon Streets, Lake Street and University Avenue. In September 1965 the regents voted that the 800 block of University Avenue be approved as the site for the Communication Arts Building, to include Journalism, Radio-Television, and speech. This site had the advantages of being close to the new Elvehjem Arts Center, and the ability to provide space for the

new Humanities complex. Additionally it was served by existing public parking, and would serve as a semipublic site for theatre productions put on for city residents. The budget for the project was estimated to be $7.5 million. By December 1965 the estimate had risen to $8.3 million.[2]

The building program as prepared by the University in January 1966, heavily emphasized the pedestrian traffic aspects of the plan, calling for pedestrian overpasses on Park, University Avenue and Johnson Street. In March 1966 the state approved the site, and allotted $130,000 for plans, and appointed architectural firm J. J. Flad to the project.[3]

In December 1966 the regents voted to approve the concept of the Communication Arts Building, and to authorize the preparation of preliminary plans with a budget of $9.62 million to be divided between $7.12 million of state funds and $2.5 million of gift and grant funds. The financing was already a thorny issue, with the state suggesting deletions to the building, and an increase in the University's share. Only the University pedestrian overpass remained as a definite part of the pedestrian traffic plan. Planning with architects J. J. Flad and Associates began in March 1966 and went on through 1967. The regent's approved preliminary plans in September 1967. Throughout this period, the University's relationship with the state in the person of its State Building Commission was at a low ebb. The University's architect told chancellor Fleming that: "I believe that there is a deliberate attempt by the [State] Bureau of Engineering to scuttle the project." On several occasions, actions by the state require that the University and it's architects halt work on the project. Most of this problem appears to have been related to the financing of the building. [4]

In February 1968, faced with estimates well over the approved budgets, the planners deleted the proscenium theatre from the plans, allowing the budget to be reduced by $1 million. The regents approved this action at their February 1968 meeting. The state building commission in March 1968 approved the preliminary plans, with a budget of $9.625 million. In November 1968 the regents approved the final plans. The regents were told that the land in the 800 block of University Avenue had not been acquired by the University, and that it was part of the Urban Renewal Project. This land status caused delays during 1969, since the Madison Redevelopment Authority did not produce clear title to the land as promised until June 1969.[5]

In August 1969 the regents voted to approve the funding for the project at a total of $9.42 million, with 8.82 million in state funds and $600,000 in grants. But two months later, the regents were informed by president Harrington that bids had again come in over budget, and that redesign would allow building costs to escalate, the delay would cause the loss of federal funds, and that because of the very high priority given to the Communication Arts Building, he recommended that the offer of the William F. Vilas Trust Estate to donate the sum of $1.2 million toward the project be accepted. The regents agreed and the Vilas gift was accepted. Part of this agreement was that the Vilas name would be associated with the building.[6]

With the funding finally settled by the Vilas gift, the regents awarded construction contracts on October 22, 1969. The general contract went to Orville. E. Madsen and Son of Minneapolis, for $5.55 million. Total costs were $10.73 million, with the funds coming from the state ($9.1 million); federal grants ($500,000), the Vilas Trust ($1.2 million). Groundbreaking took place in October 1969.[7]

In 1970, the regents voted that the Communication Arts Building be named "Vilas Communication Hall". Professor Karver Puestow indicated that he had led a campaign to name the building for former president Glenn Frank, and that this name had the support of then president E. B. Fred, but that the shortage of funds required the grant from the Vilas estate which came with the stipulation of the Vilas name.[8]

On August 19, 1971, the Vilas Communications Hall was "topped out", a traditional ceremony when a tall building reaches its highest point. At that time occupancy was scheduled for February 1972. After two years of construction, the first occupants (the Daily Cardinal and the Compass The-

atre) began to move into the building in early August 1972. The entire communications arts department, the school of journalism, and WHA radio and television moved into the new building by the fall of 1972. A partial dedication was held on May 12, 1973. The first theatrical production was on October 11,1972 and featured the University Players presentation of "A Midsummer Night's Dream" in the experimental theatre. The formal dedication of the completed building was held September 20, 1974, with Edwin Newman (class of 1940) as guest speaker.[9]

The building fills the west half of the block bounded by University Avenue and Dayton Streets, from Park Street to Murray Street. Murray Street was closed between University and Dayton to provide parking for the building. It is a seven level central core (with one level below ground), surrounded by theatre and studio wings. The central core contains offices, conference rooms, labs, storage and loading docks. A fourth floor pedestrian area connects by overpass to the Humanities building on the north side of University Avenue. Student publications are housed in the northwest wing of the building. The three story south wing contains television studios on floors one and two, and classrooms on the third floor. The northeast wing contains the Mitchell theatre and the experimental theatre. The proscenium theatre, deleted from the original plans was to have been built in the southeast corner, and may still be built there at some future date. The entire building is 152 feet square and is sheathed in face brick and precast concrete trim. A mural by art professor James Watrous entitled "Freedom of Communication" adorns the North wall of the building.

1) *Regent's Minutes*, April, 4, 1964;
2) *Regent's Minutes*, September 24, 1965, December 10, 1965.
3) *Regent's Minutes*, March 4, 1966, exhibit B; Building Program Communication Arts, January 5, 1966, Vilas Hall Archives subject file; Agency Request for State Building Commission Action, December 14, 1965, Postweiler to Lorenz, March 11, 1966, series 24/9/3 box 5.
4) Regent's Minutes, December 9, 1966 and exhibit E, September 15, 1967; Sites to Fleming, April 17, 1967, series 24/9/3 box 8; Sites also says: "The Bureau of Engineering has done some very questionable things that must be explained or exposed."
5) *Regent's Minutes*, February 16, 1968, March 15, 1968. Vilas Hall dedicatory program, Archives Vilas Hall subject file.
6) *Regent's Minutes*, August 22, 1969, October 17, 1969 and Exhibit B; Haberman to Uhl, May 22, 1970, series 24/9/2-1 box 13 Building Committee chairman Haberman refers to naming the building Vilas Communications Building by saying "It seems highly desirable that we memorialize the Vilas name in this instance because the funds we received from the Vilas estate literally 'saved' our building".
7) *Regent's Minutes*, October 22, 1969, exhibit I.
8) *Regent's Minutes*, On June 12, 1970; Undated unsigned note in the Archives' Vilas Hall subject file. Proscenium Theatre Program Statement, Archives' Vilas Hall subject file.
9) *Wisconsin Alumni Magazine*, November 1971 p. 12, November 1974, p. 18; *Wisconsin State Journal*, August 2, 1972, October 12, 1972, May 12, 1973; Vilas Communication Hall dedicatory program, September 20, 1974, Archives' Vilas Hall subject file.

ANIMAL SCIENCE

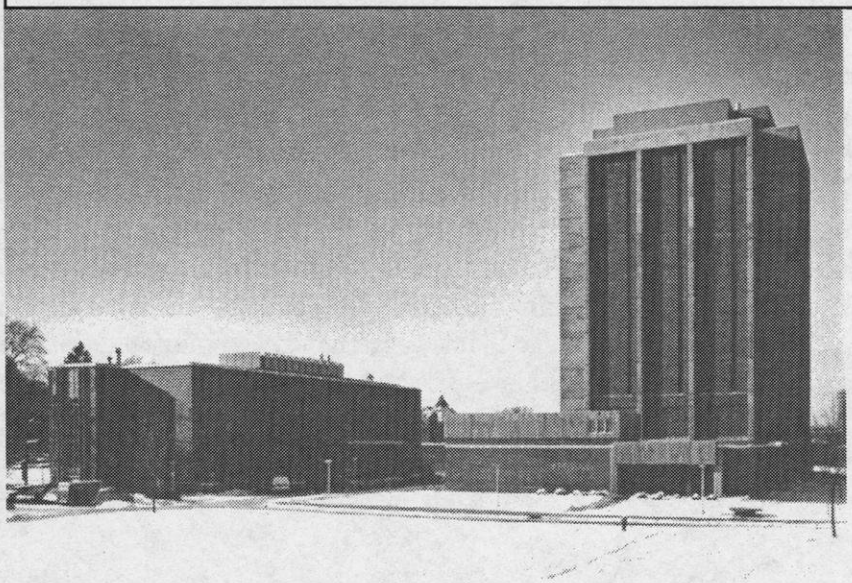


Fig. 1. The animal science building at the right, veterinary science at the left, 1975. The electron microscope is housed in the low section in the foreground. [series 9/3, Animal Science, jf-93]

Erected in 1970 to replace undersized and outmoded research space of the College of Agriculture and Life Sciences, the Animal Science Building was financed by the state with taxes on the newly legalized oleomargarine.

Planning for an animal science research facility began as early as 1961, when Assistant Agricultural director R. J. Muckenhirn asked the University for $2000 in planning money for a future animal science building. At this early date the idea was fixed to combine the research programs of animal husbandry, poultry husbandry, dairy husbandry, and some veterinary science facilities, in a single building. This idea was dropped at that time due to lack of funding.[1]

The 1967 legislature passed Assembly Bill 359 which repealed the ban on the sale of colored oleomargarine, instituted a 5.25 cent per pound tax on oleomargarine, and appropriated from the general fund the sum of $5 million for the construction of an animal sciences building. This legislation was the end product of a long struggle to repeal Wisconsin's 1895 ban on the sale of colored oleomargarine. This fight had been led by state legislators Norbert Nuttleman, and William KasaKaitas, with the support of dean of Agriculture Glen Pound.[2]

In May 1968, the regents were formally notified that the state had passed a $5 million appropriation for an animal science building to be funded from a new state tax on oleomargarine. The regents voted to approve a site adjacent to and north of the veterinary science building. It was explained that the building would house the departments of Dairy Science, Meat and Animal Science, Poultry Science, teaching space for Veterinary Science, and teaching space for the new Biology Core Curriculum. In March 1969, the budget for Animal Science was increased by $275,000 in gift funds to provide for a one million volt electron microscope.[3]

The facilities intended for the Biology Core Curriculum were deleted from the concept by the regents in July 1969, due to escalating building costs. The regents were told that the new animal science building would not provide research space for veterinary science, but that the building pro-

vided an additional argument for locating the future Veterinary School on the Madison campus. The $275,000 for the electron microscope would come from a grant from the National Institute of Health (NIH). The facility for the microscope had to be provided by the recipient institution. Originally the grant required these facilities to be ready by the end of 1971. The disruption of the building schedule required to meet this deadline led the University to have the grant deadline extended. Another difficulty with the microscope award arose when Dr. Robert Bock of the graduate school asked the University to request matching funds from the state for housing the microscope, when the previous requests to the state had expressly stated that part of the facility would be funded entirely from gift and grant funds.[4]

The revised preliminary plans for animal science were approved by the regents in January 1970. It would be a ten story building of concrete and brick with an underground connection to the nearby veterinary science building. Considerable discussion followed regarding the microscope grant. Vice president Clodius explained that the NIH was paying for the equipment and for the operating costs into the indefinite future. It was stated that this would be one of only two or three such microscopes in the country, and that it would be made available to all departments of the University. The final plans were approved by the regents without significant change in June 1970.[5]

Construction contracts were let on in August 1970. The general contractor was Vogel Brothers of Madison for $2.1 million. The total costs were $5.075 million, with funds coming from the state ($4.8 million), and gift and grant funds ($265,000).[6]

Ground-breaking took place on August 24, 1970, the day of the Sterling Hall bombing, an ironic juxtaposition not lost on the day's speakers. No unusual difficulties were encountered in construction and the formal dedication of the building took place on November 3, 1972.[7]

The building is a 248 foot by 178 foot two story base, and a nine story tower section rising to 213 feet. The exterior is sheathed with face brick and exposed concrete. The ground floor houses animal rooms, mechanical systems, the tunnel to veterinary science, offices, and the 25 by 45 foot electron microscope room (which has a special anti-vibration foundation). The 90 by 90 foot tower contains labs and offices.[8]

The animal science building was dedicated on November 3, 1972, with 300 visitors hearing an address by Glenn Pound, the dean of the college of Agriculture in the stock pavilion. Pound especially praised state representative Norbert Nuttleman, and farm bureau director William KasaKaitas for shepherding the legislation that made the building possible.[9]

1) Muckenhern to Peterson, November 22, 1961, Animal Science Building Preliminary Outline Specification, series 24/9/2 box 13.

2) *Laws of Wisconsin*, 1967, chapter 359; The Animal Science Building, Glenn Pound, October 1979, Pound to Boche, October 11, 1968, series 90/80 box 14.

3) *Regent's Minutes*, May 17, 1968, March 14, 1969.

4) *Regent's Minutes*, July 25, 1969; Bock to Clodius, December 19, 1969, Lemon to Bock, December 23, 1969, Sites to Bock, November 11, 1969, Bock to Bray and Sites, November 4, 1969, Bock to Young, November 4, 1969, series 24/9/2-1 box 12. *Wisconsin Alumni Magazine*, November 1972, p. 21.

5) *Regent's Minutes*, January 16, 1970, June 12, 1970; Animal Science Building ... Building Program and Space Needs, January 5, 1970, series 24/9/2-1 box 12.

6) *Regent's Minutes*, August 5, 1970 schedule III.

7) Groundbreaking: Memo to Glenn Pound, August 19, 1970, series 90/80 box 14; *Wisconsin State Journal*, August 26, 1970; *Capital Times*, August 25, 1970; *Milwaukee Journal*, August 25, 1970; Dedication: Animal Sciences Dedication Pamphlet, November 3, 1972, series 80/90 box 14.

8) Animal Sciences Dedication Pamphlet, November 3, 1972, series 80/90 box 14; Plans in the physical plant plans room. *Regent's Minutes*, February 11, 1972.

9) *Wisconsin State Journal*, October 14, 1972, November 4, 1972; Comments by KasaKaitas, November 3, 1972, The Animal Science Building, Glenn Pound, October 1979, series 80/90 box 14.

NOLAND ZOOLOGY

Fig. 1. Noland Zoology, 1994. [Author Photo, AP-50]

Noland Zoology was built in 1969 to house the offices and teaching spaces for the zoology department. It is connected to the adjacent zoology research building. The building is named for Lowell Evan Noland, long-time zoology professor and researcher.

Zoology was the first department to solve its space problems by using federal science funding to split the research programs off into their own building. Thus it was natural that they would be among the last to get their own classroom building. Even after the researchers had left Birge Hall for the new Zoology Research Building in 1964, Birge remained a very crowded place.

As early as 1965 the construction of a zoology classroom building was discussed, as the regents in December 1965 approved several future building sites including one for zoology, as the location east of the zoology research building for the "proposed Letters and Science-zoology building". This approval of sites was part of the discussion of an elaborate pedestrian walkway system proposed for the campus area south of University Avenue. The new zoology building project probably suffered more at the hands of this pedestrian plan (later discarded) than any other project. The regents authorized the preparation of preliminary plans for the zoology building in February 1966. These plans were to include pedestrian overpasses West Johnson and North Mills Streets. Later that month the state authorized a budget for the Letters and Science Zoology Building of $3.2 million in February 1966. Land purchase at the site began in June 1966.[1]

The preparation of plans began in February, 1966. In November 1966 the University informed

the state that preliminary planning had shown the site to be inadequate for the size of building needed, and asked permission to transfer 8000 square feet of classroom space to the Educational Science Building then being planned for the site across Mills Street. The revised budget request was for $3.19 million of which $2.5 million would be state funds.[2]

The preliminary plans were approved by the regents in March 1967. The estimated project cost was $3.19 million, including the overpasses. It was explained to the regents that a third stage of zoology, consisting of a high-rise section could later be added to the site. In October 1968 the budget was revised upwards to $3.44 million.[3]

In April 1967 the state halted all work on the zoology building pending an investigation of the plans for the pedestrian walkway system. Not until March 1968 was this study finished, and the whole overpass scheme was rejected. Because the zoology building had been designed with the walkways in mind a redesign was needed. This meant that the project had to again go through the formal procedures of examination and approval by the state and the regents. Some space was lost, but an attempt was made to recover the space by partially excavating the basement. In November 1969 the regents approved the revised preliminary plans. These plans showed a five story building with an appearance that would match the existing zoology research building, and be connected to it by tunnel. In May 1970 the architect, John Sommerville of Green Bay, estimated a completion date of March 1972.[4]

The regents approved the final plans and authorized bids for the zoology building in June 1970. During August maneuvering between the state and the University resulted in the inclusion of the unfinished basement in the project specifications. The construction contracts were let on August 26, 1970. The general contractor was Gilbert Construction of Verona for $1.48 million. Total contracted costs were $3.44 million. The state provided $2.9 million, and federal HEW grant provided the remainder. Ground-breaking took place immediately. The project was now more than two years late. The building was accepted as completed on August 22, 1972.[5]

The building is 115 by 134 feet, five stories and a basement sheathed with face brick. A tunnel connects the building to the zoology research building to the west. Most of the building is filled with large laboratories offices and classrooms. A zoological museum (open to the public) is reached from the Charter Street entrance on the street level.

The zoology building was named in May 1972 for professor Lowell Evan Noland, who came to the University in 1920 as a graduate assistant, was promoted to instructor in 1921, to professor in 1935, to department chairman in 1945, and retired in 1966. Professor Noland died at 75 in January 1972. No one was as enthusiastic about teaching zoology as Noland. Professor Noland especially loved to teach the introductory classes in biology and invertebrate zoology. When he began teaching his own course in 1949 he audited other sophomore courses in the department and got to know his students as a student.[6]

1) *Regent's Minutes*, December 10, 1965, June 10, 1966; Chronology of Events: L&S Zoology Building, undated, series 24/9/2-1 box 18.

2) *Regent's Minutes*, February 4, 1966, December 9, 1966, and exhibit C.

3) *Regent's Minutes*, March 10, 1967;

4) Burns to Kearl, July 31, 1968, Sites to Atwell, August 9, 1968, series 24/9/2-1 box 11; Chronology of Events: L&S Zoology Building, undated, Calculation of Area and Time and Budget, November 7, 1969, series 24/9/2-1 box 18; Campus planning committee, minutes November 11, 1969, Campus Request for Regent's Action, November 14, 1969, series 40/1/7/1 box 126; *Regent's Minutes*, January 10, 1969, November 14, 1969.

5) *Regent's Minutes*, June 12, 1970, August 26, 1970 schedule I, January 15, 1971, exhibit G; Marten to Hipp, August 25, 1970, Sites to Holmes, January 28, 1970, Exo to Lemon, August 20, 1970, series 40/1/7/1 box 126. Calculation of Area and Time and Budget, May 14, 1970, series 24/9/2-1 box 24; Final Inspection, August 30, 1972, series 83/35 box 4.

6) Faculty Document 96, April 10, 1972, Archives Lowell Evand Noland biographical file, *Regent's Minutes*, May 5, 1972.

TEACHER EDUCATION

Fig. 1. Teacher Education 1994. [Author Photo, AP-51]

Teacher Education was erected in 1969 as part of the School of Education complex, and houses classrooms, offices, labs and study spaces, and the Instructional Materials Center.

Planning to replace the School of Education's Bascom Hill facilities began in 1965 with the School of Education Development Committee. This committee initially assumed that the new facility would replace the old Education building on Bascom Hill. Within a few months, however, the building committee realized that no building on that site could ever be suitable. The School of Education was growing as fast any school in the University and especially fast at the graduate level. By early 1969 a site in the block bounded by Johnson, Park Dayton and Mills Streets, was chosen to house the School of Education. The purchase of the land at this site was not included in the original budget requests, and the $200,000 for the land was at first removed from the construction budget. The deletions required for this cut were later restored when the state increased the appropriation to cover the land costs.[1]

The building committee split the planned facilities into three pieces, Education Science phases I and II, and a Teacher's Education facility. They assumed that Education Science phase I would be built first. When this approach began to look unlikely (because of design and funding delays) it was

decided to proceed with the teacher's education phase. In January 1969, a separate building committee for the Teacher's Education building was selected by associate dean Robert Petzold, chaired by professor Thied.[2]

In February 1969 the state appointed architects Eugene Wasserman and Associates to the project. By October 1969 the architects had prepared a budget of $4.1 million for the Teacher's Education building. On July 2, 1970, the state retained the architectural firm of Burroughs and Van Lanen, to replace Wasserman who had died suddenly.[3]

In July 1970 the regents approved the concept, and the preliminary plans for the Teacher's Education building, at a budget of $4.01 million. The regents were told that bids would be taken about May 1971, and that prices were escalating so fast that any more delay would jeopardize the budget. The hoped for federal funds for teacher's education were acknowledged to be unattainable.[4]

In February 1971 demolition began at the North Mills Street site to remove an entire block of houses for the Teacher's Education building. By this time funding had come through and construction had begun on the adjoining site for the Educational Science buildings. Construction contracts were awarded on June 18, 1971. The general contract went to Anthony Grignano of Madison for $1.6 million. Total contracted costs were $3.61 million, substantially under the $4.01 million budget. Funding came entirely from state bonds. The contractors got the go-ahead on July 23, 1971. Construction proceeded on schedule through late 1972. The building was accepted by the University on November 20, 1972. The building was formally dedicated, with the rest of the educational science complex on April 3, 1973.[5]

The building is 155 feet square and five levels high. It occupies the southwest part of the block bounded by Mills, Dayton, Charter Streets and Clymer Place. The principal space in the center of the building is the Instructional Materials Center (the library for the school of education) on the third floor, with stack space on the fourth. Levels two holds the offices, labs, and work areas. The exterior is sheathed in exposed concrete and face brick.

1) Teacher Education Building A Summation of Building Program and Space Needs, June 23, 1970, series 24/9/2-1 box 23; Meeting #3, Project 6602-11, January 17, 1969, series 24/9/2-1 box 7; Edsall to Atwell, October 28, 1969, Atwell to Lemon, November 26, 1969, series 24/9/2-1 box 17.

2) Sites to Atwell, January 22, 1969, Petzold to Young, January 2, 1969, series 24/9/2-1 box 17.

3) May to Burroughs & Van Lanen, July 2, 1970, series 24/9/2-1 box 23; Project Budget, October 29, 1969, series 24/9/2-1 box 17.

4) *Regent's Minutes*, July 10, 1970.

5) *Regent's Minutes*, February 12, 1971, June 18, 1971; Progress of Projects Under Construction, January 12, 1973, Sorenson to Rice, November 29, 1972, series 83/35 box 6; *Wisconsin State Journal*, April 9, 1973.

EDUCATIONAL SCIENCE

Fig. 1. Educational Science, 1994. [Author Photo, AP-52]

Education Science replaced scattered and aging facilities for the School of Education. It was built in 1970 and opened in 1972. It was the last high-rise building on the Madison campus.

The School of Education was the last of the traditional University subjects to make its way off the confines of the old Bascom Hill site. The sciences had gotten new facilities during the great federal grant period of the 1960s. Languages moved to Van Hise Hall in 1967; music, art and history to Humanities in 1969; English and philosophy to Helen White Hall in 1970. Education had a chance at inclusion at both the latter sites, but was dropped in favor of more needy departments.

Education had inherited its building in the 1930s when engineering left Bascom Hill for the west campus. But by 1963 the school of Education had become one of the fasted growing disciplines in the University, especially at the graduate level. In 1963 a School of Education Development Committee began meeting to discuss plans for a new facility. It became quickly clear that the Bascom Hill site could not possibly be large enough for the needed facility. Several off-Hill sites were evaluated, including the corners of Lake and Langdon Streets, and the Lake Street and University Avenue corner. These locations were rejected primarily because of their high land cost. The regents authorized the preparation of preliminary plans in February 1966. By June 1966, land purchases began in the block bounded by Johnson, Dayton, Mills and Brooks Streets for the site of Education buildings. This area was on the fringes of the core area targeted for urban renewal, and was densely populated by homes and student rooming houses.[1]

Late in 1966 the Educational Science building was divided into two parts. The whole structure was to have been funded by a combination of state funds and federal grants. But when the federal funds were delayed it was decided that because of extreme need, the non-research section of the project would be built with only state money, and the research section would be added when the grant money became available. The regents and the state approved this scheme in December of 1966. The total estimated cost for both phases was $5.2 million. Planning, preparation of plans, and land purchase proceeded during 1967, but in May 1967, the state halted work on the project pending completion of studies for an ambitious plan for pedestrian walkways and a light rail system to link all buildings on the south campus. Since all new buildings were being designed with this pedestrian system in mind, its status had to be resolved before new buildings could be approved. The state eventually decided against the pedestrian system in May 1968.[2]

Because of cost escalations during the delay, the University asked the state to increase the budget for Educational Science from $5.5 million to $6.1 million. In November 1968 the regents granted authority to prepare preliminary plans for Educational Science phase I at an estimated cost of $6.1 million. Of this budget, $3.3 million was of state funds.[3]

In January 1969 came word that the state building commission had arbitrarily cut the budget by $313,000. The University began to make plans to reduce the project to make up this deficit. In July the University received notification that the federal department of Health Education and Welfare had approved a grant of $4.2 million for Educational Science. This considerably reduced the budget pressure on the project. The regents approved revised concept plans (without the walkway system) in July 1969. The new budget was for $6.45 million, and estimated completion was for May 1972.[4]

The preliminary plans for Educational Science were approved in October 1969. They showed a fourteen story tower, with a two story base, that covered almost half the block. During late 1969 the new budget made its way successfully through the increasingly hostile state building commission. The regents approved the final plans in April 1970.[5]

Construction contracts were let on July 23, 1970, with the general contract going to Orville. E. Madsen and Son of Minneapolis for $3.4 million. Total contracted cost was $6.3 million. The funds came from the state ($3.27 million) and the federal government ($3.1 million). Construction began in late July 1970. The project was enclosed for temporary heating by December 15, 1970. An elevator strike delayed progress slightly during the summer of 1972. The formal dedication of the new Educational Science Building took place on April 8, 1973.[6]

The building is 332 feet across the Johnson Street face. The west section is three stories high, 156 feet deep (north to south) with the first floor below grade. It contains lecture rooms, classrooms, offices, and observation rooms. The eastern section is a thirteen story tower containing offices, conference rooms, labs, and computer rooms. The two sections are joined by a plaza at street level. The tower rises 181 feet above the street.

As it turned out, the last of the schools to leave Bascom Hill had become the last recipient of an academic high-rise on the Madison campus.

1) *Regent's Minutes*, February 4, 1966, June 10, 1966.
2) *Regent's Minutes*, November 30, 1966, exhibit D, December 9, 1966, May 8, 1967.
3) *Regent's Minutes*, November 1, 1968; Lorenz to State Building Commission, October 25, 1968, series 24/9/2-1 box 7.
4) Sites to Atwell, January 9, 1969, series 24/9/2-1 box 7; Holt to Young, July 8, 1969, series 24/9/2-1 box 13; *Regent's Minutes*, July 25, 1969.
5) *Regent's Minutes*, October 17, 1969, April 10, 1970; Lorenz to State Building Commission, October 25, 1968, Atwell to Clodius, January 28, 1970, series 24/9/2-1 box 13.
6) *Regent's Minutes*, August 14, 1970, schedule I; Dietrich to Dorman, August 18, 1970, series 24/9/2-1 box 19; Progress of Projects Under Construction, July 14, 1972, series 83/35 box 4; *Wisconsin State Journal*, April 9, 1973.

WAISMAN CENTER

Fig. 1. The Waisman Center, 1995. The school section is at the right. [Author Photo, AP-53]

The Waisman Center on Mental Retardation was built with federal funding in 1971. The selection of Madison for the Center was mainly through the efforts of Dr. Richard Heber, its first director. The Center is named for Dr. Harry A. Waisman, scientist and humanitarian in the field of mental retardation.

The idea for a major center for study of mental retardation at the University grew out of the studies of Dr. Harry A. Waisman, who joined the UW department of pediatrics in 1954 and serving as director of the Joseph Kennedy Memorial Laboratory for ten years. In 1964 a panel appointed by U. S. president John F. Kennedy, chaired by Dr. Richard Heber of the UW recommended that such a center be built. Waisman and Heber began to plan the center to be located at the University of Wisconsin. In 1964 informal planning began for the facility.[1]

The first University official notice of the project came in 1965. Mr. Wallace Lemon and Dr. Heber presented the proposal for a mental retardation center at the November regents meeting. They said that a grant was being sought from the National Institutes of Health (NIH) to help with the costs of planning, construction and overhead. In fact, considerable progress had already been made on the project, led by Lemon and Heber. Planning grants had already been received from the federal government, and from the Joseph P. Kennedy Foundation. The key administrators had been chosen (Heber as director, Waisman as Associate director, and coordinators from the various departments involved).[2]

The federal government was prepared to fund twelve clinical research facilities to study the causes and treatments of mental retardation. The institutions chosen would have to match federal funds

for 25 per cent of construction costs. By March 1966 the University was notified that their proposal had been accepted and that the federal money would amount to $4.6 million, and that the University would need to put up $1.5 million, of which $1.2 million was hoped to be granted by the Kennedy Foundation. NIH officials made a project site visit in June 1966.[3]

In March 1967, the regents asked the state building commission to approve the proposed project at an estimated cost of $6.99 million to be funded by grants from the NIH, the U. S. Public Health Service, and state funds. The location north of the Veteran's Hospital and south of Marsh Lane was recommended; this was the far western part of the proposed medical center site. It was explained that the facility would be multi-disciplinary in nature, involving the medical school, the school of Education, and the College of Letters and Science, and be operated under the direction of the graduate school. Chancellor Fleming commended the work of Dr. Heber in setting up the project.[4]

During 1968, planning for the structure and its funding progressed. Representative Melvin Laird was instrumental in securing additional federal funding. In December 1969 the regents approved the preliminary plans for the mental retardation center which showed a one story school section adjacent to a tower section to house diagnostic and research facilities. Estimated cost was $7 million. It was explained to the regents that this was not a hospital or treatment facility, and would have no overnight patients.[5]

The regents approved the final plans for the project on August 14, 1970. The departments involved with the project were: School of Education, the Medical School, the School of Nursing, Zoology, Psychology, Social Work, and the graduate school. During this time the building was reduced in size by about eight per cent in order to stay within the budget. It was hoped that the building could be occupied by late 1972.[6]

Bids were opened in January 1971, and construction contracts were awarded by the regents on February 4, 1971, with the general contract going to J. H. Findorff and Son for $3.03 million. Total contracted cost was $7.2 million. Of the total, $2.2 million was in state funds, with the rest coming from federal grants, and some gift funds. Ground-breaking was held on March 5, 1971. Construction was "substantially complete" by February 15, 1973, and on February 16, 1973 the building was turned over to the university for use. By June 1973 the first classes were held in the building. The formal dedication and open house was held on October 7, 1973. The building is named for Harry Waisman, University scientist and humanitarian in the field of mental retardation. Dr. Waisman died in 1971, before the building was built or named.[7]

The building is in two sections, a 184 by 171 foot single story school section, connected to the eight story 135 by 123 foot research tower section. The tower section holds offices, labs, conference rooms, and a library. The school section contains classrooms, activity rooms, and a 268 seat auditorium. The entire complex is sheathed with face brick and concrete. There are now (1994) preliminary plans to add another tower section to the Waisman Center for more research space.

1) Chronology of Events: Mental Retardation Center, undated, series 24/9/2-1 box 21; Application for Construction Grant, May 26, 1965, series 40/1/7/1 box 48; Capital Times October 27, 1961;
2) Regent's Minutes, November 12, 1965; Wisconsin State Journal, November 14, 1965; Daily Cardinal, July 2, 1965; Guthrie to Heber, June 23, 1965, Memorandum, Holt to Madsen, July 26, 1965, Clodius to Jossem, November 22, 1965, series 40/1/2-1 box 14.
3) Heber to Fleming, April 28, 1966, Clodius to Fowler, May 24, 1966, series 40/1/2-1 box 14.
4) Regent's Minutes, March 10. 1967; Wisconsin State Journal, January 26, 1967.
5) Regent's Minutes, July 25, 1969, December 12, 1969; Wisconsin State Journal, June 20, 1968.
6) Regent's Minutes, April 10, 1970, August 14, 1970; Building Program and Analysis, July 27, 1970, series 24/9/2-1 box 21.
7) Bid Tab, February 2, 1971, series 24/9/2-1 box 21; regent's Minutes, February 2, 1971 Exhibit L; Heber to Edsall March 1, 1971, series 24/9/2-1 box 21; Progress Reports, June 8, 1973, series 83/35 box 4; Capital Times, June 23, 1973, October 6, 1973; Wisconsin State Journal, October 8, 1973; Archives H. A. Waisman biographical file.

WEEKS HALL

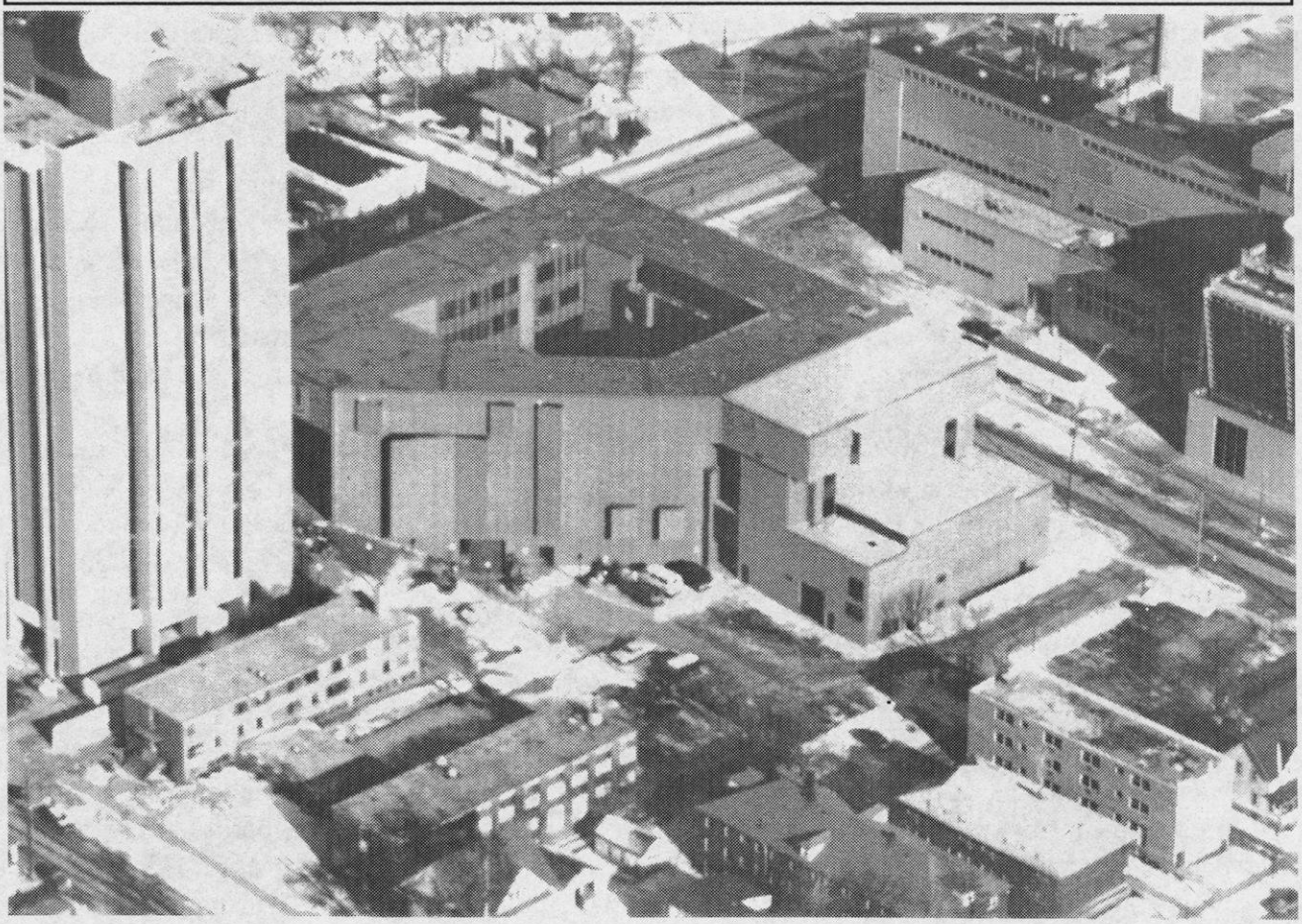


Fig. 1. Weeks Hall, April 1981. Meteorology is on the left of the picture, the Charter Street Heating Plant in the upper right, Rust and Bowman houses in the lower foreground. The light colored 'L' shaped section of Weeks Hall on the right end of the building is the phase II addition. [photo courtesy of Robert H. Dott, department of geology]

Weeks Hall for Geology and Geophysics was built in two stages in 1972 and 1979, with multimillion dollar gifts from alumnus Lewis Weeks and state matching funds.

Geology was the last of the major science departments to obtain a facility of its own. This was not for want of trying. As one of the original occupants of Science Hall, geology began a serious attempt to leave it in 1966. The problem with that building was the same thing that has saved it, namely that so many walls are load-bearing that the interior cannot easily be remodelled into the large open areas needed by modern science facilities. Besides the inadequate space in Science Hall, the department had expanded into several equally poor rental locations along University Avenue, and taken over the Brittingham mansion on the far west side of Madison.

Although the University placed the geology project high on the priority list, the initial project foundered. Financing depended heavily on federal funding, which although it had been flowing freely throughout the post-Sputnik era, was beginning to dry up in the Nixon Vietnam funding crunches. The state was unwilling to put up the required funding alone.[1]

The department of Geology and Geophysics, with some advance notice of gift funds to become available, requested a grant from the National Science Foundation for planning and design of a new building. This grant, in the amount of $500,000 was granted in June 1970. In April 1971 the regents were told by president Weaver that alumnus Lewis G. Weeks (a 1917 geology graduate who had become extremely wealthy finding oil deposits on commission for the Australian government) had pledged a gift of $1.5 million to be used for the construction of a new building for the department of geology and Geophysics. This gift was contingent on additional funding from the state of $1.85 million, and $500,000 in federal grant money (the federal money already obtained). At the same meeting the regents approved as the site of the new building the corner of West Dayton, and North Charter, immediately east of the Earth and Space Science Building. During 1971 a building program statement was developed, defining the new building and its funding.[2]

During the spring of 1971 two major issued had to be resolved. The first was whether to have two buildings at the site (one for instruction and another for research). The decision to combine the two was apparently made without too much difficulty, now that funding seemed to be available for a large building. The new building was to hold everything but the lower division instruction and the geology museum, which would remain in Science Hall (due to budget constraints).[3]

The second problem was the desire of the Geology department to include in the building (at the cost of some research space) a specialized library facility. The University was at that time considering planning an Engineering and Physical Sciences Library (eventually the Wendt Library), and it was not obvious that the Geology department could justify a separate departmental library. This question was eventually decided in favor of a Geology branch library, both because of the uncertainty about the physical sciences library project, and the size and importance of the Geology research library.[4]

In June 1971 the regents presented the project to the state building commission, who approved the project at a projected budget of $3.8 million, and authorized the state matching funds required by the Weeks gift. The University asked the state to assign an architect for the project in June 1971. The state responded by selecting the Madison firm of Graven, Kenney and Iverson. Because of the sharp escalation of building costs several features had to be deleted from the building, and were relegated to a possible future expansion.[5]

In May 1972 bids for the project were opened, and a short legal wrangle ensued between the University, who wanted to award the contracts, and the Attorney General's office, who argued that because Mr. Week's entire gift had not yet been received the money was not legally available and the contracts could not be signed. Mr. Weeks and the University altered the conditions of the gift's delivery to satisfy the state. With this difficulty out of the way, the construction contracts were confirmed on September 8, 1972. The general contractor was J. H. Findorff for $1.99 million. Total contracted costs were $3.85 million, of which $1.8 million was state money, and the remaining $2 million the Weeks gift and the federal grant. Ground-breaking took place in the last week of August 1972. Construction proceeded without serious incident and the building was dedicated on October 18, 1974, with speeches by Mr. Weeks, Dr. Clark, chancellor Young, and president Weaver.[6]

At the time of ground-breaking a letter to Dr. Clark from Mr. Weeks expressed disappointment at the elimination of certain features of the building and asks for an estimate of the cost of the deleted items. In September the University presented Weeks with detailed explanations of the reduction of the building program, and on December 15, 1972 Mr. Weeks informed the Wisconsin Foundation that he had transferred 600,000 shares of Weeks Natural Resources stock to the Foundation to be applied to

the construction of the Geology Building. This additional gift was worth an estimated one million dollars. By April 1973 this money had been budgeted toward the deleted items in phase I (about $175,000) and the remainder toward a planned $1.3 million phase II addition to Weeks Hall to hold the parts of the department left behind in Science Hall. In January 1974 the regents officially named the new building the "Lewis G. Weeks Hall for Geographical Sciences".[7]

After considerable scrambling for adequate financing caused by the fluctuating price of the stock gift during 1977 and 1978 the contracts for phase II (also designed by Graven and Associates) were let on August 8, 1979, with J. H. Findorff the general contractor for $1.02 million. Total cost was $1.56 million, with the funding coming entirely from gift funds. The ground-breaking for the Weeks Hall phase II was held on September 27, 1979. Mr. Weeks had died the March 4, 1977 but was represented by his widow.[8]

The building is a basement and four levels, containing offices, labs and seminar rooms, in a roughly triangular shape 160 by 200 feet around an open courtyard. The configuration was developed by the architects to avoid looking out onto the relatively unattractive and industrial neighborhood. Instead the building looks inward to a self-contained green space. According to faculty member Robert H. Dott, the unusual angled windows on the outside of the buildings allow light but exclude the view. The 80 by 120 foot phase II addition on the south side contains the geology museum, library space and offices. The exterior is sheathed in face brick.

The completion of phase II came in April 1981 when the geology museum was moved from Science Hall to the new space in Weeks Hall. Thus Geology ended 87 continuous years of occupancy of Science Hall, and were united under one roof for the first time since the 1920s.[9]

1) Geology - Geophysics at the University of Wisconsin, undated, unsigned, Young to Frautschi, August 5, 1969 and July 30, 1969, Bailey to Young, July 1, 1969, Building Program - Geology and Geophysics, August 15, 1969, Atwell to Young, October 13, 1969, Edsall to Young, February 14, 1969, series 24/9/2-1 box 14; Bailey to Young, February 7, 1969, series 24/9/2-1 box 8; Geology - Geophysics Proposal, undated, series 24/9/2-1 box 2.

2) *Regent's Minutes*, June 12, 1970, May 21, 1971; Gentry to Clark and Roeber, April 8, 1970, Campus Request for Regents Action, June 12, 1970, Exo to Atwell, May 29, 1970, series 24/9/2-1 box 14; Edsall to Lemon, September 15, 1970, Building Program and Analysis, May 3, 1971, Bailey to Frautschi, October 12, 1970, series 24/9/2-1 box 20.

3) Lemon to Weaver, May 11, 1971, Lemon to Heider, June 29, 1971, series 24/9/2-1 box 20.

4) Lemon to Edsall, May 11, 1971, series 24/9/2-1 box 20.

5) Request to State Building Commission, for June 1971 Meeting, Exo to Brown, June 28, 1971, series 24/9/2-1 box 20.

6) Bleck to Kopp, June 16, 1972, Weeks to Clark, September 6, 1972, series 40/1/15/1 box 6; *Regent's Minutes*, September 8, 1972 Exhibit A; Dedication Program, October 18, 1974, series 40/1/1/2-4 box 8; *Wisconsin Alumni Magazine*, September 1974, p. 25.

7) Clark to Weeks, September 22, 1972, Rennebohm to Weeks, November 6, 1972, series 40/1/1/2-2 box 11; Regent's Minutes, January 11, 1974.

8) History and understanding of the Financing ... Weeks Geology Building, December 15, 1977, Summary of Meetings on Weeks Hall phase II, Clark to Young, September 26, 1978, Shain to Craddock, February 15, 1978, series 4/22/1 box 87; Agency Request for State Building Commission Action, August 1979, Invitation, from Shain, September 19, 1979, series 4/31/9-3 box 4; Rennebohm to Mrs. Lewis Weeks, September 18, 1979, series 4/22/1 box 87.

9) Department of Geology - Annual Report for 1981, Open House pamphlet, April 17, 1982, series 40/1/1/4-2 box 11.

WEST CAMPUS HEATING PLANT

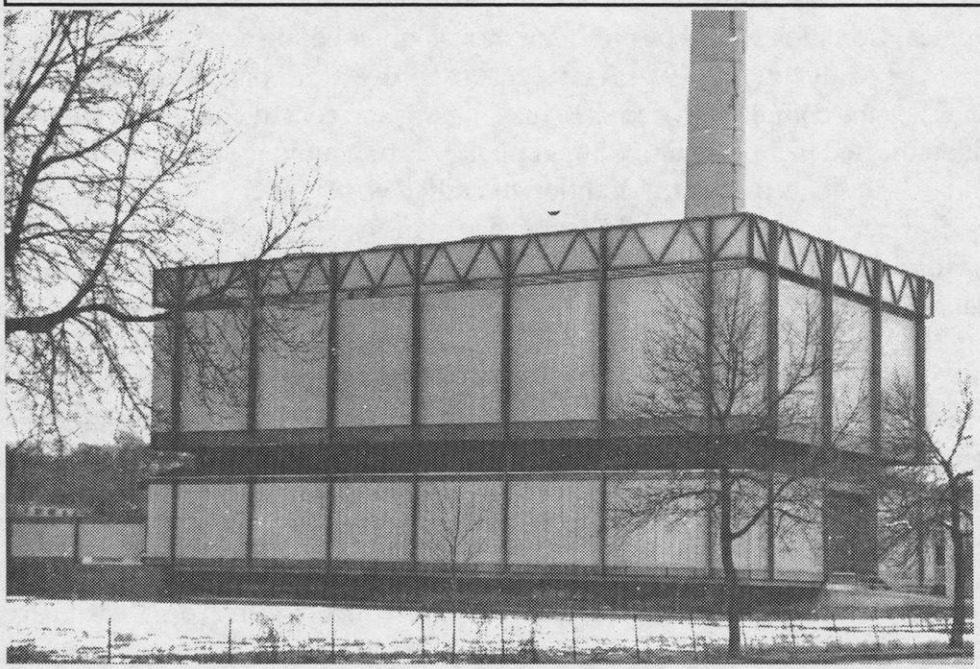


Fig. 1. West Heating plant 1994. [Author Photo, AP-54]

The West Campus Heating/Chilling Plant was built in 1972 to provide heat and cooling for the new Medical Sciences complex, and for other building on the west end of campus.

The declining ability of the Charter Street heating and chilling plant to expand, intersected neatly with the need to heat and cool the enormous new space of the new hospital and clinics building to produce the west campus heating and chilling plant. In the late 1960s during the early planning for the new hospital the University obtained a study of the projected utility loads. This study by engineers Orr-Schelen- Mayerson examined alternatives from expanding the Charter Street plant, to utilities in the hospital buildings, but finally recommended a separate heating plant to heat and cool the hospital and all other buildings west of Elm Drive. They compared various fuels, including gas, oil, coal and nuclear, and recommended a gas and oil fired plant.[1]

As a result of this study the west campus heating plant was placed at a high priority on the 1971-73 biennial building list conditional upon the construction of phase I of the Medical center. In January 1972 the state building commission authorized the release of planning funds for the heating and cooling plant. The engineering firm of Ring and Du Chateau was then retained. By July 1972 the basic plan for the plant had evolved. It would generate steam, chilled water and compressed air, and distribute electrical power and communications systems for the hospital complex and nearby buildings. It would be designed for easy expansion as the west campus area grew. It would be interconnected to the steam and chilled water lines from the Charter Street plant to provide backup heating and cooling during plant service periods. Importantly it would meet the new and stringent state and federal air quality standards. These standards were best met by burning natural gas as a principal fuel, with oil as a backup fuel during the periods of heavy gas use by the city of Madison. These fuels contrasted with the Charter Street plant which burns mainly coal and has a difficult time meeting air quality standards.

The new plant would be funded entirely with state money. During the summer of 1972 the building committee met several times to iron out the issues relating to the electrical substation to be jointly owned by the University and Madison Gas and Electric Company.[2]

The regents heard the proposal for the plant at their July 1972 meeting. They were informed that the first phase of the plant would contain two gas-oil fired boilers, the future installation of two centrifugal water chillers, compressed air and domestic hot water generation. Temporary heat for construction of the Medical Complex would be provided by a small boiler owned by the athletic department. Steam was to be ready by June 1974. The regents approved the concept and budget of $5.06 million and authorized the completion of final plans, bidding and construction. In September 1972, after a report that indicated that the Charter Street plant was operating its chilled water generators at their design limits, the regents placed the addition of chilled water generation and distribution at the top of the 1973-75 project priority list at an estimated cost of $1.7 million. By the end of December 1972 the plans for the west campus plant were essentially complete. Additional expansion capability had been added, especially for the generation of chilled water.[3]

On February 16, 1973, the state building commission approved, contingent on the Medical Center phase I construction, the budget for the west campus heating and chilling project, at a total budget of $5.746 million. Construction contracts for the heating and chilling plant and the electrical substation and the distribution system were awarded July 20, 1973, with the general contract going to Anthony Grignano Company of Madison for $1.09 million. In September of 1973 contracts were awarded for the construction of boilers to the C. A. Hooper Company of Madison in the amount of $502,000. In October 1973 the regents asked for and received state permission to add $62,000 to the budget to provide for burning a wider range of fuel oil grades. The first firing of the west campus plant boilers took place in December 1975. In April 1975 contracts were awarded for the installation of the chilled water generating facilities. The contract for all work went to H & H Industries of Madison for $1.25 million. The chillers came on-line in April 1976.[4]

The building is 104 by 200 feet on two levels. The design of the structure is the work of architects Sample and Potter. The framework is of structural steel, and is sheathed with insulated metal panels. A 250 foot smokestack stands on the south side of the building. The electrical substation is approximately as large as the building but is located outside the building to the southeast and is enclosed by a chainlink fence.

Interconnects between the Charter Street plant and the west campus plant were constructed during 1980, and enable either plant to be shut down for repairs during a narrow window of spring and fall weather when the heating and cooling loads are at a minimum.

In 1989 the University approved plans to enlarge the cooling capacity of the west campus plant at a cost of $5.1 million. As part of this project they entered into an agreement with the Federal Veteran's Administration to provide chilled water to air-condition the Veteran's Hospital on the west edge of the campus. The west campus plant's chilled water capacity was expanded by 9000 tons, of which 2000 tons was paid for by the Veteran's Administration at a cost of about $1.5 million. These chillers were run beginning in the spring of 1990.[5]

Future plans call for the addition of a new boiler to widen the time period in which one plant can be taken off-line for service. It is also planned to expand the west campus plants capacity to accommodate heating and cooling the buildings of the Forest Products Laboratory, and the supplying of steam as well as chilled water to the Veteran's Hospital.

1) West Campus Heating & Chilling Environmental impact, undated, referenced in West Campus Heating & Chilling Environmental Assessment, July 11, 1972, series 83/35 box 11.
2) *Regent's Minutes*, October 9, 1972 Attachment 1; Meetings re: West Campus Heating Plant, July 12, 1972, September 15, 1972, November 28, 1972, series 83/35 box 11;
3) *Regent's Minutes*, July 14, 1972; West Campus Heating/Chilling Plant, July 1972, series 83/35 box 11.
4) *Regent's Minutes*, March 9, 1973 Exhibit A, July 20, 1973, Exhibit A, September 7, 1973, November 9, 1973 Exhibit A, March 8, 1974, April 11, 1975, January 9, 1976, November 11, 1983, ; Interview with Mike Grimmenga, fall 1994.
5) *Regent's Minutes*, May 5, 1989. Ahluwalia to Van Ess, July 17, 1989, existing Conditions ... Central Heating and Cooling Systems, July 1985, series 4/31/9-3 box 4.

WENDT LIBRARY

Fig. 1. The Wendt Library, from Randall Street, July 1976. [Photo courtesy of Enid Simon]

Built to house the cramped and scattered libraries of the College of Engineering, and other physical sciences, the Wendt Library was opened in April 1976. It is named for long time engineering Dean Kurt F. Wendt.

The Engineering and Physical Science Library was the last stand alone library built by the University, in a sequence that saw the construction of Memorial Library (1959), Steenbock library (1968), and Middleton Medical library (1970). The huge construction and enrollment boom in the 1960s coupled with a disinclination to allow significant departmental libraries (which ran counter to the centralist library theory accepted at the University) resulted in an extreme need for a science and engineering library.

In 1969 the engineering Library was distributed between the third floor of the Mechanical Engineering building and storage in garages and rented space around the fringes of campus. Agitation had begun in 1966 for new facilities, or at least more operating hours. Pleas from professor L. G. Zweifel the engineering librarian, called the facilities "extremely poor", and pointed out that there were only 16 reader stations in the entire library, "a ridiculous figure for a college of this size." Engineering Dean Wendt (also a member of the University Campus Planning Committee) responded with a strong plea to chancellor Young for action on the engineering library. Went told Young: "Our present library, long inadequate, is rapidly becoming hopeless." Clearly new facilities were needed. Preliminary planning went on during the late 1960s, under a committee composed mainly of engineering faculty, since the first phase of the physical sciences library was assumed to be dedicated to engineering. Much early planning was based on the experi-

Fig. 2. The Wendt Library rises at the corner of Randall and Dayton streets, October 25, 1974. Buildings in the background are Union South and Hi-Ray Hall. [Photo courtesy of Enid Simon]

ence gained from the Steenbock library facility.[1]

The state building commission authorized advanced planning and selected architects Weiler and Strang of Madison for the project in the fall of 1970. Planning meetings began in October 1970. The site was from the first assumed to be the corner of Randall and Dayton Streets, to the south of Union South. By November 1970 a basic plan was developed by the architects, the library staff (including professor Zweifel, Louis Kaplan and Enid Simon), the Union staff (Ted Crabb), and representatives of the state. This plan included a second phase to be built toward the southeast at a later date.[2]

During December 1970 the state representative, Mr. Walker Patton, unilaterally reduced the working budget of the project by 12 per cent. This was in an effort to reduce the University's total building program to a level likely to receive approval from the legislature and governor. The building committee began to modify the plan based on this new budget. Trim levels on the interior were the main modifications. By April 1971 a concept and budget report was ready for the Engineering and Physical Sciences Library. The budget was $3.49 million. Estimated construction was to be completed by spring 1974. Then as a result of the state budget crunch, the regents declined to request the project as part of the 1971-1973 construction biennium. They did however recommend more planning and the purchase of the land at the Dayton and Randall Streets site. This ensured that the project would be high on the priority list for the following biennium. In January 1973 the state building commission approved the $3.8 million budget for the library for inclusion in the 1973-1975 state building program.[3]

In March 1973 governor Lucey as a member of the state building commission, cast a tie-breaking vote that deleted the library from the building program. After further investigation was made, it became clear to the governor that the program would be well under the $55 million limit, and Lucey switched his vote and the commission reversed itself and included the library in its recommended list of projects. At their April 1974 meeting the commission denied approval to the project, pending a resubmission at the next meeting. At the May 1974 meeting the building commission approved the regents request to bid and construct the library at a cost of $3.84 million.[4]

Ground-breaking was held on September 4, 1974. Construction contracts were formally awarded on September 6, 1974. The general contractor was Gilbert Builders of Verona for $1.98 million. The total contracted costs were $3.84 million. All funds were state trust funds.[5]

Remarkably after years of delay in the project, construction took 25 months, six months less than

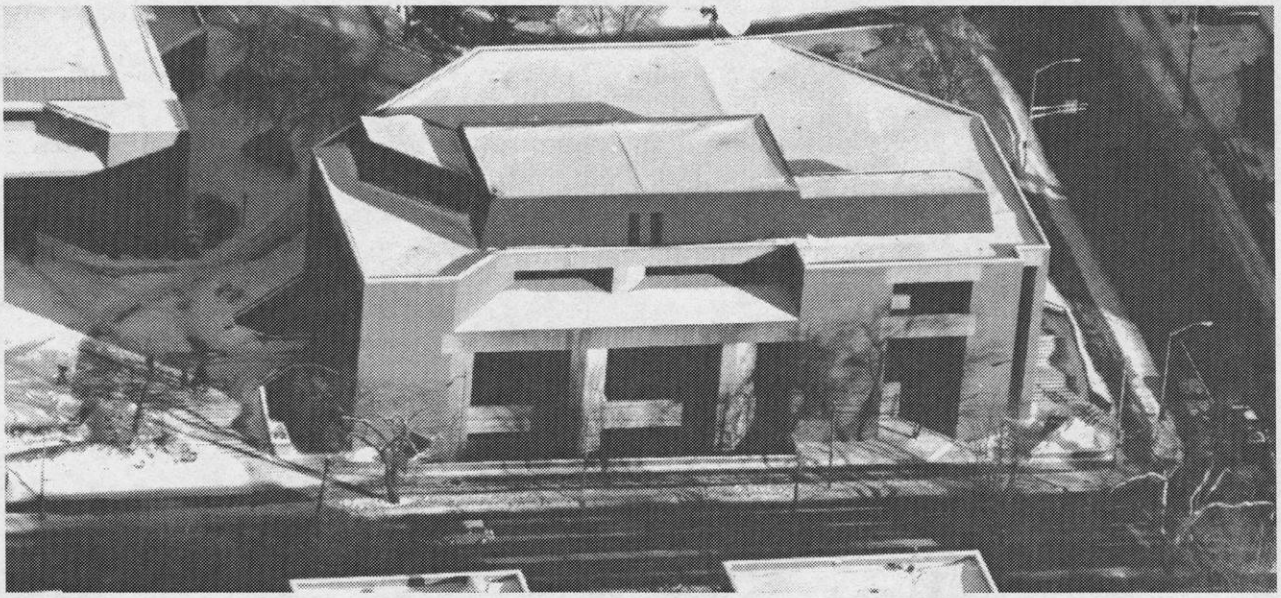


Fig. 3. Wendt library, February, 1997. Randall Street in foreground. [Del Brown Photo, AP-74]

the schedule. Coupled with a moving operation into the building that also went faster than expected the library was open for service on April 5, 1976. A formal dedication ceremony, featuring Engineering dean Robert Marshall, chancellor Edwin Young, and emeritus Dean Wendt, was held on October 8, 1976. In September 1976 the regents had voted to name the new library after Kurt Frank Wendt.[6]

Kurt Wendt graduated from the University in 1927, and served on the engineering faculty for 44 years, including 18 as dean. Dean Wendt served as Wisconsin's representative to the Big Ten during the 1950s. He retired in May 1971, but continued to serve the University on the planning Committee. Dean Wendt died on June 9, 1982.[7]

The Wendt Library is on four levels in a roughly triangular shape. The lowest level is below grade and contains the reserve room, the bindery, storage and offices. It is also larger than the upper levels, since it was design to extend under the unbuilt phase II section of the library. On level two are the main entrances, from a plaza shared with Union south, the general collection, the circulation desk, offices and conference rooms. The third level holds more of the general collection, reading areas, offices and the film collection. Closed stacks and offices are on the fourth floor. The building is sheathed in face brick. Because of the advent of computers and the electronic storage of technical journals and other material, it is unlikely that phase II will ever need to be constructed.

The engineering library at last had a permanent and suitable home after its migration from Science Hall (1888-1900) to the old engineering building on Bascom Hill (1900-1939), to the Mechanical Engineering Building (1939-1976).

1) Zweifel to Wendt, December 26, 1967, Zweifel to Wendt et al. Appendix "B", Wendt to Atwell, December 12, 1969, Wendt to Young, October 3, 1969, Resolution adopted by Polygon, October 1969, Resolution adopted by Student Chapter of the American Society of Civil Engineers, December 3, 1969, Wendt to Young, January 1970, series 24/9/2-1 box 15.
2) May to Lorenz, September 28, 1970, series 24/9/2-1 box 20; Project meeting minutes, meetings #1 - #8, October 13 - December 7, 1970, series 24/9/2-1 box 20.
3) Orr to Erich, December 14, 1970, series 24/9/2-1 box 20; Concept and Budget Report - Engineering and Physical Sciences Library, April 1971, Edsall to Fred June 24, 1971, series 24/9/2-1 box 20; *Regent's Minutes*, October 6, 1972, Attachment 1, January 22, 1973, exhibit A.
4) *Regent's Minutes*, April 6, 1973, May 10, 1974, June 7, 1974 ; *Wisconsin State Journal*, March 17, 1973.
5) *Regent's Minutes*, September 6, 1974, exhibit A.
6) *Wisconsin Engineer*, October 1976, pp. 13-20; *Wisconsin Alumni Magazine*, November 1976, p. 13.
7) Wendt biographical File, University Archives.

CLINICAL SCIENCE CENTER

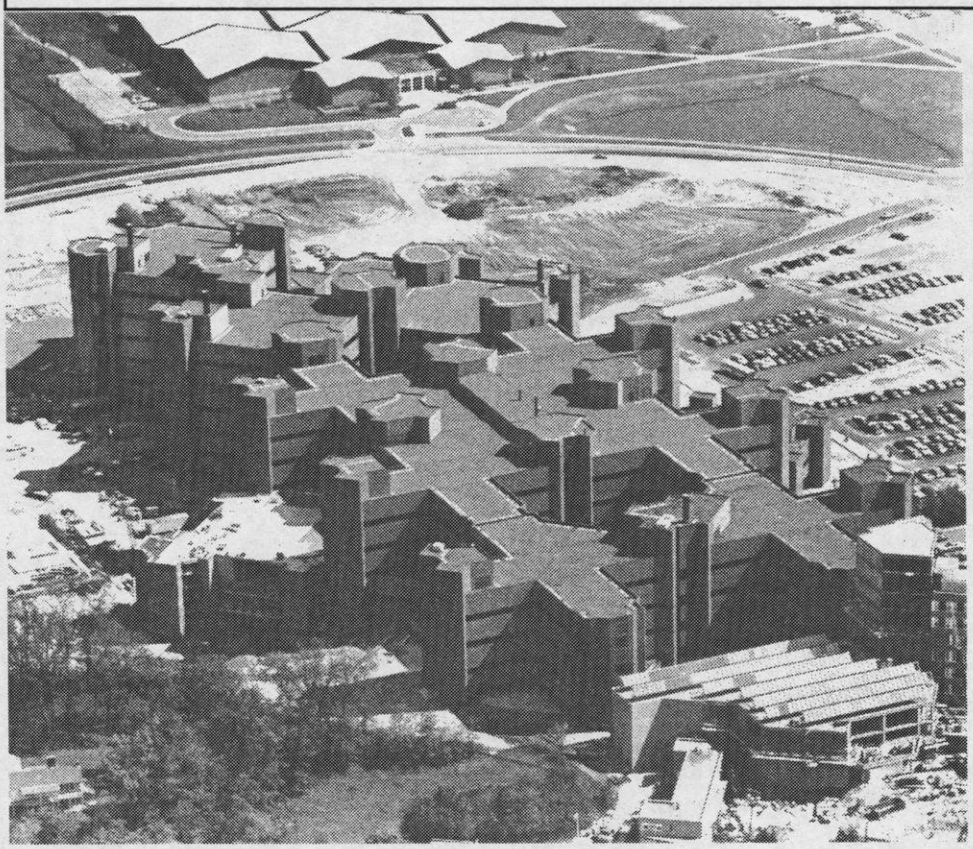


Fig. 1. The "completed" Clinical Science Center. Clear visible is the modular nature of the building, with the towers being stacks of modules connected at their corners. Nearly indefinite expandability is a hallmark of the design. The building in the background is the Nielson Tennis Stadium. [7/4 folder #2, jf-97]

Built to replace old and outmoded facilities the Clinical Science Center was planned from 1961 to 1973. Groundbreaking took place in May 1973, and the move to the new building took place in March 1979. The building is designed as stacks of modules for easy expansion and remodelling. Its cost at opening was about $100 million. Part of the medical school is still housed in the old hospital on University Avenue. The Center became a semiprivate entity in 1995.

Built in 1925 the Wisconsin General Hospital served for more than 50 years as the clinical hospital for the UW Medical School, and as a cutting edge hospital for the citizens of Wisconsin. By the mid-1950s it needed and got a major upgrade when floors were added, and a number of the discrete buildings on the site were connected and modernized. It did not address the increasing crowding and obsolescence of the academic facilities of the Medical School housed mainly in the Service Memorial Institute.

The first external confirmation that a new hospital and clinics facility were needed came from the Hamilton Report in 1957. This report was commissioned just after the expansion of the Wisconsin General Hospital. The lack of modern Academic facilities was highlighted by the Hamilton Report. The Medical School began almost immediately to make preliminary plans for long-term future expan-

Fig 2. Phase I construction April 1974. Construction had been underway for about 11 months. [7/4 folder #2, jf-98]

sion.

These initial plans, prepared by the Medical School with the assistance of Professor Leo Jakobson of Planning and Construction, were presented to the regents in January 1961. The plans and their models examined development at the University Avenue site and the block south of it. The news was not good. The fully developed site would require the removal of the infirmary, Bradley Memorial, the old heating station, and the service building. The two blocks would be almost solid high-rise buildings. The regents voted to approve the plans in principal. This preliminary planning stage lasted several years. Most of the conclusions drawn were negative ones: more space was definitely needed, the site might be too small for the needed expansion, etc.[1]

It was soon clear that more formal and long-range planning was necessary. A legislative task force determined that not only was the old facility inadequate for the Medical School but that a larger Medical School was needed to produce the number of doctors needed by the State of Wisconsin. In 1963, the legislature authorized and hired a consultant to aid the Medical School in planning a new and expanded Medical School.

By 1965 it was generally recognized that the University Avenue site would never be adequate for the hospital and Medical School, even if built to a very high density. A new site was proposed on forty five acres of land to the north of the Veteran's Administration Hospital, with which the Medical School was closely integrated. By the end of 1965 the new site had been accepted (and recommended by the Campus Planning Committee), even with the difficulties presented by the splitting of the Medical School facilities between the two sites for up to 20 years. In January 1966 the regents made it official, voting that the Medical Center Facilities be sited contiguous to and north of the Veteran's Administration Hospital.[2]

In June 1966, the regents approved the allocation of $283,000 for a consultant and planning funds. The report by the consulting firm, Lester Gorsline Associates International, was presented to the state Building Commission in the fall of 1968 and to the regents on November 1, 1968. This report confirmed the new site on the west end of campus, the need to increase the size of the Medical School class (from 104 to 160) and asked the regents to request state authority to proceed to preparation of

master plans and implementation of Phase I. After 8 years, the planning phase was barely half over.[3]

The Master Development Plan by architects HOK (Hellmuth, Obata and Kassabaum) was received by the regents in July 1970. The regents passed two resolutions: the first approved the Master Plan, and the second approved the concept of Phase I, authorized the preparation of preliminary plans for Phase I, and attached "the highest priority to the implementation of Phase I as related to the building program of the University". The discussion for these resolutions betrays some impatience with the seemingly endless planning, and a strong desire to get on with it. Still it was almost two years before the plans for Phase I were approved. At the May 1972 regents meeting those plans were reviewed and approved. The project had been in the planning stage for so long that the enrollment estimates were starting to come into question. The total project was now estimated at $120 million and eight years. Phase I was to cost $45 million.[4]

Another year elapsed while final plans were completed. Construction contracts were signed in the spring of 1973. General contractor was a joint venture between J. H. Findorff and Hutter Construction of Fon Du Lac for $23.2 million. Total contracts were for $48.4 million. Funding was from state funds ($21.3 million), Federal grants ($14.6 million), and hospital operating funds. Groundbreaking on the phase I of the largest and most expensive building in the history of Wisconsin took place on May 23, 1973.[5]

The design of the building is unusual, even ignoring its enormous size. The planners (Hellmuth, Obata and Kassabaum) recognized that the old hospital was only 50 years old and obsolete as a hospital, regardless of modifications. To avoid this fate for the new hospital it was made as flexible as possible. This meant avoiding designing rigid areas such as "wards" that were designed for a particular purpose and unsuitable for any other. This consideration led the designers to a modular approach. The module they decided on was an open (unpillared) 120 foot square with interconnections not along the sides of the square as in conventional construction but on the corners, where elevators, stairs and utilities are run vertically between modules. These modules can be stacked either horizontally or vertically. In addition, each module has a space above its ceiling that is nearly a full floor in height. This "interstitial" space is used for the horizontal distribution of utilities. This arrangement allows very flexible remodelling, and much remodelling of a module can be done from above, without disturbing the current occupant of the module. Maintenance is also easier and non-disruptive. It also ensures that addition of new modules as the building grows will be easy and non-disruptive. Another significant design feature of the building is the orientation of the main traffic patterns along the diagonal axes of the square modules. This was done to provide outside exposure for the sides of each module, thereby allowing for windows in nearly every room in the building.[6]

Only a few months after construction began a major modification was made to the master plan. Under pressure of time, changing federal financing and the legislature, it was decided that the four phase plan was too large and unlikely to obtain adequate federal funding. As a result the University and the state decided to reduce the project. They decided that the total project should consist of the first two phases of the old project with a few changes, and a major remodelling of the old University Avenue facilities to accommodate the programs previously intended for the eliminated third and fourth phases. This major scaling back of the original plan from four phases to two reduced total cost to a figure judged likely to obtain federal funding. They also replaced the original architects with Flad and Associates. Construction contracts for phase II (the second half of the new version of the building) were let in the fall of 1975, to the same contractors already building phase I. These contracts were for an additional $43 million. These bids were much higher than anticipated and caused much criticism of the project and its planners. It appears that most of this cost over-run was due to inflation.[7]

Although the huge scale of the project absorbed nearly all the skilled building workmen in the Madison area for many years, the actual construction went smoothly; but planning continued to be a

problem. In 1976 the regents authorized the addition of a module for animal facilities, at a cost of $1.8 million. What was more troublesome, however, was the breakdown of the arrangements with the VA hospital. For many years during the planning phase negotiations had established what facilities would be shared between the new hospital and the adjacent Veteran's Administration Hospital. After construction had progressed considerably, it was revealed that these understandings were not in writing, and because of a number of altered conditions would not be honored. This meant that the new hospital, close to a decade in planning and $100 million in known costs would not have rehabilitative or radiology facilities. The planners went to the regents, and the regents went to the legislature and $6.4 million was added to the budget to add modules for the missing functions. It was estimated that these changes would add eight months to a construction schedule that had projected completion by September 1978.[8]

The various parts of the Medical School began to move into the new building in January and February of 1978 when the UW nursing school and the Wisconsin Clinical Cancer Center relocated from the old hospital complex on University Avenue. The move from the old building was completed on March 31, 1979 when 200 patients were transferred from the old hospital to the new. The move was supervised by Associate vice chancellor William Davis, assisted by Air National Guard medics, the 44th General Hospital Army reserve, and a fleet of tractor trailer rigs from Reynolds Transfer and Storage. The move, orchestrated from the 14th floor of the WARF building, went off without any significant delays or mishaps. The doors were locked on the old hospital after more than 50 years of service to the state.[9]

The completed (as of 1979) building was 6 stories high containing 1.5 million square feet, or about 35 acres of floor space, the size of a small farm, and had cost about $100 million. Comparing the new structure with the old we see that the cost of the pneumatic tube system ($1.1 million) in the new building exceeded that of the entire original Wisconsin General Hospital building. The new building was more than five times the size of the old one. The old one had a useful life as a hospital of 50 years. The new one is estimated by current building managers to have an expected useful life of 200 years.

There is little doubt that the new clinical science center was a success. Certainly some snags arose: several doors were too narrow to accommodate some of the older beds from the old hospital. Complaints were voiced about the difficulties in finding one's way around the huge structure. Staff was hired and acquired through volunteer organizations to serve as guides to patients and visitors. Mechanical systems needed to be sorted out, landscaping was incomplete and other normal inconveniences from the opening of such a huge new project. No serious problems arose with the new building.

A real and ongoing difficulty was that when the project was scaled back in 1974 it had been done in a hurry, and things were eliminated that were later deemed essential. In the twenty-five years since the Clinic for Health Sciences (CHS) opened it has been necessary to make a number of additions and modifications. Fortunately the modular approach taken by HOK (the original architects) made the addition of modules relatively painless, although not cheap. There is a general feeling in Madison and the legislature that the CHS is a kind of infinite sink for building funds. Earliest among the costly projects was the renovation of the old University Avenue complex. The price tag on this project escalated to nearly $25 million, an astonishing figure to regents and legislators alike. This amazement was largely due to neglecting the fact that the old building was being made to stand in for phases III and IV deleted from the new building to save money. In 1984-85 it was necessary to perform a major ($5 million) energy efficiency upgrade on the CHS, which had been designed and built before any widespread concern for energy conservation. The addition of four new modules (for surgical science, radiology, and records management), and the remodelling of two others were ap-

proved in 1986 at a cost of $18 million. The radiology addition was an excellent example of the kind of change that the new building could handle that old kinds of hospitals could not. The radiology addition was driven by the development of Magnetic Resonance Imaging (MRI) which required large costly and very heavy equipment. At the old hospital this kind of development would have been impossible to accommodate. At the CHS it was a matter of adding a module near the existing radiology area. The other modules were to handle operations that had been left out of the redesign in 1974. A helicopter pad was constructed on the roof of the new modules to accommodate the helicopters leased by the Medflight program, a medical emergency and rescue operation. After severe winter weather caused the failure of the helicopter in several medflight emergencies, in 1987 a $206,000 hangar was built into the hill outside the emergency room. In 1989 approval was given for the construction of a parking ramp at the CHS at a cost of $6.9 million paid by parking revenue. An $15 million expansion of surgical and critical care facilities was approved in 1990.[10]

The new hospital and clinics complex has been a tremendous (though expensive) success. The responsibility lies in large part with the enormous number of people who with diligence patience and vision shepherded the huge project through its long and difficult gestation. In 1995 it was decided that to escape the slow and laborious bureaucracy that gave it birth, but slowed its professional response time to unacceptable levels the CHS would become a quasi-private entity. The buildings will be leased from the University, medical education will still be provided there, but the administration of the hospital will be removed from the University and State.

1) *Regent's Minutes*, January 6, 1961, January 7, 1966 and exhibit C.

2) *Regent's Minutes*, October 22, 1965, December 10, 1965, January 7, 1966 and exhibit C.

3) *Regent's Minutes*, November 1, 1968 and exhibit E, June 10, 1966; Medical Center Task Force Report to the Chancellor, December 1970, series 4/31/9-1 box 9. There is some confusion regarding who hired the consultants. The minutes refer to "the employment by the State Department of Administration of a consulting firm..." But in the summary report included as exhibit E is the emphasized statement "a medical center consultant was employed by the University to plan the facilities expansion program"; the Master Plan filed with minutes of regent's meeting, May 1972 states that the planners were hired by the state.

4) *Regents Minutes*, July 10, 1970 and Master Development Plan filed with minutes of meeting, May 1972 and plans filed with minutes; *Wisconsin Alumni Magazine*, August-September, 1970, p. 15; *Wisconsin State Journal, May 5, 1972; Green Bay Press-Gazette*, May 7, 1972; The building was proposed to consist of four phases. Phase I would establish the core building and house the bulk of patient care, much research space and some academic space. Phase II through IV would be additions to the core and house more research space, additional patient care areas and the bulk of the academic facilities. The projected budget and period of time ($100 million and 12 years) is roughly the original asking price of basketball player Glenn Robinson whose agent first asked the Milwaukee Bucks for a $13 million, 13 year deal.

5) *Regent's Minutes*, June 8, 1973 Exhibit A; Building progress reports, June 8, 1973, series 83/35 box 6; *Wisconsin Alumni Magazine*, June 1973 p. 20.

6) Master Development Plan filed with minutes of regent's meeting, May 1972; Wisconsin State Journal, November 25, 1976.

7) *Regent's Minutes*, February 8, 1974, September 12, 1975 and exhibit A; "University of Wisconsin Center for Health Sciences", filed with Board of Regents Papers, May 5, 1972; *Wisconsin Alumni Magazine*, May 1972 p. 24.

8) Wisconsin State Journal, March 3, 1977, April 15, 1977, April 26, 1977; The Capital Times, April 26, 1977; The discussion of who was to blame for the failure of the shared facilities planning was occasionally rancorous, and distinctly unclear. The University believed that clear agreements had been made and that the VA reneged on them. The VA strongly objected to this characterization and stated that the UW had known for a long time that the facilities would not be available to them. Apparently most shared facilities were to be housed in an addition to the VA hospital that was not built due to reorganization of the VA facility. See series 4/31/9-1 box 9, Edwin Young to John Chase M. D., summary of Veterans Hospital Building Program, etc.

9) *Wisconsin State Journal*, April 17, 1977, March 3, 1979, March 30, 1979, March 31, 1979, April 1, 1979; The Capital Times, February 9, 1977.

10) *Regent's Minutes*, December 2, 1980, December 6, 1985, July 13, 1984, October 10, 1986, December 6, 1986, October 10, 1986, October 10, 1986, November 7, 1986, March 6, 1987, December 9, 1988, June 8, 1990, November 8, 1991; *Agency Request for State Building Commission Action*, November 1986, series 4/31/9-1 box 2.

DAIRY FORAGE CENTER

Fig. 1. The forage lab, 1982. [Photo courtesy of Dairy Forage Center Office, copy in Author collection.]

The U. S. Dairy Forage Research Center is a federal facility, comprising two parts, the research laboratory in Madison, and the field facility near Baraboo. Broad cooperation exists between the Center and the University. The purpose of the center is to lower the cost of milk production and the cost of dairy products. The campus research facility opened in 1981.

The idea for a federal forage laboratory appeared as early as 1960, when the United States Department of Agriculture (USDA) listed it as a priority item to be located in a north central state to serve the regional and national dairy industry. By 1962 dean Froker of the University Agriculture College had proposed that the regional facility be located at or near Madison. In April 1963 the Wisconsin legislature memorialized members of Congress to empower the USDA to construct such a research laboratory on the Madison campus. The proposed facility was for offices and labs and housing for 250 cows; at an estimated cost of $2.5 million. This was the beginning of a long and protracted effort to obtain the facility for the Madison campus.[1]

In 1967 more progress was made when senator William Proxmire began lobbying the senate Agricultural subcommittee (of which he was a member) to include the federal forage lab in their budget. The logic of locating the lab in the nation's leading dairy state was pointed out.[2]

As a result of this effort, Congress included in its Agricultural Appropriations bill for 1968 a request for a committee to make a feasibility study on the forage center. This committee recommended that a Dairy Cattle Forage Utilization Center be established in the north central region, and that it be located at or near the University of Wisconsin-Madison. Estimated costs had risen to $5.9 million. On the strength of this report Proxmire was able to get the senate to include an appropriation of $680,000 for planning money for the forage lab, but both times (1970 and 1971) the item was deleted by the Joint Conference Committee. In 1971 the senate asked the USDA to restudy the issue with an eye toward

reducing its size and cost. In 1972 this new study recommended against appropriating money for the lab. Dean of the Agricultural College Glenn Pound referred to this study as a "snow job". In 1974 the project was revived by interested dairy organizations. A letter of support from Senators Proxmire and Nelson (Wisconsin), Humphrey and Mondale (Minnesota), Clark (Iowa), Stevenson (Illinois), Bayh (Indiana) and other north central states to Secretary of Agriculture Earl Butz supporting the dairy forage lab. Support was recommended by the House-Senate Report for the fiscal year 1975. Four regional study groups were appointed.[3]

By early 1977 the reports of these regional groups were completed, and in July 1977 the Senate approved $1.1 million in planning funds for the center to be built at Madison. The 1977 North Central Region's proposal for the center calls for the center to be located at Madison with the field facilities, that is the 450 cattle and associated equipment, to be located on federal land at Baraboo, the site of the Badger Ordinance Works. The complete project, including the field facility was estimated to cost $8 million and the lab building was to house a director and fifteen research scientists. The schedule called for construction to be completed in July 1982. Governor Lucey agreed to support the facility on the conditions that the state not be required to pay any operating costs other than utilities, or to buy land for the field facility if the Baraboo site was not available.[4]

In May 1978 the funding for the center was approved with a $9 million budget limit. Senator Proxmire was the recipient of a Tarnished Fleece award from the Young Americans for Freedom for his efforts to bring the forage center to Wisconsin. This was a takeoff on Proxmire's own Golden Fleece awards for legislative "pork" projects. In late 1978 the Baraboo site for field work was confirmed, although the herd size was reduced to 300. The laboratory building in Madison was located on a parking lot (#12) north and west of the stock pavilion. This site had been considered for the College of Veterinary Medicine a few years earlier, but rejected because of limited size. The USDA received a fifty year lease on the land. The Madison facility would cost about $6.5 million.[5]

On October 18, 1979, the general construction contract was awarded to the J. H. Findorff Company in the amount of $5.2 million. Ground-breaking was held on October 26, 1979. Construction met with no unusual delays, and the dedication of the Dairy Forage Research Center was held on June 30, 1981, with remarks by congressmen Kastenmeier, Proxmire, and center director R. J. Bula.[6]

The building is three stories high, built of concrete block, sheathed in face brick. The first floor contains offices, animal rooms, storage, and a head house for the seven greenhouses at the back of the building. On the second floor are more offices, conference rooms, and laboratories. The third floor hold more laboratories, offices, and conference rooms. The "Engineering wing" on the southwest corner of the building contains more offices, shops and laboratories. This unit was originally optional if bids for the entire unit were too high for the budget. The forage center coordinates research at four other "cluster" sites, the University of Minnesota, Iowa State University, Cornell, and Michigan State University.

1) Chronology of Efforts ..., September 13, 1976, series 88/41 box 1. Some Aspects of the Development ..., Glen Pound, November 1979, series 90/80 box 14.
2) Chronology of Efforts ..., September 13, 1976, series 88/41 box 1; Hutchinson to Proxmire, May 12, 1969, series 40/1/7-1 box 123.
3) Chronology of Efforts ..., September 13, 1976, series 88/41 box 1;
4) Proposal for North Central Regional Dairy Forage Research Center, February 10, 1977, Pound To Lucey, April 5, 1977, series 90/80 box 14; *Wisconsin State Journal*, March 31, 1977.
5) Memorandum, Scornicka to Shain, November 8, 1978, series 4/31/9-2 box 1; *Regent's Minutes*, March XX, 1978; *Daily Cardinal*, May 15, 1978; *Wisconsin State Journal*, May 11, 1978, October 13, 1978; *Milwaukee Journal*, May 28, 1978. North Central Dairy - Forage Research Center, November 30, 1978, series 4/31/9-2 box 1.
6) *Wisconsin State Journal*, October 27, 1979; News Release, August 24, 1979, series 90/80 box 14; *Baraboo News Republic*, November 1, 1979. Dedication Programs, June 30, 1981, papers of Dairy Forage Laboratory.

VETERINARY MEDICINE

Fig. 1. The veterinary school building, designed by Flad and Associates of Madison, is a four story and partial basement 375 by 225 foot structure of steel and concrete sheathed with face brick and aluminum. The first floor contains the entire teaching hospital and associated services. On the second and third floors are offices, laboratories, classrooms and lecture halls. [photo courtesy of Bernard Easterday]

Built with state funds in 1981, the veterinary school was first proposed by the regents in 1947. Because of the financial difficulties of the times, there was much acrimonious debate over the construction of the school.

The creation of the School of Veterinary Medicine had strong parallels to the founding of the University's medical college a half century before. The founding of both colleges was used as political fodder by both backers and opponents. In both cases legislatures believed the costs to be too high, finally relented and appropriated funds, only to be vetoed by cost-conscious governors. In both cases the resistance of the governor was removed by the appearance of new governors.

The first clear call for a school of veterinary medicine came from the regents when in 1947,

they called for the "establishment of a School of Veterinary Medicine when the necessary funds are available for that purpose." It would be decades before this resolution bore fruit.[1]

In the mid 1960s the new dean of the college of Agriculture Dean Glenn Pound presented the regents with a report that pointed out the great need for a school of veterinary medicine in the state of Wisconsin. There was no action on the recommendation because of a lack of funding. A year later in May 1969 the regents took up the matter again. Dean Pound's report was re-discussed and a resolution passed resolving that the regents "reaffirms its desire to establish a school of veterinary medicine as of veterinary medicine and that the preferred site was at Madison. The estimated cost of the new School was about $20 million. The rest of 1974 was occupied with interpretations of the report, discussions among the regents, and meetings with the University and legislature of Minnesota about a regional school; no definite decision was made regarding the establishment of a new School of veterinary medicine at Madison.[3]

In January 1975, University officials recommended to the regents that a new veterinary medical School be built at Madison, but only on the condition that money for the project come from outside the University budget. It was part of the recommendation that a clinical facility be built at U.W.-River Falls. At their January 1975 meeting the regents adopted a resolution supporting the building of a veterinary medical School at Madison if the state provided enough money to build it without ignoring any of the University's existing programs. This resolution was so ambiguous that regent Fish asked "if this resolution is passed will it be interpreted as having approved or defeated the Veterinary School?"[4]

The state passed legislation in early 1976 to approve the founding and financing of the veterinary School, but this action was vetoed by governor Patrick Lucey. In a close fight, the Assembly overrode the veto, but the Senate only overrode the part of the bill establishing the School. This odd turnabout meant that the University could establish the veterinary school, but that it would not be funded, since the line-item veto had killed the funding part of the bill. Lucey asked the University to investigate other funding sources for the School. During 1977 the state asked the University if additions to the veterinary research programs would satisfy them, the regents declined, since it would not provide education leading to the degree of DVM. The legislature then voted to provide funding for the School and was again vetoed by Lucey, whose veto was again upheld by a very narrow vote.[5]

In March 1978 the state appropriated $250,000 in planning money for the new program and facility with the explicit approval of the new governor Martin Schreiber. The rough estimate of cost was about $16 to 28 million for the Madison facility and the satellite campus at River Falls. By May 1978 Chancellor Shain had appointed an acting dean for the new School, Bernard C. Easterday, previously chairman of the department of veterinary science. The regents closely questioned dean Easterday about the need for a veterinary School. They discussed the "Arthur Little Report" which stated that 70 per cent of veterinarians were employed in the dog and cat field, the so-called "Fifi and Mimi trade" that governor Lucey had argued (calling it "vets for pets") would be the main beneficiary of the school. The regents decided to proceed with the planning of the School. In March 1979 the regents asked the state for $30 million for the veterinary School in the 1979-81 biennium, to be built at Madison with a clinical facility at UW-River Falls. The state approved $28 million for the project, stipulating that the school be ready for students by September 1983, and be sized to graduate 80 veterinarians per year.[6]

A site was selected in February 1980, on Linden Drive, south of the Natatorium. Regent Erdman had not abandoned her resistance to the building of the veterinary medical school, and voted against the site. Then in September 1980, just before the legal deadline for letting construction contracts, the regents asked the state to delay the construction. They argued that the project was causing existing programs to lose funding, and that the funds for veterinary medicine should be reallocated to sustain existing programs. In November, 1980 the regents heard arguments that there was no longer a

shortage of veterinarians. The regents discussed for hours the issues surrounding the building of the Veterinary school in a time of financial cutbacks. In December 1980 the regents voted on a measure that asked the state to reconsider the construction of the Veterinary School. After long discussion, the motion was put to the vote and adopted on a 9-6 vote. The regents were deeply divided on the issue, mainly whether the state could afford to fund the program at a time of severe budgetary shortfalls, and to some degree on whether or not the state needed a veterinary school. To some it did not appear that the regents insistence on the preservation of existing programs in the face of the new one was being respected.[7]

Then suddenly, after strong pleas from president O'Neil and a reiteration of purpose from the regents in February 1981 that stated unambiguously the need and desire of the University for a School of Veterinary Medicine the politicking came to an end and the state building commission let building contracts on February 19, 1981. The general contractor was Anthony Grignano of Madison for $ 7.46 million. The total contract amount for the Madison facility was $15 million. The total for all three facilities, Madison, River Falls, and Charmany farms was well under the $28 million limit. As a result of these favorable bids, a number of features that had been deleted were put back in the plan. Among these features was an solar panel wall on the south side of the building that is a principal visual feature of the building.[8]

Construction of the Madison building went smoothly and quickly. Ground-breaking took place in March 1981, and the shell was closed in by Thanksgiving 1981. The regents toured the partly completed facility in October 1982; faculty and staff began the move into the new building in March 1983, about five months ahead of schedule. The first class was admitted in November 1983.[9]

On the fourth floor are classrooms and research labs. The River Falls facility, consisting of one building, was intended for use as a food animal clinic. It was however used only as a field consultation facility, with two faculty members to consult with local veterinarians. Later the state veterinary lab at Barron, Wisconsin was moved to the River Falls site, and later still the facility was transferred to the possession of the River Falls campus for use as an agriculture center.[10]

At the June 10, 1983 dedication dean Easterday (who retired in 1994) pointed out that the first class of veterinarians would graduate in the spring of 1987, just forty years after the regents first called for a Veterinary School at Madison.[11]

1) *Regent's Minutes*, April 12, 1947.
2) *Regent's Minutes*, May 9, 1969.
3) Consultant's Report to the University of Wisconsin System, February 8, 1974, series 1/1/3 box 176; *Capital Times*, March 9, 1974 ; *Wisconsin State Journal*, March 9, 1974, March 11, 1974, April 9, 1974, April 14, 1974, November 24, 1974, January 11, 1975 ; New Academic Program Request, July 15, 1974, series 4/31/9-2 box 22.
4) *Capital Times*, January 11, 1975; *Wisconsin State Journal*, January 6, 1975, March 13, 1975, September 25, 1975;
5) *Capital Times*, June 1, 1976, October 15, 1976; *Wisconsin State Journal*, June 15, 1976, June 17, 1976, June 19, 1976, December 18, 1976, February 26, 1977, March 12, 1977, June 8, 1977.
6) *Wisconsin State Journal*, January 26, 1978, February 16, 1978, March 9, 1978, June 21, 1978; *Madison Press Connection*, March 8, 1978; *Wisconsin Alumni Magazine*, May 1978, p. 18; *Regent's Minutes*, September 7, 1979, March 9, 1979, October 6, 1978; Steering Committee Minutes, October 22, 1979, Agency Requests for State Building Commission Action, March 1979, October 1979, series 4/31/9-2 box 22; *Wisconsin Alumni Magazine*, September/ October 1979 p. 18, January 1979, p. 18.
7) *Regent's Minutes*, February 8, 1980, September 5, 1980, November 7, 1980, December 5, 1980.
8) *Regent's Minutes*, February 6, 1981, March 6, 1981 exhibit A V-7 and V-8, April 10, 1981 exhibit A; *Milwaukee Journal*, December 3, 1981.
9) *Regent's Minutes*, October 8, 1982; *Wisconsin Alumni Magazine*, March/April 1983 p. 4.
10) Plans in the plans room of the Physical Plant; interview with Bernard Easterday, February 1995.
11) *Wisconsin Alumni Magazine*, September/October 1983 p. 5, March/ April 1986 p. 4, May/June 1987 p. 13;

SERF

Fig. 1. SERF from Ogg Hall 1987. [Series 9/ 5, SERF, jf-94]

On the planning boards for many years, the third unit of the University gymnasiums was built in 1982, named the Southeast Recreational Facility and known as SERF.

This project was in the planning stage for so long that its first incarnation, that of a women's gymnasium, was as dead as bloomers by the time of construction. When Gyms I and II were built in the early 1960s, the student population center was near the lake-shore dorms at the west end of campus, and the gyms were built near there. After the southeast dorms were built, it became obvious that recreational facilities were needed on the east end of campus. An estimated 10,000 students in that area were serviced mostly by a combination of Lathrop Hall for the women and the Red Gym for the men.

The "East Campus Physical Education Facility" was placed in eleventh place on the 1975-1977 priority list, over the objections of some regents who would not support a recreational facility over any academic ones. During 1975 the University's income from the state was curtailed drastically: the state granted less than 30 per cent of the $50 million in construction funds requested by the regents. It was clear that the new gym would not come quickly or easily.[1]

A program statement was written by the building committee, and the department of planning and construction in June 1976. This justification paper leaned heavily on the outmoded recreational facilities available to women, citing the heavy use of the old pool and gym at Lathrop Hall. This paper also reflected the early idea that the site for the gym should be on the block of the recently completed

Educational Science and Teacher Education Buildings, since Physical Education is part of the School of Education. By 1978 the site near Educational Science had also been discarded. Early in 1979 the state building commission responded to a proposal for a $11.5 million facility by recommending reductions in scope, including the size of the pool, faculty areas, and spectator accommodations. These changes reduced the cost to $9.3 million, which the commission approved. Legislative approval came in the summer of 1979. The remainder of 1979 was used in replanning to account for the reduction in size.[2]

The next major problem to solve was the site. This issue was unusually complicated because of overlapping plans. The University after discarding the site near the Education complex, selected the 600 Block of University Avenue, a parking lot jointly owned by the University and the city of Madison. The city objected to this site because of ongoing plans for urban renewal in the area. The city and the University investigated five other locations, including three on Dayton Street and one on Johnson, before deciding on the 700 block of Dayton Street in May 1980. With funding approved and a site selected the project was underway in earnest.[3]

The land at the Dayton Street site, bounded by Murray, Dayton, and Lake Streets and the railroad tracks was purchased from the U.W. Building Corporation and the Illinois Central Railroad for a total of $291,000 in state funds in November 1980.[4]

Some resistance to the funding for the gym arose in 1981. According to the Daily Cardinal, it was agreed by students in the early 1970s that segregated student fees were to be used to help finance the gym but as the project dragged on the Wisconsin Student Association called for a student referendum on the subject. Nothing resulted of this affair, but discontent over this use of segregated fees lingered throughout the project's life. In June 1981 the regents voted to approve the concept and budget for the new gym. In that same month, the state building commission approved the final plans and granted authority to bid construction at a budget of $9.5 million. In July 1981 the city of Madison granted the rezoning request for the 700 block of West Dayton Street.[5]

Ground-breaking took place on June 16, 1982, by general contractor Anthony Grignano of Madison, with a contract for $4.35 million. Total contracted costs were $9.5 million. Of this amount $6 million came from gifts and grants, about half of that from the accumulated segregated student funds, and $3.3 million in state funds. The schedule called for completion by September 1983.[6]

No particular difficulties were encountered during construction and the facility opened to student use on October 20, 1983. A formal dedication was held October 19, 1983, moderated by chancellor Irving Shain. It featured the unveiling of a sculpture at the Dayton Street entrance titled "Interspirit" by James Russell of Redondo Beach California. Use of the new recreational facility for class work began the following semester in January of 1984. After 15 years of planning and waiting, the third part (after the Natatorium and Gym II on the west end of campus) of the University's physical education plant was a reality.[7]

The finished building is a four level rectangle 300 by 100 feet, framed in steel with concrete block walls, sheathed in face brick and aluminum wall panels. A striking external feature of the design are the four protruding polygonal stairwells at the corners of the building. Level 0 contains 12 racquetball courts, mechanical systems, and storage areas. Level 1 hold weight rooms, the upper part of the lower courts, and part of the pool tank. The 65 meter pool (the University's largest) is on level 2, and can be partitioned by moveable bulkheads for simultaneous multiple uses. Locker rooms, offices, and the lobby are also on level 2. Level 3 contains two large (113 by 100 foot) gymnasiums, and the upper part of the pool area. Level 4 is a one-tenth mile running track suspended above the gymnasium area. Late in 1984 a large part of level 0, which had been left unfinished to meet budget restrictions was finished to provide extra weight training facilities. Some planning has taken place with a view toward expanding the building on the west side.

The new gym was an immediate success by 1986 it was hosting from 2000 to 4500 users per day.

The building hosted classes in the departments of physical education, education and dance, and recreational sports. When the aerobics and jazzercise movement struck in the mid 1980s attendance reached as high as 600 per class.[2] This raised a problem because the constant synchronized bouncing movement began to cause parts of the building to move visibly. After some initial concern and the reduction of class size to a maximum of 150, a structural engineering study concluded that the building was safe and presented no danger.[8]

1) *Regent's Minutes*, December 6, 1968, November 1, 1974 and exhibit I-1.
2) Facilities Requirements and Justification, June 1, 1976, series 4/31/9-3 box 4; *Regent's Minutes*, February 7, 1975; *Daily Cardinal*, November 10, 1978. *Wisconsin State Journal*, March 14, 1979.
3) *Madison Press Connection*, September 6, 1979; *Daily Cardinal*, November 19, 1979; *Wisconsin State Journal*, March 14, 1979; Capital Times, January 30, 1980; Edsall to Springman, March 6, 1980, Agency Request for State Building Commission Action, May 1980, series 4/31/9-3 box 4; *Regent's Minutes*, May 9, 1980.
4) *Regent's Minutes*, November 7, 1980.
5) *Daily Cardinal*, February 9, 1981; *Regent's Minutes*, June 5, 1981; Peterson to Bower, July 22, 1981, Agency Request for State Building Commission Action, June 1980, series 4/31/9-3 box 4; *Daily Cardinal*, February 9, 1981.
6) UW News Release, June 14, 1982, Agency Request for State Building Commission Action, May 1980, series 4/31/9-3 box 4; *Regent's Minutes*, June 11, 1982; *Wisconsin State Journal*, October 6, 1982; *Badger Herald*, July 8, 1982.
7) *Daily Cardinal*, September 1, 1983, October 20, 1983; *Badger Herald*, August 22, 1983; *Capital Times*, October 18, 1983; *Wisconsin Alumni Magazine*, November/December 1983 p. 19.
8) *Wisconsin Alumni Magazine*, May/June, 1986, p. 16; *Capital Times*, March 24, 1987; *Daily Cardinal*, April 9, 1987.

STORES

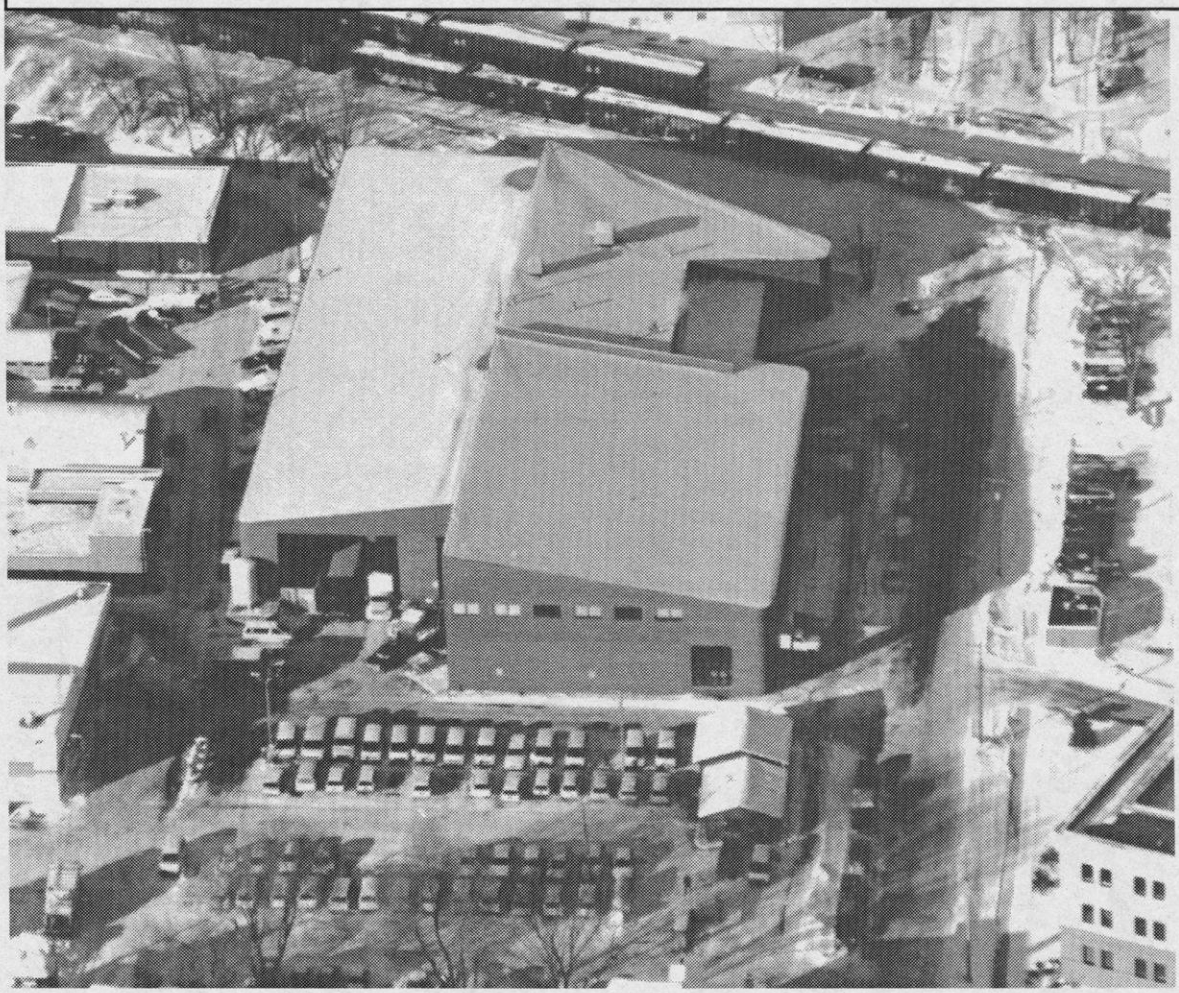


Fig. 1. Stores February 1997. The street at the right is Murray, the Fleet car Office is near the bottom of the picture.[Del Brown Photo, AP-71]

The stores building replaced the old and deteriorating Charter Street warehouse in 1985. It houses University Stores as well as the Extension printing and bulk mailing services.

The problem of storage of the goods needed to operate the University has existed since the early part of the twentieth century. In the earliest days of the University, the professors and janitors were enough to handle the classroom supplies, furniture, and other items (stored in the basement of North Hall, and later Music Hall) needed for the small school of that day. But in the period between 1910 and 1925 the enrollment grew large enough that some permanent storage was needed and a systematic way of stocking and delivery. The University architect Arthur Peabody designed the Service building on University Avenue primarily as a store room to handle these issues. The Univer-

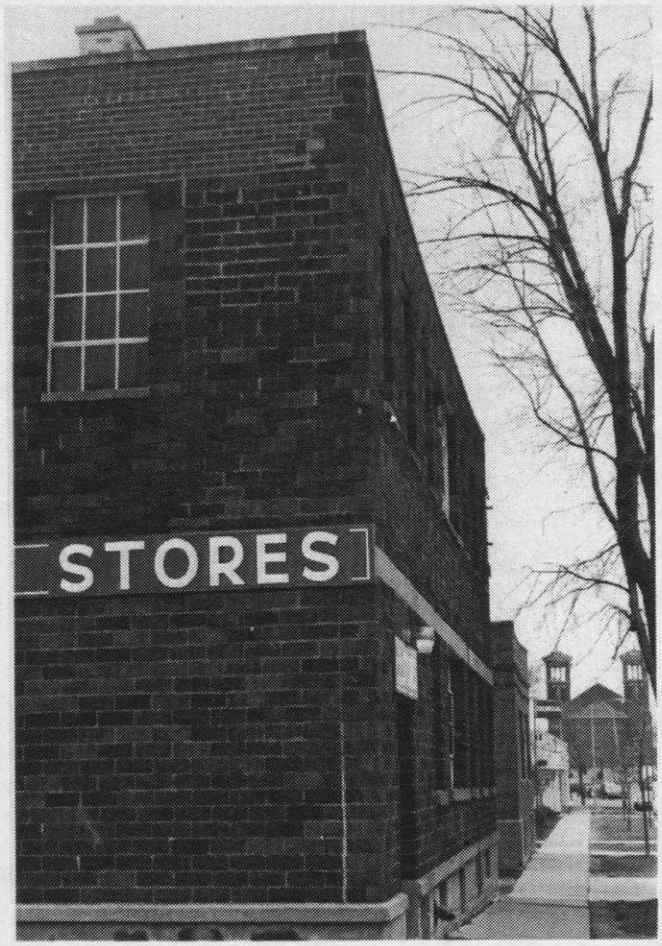


Fig. 2. The old store building at 29 N. Charter Street, 1969. This building was built about 1925 as the Feldman Paper Box Company, and later housed other industrial companies, including Rundle-Spence Plumbing Supply. The University purchased the building in 1958 and moved the University stores operation into it. By the late 1960s the building was deteriorating rapidly. This picture is one of a series taken to illustrate the failing condition of the building. Its foundations had heaved, making the floors uneven, and the basement ceiling was very low because of the installation of modern utilities across the ceilings. Fired danger was considerable because of the storage of flammable gases. A civil engineering professor (John Johnson) was consulted, but his report indicated that the building was too far gone to save. The old stores building was demolished in July 1986 (Memorandum, Kennedy to Fulop, series 4/31/9-3 box 7), after the new Murray Street building opened. The site is now a large parking lot next to the photomedia building.

sity stores moved into this storage space in the mid-1920s, and stayed there until 1959 when the size of the University had made another huge leap. Stores then moved to a warehouse at 29 N. Charter Street (see Fig. 2.)[1]

As the Charter Street warehouse deteriorated in the late 1960s, several alternatives were explored including the purchase of existing warehouses. The most positive result of these 1970s studies was that the problem of a permanent storage facility was made clear to the University administration, since chancellor Shain and his staff took an active part in these studies. In November 1974 the Planning and Development Committee recommended that $2 million be approved to build a combined stores and Extension services building. In early 1975 the stores/service building was placed in 19th position on the biennial priority list. Then followed four years of difficulty in deciding on and procuring a site for the building. Some of this delay was the result of the arranging of agreements between the University and the City of Madison regarding the development of the rail corridor.[2]

In May of 1979 the regents made a new request to the state building commission. This proposal marked the approval of a greatly expanded project. Now instead of just a stores warehouse the project included space for Extension Duplicating Services (then in the basement of 45 N. Charter St.), Extension Bulk mailing (in an old house on Brooks St.), and Agricultural Bulletin operations (in the old agricultural heating plant on Babcock Drive). These operations were all greatly cramped for space and would benefit from proximity to the stores operation. In May 1979 the state building commission approved a $36,000 advance for planning of a $2 million stores/extension building. In August the state

selected the architectural firm of Kreuger and Shutter for the project.[3]

At their December 1980 meeting the regents approved the acquisition of a 1.22 acre improved site on North Murray Street for the stores/extension building (then the site of the Sinaiko Brothers Salvage Yard). After a year of futile negotiating with the owners of this land, the regents voted in October 1981 to commence condemnation proceedings to acquire the land. Not until November 1982 were the regents able to approve a purchase price of $421,000 of state funds for the parcel. At the same meeting the regents approved a budget increase of $322,000 for a total budget of $2,322,000. It was pointed out to the regents that this project had already been ten years in planning and that the Charter Street building continued to deteriorate. A June 1983 request for a building ordinance variance to construct the building within three feet of the lot line instead of the required 30 feet was denied by the city of Madison. This reduction in size of the warehouse building would become a drawback of the design. In February 1984 after an unsuccessful round of bids, the regents deleted a number of features to reduce the cost and added another $162,000 to the budget, up to $2.48 million. This would be the last budget adjustment.[4]

The state let building contracts for the Stores/Extension Services building on March 20, 1984. The contractor for all work was Corporate Construction Limited of Oregon Wisconsin, for $2.18 million. Total costs were $2.428 million. The construction went smoothly and the road construction for the project was contracted by the Joe Daniels Company. The new building opened for business on August 19,1985.[5]

The building is 312 by 165 feet of concrete block, faced with brick. The main storage area is awkwardly triangular to fit the oddly shaped and too-small lot. The southeast part of the building has a mezzanine level for the offices of the Extension departments. There are two loading docks on the east side. Stores occupies 75 per cent of the building, with the remaining quarter filled by Extension Services. Surprisingly, no material is brought to the site by the adjacent railroad tracks, all deliveries being made by truck.

1) University Directories.

2) Farnsworth to Edsall, November 14, 1969, series 4/31/9-3 box 7; Shain to Everson, Farnsworth and Collins, April 27, 1972, series 83/35 box 4; Program Statement, April 27, 1972, series 83/35 box 4; *Regent's Minutes*, November 1, 1974, February 7, 1975.

3) Agency Request for State Building Commission Action, May 1979, series 4/31/9-3 box 7; *Regent's Minutes*, June 8, 1979 p. IV-2; Kumlien to Edsall, August 16, 1979, series 4/31/9-3 box 7.

4) *Regent's Minutes*, December 5, 1980, October 11, 1981, November 5, 1982, February 10, 1984; Notes for regent's meeting, November 1982, series 4/31/9-3 box 7; Zoning Application, June 30, 1983, Agency Request for State Building Commission Action, February 1984, Final Cost Reduction List, February 13, 1984, series 4/31/9-3 box 7.

5) State Budget Letter, Paul Brown to Shutter, March 20, 1984, State Department of Administration, office of Patricia Hillestadt; UW New Release, August 13, 1985, series 3/31/9-3 box 7.

MERIT HOUSE

Fig. 1. Merit House shortly after its 1986 opening. [photo courtesy of Norm Sunstad of Residence Halls]

Merit House was built in 1985 with a donation from the Stone family. Initially academic merit and financial need were standards for acceptance, but these requirements have been eliminated. The dorm holds a total of 63 men and women.

Merit House was the first dormitory built by the University after the 1965 completion of the southeast dorms. Its genesis came in February 1984 when representatives of three generations of the Stone family approached the University with a plan to construct and donate a high quality low-rent dormitory. The Stones would provide plans, contract for and erect the building. The Stones comprised Samuel and Cecyle Stone of Laguna Beach, California, their son Mark an executive of the Metalex Corporation of Libertyville Illinois, and his sons David and Gary. Only Gary was a UW graduate.[1]

The first issue to be resolved was a location for the building. The 1980 campus plan specified the area south and east of Dayton Street as a potential housing development area. A location in the Spring Street area was first examined, but rejected. By the end of March 1984 the search had narrowed to land at the existing parking lot #44 at the southeast corner Dayton and Park Streets. Because the Stones were requesting a 100 by 90 foot lot for the project, the University needed to acquire property adjacent to lot 44. The University would then grant the Stones a conditional use permit on the land to erect the building. The purchase of this land would not be completed until October 1984, and was to be paid for from residence halls revenue.[2]

The formal agreement between the Stones and the University was drawn up and signed in May

1984. It stated that the Stone family wished to donate a residence hall to be built on University land at a cost of $1.25 million. The Stones would provide plans for the building, subject to the approval of the University, and contract for the construction of the residence hall. Applicants would be limited to full-time graduate and undergraduate students with a cumulative grade point average (GPA) of 3.0 or better, and who could demonstrate financial need. The building would be known as the Stone Residence Hall, after the three generations of the Stone family who were the donors. Construction was to begin as soon as possible. It was estimated that the residence hall would house from sixty to seventy students. The Stones made a separate agreement with the University of Wisconsin Foundation, a nonprofit channel for contributions to the University to disburse construction funds.[3]

In June 1984 the regents agreed to accept the residence hall gift, and to name it "Stone Residence Hall". The required state approval for the acquisition of the additional land came in July 1884.

Mark Stone, the second of the three generations was the principal actor from the Stone family in the construction of the building. In May 1984 he initiated a design contest in the University of Wisconsin School of Architecture at Milwaukee for the design of the residence hall. This competition required that each design team include one state licensed architect and at least two students. The winning entry was made by a team of four faculty member and two students. By October 1984 a preliminary design was ready, but was altered that same month to fit the exact dimension of the lot now in the hands of the University, and to meet state codes on accessibility standards for public buildings. These changes required the change from two stories to a shorter three story building and the addition of an elevator. Architects Jules, Van Oudenallen and Shields, formed the JVOS company to complete the design and supervise construction. In January 1985 Mark Stone authorized the preparation of construction drawing from the JVOS design. The construction drawings were completed and delivered on May 16, 1985. The Stones had selected a contractor, Robert Newcomb of Madison, by June 20, 1985. Construction began in July 1985. By November 11, 1985 the project was three weeks behind schedule, due to weather problems and material theft. It was hoped that the building would be completed in time for summer school in 1986.[4]

In December chancellor Shain informed Mark Stone that construction was proceeding well, and that completion was planned for summer 1986. Shain also asked Stone why all the documents for the project were marked "Merit House" instead of "Stone Residence hall" as agreed by the regents.[2] In February 1986 Mark Stone made clear to the chancellor that the family had changed its mind about the name and wished the building to be called "Merit House". This change was approved by the regents at its May 8, 1986 meeting.[5]

The formal dedication of Merit House took place on Friday May 30, 1986. Speakers included chancellor Irving Shain, and Norm Sunstad, director of University Housing.[6]

The building is a three story dumbbell shape, 180 feet long and 43 feet deep. For the accommodation of sixty three students there are nineteen double rooms with a bath and kitchenette each, in the end pods, and the center section of the building contains five suites of five single rooms; each suite has a bath, full kitchen and dining room, all rooms are furnished. There are community areas and washer/dryer facilities on the first floor. Residence in each suite are of the same sex. The building is sheathed in red brick, trimmed with marble iron and copper trim. It has a standing seam copper roof and copper flashing and downspouts. There are patios on the south side of the building, and parking south of that. All mechanical systems are housed in the attic.[7]

The total cost of the project came in slightly under the $1.25 million donation. The regents accepted the building as a gift-in kind on June 6, 1986. In the summer of 1987 the University installed air-conditioners to attract summer conference groups. Norm Sunstad informed Mark Stone that "All is going extremely well at Merit House."[3] With the Stone's permission the University no longer requires either a minimum GPA or financial need.[8]

The donation of Merit House closely parallels the donation of the Washburn Observatory in 1878, when Cadwallader C. Washburn selected the architect, the contractor and paid all the bills for the Observatory with minimal involvement of the University.

1) *Regent's Minutes*, June 8, 1984; *Wisconsin State Journal,* June 7, 1984; *Milwaukee Journal*, December 9, 1984; Rennebohm to Winter, May 24, 1984, papers of Residence Halls, Norm Sunstad's files.
2) *Regent's Minutes*, June 8, 1984; UW New Release, June 6, 1984, J. J. Koltes to Sunstad, October 10, 1984, Rennebohm to Winter, May 24, 1984, papers of Residence Halls, Norm Sunstad's files.
3) Memorandum of Understanding, May 4, 1984, papers of Residence Halls, Norm Sunstad's files.
4) Memorandum, Roeber to Fulop, October 29, 1984, Stone to Shain, October 30, 1984, Sunstad to Fulop, February 8, 1985, Lobe to Sunstad, May 17, 1985, Montgomery to Van Ess, June 20, 1985, *Wisconsin State Journal*, August 6, 1985; *Badger Herald*, November 14, 1985.
5) Shain to Stone, December 9, 1985, Shain to Brown, April 3, 1986, papers of Residence Halls, Norm Sunstad's files; *Regent's Minutes*, May 8, 1986.
6) Dedication program, papers of Residence Halls, Norm Sunstad's files.
7) Plans in plans room of physical plant; Merit House brochure, February 5, 1992, papers of Residence Halls, Norm Sunstad's files; interview with Norm Sunstad, fall 1994.
8) Sunstad to Stone, August 17, 1987, papers of Residence Halls, Norm Sunstad's files.

MCCLAIN FACILITY

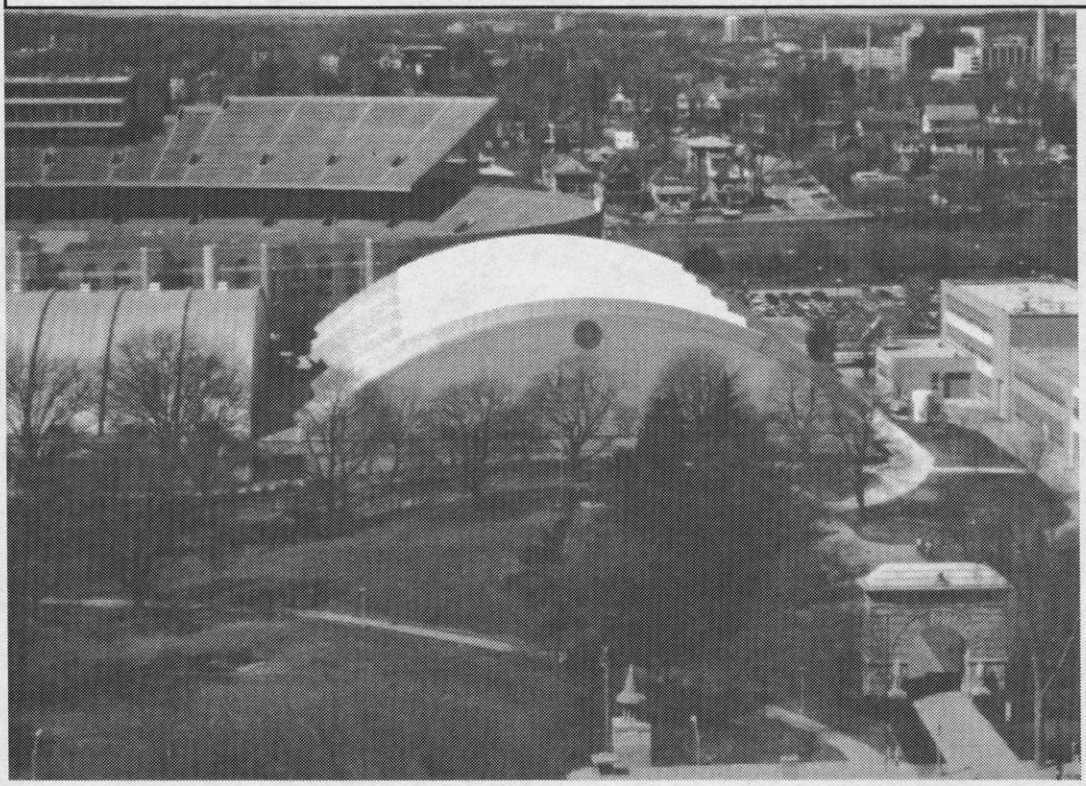


Fig. 1. The McClain Center, looking west, 1988. The connection to the Shell is visible, but the one to the stadium is not. The building at the right is Engineering, and the Camp Randall arch is in the right foreground. [slide S-1418]

The McClain Facility was erected with gift funds in 1989. It houses indoor practice facilities for football practice. It is named for the late football coach Dave McClain.

Coach Dave McClain argued that part of the woes of the Badger football program could be attributed to the lack of indoor practice facilities. This problem had been supposedly taken care of in the 1950s when the Memorial Shell was built, but the shell was so heavily used by other sports that the football program was not able to get adequate time or facilities in the shell. McClain planned and lobbied hard for a new indoor practice facility like the ones used by other Big 10 schools. The moment of victory in this campaign seemed to come in late 1985, when the Athletic board authorized the construction of a $1.5 million "bubble" over Camp Randall stadium. The bubble was to be paid for by the "W" Club, the Mendota gridiron Club, and other boosters. In a few months this idea had been discarded, because of questions about its life expectancy, where to store the bubble in the months when it was not erected, and the cost of heating the skin to keep snow off. At this time planning began for a permanent building.[1]

In March 1986 the regents resolved to accept gifts and grants to build an indoor athletic facility, to ask the legislature for approval to locate the building on the site just north of Camp Randall Sports Center, which would slightly encroach on the Memorial Park. From the regents discussion it is clear that the plan was well developed at the time. Besides the site, the plan already had the shell-type

building at right angles to the Memorial Shell, and connected to the stadium. The regents also discussed the unusual funding for the building. There was never any possibility of state money for this project, so the entire cost would be borne by gifts, many of which were "gifts-in-kind" or noncash donations of services, materials etc. The regents authorized the land to be used by a private corporation in order to develop the project, which would on completion be given back to the University as a gift-in-kind. Chancellor Shain told the regents that gift pledges were already sufficient to build the foundation and erect the building, but that the finishing of the lower level would have to be deferred. The encroachment on the Memorial Park was minimized by the regents since the small corner of the park to be used by the new building was already fenced off and part of a practice field. More cautious heads (who may have remembered the original uproar over the construction of the Memorial Shell on Memorial Park property) would soon prevail; the legislature arranged a swap of half-acre land parcels, so that the regents would own the bit needed for the building on the north end of the Memorial Shell. The Department of Veteran's Affairs received in exchange a plot south of the Memorial Shell. The legislature approved the building in June 1986.[2]

On April 28, 1986, coach Dave McClain, age 48, died of massive heart failure in a whirlpool tub. He had been coach at Wisconsin for less than ten years. At their June 1986 meeting the regents unanimously passed a resolution that the indoor practice facility would be dedicated to the memory of David McClain. By December 1986 financial arrangements had been announced. The national "W" club would select an architect, and conduct the project and act as principal owner until the building was turned over to the regents.[3]

By January 1987 the club had made an agreement with architects Bowen Williamson Zimmerman Incorporated of Madison for the design and construction oversight of the McClain Athletic Facility. This agreement split the project into two phases: phase I the foundation and erection of the basic building with practice field and phase II the finishing of the space in the level below the field. The budget was estimated at $5.88 million for phase I and $3.6 million for phase II.[4]

Funding for the project was a complicated arrangement. In July 1987 the M & I bank of Hilldale agreed to loan the "W" club $4.5 million secured by the assets of a group of football backing organizations (the "W" club, the Mendota gridiron Club and the Wisconsin Foundation) for construction. This construction loan was temporary, and was to be repaid by November 1, 1988, at which time a permanent loan would be arranged.[5]

An agreement with contractor J. H. Findorff and Son of Madison on July 13 1987 got the construction under way. Findorff agreed to accept only a five per cent commission on the total contract, a sharp discount from their usual fee. Because of the unusual nature of the entire project, everyone involved was anxious to finish in the shortest possible time, and the contractors were able to complete phase I of the building by September 1988, at which time the "W" club arranged for the football team to begin formal use of the practice field. Phase II was not turned over to the athletic department until January 20, 1989. The total cost of the facility was $9.5 million. Some difficulty in financing was experienced by the booster clubs because of the extremely low levels of support for the football program in 1989, and correspondingly low donations to the McClain project. These problems were worked out in cooperation of the M & I bank and the legal representatives of the booster clubs.[6]

The building is a 374 by 222 foot rectangle with two main levels and a partial third level. The lower part of the exterior walls are sheathed in ashlar stone to match the Memorial Shell, the outer edges of the roof are of metal, and the central portion of the roof is of Teflon coated fabric. The lower floor contains offices, conference rooms, weight training rooms, locker rooms, a therapy pool, saunas and lounges. On the second level are a 90 yard astroturf practice field, storage and a connection to the Memorial Shell. The mezzanine level holds seating for 80, classrooms, coaches offices, meeting rooms, and a connection to the stadium.

There was a $4.5 million debt remaining on the McClain facility when it was given to the University

by the "W" club on December 8, 1989. This debt was refinanced by the University through the state to pay off M & I Bank and to obtain the lowest possible interest rate, and is now being paid off by the clubs ("W" club, Mendota gridiron club and the Big Red Fund). The debt will be extinguished in 2010.[7]

1) *Wisconsin Alumni Magazine*, January/February 1986, p. 11, March/April 1986, p. 15.
2) *Regent's Minutes*, March 7, 1986; *Wisconsin State Journal*, March 7, 1986, April 30, 1986, May 23, 1986, June 13, 1986.
3) Archives' McClain, biographical file; *Wisconsin State Journal*, December 13, 1986; *Regent's Minutes*, May 9, 1986, June 6, 1986, July 11, 1986.
4) Section 1 of McClain Athletic Facility Project Documents, series 4/31/9-3 box 1.
5) Section 3 of McClain Athletic Facility Project Documents, series 4/31/9-3 box 1.
6) Section 14 of McClain Athletic Facility Project Documents, series 4/31/9-3 box 1; *Wisconsin Alumni Magazine*, September/October, 1988 p. 11; *Wisconsin State Journal*, September 7, 1988; Sweet to Neale et al. November 10, 1988, Van Ess to Brown, January 31, 1989, Memorandum Murphy and Desmond to Murawski, November 9, 1988, series 4/31/9-3 box 1.
7) *Regent's Minutes*, December 8, 1989; *Wisconsin Alumni Magazine*, May/June 1989 p. 10; Barca to George and Kunicki, May 17, 1989, Dedication Program, April 27, 1990, series 4/31/9-3 box 1.

FLEET CAR OFFICE

Fig. 1. The Fleet car office and garage, with the Stores building in the background. [Author Photo, AP-57]

In the days before the last great expansions of the University, the operation of the fleet of vehicles used by University employees was a small enough job that it could be run out of the old service building on University Avenue, and the cars kept on the lots adjacent to that building. This lasted throughout the 1950s. But the land at University and Charter Streets became needed for academic expansion and the fleet grew so large that it could not be administered in that small space.

Consequentially, in 1963 the University moved the auto fleet operation to a large parking lot on College Court. To house the administration of the operation they installed a trailer at 1006 College Court. This new arrangement lasted eighteen years. But the size of the fleet continued to grow. In addition to the size pressure, the trailer that housed the fleet car staff was increasingly unsuitable, since it was uninsulated, and had no indoor plumbing of electricity.[1]

The issue was dealt with first when the regents in December 1980 voted to acquire a .6 acre property on North Murray Street. This plan was part of a larger campus development plan developed with the city of Madison. It was not until 1982 that this property was finally secured. The University made an even trade with the city, the University's College Court property for the city's Murray Street parcels. The University immediately developed the property to be used as the fleet car lot. The city within a few years allowed the College Court property to be developed as housing. The old trailer from College Court was moved to the new Murray Street site, still without plumbing. Efforts by John Brown, the director of fleet car operation, were finally rewarded in 1986 with the construction of a new fleet car facility at 10 North Murray Street. The building is a one story wood frame 26 by 20 feet, sheathed in wood siding and contains an office, storage and a bathroom and lounge. The contractor was S. I. and Son for $23,468. In 1989 a small garage was added to the north side of the building for additional storage and some car parts. As the area of Murray and Regent Street becomes more attractive to developers, the fleet facility may eventually be moved again.[2]

1) University Directories; interview with Paul Brown, spring 1995.

2) *Regent's Minutes*, September 9, 1976, IV-2, December 5, 1980, July 16, 1982; Fleet Car Facility Rebid in papers of John Brown director of fleet car operations, Wanner to Brown, March 17, 1986, Department of Administration budget letter, office of Patricia Hillestadt.

POLICE AND SECURITY

Fig. 1. Police and Security Building, 1995. [Author Photo, AP-58]

Built in 1988 to replace old, undersized and outmoded quarters on Charter Street, the new police and security facility went into use in January 1989.

The University protection and security (P&S) force grew from a total of one officer (Joe Hammersley) in 1937, working out of an office in an old house at 420 North Charter Street, to nineteen in 1961 in the same quarters. After the planning of the psychology building on the Charter Street site, P&S moved in 1962 to another old house at 101 Mills Street. This three level apartment building (see Fig. 2) provided greatly expanded space, and maintained a central position on the expanding campus. But by 1972, with the increase in size to 37 officers in response to campus unrest and increased enrollment, and the increasing number of women officers, the Mills Street building became dramatically unsuitable. In 1983 a request was made to the campus planning committee to provide new quarters for P&S.[1]

A P&S facility was placed at priority position number two on the 1986-87 capital building program list. Because the program proposed a new facility rather than remodelling or expansion of existing ones, the project was subjected to considerable scrutiny and official examination. After very negative reports regarding the state of existing facilities, and some airing of the problem in the press, the project began to develop momentum.[2]

By November 1984, after looking at four locations around campus, a site was selected in the

Fig. 2. This 6,912 square foot vintage 1925 apartment building was home to the University Protection and Security department from 1962 to 1989. By the early 1970's it was extremely crowded. The Mills Street facility was about half the size needed, and lacked handicapped access, had makeshift locker and rest-rooms, inadequate storage and ventilation. Parking was very deficient and some records were stored at another old house at 919 Spring Street (since demolished). The women's locker room had no shower facilities. The property and evidence room could only be reached through the men's locker room. After the new building was finished this building was sold, and is now in use as a private apartment building. [Author Photo, AP-59]

1400 block of Monroe Street. Among the advantages of this site were good traffic circulation, the fact that the University already owned the land, and that the land was an eyesore that needed to be cleaned up. The site contained one building that would be retained, the Art department's glass laboratory. The estimated project cost was $1.9 million. In early 1985 the state asked the University to reduce the size of the building and approved a budget of $1.65 million. The architectural firm Potter Design Group was selected for the project in August 1985. The building was designed with the glass lab in place against the east wall of the P&S building but not connected. In November the regents approved a land deal whereby the Mills Street property was exchanged for two storage warehouses on Gerry Court, with the understanding that P&S could stay at Mills Street until the new building was finished. In June 1986 the state approved the University's proposal. The same month the regents approved the budget of $1.6 million. It was anticipated that the building could be completed in the fall of 1987.[3]

Bids were received in May 1987, but were almost a half million over budget. The building committee and the architect made revision to the plan to bring the cost down. The main items deleted were the garage, a second communications console, and security fences. A second round of bids were received in November 1987.[4]

After some negotiations with the lowest bidders, the contracts were awarded on January 28, 1988. The general contractor was P. G. Miron Construction Company of Menasha Wisconsin for $755,000. Total contracted amount was $1.60 million. These contracts included the foundation for the garage. Ground-breaking took place on March 10, 1988. Construction proceeded without incident through the summer and fall of 1988, and in December 1988 the building committee reported that the major contractor finished his part of the building on December 9, 1988. The following report states that the department moved into the new facility on January 9, 1989. The Mills Street facility was "abandoned except for the garage". In February 1989 a problem appeared with the new alarm system that slowed response of the department in case of a fire alarm. This problem was traced to the alarm system budget reduction during building planning and was resolved in July 1989.[5]

A formal dedication and open house was held at the University Police and Security Facility on April 21-22 1989. Chancellor Donna E. Shalala "cut the ribbon", and speeches were made by chief Ralph Hanson, and Mark Musolf, deputy attorney general of Wisconsin.[6]

The building is 62 by 111 feet, two stories of concrete block walls, sheathed with face brick and glass block windows. The partial basement hold utilities only. The first floor contains the entry lobby, offices, records area, conference rooms and interview rooms. On the second floor are classrooms, men's and women's shower and locker rooms, a break room with kitchen, and other offices.

The 25 by 71 foot six-stall garage was funded in August 1989 with $52,000 of unused funds from the main building budget.

1) *Wisconsin Alumni Magazine*, March 1949, p. 8; *Daily Cardinal*, February 6, 1963 p. 7; University Directories; Police Annual Report, 1985, series 17/1/1 box 1; Shain to Bauer et al. June 28, 1984.
2) Police and Security Facility, December 5, 1984, Valeria to McGown, February 22, 1984, Memorandum, Fulop to Gerhard, October 18, 1984, Barroilhet to Van Ess, June 22, 1984, Memorandum, Macari from Kennedy, November 28, 1984, series 4/31/9--3 box 6.
3) Addendum to Building Program Dated June 1984, Fact Sheet, February 6, 1985, Agency Request for State Building Commission Action, December 1985, Agency Request for State Building Commission Action, June 1986, Agency Request for State Building Commission Action, May 1987, series 4/31/9-3 box 6; Police Annual Reports, 1985 and 1986, series 17/1/1 box 1; *Regent's Minutes*, November 8, 1985, June 6, 1986, May 8, 1987.
4) Police Annual Reports, 1987, series 17/1/1.
5) Police Annual Reports, 1989, series 17/1/1; Progress Reports - Police and Security Facility, November 1, 1988, December 5, 1988, January 23, 1989, Dennis to Foley, January 27, 1989, series 4/31/9-3 box 6.
6) Dedication program, April 21-22, 1989, series 4/31/9-3 box 6.

BAND STORAGE

Fig. 1. The Band Storage building, 1995. The building is one story 36 by 100 feet of reinforced concrete with plywood siding and cedar shingles. It was designed to require minimum maintenance, and has an estimated 50 year lifespan. [Author Photo, AP-60]

Discussion of a facility to house marching band instruments began in 1984 when Harry Peterson of the Chancellor's office asked David Berge, Mike Leckrone, and Dick Tipple to plan a facility to house band instruments. By June 1985 this committee had begun negotiations with the Forest Products Lab's (FPL) director John Erickson with the aim of securing ownership of the FPL building on campus for the storage space needed. The FPL had purchased the land holding its four experimental buildings in the early 1960s, then returned the land to the University in the early 1970s as part of a three way land exchange with the University and WARF. The FPL retained the ownership of the buildings and some rights to use the land.

In 1966 the FPL constructed on this land a storage building intended for very long objects, like wooden trusses and beams. When the University approached them about using the building for band instruments, the FPL pointed out that they still needed the kind of storage that the building provided, and that because of Federal constraints were not allowed to accept a cash donation for the building. FPL's Erickson suggested that the University erect a new building for the use of the FPL on its own property and exchange that new facility as a gift-in-kind for the existing one on the University's property. In December 1986 the University's Tipple produced an estimate of $20,000 to build a new 40 by 80 foot building for the FPL on their property near 502 Walnut Street. On June 25, 1987 the National "W" Club became involved in order to provide funding for the project. The club formally offered to construct a 40 by 80 foot building for the FPL in exchange for the gift-in-kind of the old storage building to the University. The FPL agreed to this arrangement on July 1, 1987. The new building was completed in early 1988 at which time the FPL turned over occupancy of the old building to the University Athletic Department.

Since the smaller experimental buildings had already been given to the University, and were in use as a day care center, the release of the band storage building marked the end of the occupancy of the Forest Products Lab on campus property.

1) Person to Berge, Leckrone and Tipple, August 6, 1984, Berge to Bower, June 4, 1985, Erickson to Berge, February 25, 1987, Murawski to Erickson, June 25, 1987, Erickson to Murawski, July 1, 1987, Neale to Paulson, August 13, 1987, series 4/31/9-3 box 1.

SOUTHEAST CAMPUS RAMP

Fig. 1. The Southeast ramp from Gordon Commons, 1995. [Author Photo, AP-61]

The Southeast Parking Ramp was built in 1988 as part of a proposed housing development in that block. The unusual appearance of the parking ramp is due to the design of the later abandoned housing project.

The University acquired (with department of Residence Hall's funds) the south half of the 600 block of University Avenue between June 1961 and January 1966 as part of the expansion defined by the 1959 "Sketch plan". The original intent was to build women's undergraduate student housing on that site. But state policy generally turned against the construction of University owned housing, and the land became a parking lot.

In 1968 the University and the City of Madison jointly developed an urban renewal plan that included the 600 block of University Avenue, and the city began to buy the north half of the block. The city used their half for parking. During 1985 the city received an offer from a developer, University Residential Properties (URP), of Minneapolis Minnesota to purchase the land and develop 100 or more residential apartment units on the block. The development of the block was opened to other proposals, URP was selected in October 1986.[1]

The URP plan as accepted in February 1987 called for three eight-story residential buildings containing 280 two-bedroom units on the north half and a small part of the south half of the block, with a 450 stall parking structure to be built and operated by the University. This ramp would replace and expand the 380 spaces on the block that would be lost to the apartment buildings. The University's

1977-79 capital budget had authorized $2.9 million for the structure (at a location to be decided later), and in April 1987 was increased to by the regents to $3.8 million because of inflation. Also in April 1987 the state approved the budget, the release of $109,000 in planning funds, and the exchange of some real estate parcels in the block between the city and the University. By May 1987 the consulting engineers, Arnold and O'Sheridan had prepared a report on the design of the ramp. The design provided six levels of parking with main access from Lake Street and egress on the Frances Street side, consisting of 375 spaces controlled by gate for faculty and staff, 50 metered general use spaces, and 50 gate controlled conference user spaces. The regents approved the preliminary plans on December 11,1987. The final plans were finished and approved by the state February 5, 1988.[2]

Bid for the project were opened June 16, 1988, and the general contract awarded to Stevens Construction Corporation in the amount of $980,580. These bids were so favorable that the budget for the project was reduced $465,500. Work began in the summer of 1988. In July 1989, with the project nearing completion the University officially named the structure the " Southeast Campus Ramp". The ramp went into use in the fall of 1988. The final cost was $3.4 million.[3]

The structure is 225 by 122 feet of reinforced concrete, with 475 spaces on six levels. The unusually ornate appearance of the exterior design which led to the humorous appellation "Taj Ma Garage" with its brick faces and arched upper levels, was the result of an effort to integrate the design of the ramp with the design of the apartment buildings proposed for the block by the developers URP, who later bowed out of the project entirely, leaving the parking structure the only building on the block. After the development plan failed in 1990 an additional surface lot was installed by the University on the east side of the ramp, an area that was previously marked for sale to the city to accommodate the proposed apartment buildings. The original design of the ramp allowed for the later addition of three levels of parking, which with the planned construction of the nearby Kohl Center, may become necessary.[4]

1) Memorandum, 600 Block University History and Issues Narrative, Fulop to Brown, March 10, 1987, series 4/31/9-2 box 17.

2) Program Statement, March 1987, Agency Request for State Building Commission Action, April 1987, Building Commission Actions, June 24, 1987, Fulop to Austin, July 7, 1987, Draft of Final Report, Arnold and O'Sheridan, May 27, 1987, Brown to Slack, November 3, 1987, Final Environmental Impact Statement, Arnold and O'Sheridan, December 1987, series 4/31/9-2 box 17; *Wisconsin State Journal*, December 1, 1987.

3) Slack to Brown, July 14, 1988, Richner to Rice, October 17, 1988, Fulop to Austin, April 11, 1988, Memorandum, Hendricks to Barroilhet, July 31, 1989, series 4/31/9-2 box 17; *Regent's Minutes*, June 10, 1988.

4) *Regent's Minutes*, July 7, 1989; Building Commission Actions, August 8, 1989, Agency Request for State Building Commission Action, July 1989, series 4/31/9-2 box 17; The nickname was the work of longtime Madison mayor Paul Soglin.

LIVESTOCK LABORATORY

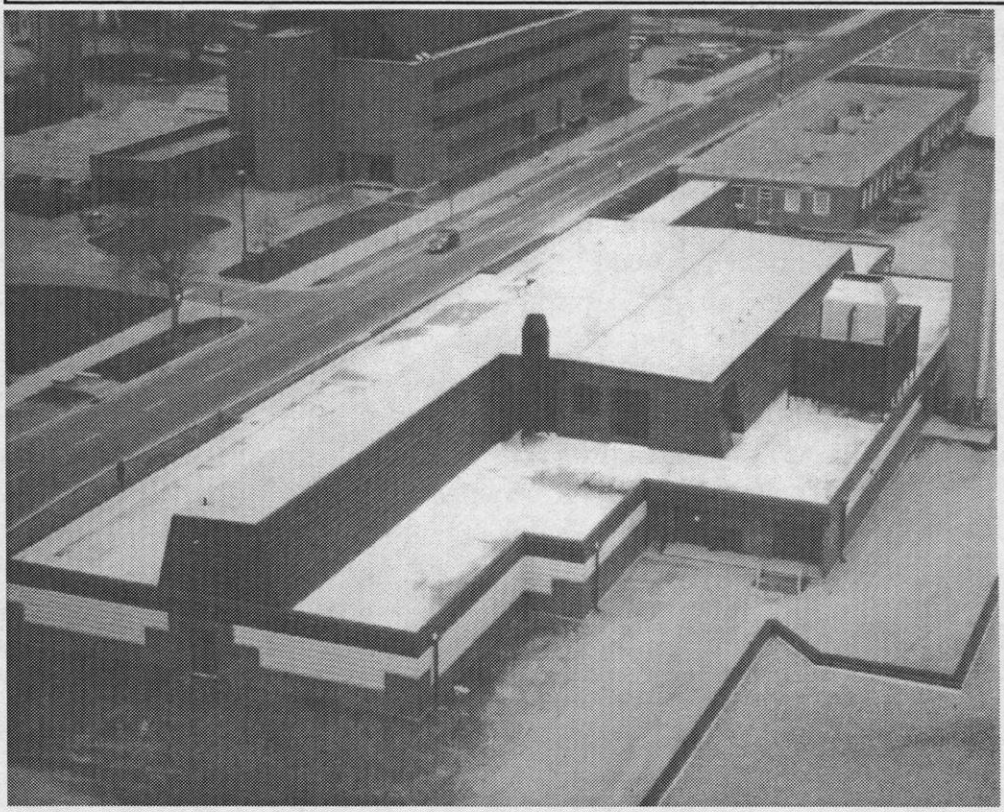


Fig. 1. The Livestock Lab just after opening, 1992. [photo courtesy of Dr. Daniel Shaeffer]

The livestock laboratory, previously known as the large animal holding facility was built after decades of planning in 1991. The laboratory animal contains holding pens for goats, sheep, and swine, cattle holding, weighing rooms, feed laboratories, surgery rooms, and offices.

The struggle to build a research quality animal barn began as early as the 1950s. The departments of meat and animal science were housing animals in a group of very old and unsuitable buildings (see Fig. 2).

In the 1950s the department of Animal Husbandry asked for separate buildings for cattle swine and sheep in the area later used for the school of veterinary medicine. This early attempt drew no support. In 1966 a new plan arose from the department of meat and animal science. It was hoped that a surplus of funds for the animal science building, which was funded by a special oleomargarine tax, would provide the money for the new research facility. The surplus did not come near the estimated $2.1 million needed. In 1970 the project was listed eighth on the campus priority building list. Funding was projected to come from the sale of real estate used by the college of Agriculture. This attempt failed when a combination of declining demand and inflation destroyed this avenue for funding. The failure of a plan to remodel the old horse and dairy barns marks the beginning of the successful plan.

In 1979 a faculty committee justified the need for a "large animal holding facility", with equipment to flush manure to the Madison city sewer system. This report led to the appointment of a plan-

Fig. 2. The old beef barn, just before demolition in August 1991. The beef barn was built in 1924. For decades the departments of meat and animal science were limited to a few old buildings. Besides the old horse and dairy barns (not shown) there were at 1810 Linden Drive two c. 1912 swine barns (already demolished when this picture was taken), and the beef barn. [photo courtesy of Dr. Daniel Schaeffer]

ning committee (chaired by Dr. Daniel Schaefer) for the new building in 1983. This committee submitted the building plan to the department of planning and construction (P & C) whose estimate of $2.1 million was based on animal facilities at the Arlington Farms, and turned out to be far too low. The building committee had selected as a location the site of the older barns for swine and cattle, just north of the horse barn on Linden Drive. Trouble reappeared when in 1986 the project architects MZM of Madison informed the meat and Animal Science department that the building would cost about $3.1 million. The building committee went back to the drawing board, and slashed as much cost from the plans as possible. Among the features which became casualties at this stage were upper level apartments for student managers, and a relatively "normal" looking pitched roof. As a result of these changes, in September 1987 the regents approved a budget increase to $2.5 million.[1]

In the 1980s, the state Department of Natural Resources (DNR) began to object to the runoff of manure into Lake Mendota. As a result the new barn would have to be built with modern and effective manure handling equipment. It also meant that the new building would have to be built soon to avoid legal action by the DNR.[2]

The regent's approved the preliminary plans for the building in November 1987. When estimates came in well over budget, the decision was made by the departments involved to erect the building without equipment, and obtain separate funding later for equipment.[3]

Construction contracts were let June 20, 1991, with the general construction contract going to Gilbert Construction Company of Verona, for $1.3 million. Total contracted costs were $3.44 million. On August 9, 1991 the governor signed the contracts for construction of the livestock lab. Groundbreaking on the livestock lab took place on August 26, 1991.[4]

Construction proceeded smoothly and quickly as the contractors worked through the winter. Basement walls were completed in early October. All bearing walls were completed by January 9, 1992. Exterior siding was completed by May 1 1992. The silo was erected in June 1992. Landscaping and punch-list items consumed the remainder of 1992, and the building was turned over to the University by the state on February 17, 1993. On April 5, 1993 the first animals, a small flock of ewes, spent the night in the new building.[5]

A formal dedication was held for the new livestock lab on April 30, 1993. Dr. Schaefer gave the address, reflecting the turbulent gestation of the facility, when he said " There were days when I didn't believe this event would occur. There were other days when I felt I wouldn't attend if it did

occur." The appearance of the building caused much comment. The Capital Times called it strange and ugly.[2] Dr. Schaefer himself remarked upon its undeniable similarity to a Pizza Hut. Most of this peculiarity of appearance is caused by the budget-driven replacement of the originally planned gable roof with a flat roof which required a penthouse to house mechanical systems.[6]

The finished livestock lab is 260 by 112 feet of concrete block, sheathed with terra-cotta colored face brick and red metal siding. It is a basement and one floor above grade. The lower level contains animal holding pens for goats, sheep, and an entire swine production unit (from gestation to finishing). The upper level contains cattle holding, weighing rooms, feed laboratories, surgery rooms, and offices.

After four decades, the University had a laboratory quality animal facility. As of the spring of 1995 the livestock lab is still not completely furnished.

1) A Brief History of the Livestock Laboratory, undated, papers of Dr. Daniel Schaefer. Large Animal Holding Facility, August 1984, series 4/31/9-2 box 1;
2) A Brief History of the Livestock Laboratory, undated, papers of Dr. Daniel Schaefer. *Wisconsin State Journal*, September 12, 1987; *Regent's Minutes*, February 8, 1985.
3) Regent's Minutes, November 11, 1987, July 12, 1991.
4) Brandherm to Brown, June 20, 1991, State Department of Administration, office of Patricia Hilestadt. Progress Meetings #1-3, August 8, August 15, August 22, 1991, papers of Dr. Daniel Schaefer.
5) Progress Meetings #1-30, August 8,1991 - June 18, 1992, papers of Dr. Daniel Schaefer; *Wisconsin State Journal*, April 18, 1993; News and Features Release, October 8, 1992, papers of Dr. Daniel Schaefer.
6) Livestock Lab Grand Opening program, and remarks, April 30, 1993, papers of Dr. Daniel Schaefer; *Capital Times*, May 29, 1992;

GRAINGER HALL

Fig. 1. Grainger Hall, 1994. [photo courtesy of Grainger public relations office]

Built in 1992 with state funds and a 9 million dollar gift from David Grainger, Grainger Hall of Business Administration helped restore the UW School of Business to its place of national preeminence.

A series of meetings of the Board of Visitors (BOV) for the School of Business in April and May of 1985 began the process that would culminate in the construction of Grainger Hall. The BOV was addressed in April 1985 by the acting dean of the school of business James Blakely and told that he had asked for University support for a new building that would allow the school of business to be housed in one building, and bring the University's facilities into line with other top-ranked business schools.

The same day the president of the BOV wrote to chancellor Irving Shain that the BOV (chaired by ex-regent Joyce Erdman) had passed a resolution committing the BOV to raising from the public sector twenty five per cent of the cost of a new building, or $5 million, whichever is lower. This resolution implies that plans were already in the works, since it mentions the "Brooks Street site". In May 1985 associate dean Strang asked permission from campus planning to proceed with a detailed proposal. Strang would be heavily involved in the project from then on.[1]

In October 1985 a major project proposal was produced by the building committee chaired by William Strang. It called for the construction of an entirely new building to house the school of Business to be erected on the west half of the block bounded by University Avenue, North Johnson, North Park and North Brooks Streets. This proposal points out that the existing facilities for the School of

Business in the Commerce building had been inadequate for more than ten years. Enrollment in the School had grown by 85 percent between 1967 and 1977. The School's enrollment in 1985 comprised 27 per cent of the Letters and Science freshman class, and 13 per cent of all Madison undergraduates. Clearly the School of Business had space deficiencies. Besides the Commerce building the School had space in Bascom Hall, the old Infirmary, and storage in other buildings around campus. This dispersal of space led to problems in maintaining the high standards of the School. The proposal would not only unite the School under one roof, but provide expansion for about 400 more undergraduates. As an alternative to a new building, the committee had examined the possibility of expanding the commerce building by extending it down Charter Street and building upwards five stories. This plan would have meant the loss of the Commerce building for the 2-3 years of construction time.[2]

In early 1986 state business leaders encouraged chancellor Shain and the administration to expedite the new building. It was pointed out that the enrollment of the School had risen 152 per cent since 1965 when new space (an addition to the commerce building) had first been mentioned. In October 1986 the regents approved the construction of a new School of Business facility on North Brooks Street, at a budget of $21.8 million, provided that $8 million in gift funds could be raised for the project. In March 1987 the state building commission approved the project at a budget of $26.3 million, with a provision that $8 million be raised in private funds, and that state money to proceed with planning would be released when the fund-raising reached $4 million.[3]

Reflecting the wide support in the business community for the project, fund-raising went well from the start. The $4 million halfway point needed to obtain state planning money to hire architects and consultants was announced to the regents at their July 1988 meeting. The state building Commission approved the preparation of preliminary plans, with the provision that the plans include parking for 350 cars. Large donations were received from individuals John Morgridge, Ab Nicholas, Ted Kellner and corporations American Family Insurance, the Bolz Foundation and the Rennebohm Foundation. In August 1988, the first hint of an anonymous source for a large contribution appeared. "Mr. X" was interested in some major name recognition in the School of Business. Also in August 1988 the state released $550,000 for preparation of plans. Architects were chosen in early November 1988. The choice fell to the Zimmerman Design Group of Milwaukee, who teamed with the Architect's Collaborative of Cambridge Massachusetts.[4]

Building committee meetings with the architects began in January 1989. An early complaint from the designers was the limited amount of space available on the half block site. William Strang noted that the still anonymous donor had made as a firm condition of his gift that the Walgreens store lot be brought into the building site. Since the University already owned the old state crime lab building next to Walgreens, this would give the designers the entire block to work with, except the old bank building which was deemed unexpendable. The negotiations with Walgreens and their real estate holding company went on for all of 1989, with widely varying appraisals quoted by both parties. In June 1989 the Board of Visitors asked that the architects use the Walgreens space for design but that they include a phase II addition that would eventually use the old bank space as well. The University asked the state to approve the preliminary plans, and to release money for final plans in November 1989.[5]

In February 1990 the University prepared to fire its big cannon in the land acquisition war, when the regents approved the initiation of condemnation proceeding against the owners of the Walgreen property. As usual the threat did not have to be carried out. Within a month the property was sold to the University of Wisconsin Foundation, a nonprofit corporation that was coordinating the fund-raising program. The sale price was $1.0 million. This was an un-budgeted expense for the project. The still unannounced mystery donor, now widely known to be David Grainger, agreed to pay the million for the land. The regents accepted the gift of the Walgreens property from the Foundation at their May 1990 meeting. On May 14, the University of Wisconsin Foundation released the news that David W. Grainger and the Grainger Foundation

had committed $9 million to the construction of the new School of Business Building. At its May 11, 1990 meeting the regents approved naming the building the "Grainger Hall of Business Administration". Grainger was a 1950 graduate of the University in engineering, and the chairman of W. W. Grainger of Skokie Illinois. One million dollars of the gift provided for a new program in business ethics.[6]

A major change took place in the project during May 1990, the formal combination of two projects, the School of Business building and a parking ramp earlier intended for the same block. At the suggestion of the Business school architects, the parking was design to go under the new building, and the state approved this alteration. This enabled the design of the building to cover more of the block.[7]

Ground-breaking for Grainger Hall took place on March 20, 1991. The ceremony was attended by governor Thompson, chancellor Shalala, the University pep band, and guests David and Juli Grainger. At the time of the ceremony a contractor had not yet been selected.[8]

Because of the complexity of the building, contractors had asked for and received an extension of the time for submitting bids. When the bids did come in early April 1991 they were more than $3 million over the budget. The building committee and the architects and the contractors began to look for items to remove from the building. In June 1991 the regents approved the addition of $3.4 million in gift funds to the budget. The state concurred in the increase. The total budget was now $34.4 million. The building could now be built but much of the quality had been removed, stone facing and floors, landscaping and other items that would set the building apart from run-of-the-mill University buildings. Then in July 1991 David Grainger, faced with the cheapening of a building with his name on it, agreed to donate another million dollars. The gift was contingent on the replacement of certain specified items that had been negotiated out of the project, especially colored concrete and much stone trim and flooring. This was the final piece of the budget.[9]

Contracts were awarded in May 1991 with the general contract going to J. H. Findorff for $22.2 million. Total contracted amount was $31.1 million. Construction began with the demolition of Walgreens on July 10, 1991. The site was so completely covered by the building that normal construction storage and parking was problematical. Given the size and complexity of the project, construction was uneventful. A cornerstone and time capsule ceremony was held to mark the halfway point was held on June 5, 1992. At that time the building was on schedule to open in the summer of 1993.[10]

The building was finished and began to host classes in August of 1993, but the grand opening was delayed in order to coincide with homecoming week of October 8-10. Secretary of Health and Human Services Shalala and guest speaker Jim Leher were honored guests at the grand opening. David Grainger was the ribbon-cutter. The August opening of Grainger Hall set off a wave of campus movement not only into Grainger but into the large spaces vacated by the School of Business in Commerce, Bascom and the Infirmary.[11]

The building is five stories high in its main parts, but the library section on the University Avenue side is only three and the central atrium has a tower that rises 180 feet. Parking for 415 vehicles is provided below grade. The architecture mirrors (albeit in a very large scale) features from other older building from the campus. The Brooks Street entrance has the formal 'H' shape of Barnard and Lathrop Halls across University Avenue. The large curved segments on University and Johnson Streets reflect the main towers of the red gym. Other elements were borrowed from the design of the state capitol. The effect of architecture from another more opulent time is heightened by the extensive use of "quality" materials: there are three kinds of stone and brick on the exterior of the building, most of the visible roofs are red clay tile. The huge stained glass window in the library (designed by artist Ed Carpenter of Portland) lends an unexpected touch to the University Avenue facade.

The building contains the latest in high tech equipment. Many of the casual seating benches have computer hookups at hand. The three plush lecture halls, named for other generous benefactors (the 280

seat Morgridge auditorium, 125 seat Nicholas hall, and 125 seat Kellner hall) have state of the art sound and video facilities, "squeakless" chalkboards, computer hookups, and well spaced and comfortable seating. The 30 classrooms are similarly equipped.

The final budget was $36.8 million, $17.1 million in state funds, $14.32 million in gift funds and 5.2 million in other University funds. After 30 years of crowding and dispersal the School of Business is under a single roof, with room for expansion and a home that was designed and built to last as well as the best older buildings on the University campus.

1) Erdman to Shain, April 29, 1985, UW News release, May 1, 1985, and May 6, 1985, Strang to Van Ess, May 20, 1985, series 4/31/9-3 box 2.
2) School of Business, A Major Project, October 1985, series 4/31/9-3 box 2.
3) Erdman to Van Ess, January 31, 1986, Britt to Van Ess, January 3, 1986, Strang to Van Ess, February 4, 1986, Memorandum, Hickman to Shain, October 28, 1986, School of Business, A Major Project, May 1986, UW News Release, March 12, 1987, series 4/31/9-3 box 2; *Regent's Minutes*, October 1986; Laws of Wisconsin, 1987 Senate Bill 100 section 13m.
4) *Regent's Minutes*, July 8, 1988; UW News Release, July 12, 1988, November 3, 1988, Building Commission Actions August 2, 1988, Memorandum Hickman to Shalala et al. August 22, 1988, series 4/31/9-3 box 2; Wisconsin Week, July 13, 1988; *Wisconsin State Journal*, February 8, 1988.
5) Meeting Minutes, UW School of Business, January 20, 1989, Strang to Kennedy, February 17, 1989, Hickman to Shalala, April 21, 1989, Shalala to Brown, April 28, 1989, Fulop to Wilcox, May 2, 1989, Fulop to Feldt, June 29, 1989, Informational Briefing for Regents may 4, 1989, Fulop to Hendricks, February 9, 1989, Bessey to Feldt, July 18, 1989, Bessey to Gerhard, July 20, 1989, Strang to Kennedy, June 15, 1989, Agency Request for State Building Commission Action, November 1989, series 4/31/9-3 box 2.
6) *Regent's Minutes*, February 2, 1990; Ward to Shalala, January 25, 1990, Wilcox to McGown, March 30, 1990, Memorandum of Agreement, Grainger Foundation and University of Wisconsin Foundation, April 16, 1990, series 4/31/9-3 box 2; University of Wisconsin Foundation News Release, May 11, 1990, series 4/31/9-3 box 2; *Regent's Minutes*, May 11, 1990.
7) Agency Request for State Building Commission Action, May 29, 1990, series 4/31/9-3 box 2.
8) UW News Release, March 13, 1991, Groundbreaking program, March 20, 1991, series 4/31/9-3 box 2.
9) Memorandum Gluesing to Macari, March 19, 1991, Strang to Fluno, May 21, 1991, Strang to Wilcox, April 26, 1991, Strang to Gluesing, July 22, 1991, Hickling, to Eisenberg, May 21, 1991, Gluesing to Hickling, April 30, 1991, series 4/31/9-3 box 2; *Regent's Minutes*, June 7, 1991, October 11, 1991, December 11, 1992, December 10, 1993; Wilcox to Shalala, August 27, 1991, series 4/31/9-3 box 2.
10) Brandherm to Brown, May 21, 1991, State Department of Administration, office of Patricia Hillestadt; UW News Release, July 10, 1991, UW News Release, May 28, 1992, Grainger Hall cornerstone ceremony program, series 4/31/9-3 box 2.
11) *Wisconsin State Journal*, August 29, 1993; A Guide to Grainger Hall, Archives Grainger Hall subject file.

BIOTECHNOLOGY

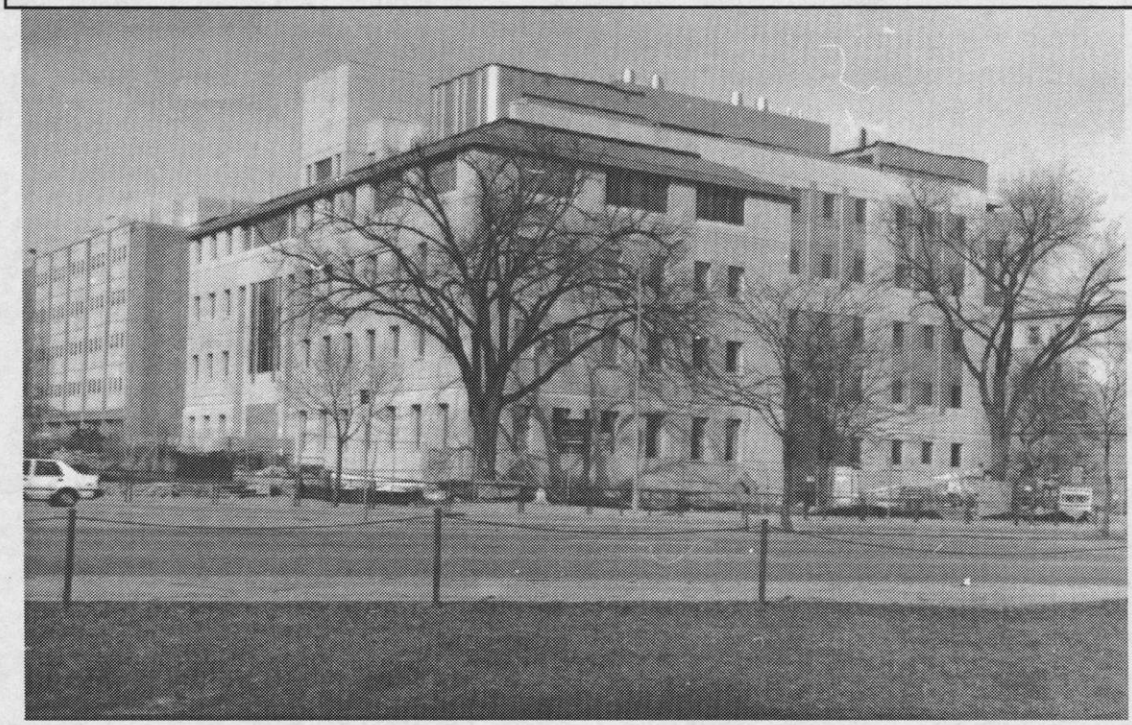


Fig. 1. Biotechnology, March 1995, just before opening. The camera is looking northeast from Engineering Mall, across University Avenue. [Author Photo, AP-62]

Built in 1993, the $30 million Genetics/ Biotechnology Building extended, updated and consolidated the University's decades old facilities for research into the biological sciences.

As early as 1983, the space problems for the department of Genetics was becoming crucial. In a building proposal in that year it was made clear that the twenty year old Genetics laboratory building was severely undersized and outmoded. Much of this problem was due to the changing nature of genetic research. In 1963 when the building was new, a genetics research lab could consist of nothing but a bench for a microscope, ears of corn and a mink pelt. By the 1980s, room was needed for ultracentrifuges, chromatography columns, and other bulky expensive and sometimes noisy equipment. In addition the faculty of the genetics department had grown much larger as new discoveries and techniques caused an influx of students and researchers into the field. This crowding had led to the extreme subdivision of the lab space in the building, and to the fragmenting of the Genetics faculty as professors were housed in other buildings around the campus. Equally bad the building contained very little classroom space, since it had been design mainly as a laboratory building. All these factors pointed to the serious need for a new facility. As usual with major building projects there were two major issues: where to put the new building and how to pay for it.[1]

In the next several years, a number of proposals were generated to alleviate the crowding in the genetics building. One was to move the state lab of hygiene from Henry Mall to the new Clinical Science Center, and use the Stovall labs building as an annex to Genetics. Although nothing came of this idea, the concept of an annex to the existing building was to be acted on in a later plan. The most significant step taken during this period was the establishment in November 1984 of the Biotechnology Center. The center coordinates research and development among more than 100 research faculty across the campus. Because of the lack of space in the Genetics building, the Biotechnology Center was assigned 3000 square feet in the Enzyme Institute. Within a year the Center had attracted more than a million dollars in funding. This quick and substantial success in attracting money would prove to be part of the way out of the funding problems for the Genetics laboratory in general.[2]

A 1985 project proposal by a building committee under chairman Millard Susman first proposes a major building intended to alleviate the space problems of all the various disciplines under the heading of Genetics. The disciplines proposed as tenants of the new building included Genetics, medical Genetics, Clinical Genetics (then housed mainly in the Waisman Center), Biotechnology, and a large amount of shared space. The purposes of such an approach was dictated by the high level of interaction among these disciplines, the high growth rate in some of them, and the equipment and facilities needs shared by them. This proposal did not specifically address siting or funding of the building, but recommended that it be near the existing Genetics building to provide proximity to the Medical School, and the departments of the College of Agriculture, with which the Genetics lab traditionally interacted. By 1986 Susman's committee was recommending that the building be erected in three phases on the site of parking lot twenty, between the McArdle Lab building and University Avenue. It was envisioned that funding would be entirely from the state and might take six years to complete.[3]

Early in 1988, when it became clear that state funding for such a large project would be very difficult to get, the University decided to apply for federal funds. Chancellor Donna Shalala began to lobby Senator Robert Kasten for his help in securing federal financing for the Biotechnology and Genetics building. She cited the strong support of governor Thompson and the long and strong history of Genetics research at the University. Kasten became committed to the project and in September 1988 the Congress appropriated $50,000 for a feasibility study for the new building. This money was in addition to a March 1988 state appropriation of $490,000 for planning. A building proposal from July 1988 recommended that the new building be adjacent to and connected to the existing Genetics building. It was proposed that the building hold a large number of large labs, four lecture halls, common space and shared equipment areas. Although funding is not discussed, the proposal states that "The potential for grant support for the Biotechnology Center is tremendous".[4]

During 1989 the funding issue was generally developed. An early estimate of cost was $26.3 million. The federal feasibility study suggested that federal funds provide half of the cost. In March 1989, the regents voted to ask the Vilas estate trustees to create a fund for the project to accumulate $10 million from the Vilas income over five years. This request was granted . Chancellor Shalala informed governor Tommy Thompson that the project would require $3.2 million in state funding. Thompson was a strong backer of the project and lent it his support, promising additional state money once the federal funding was resolved. In August 1989 the state selected architects Hammel, Green and Abrahamson for the project. During late 1989 the siting of the building received more attention, when the demolition of the old Wisconsin High School was proposed. The state did a historic building evaluation and concluded that the building was disposable. In January 1990 a schedule was developed for the vacating of the building. By the time of the architects study of April 1990, the site on Henry Mall was resolved.[5]

In late 1990 Congress appropriated $3 million for the project. The University decided to

partially fund the building with the WISTAR program. WISTAR is state bonding to provide matching funds for federal grants. The regents approved WISTAR funding for the Biotechnology Center in February 1991. In October 1991 Congress appropriated $7.6 million for the project.[6]

The regents approved the final plans in February 1992. Contracts were let on May 28, 1993 to J. H. Findorff for $11.3 million, and ground-breaking took place on June 17, 1993. In December 1992 the regents approved the construction of a $3 million parking ramp on lot twenty behind the new building; ramp construction was begun in the fall of 1994. The Biotechnology Center was opened in the fall of 1995. The parking ramp on lot 20 was completed in the winter of 1995-1996.[7]

The building is five stories, 176 by 142 feet. The front of the building is only four stories to match the scale of other Henry Mall buildings. The four story section has a red tile roof, and is connected to the genetics building on the north. The building is faced with brick and trimmed with precast concrete and stainless steel.

1) The Laboratory of Genetics, October 1983, Susman to Campus Planning Committee, February 8, 1984, Walsh to Shain, June 15, 1984, series 4/31/9-3 box 3.

2) Laboratory of Genetics, A Major Project, November 1985, series 4/31/9-3 box 3.

3) Laboratory of Genetics, A Major Project, November 1985, Memorandum, Burgess and Susman to Campus Planning Committee, February 19, 1986, series 4/31/9-3 box 3.

4) Walsh to Shalala, March 3, 1988, Shalala to Kasten, May 9, 1988, series 4/31/9-3 box 3; *Wisconsin State Journal*, September 28, 1988.

5) *Wisconsin State Journal*, March 9, 1989, March 15, 1989, March 30, 1989; *Milwaukee Sentinel*, February 18, 1989, March 14, 1989; *Regent's Minutes*, February 10, 1989, March 10, 1989; Wisconsin Alumni Magazine, May/June 1989 p. 12; Walsh to Macari, October 1989, Denniston to Walsh, November 2, 1989, Shalala to Thompson, February 14, 1990, series 4/31/9-3 box 3; *Capital Times*, February 13, 1990; *Wisconsin State Journal*, February 16, 1990; *Daily Cardinal*, February 14, 1990; Site Density Study for Laboratories, Hammel Green and Abrahamson, April 25, 1990, series 4/31/9-3 box 3.

6) *Daily Cardinal*, October 23, 1990; *Badger Herald*, July 19, 1990; UW Clipsheet, October 7, 1991, UW News Release, June 7, 1991, series 4/31/9-3 box 3; Budget January 17, 1990, series 4/31/9-3 box 3. Agency Request for State Building Commission Action, September 1991, series 4/31/9-3 box 3; *Regent's Minutes*, February 8, 1991.

7) *Regent's Minutes*, February 7, 1992, December 11, 1992. Brandherm to Brown, May 28, 1993, State Department of Administration, office of Patricia Hillestadt; UW News Release, June 15, 1993, June 16, 1993, October 25, 1995; *Daily Cardinal*, October 26, 1995.

APPENDIX A

THE BUILDING OF THE SCIENCE HALL GROUP

In a series of long and fruitful meetings, beginning December 20, 1884 (less than a month after the burning of the original Science Hall), the Board of Regents, Milwaukee architect H. C. Koch, and engineering professor Allan Darst Conover developed a basic plan to erect four buildings: a science hall, a chemistry building, a machine and carpentry shop and a boiler house. The speed with which this was accomplished raises the possibility that such plans had been previously considered. The estimates of the total cost of these buildings ranged from President Bascom's initial $160,000 (December 30, 1884) to $293,000 (January 20, 1885). The general plan of construction was approved by the board at the January 1885 meeting, though the details were in flux. Professor Conover was sent east to inspect the science buildings at other universities.[1]

On April 7 1885, the legislature appropriated money for the new science group as follows: Science Hall, machine shop and boilerhouse, $150,000; Chemical laboratory, $20,000; and heating apparatus, $20,000, for a total of $190,000.[2]

When Conover returned he and Koch developed the plans for Science Hall proper. The plans for the smaller buildings, i.e., the boiler house, shops, and chemistry building, were already completed by Koch, and were put out for bid on June 1, 1885. At the June 1885 regents meeting the contract for the three smaller buildings was awarded to the lowest bidder, John Trumbull of Whitewater, for $55,000, who agreed to finish the three buildings by December 30, 1885.

This would prove to be a mistake. Not only was this more money than was available for those buildings, but by January 2, 1886, the regents had turned over to their lawyers the matter of Trumbull's nonperformance under the contract, and the dismal tone for the whole undertaking was established. The chemistry building was finished in a blizzard of suits, countersuits, and mechanics liens, in 1887. The construction of the small, presumably easier buildings dragged on and on. Apparently local and national labor unrest was a major cause of Trumbull's trouble. On January 29, 1886, the regents agreed to give them an extension until July 15, 1886. This deadline also passed without result, and in November 1886, the regents exercised the default clause in Trumbull's contact and turned the superintendency of the project over to Professor Conover.[3]

The regents called for bids on Science Hall in August 1885; this resulted in bids ranging from $179,000 to $229,000.[4] Since the entire appropriation was for $190,000 and almost $60,000 had already been contracted for with Trumbull, these bids were very bad news. The response of the regents' building committee, with the concurrence of the whole board, was to reject all the bids and to employ Professor Conover as superintendent of the building.[5] It is said that the decision angered powerful construction interests in the state.[6] Conover had been involved in planning the building, was working as superintendent on the unfinished Trumbull contract, and would soon have a machine shop available to him. The machine and carpentry shop was the first of the small buildings finished in May 1886.[7] Work on Science Hall began in earnest in October 1885.

The question of whether Science Hall was the world's first building framed entirely with steel is confused by the fact that checks as listed in the regents report for 1886 were issued both for "iron and iron girders" as well as "steel beams"[8] The facts as revealed by the University check register itself are even more ambiguous. The payments are all listed as being for "iron", including the Carnegie checks that are later listed (in the report) as payment for "steel beams". Frank Lloyd

Wright, who claimed (without any known independent corroborating evidence) to have worked on the building as a helper of Conover, adds to the confusion by referring to "iron beams" and "steel beams" in the same paragraph.[9] The structural authority, Carl Condit of Northwestern, says only that Science Hall must have been one of the first steel-framed buildings, and since the destruction of other claimants may now be the oldest.[10] There is also at least a suspicion that the building is framed not with steel at all but with wrought iron.[11] An investigation of this question was undertaken by the author in the fall of 1996. With the assistance of the University Physical Plant samples were cut from the attic and floor joists and submitted for metallurgical analysis. The results show conclusively that the metal is steel. The destruction of other early steel framed buildings leave Science Hall the oldest building in the world with significant amounts of steel in its frame. The supporting columns were also drilled to look for metal support, but they are solid masonry without internal metal. A copy of the report of this investigation is in the University Archives Science Hall subject folder.

Whatever the materials used by Conover to fireproof the building, by April 8, 1887, the regents had spent the entire appropriation ($190,000), the insurance payment ($41,000), and another $30,000 borrowed from Madison Banks at 6% interest, and still Science Hall was "without roof, windows or doors." When on January 19, 1887, the regents asked the legislature for another $200,000 to finish the construction and furnishing of the science group, the state responded briskly by appointing a bipartisan committee to investigate the expenditure of the 1885 appropriation. This committee elicited some truly remarkable testimony from their witnesses, including regents Paul and Keyes, President Bascom, Professor Conover and others.

To begin with the committee wanted to know what had been done with the $261,000, so they brought in an expert accountant from Chicago to go over the books. His testimony was to the effect that the bookkeeping was so primitive that there was no way to determine where the money went:

> Q: Was there anything by which any man, whether connected with the university or not, could tell from an inspection of the books, anything as to the financial condition of the university?
>
> A: I think not.
>
> Q: In other words a person who would look at those books and not go anywhere else, would be entirely misinformed as to the actual condition of the finances of the university?
>
> A: He could form no estimate of the university fund at all, from the books.[12]

There was some intimation that the $30,000 borrowed by the regents had not been used to advance the building, but had disappeared into the black hole of those books.[13]

Another thing that angered the committee was that Professor Conover had been paid as a university professor, as the Science Hall supervisor, and as the supervisor of the Dane County Courthouse, simultaneously. They are not only critical of the quality of his supervision, they also quote the university's rules about professors taking outside employment.[14]

There was a strong suspicion that remained generally undispelled by testimony that, rather than planned, the buildings had been improvised. "The evidence is conclusive that the matter of the probable cost of the proposed new buildings was purely a matter of guess-work with the building committee ... nothing but 'sketch plans' had been submitted to the board of regents."[15]

The practice of the regents doing their own contracting (through Conover), was sharply questioned. Senator Widule stated: "These men working, walked around slowly, apparently killing time. I put the question [to a hod carrier] Who is running this business?... And he said 'Prof. Conover is superintending the construction, but he isn't in town.' I could see no foreman or anything." Simeon Mills testified, "The men never seemed to be half working."

The strongest wrath was directed at regents Paul and Keyes for the attitude that they dis-

played regarding the enormous cost and time overruns. The regents had three main arguments. First, that the wording of the law making the appropriation of 1885 required that the buildings be made entirely fireproof, which pushed the cost out of range of the appropriation. Second, that they believed that the appropriation of 1885 had been only the amount *that year's legislature* was willing to give. Thirdly they had the duty and obligation to do what they believed best for the university, regardless of the legislative intent.

On the first point the 1885 law stated: "All such buildings [the science group] shall be built with a view to their being substantially fireproof." The original architect Koch testified that his initial design would have been substantially fireproof as that word is ordinarily used. He also said that the building as constructed was more fireproof than would have been the one he planned.

The committee asked: If the original plans and specifications did not call for a substantially fire-proof building as demanded by law, why did the [regents] committee advertise for bids for the construction of such buildings? And why have they constructed the three smaller buildings so as to make them what Prof. Conover calls 'slow-burning' buildings. Have they violated the law in erecting those buildings and only observed it in regard to Science Hall?

On the second point (that the appropriation was just that of the 1885 legislature and not the total to be expected), the committee quotes the 1885 appropriation law: "For the purposes mentioned in the first section, there is hereby appropriated from the general fund, so much as is necessary, not exceeding the several sums respectively following: For the science hall, machine and carpentry shop, boiler house and engine, $150,000, for the building for the chemical department, $20,000, for heating apparatus for said buildings $20,000." They then asked regent Keyes:

Q. What did you understand by those words, "not to exceed the several sums?"

A. That it should be the full amount appropriated from the general fund, by the legislature of 1885, for the purposes specified in the act.

Q. So you understand, then, that so far as the state moneys are concerned, that $190,000 was to be the full amount appropriated?

A. By *that* legislature. The act so states. If I understand the act, it means just what it states. No more, no less.

Q. Did you understand it that was simply, as we would call it, a 'starter'?

A. Well I don't know what you are trying to get at.

It was, however, on the third argument, that the regents had autonomous authority to build what they thought best, that the questions and answers even after more than a century and long after the death of all the principals, still look positively pop-eyed with rage and indignation. First the committee quotes Regent Keyes: "We have always thought that we had the power under the statute, under the authority conferred upon us, to go on with the work and plan the buildings as seemed necessary to us for the present and future needs of the university; that we were not tied down to an appropriation made by the legislature; that we were not compelled, in the exercise of our duty, to cut our garment according to the cloth which the legislature in these appropriations, furnished us."

Q. How did you expect the building to be paid for, then?

A. Well we expected that in the great liberality of the legislature of this state that it was quite probable that they would make an additional appropriation.

Q. Is there any way by which the university can complete that building, or the board of regents complete it, unless the legislature makes an appropriation?

A. I don't know that there is.[16]

Regent Paul generally substantiated this view in his testimony.

Q. Did you suppose that the legislature would hand over $200,000 or $300,000 without a question? Was there any amount you thought they would object to?

A. No, sir, and it is not my business to know, and I don't care, individually as a person, at all.

Q. Why hadn't you the right to lay it out so that the state would have to pay a million to build it? There is no limitation to the amount is there?

A. If the board of regents is of the opinion that it ought to lay out a million dollars for the university, within the limits of the law, it has a perfect right to do it; and no man ought to question that right without changing the law.[17]

The committee established from Paul and Conover that no attempt was ever made to design buildings that could be built from the appropriation of 1885, and from President Bascom that he told the building committee that the university did not need such a large and expensive building. The committee then began to address the issue of extortion with Paul who finally makes plain where he believes the power lies.[18]

Q. Haven't you compelled the legislature to make the appropriation, to save the buildings?

A. No, sir; we have not, as I look at it. The legislature can exercise its discretion. We have exercised ours as we have a perfect right to do under the law.

The regents had made their case as plainly as possible; the state could call it extortion if they wished, but the regents could build anything they wanted and they expected the state to pay. And, in effect, the state agreed. On the day the committee presented their report the assembly passed the $200,000 appropriation. By June 1888, the "plain disregard of the legislative intent and a monstrous perversion of the spirit of the law"[20] had worked out fine, the buildings were done and the bills were paid. The wounds had healed sufficiently for the Board of Visitors to call the science group buildings "living monuments to the wisdom and courage of the Board of Regents."[21]

There is now a legal requirement that all contracts entered into by the regents must be signed by the governor. This has been sometimes an expensive and odious requirement, but stands as a permanent reminder of the scandal surrounding the construction of the Science Hall group.

1) *Minutes of the Regents of the University of Wisconsin*, December 30, 1884, Vol. B p. 442, 429, 430; January 20, 1885, Vol. B p. 434, 435; April 14, 1885, vol. B p. 437, 439.
2) *The Aegis*, February 4, 1887 p. 7.
3) *Laws of the State of Wisconsin,* 1885, chapter 332.
4) *Journal of the Senate*, April 12, 1887 p. 720.
5) Ibid.
6) Pyre, J. F. A., *Wisconsin*, p. 216.
7) *University Press and Badger,* May 21, 1886 p. 9.
8) *Report of the Regents of the University of Wisconsin,* 1886 p. 32-33.
9) Wright, Frank Lloyd, *An Autobiography*, Horizon Press p. 77.
10) correspondence Condit to Thomas Hines July 5, 1966, Science Hall subject file, University Archives.
11) Metallurgist Dr. David Fahlberg, quoted by Clarence W. Olmstead in *Science Hall, the First Century* [fn. 82], University Archives, Science Hall subject file.
12) *Journal of the Senate*, April 12, 1887.
13) *Journal of the Senate,* April 12, 1887 p. 713, 716.
14) Ibid p. 720-725.
15) Ibid p. 719.
16) Ibid p. 726.
17) Ibid p. 730.
18) Ibid p. 719-720.
19) Ibid p. 730-731.
20) Ibid p. 732
21) *Report of the Regents of the University of Wisconsin,* 1887-1888 p. 59.

OLD LANGDON STREET

Fig. 1. Science Hall and the first neighborhood swallowed by the university. Langdon Street Houses, left to right: presidents house, Olin house, Raymer house, Birge house, c. 1900. [Series 7/2, Lower Campus folder #1, jf-106]

In 1890, except for a handful of agricultural buildings, the University of Wisconsin campus was contained entirely on the Hill. The presidents of the university had been living since the 1850s in the house on observatory hill [now the observatory office]. John Bascom, because of a need for larger and more convenient housing for his large family, and as part of his effort to reduce the gap between 'town and gown', left the observatory hill house for a house at 620 State Street, The university had purchased this land and house in 1880, from ex-governor Nelson Dewey [now the site of the Tower apartments]. Then because of rising maintenance and a desire to accumulate land nearer the university, in 1887, the regents exchanged this State Street property with Nancy and Charles Bross for lots 1 and part of lot 2, in block 2 (approximately the current [1993] location of the memorial union theater). The house on this property (772 Langdon Street) became the new presidents house (see Fig. 2). Thomas Chamberlin was the first university president to live there, from 1888 through 1891, In 1892 the new president C. K. Adams moved in and lived there until 1900 when his health failed, and he resigned. He was replaced as president by acting president E. A. Birge who held that post from 1901 to 1902. Since dean Birge already had a house on Langdon Street (744 Langdon, purchased for $800 in 1879) he stayed in his own home during this period. The president's house at 772 Langdon stood empty until Charles Van Hise became president and moved there in 1904.[1]

At this time [1904] the row of houses on Langdon Street consisted of 772 (the presidents house), 762 the home of attorney and land speculator John Olin, 752 the home of war hero, regent, and politician George Raymer, and 744 the home of dean Birge (see Fig. 1, left to right.). As befits

Fig. 2. The presidents house [1888-1925], corner of Park and Langdon Streets, c. 1890. This house was the home of Charles Bross, and sold to UW in 1887.

an upper class professional neighborhood, occupancy was very stable. It was the voracious appetite of the university for expansion that finally altered the neighborhood. In 1910 the Olin property (parts of lots 2 and 3) was purchased for $55,000 and in 1912 with an $12,000 addition became the UW Clinical laboratory. In 1914 the Raymer property was purchased for $45,000 and was initially intended for administrative space but later that year at the request of dean Bardeen was altered to house the student infirmary.[2]

The buildings kept these functions until the early 1920s. In 1921 752 Langdon appears in the city directory as the UW Union, and the Birge house at 744 as the home of Blankenship, since Birge (appointed acting president again after the death of Van Hise in 1918) had finally moved into the presidents house. The old infirmary had become expendable after a new infirmary was built in 1918.

By 1925, the expenses of maintaining the old frame buildings and their limited size had doomed them all. President Birge moved to a new president's house in the University Heights neighborhood, leaving the old house to be used for miscellaneous functions. The house at 752 was still listed as the Wisconsin Union Building, 762 was called the old clinic and ticket office, and 744 Langdon, the old Birge house had already (c. 1908) been demolished to make way for the Y. M. C. A. building. The planning of the memorial union included the investigation of several different sites on the lower campus, but because of the convenience and the increasingly low value of the old Langdon Street houses, the site in the 700 block of Langdon was selected, and in August, 1925 the regents approved the demolition of both the 'present union building' (752) and the old clinic building at 762. The demolition contract was let in October 1925 to J. F. Icke. These old houses while not especially long lived fulfilled several important functions (particularly the original site of the university's medical school) for the university, and form memories for the oldest students and Madison residents alike.[3]

1) University and Madison City Directories; Dane County Register of Deeds;
2) *The University of Wisconsin*, Curti and Carstensen vol. 2, p. 491; Papers of the Executive Committee, October 31, 1910, July 10, 1914; Report of the Regents, 1912-1914, p. 339; Regent's Minutes, January 21, 1914.
3) Executive Committee Minutes, August 4, 1925; Daily Cardinal, December 13, 1925.

REFERENCE TABLE

The following Table is intended as a quick reference guide to the most significant facts regarding the University Buildings. The buildings are presented in roughly chronological order, and the table contains the following categories:
Building Name: This is the official name of the structure as used by the University. In the case of building no longer in existence, it is the most common name used during its life.
Aliases: These are other names by which the structure was or is known. Slang and nicknames are not included unless they attained enough currency to become unofficial names.
Address: When possible this is an official Street Address. Where no address was available a location relative to other buildings is noted.
Size in Gross Square Feet: This item provides a relative measure of size, as supplied by the University's department of Space Management. The size includes all additions made to the building after its initial construction. In the case of destroyed buildings, the size is estimated from descriptions or listed as unknown.
Date Built: This date is the year of the start of first construction only. Date for additions are not listed in the table. They can be found in the body of the article.
Architect: Whenever known, the name of the principal architect is listed.
The table is fully indexed in the main index at the back of the book.

Building Name	Aliases	Address	Size (GSF)	Date Built	Architect
North Hall	North Hall, North College, North Dormitory	1050 Observatory Drive	22,460	1851	John Rague
Keystone House	Keystone House, Petherick House, Winterble House, Max Kade Institute	901 University Bay Drive	4,444	1853	William Petherick
Knapp Graduate Center	Knapp House, White House, Governor's Mansion	130 E. Gilman Street	8,704	1854-1856	Unknown
South Hall	South Hall, South Dormitory, Agriculture Hall	1055 Observatory Drive	22,565	1855	John Rague
Observatory Hill Office Building	President's House, Observatory Hill Office, Astronomer's House, La Follette Institute	1325 Observatory Drive	6,962	c. 1855	Unknown
Old Administration Building	Porter House, Administration Building, De Forest House	831 Park Street	Unknown	1855	Unknown
Bascom Hall	Main Edifice, Main Hall, University Hall, Bascom Hall	500 Lincoln Drive	167,293	1857	William Tinsley
Horse Barn	Horse Barn	520 Elm Drive	19,808	1868	August Kutzbock(?)
Artist - in - Resident's House	Artist-in Resident's House, Farm House, 1645 Linden Drive	1645 Linden Drive	3,674	1869	August Kutzbock

Building Name	Aliases	Address	Size (GSF)	Date Built	Architect
Old Gymnasium	Gymnasium	Located near current site of Carillon Tower	5,680	1870	W. S. Franklin
Old Chadbourne Hall	Ladies Hall, Maid's Hall, Sterling Hall, Chadbourne Hall	420 Park Street	29,080	1878	G. P. Randall
Washburn Observatory	Washburn Observatory, Old Observatory	1401 Observatory Drive	7,444	1878	David R. Jones
Old Music Hall	Assembly Hall, Library Hall, (Old) Music Hall	925 Bascom Mall	30,615	1878	David R. Jones
Solar Observatory	Watson Solar Observatory, Watson Mystery House	South of Washburn Observatory	Unknown	1878	James C. Watson
Magnetic Observatory	Magnetic Observatory, Magnetic Cellar, Davie's Root Cellar	Below Birge Greenhouses	est. 320	1878	David R. Jones
Student Observatory	Student Observatory	East of Washburn Observatory	est 600	1880	James C. Watson
Old Science Hall	(Old) Science Hall	550 North Park Street	58,848	1875	H. C. Koch
Machine Shops	Engineering Shops, Machine Shops, Electrical Engineering, Art Education, Journalism Hall	600 North Park Street	41,218	1885	H. C. Koch

Building Name	Aliases	Address	Size (GSF)	Date Built	Architect
Chemical Engineering	Chemistry, Chemical Engineering, 600 North Park	600 North Park Street	30,831	1885	H. C. Koch
Radio Hall	Central Heating Plant, Boiler House, Mining Engineering Lab, Radio Hall	975 Observatory Drive	21,318	1888	H. C. Koch
Campus Assistance Center	Campus Assistance Center, Willison House	420 North Lake Street	4,418	c. 1888	Unknown
Franklin King House	Franklin King House	426 Farm Place	Unknown	1889	Franklin and Carrie King
First Dairy Building	First Dairy Building	adjacent to Horse Barn	Unknown	1890	Stephen Babcock
Hiram Smith Hall	Smith Hall, Dairy Building	1545 Observatory Drive	16,245	1891	Ferry and Clas
Old Law Building	College of Law, Law School	957 Bascom Mall	Unknown	1891	Charles S. Frost
Babcock House	Babcock House	432 North Lake Street	Unknown	1892	Unknown
King Hall	King Hall, Horticulture, Agricultural Physics, Land Tenure Center	1525 Observatory Drive	22,607	1893-1896	J. T. W. Jennings
Gymnasium and Armory	Gymnasium and Armory, (Old) Red Gym	716 Langdon Street	63,303	1892	Conover and Porter

Building Name	Aliases	Address	Size (GSF)	Date Built	Architect
Agricultural Dean's House	Agricultural Dean's House, 10 North Babcock, Agricultural Research	620 North Babcock, 10 N. Babcock	8,889	1896	Conover and Porter
Historical Society Building	State Historical Society Library, University Library	816 State Street	62,000	1896	Ferry and Clas
Dairy Barn	Dairy Barn, Cow Palace	1915 Linden Drive	40,782	1897	J. T. W. Jennings
Old Boat House	University Boat House, Crew Canoe and Bathing House	On Lake Mendota behind old red gym	est. 5,760	1892	Conover and Porter
H. L. Russell House	Russell House, (Old) Dean's House, Old Entomology, Forestry	424 Farm Place	Unknown	1898	Carl Fritz
Old Education	Old Engineering, Johnson Hall, Art Education, (Old) Education	1000 Bascom Mall	82,630	1899	J. T. W. Jennings
Agricultural Bulletin Building	Agricultural Heating Station, Agricultural Bulletin Building	1535 Observatory Drive	7,068	1899	J. T. W. Jennings
Practice Cottage	Practice Cottage	444 Warren Street , 1501 Linden Drive	Unknown	c. 1900	Unknown
Agriculture Hall	Agriculture Hall, College of Agriculture	1450 Linden Drive	72,546	1901	J. T. W. Jennings

Building Name	Aliases	Address	Size (GSF)	Date Built	Architect
Chamberlin Hall	(Old) Chemistry, Pharmacy, Chamberlin Hall	1425 North Charter Street	310,742	1903	J. T. W. Jennings
Old YMCA Building	YMCA, Student Union	740 Langdon Street	Unknown	1905	E. J. Coulton, Leenmouts and Guthrie
Hydraulics Laboratory	Hydraulics Lab, Pump House, Water Science and Engineering Lab	660 North Park Street	38,327	1906	Arthur Peabody
Old Agronomy	Agronomy, Genetics, Dairy Science, Agricultural Journalism	440 Henry Mall	16,992	1906	Arthur Peabody
Agricultural Engineering	Agricultural Engineering	460 Henry Mall	29,848	1906	Arthur Peabody
Old Heating Plant	(Old) University Heating Plant, Sheet Metal Shop, Service Annex	1225 University Avenue	29,574	1907	Arthur Peabody
Old Forest Products Laboratory	US Forest Products Lab, Mining and Metallurgy, Material Science	1509 University Avenue	38,558	1909	Albert Gallistell
Stock Pavilion	Stock Pavilion, Animal Husbandry	1675 Linden Drive	87,151	1909	Laird and Cret
Lathrop Hall	Lathrop Hall, Women's Building	1050 University Avenue	105,292	1909	Laird and Cret
Birge Hall	Biology Building, Birge Hall	430 Lincoln Drive	178,237	1910	Arthur Peabody and Jarvis Hunt

Building Name	Aliases	Address	Size (GSF)	Date Built	Architect
433 North Murray Street	Office of Admissions, Housing Bureau, International Admissions	433 North Murray Street	6,193	c. 1910	Unknown
Carrot and Beet Lab	Carrot and Beet Lab, Animal Isolation Building, Crematory, Hog Cholera Serum Lab	2125 Herrick Drive	1,101	1910	Arthur Peabody
Service Building	Service Building, Shops and Stores Building	1217 University Avenue	47,735	1910	Arthur Peabody
Sea Grant Building	Poultry Building, Entomology, Rehabilitation Counseling Center, Computing Center, Sea Grant	1800 University Avenue	5,095	1910	Arthur Peabody
Hiram Smith Annex	Hiram Smith Annex, Soils Annex, Poultry Science, Veterinary Science	1545 Observatory Drive	12,473	1910	Arthur Peabody
Horticulture Greenhouses	Horticulture Greenhouses, Babcock Greenhouses	425 Babcock Drive	34,021	1910	Arthur Peabody
Horticulture	Horticulture, Moore Hall, Plant Science	1575 Linden Drive	25,053	1910	Arthur Peabody
Chancellor's Residence	Olin House, Chancellor's Residence	130 North Prospect Street	12,472	1911	Ferry and Clas
Johnson Street House	1120 W. Johnson, International Studies	1120 West Johnson Street	5,644	c. 1916	Unknown
Women's Studies	Women's Studies	209 North Brooks Street	5,363	1902	Unknown
Chemistry House	Chemistry Tutoring, 1124 W. Johnson, 307 N. Charter	1124 West Johnson Street, 307 N. Charter	4,259	c. 1902	Unknown

Building Name	Aliases	Address	Size (GSF)	Date Built	Architect
Athletic Annex	Athletic Annex, Gym Annex	702 Langdon Street	17,000	1911	Arthur Peabody
University Club	University Club	803 State Street	17,120	1912	Law, Law and Potter
Hog Serum Plant	Hog Cholera Serum Plant, Forestry Lab	2119 Herrick Drive	2,048	1912	Arthur Peabody
Old Sheep Barn	Sheep Barn, Kleinheinz Hall	1815 Linden Drive	Unknown	Unknown	Unknown
Biochemistry	Biochemistry, Agricultural Chemistry	420 Henry Mall	201,817	1912	Laird Cret and Peabody
Barnard Hall	Barnard Hall	970 University Avenue	53,555	1913	Laird Cret and Peabody
Home Economics	Home Economics, Extension, Family Resources and Consumer Science, 1300 Linden Drive	1300 Linden Drive	76,077	1912	Laird Cret and Peabody
Wisconsin High School	Wisconsin High School, Journalism, Library School, Social Work	425 Henry Mall	56,261	1913	Laird Cret and Peabody
Meiklejohn House	Meiklejohn House, Anderson House	228 North Charter Street	5,955	1914	Unknown
BAVI	Bureau of Audio Visual Instruction, Schlimgen Building, Extension Annex	1327 University Avenue	15,203	c. 1914	Claude and Starck
Sterling Hall	Sterling Hall, Commerce Building	475 North Charter	165,139	1914	Laird Cret and Peabody
Camp Randall Stadium	Camp Randall Stadium	1440 Monroe	204,875	1915	Arthur Peabody
Soils Annex	Soils Building, New Soils, King Hall Annex	1525 Observatory Drive	26,447	1915	Laird Cret and Peabody

Building Name	Aliases	Address	Size (GSF)	Date Built	Architect
President's House	President's House, Brittingham House, Dunmuvin	6021 South Highland Avenue	13,657	1916	Frank Riley
Women's Field House	Women's Field House	Camp Randall	3,584	1917	Albert Gallistell
Old Infirmary	Infirmary, Social Work	445 North Randall	40,860	1918	Henry Nyeland
Bradley Memorial Hospital	Bradley Memorial, Medical Administration	1225 Linden Drive	23,416	1918	Henry Nyeland
Old Hospital	University Hospital, Wisconsin General Hospital, Medical Sciences	1300 University Avenue	444,789	1920	Arthur Peabody
Old Library School	Phi Kappa Psi, Library School, Planning and Construction	811 State Street	13,715	c. 1921	Frank Riley
Nurses Dormitory	Nurses Dormitory, Nurses School, ROTC Building	1402 University Avenue	28,408	1924	Arthur Peabody
Van Hise Dormitories	Van Hise Dorms, Tripp Hall, Adams Hall, Lakeshore Dorms	1520 Tripp Circle	211,321	1925	Arthur Peabody
Land Tenure Center	Land Tenure Center, (Old) Rennebohm's	333 North Randall Street	16,215	c. 1926	J. Glaetti
Primate Laboratory	Primate Laboratory, Harlow Primate Lab, Madison Milk Co-op	22 North Charter Street	35,259	c. 1927	Unknown
Service Memorial Institute	Service Memorial Institute, SMI, Medical School	470 North Charter Street	130,380	1927	Arthur Peabody
Memorial Union	Memorial Union	800 Langdon Street	223,512	1927	Arthur Peabody

Building Name	Aliases	Address	Size (GSF)	Date Built	Architect
Field House	Field House	1450 Monroe	119,166	1929	Arthur Peabody
Mechanical Engineering	Mechanical Engineering	1525 University Avenue	146,944	1929	Arthur Peabody
Old Bank	First Wisconsin Bank, Summer Sessions, 905 University Avenue	905 University Avenue	47,087	1929	Frank Riley
Orthopedic Hospital	Orthopedic Hospital, Children's Hospital, Nutritional Science	1415 Linden Drive	56,703	1930	W. F. Stevens
Meat and Muscle Laboratory	Animal Research, Meat Lab, Meat Science and Muscle Biology	1805 Linden Drive	30,066	1931	Arthur Peabody
Old Post Office	Rennebohm's Post Office, University Post Office, Safety Building, Arts Building	317 North Randall Street	9,368	1929	Phillip Homer
Old Lake Laboratory	Marine Biology Lab, Lake Lab, Hydrobiology Lab, Hoofer's Storage	870 Langdon Street	1,530	1932	Arthur Peabody
Carillon Tower	Carillon Tower	1150 Observatory Drive	1,661	1936	Arthur Peabody
Kronshage Dorms	Kronshage Dorms, Lakeshore Dorms	1650 Kronshage Circle	47,537	1938	Roger Kirchhoff
Elizabeth Waters Hall	Elizabeth Waters Hall, Liz Waters	1200 Observatory Drive	142,912	1938	Roger Kirchhoff
Animal Disease Lab	Animal Disease Control Lab, Food Research Institute, Horticulture Annex	2115 Herrick Drive	8,756	1939	Roger Kirchhoff

Building Name	Aliases	Address	Size (GSF)	Date Built	Architect
State Highway Laboratory	Old Highway Lab, CAE Lab, Plasma Physics, 1410 Johnson Drive	1410 Johnson Drive	63,618	1939	Arthur Peabody
Old McArdle Laboratory	McArdle Labs, 420 North Charter Street	420 North Charter Street	95,130	1939	Roger Kirchhoff
Agronomy Seed Building	(Agronomy) Seed Building	1930 Linden Drive	17,744	1940	Arthur Peabody
University Press Houses	University Press	807, 811, 817 West Dayton Street	807 = 4,091 811 = 3,632 817 = 1,810	807: 1913 811: 1902 817: 1875	Unknown
University Press Warehouse	University Press Warehouse	114-116 Murray Street	18,223	1927	Unknown
West Day Care	West Day Care, Campus Day Care, Forest Products Research Park	2280 and 2290 Observatory Drive	2280 = 2240 2290 = 870	1937 and 1965	Unknown
Home Management House	Home Management House, Practice House, Child and Family Studies	1430 Linden Drive	5,379	1940	Roger Kirchhoff
Small Animal House	Small Animal House, Polio Research Lab, Fur Research Lab, Fur and Virus	2105 Herrick Drive	1,860	1941	Roger Kirchhoff
Trailer Parks	Randall Trailer Park, Monroe Trailer Park	Camp Randall	Unknown	1945	Unknown
University Houses	University Houses		178,229	1946	Leonard Schultz
Quonset Huts	Quonset Huts, Q1 - Q15	14 units scattered across campus	2,571 (Q15 only)	1946	None

Building Name	Aliases	Address	Size (GSF)	Date Built	Architect
Slichter Hall	Charles Sumner Slichter Hall	625 Babcock Drive	62,985	1946	Roger Kirchhoff
Medical Warehouse	Medical Warehouse and Offices	112 North Lake	38,360	1947	Unknown
Old WARF	Old WARF, 504 Walnut Street	504 Walnut Street	21,247	1947	Law, Law Potter and Nystrom
Temporary Buildings	Temporary Buildings, T1 - T27	27 locations across campus	Unknown	1947	Weiler and Strang (on campus erection)
Institute For Enzyme Research	Institute For Enzyme Research, Enzyme Institute	1710 University Avenue	69,559	1947	Lewis Siberz
Primate Annex	Primate Annex, Primate Center Building #2	120 Capitol Court	42,905	c. 1947	Unknown
Engineering Building	Engineering	1415 - 1425 Johnson	155,663	1948	Foeller, Schober, Berners and Jahn
Babcock Hall	Babcock Hall, Dairy Building	1605 Linden Drive	138,405	1948	Grassold and Johnson
Short Course Dorms	Short Course Dorms, Jorns Hall, Humphrey Hall	640 - 650 Babcock Drive	33,074	1949	Roger Kirchhoff
Barley and Malt Lab	Barley and Malt Lab	501 Walnut Street	Unknown	1949	Unknown
Memorial Library	Memorial Library	728 State Street	572,535	1950	Roger Kirchhoff
Intern's Dorm	Intern's and Resident's Dorm, Psychiatry, Agricultural Economics, Taylor Hall	427 Lorch Street	34,454	1951	Roger Kirchhoff

Building Name	Aliases	Address	Size (GSF)	Date Built	Architect
Stovall Laboratory Of Hygiene	Stovall Hygiene Lab, Stovall Lab	465 Henry Mall	81,357	1951	Brimyer, Grellinger and Rose
Heating Shop	Heating Shop, Steamfitter's Shop	115 North Mills Street	19,000	1951	Grover Lippert
University Health Service	University Health Service, State Diagnostic Center	1522 University Avenue	45,388	1952	Eschweiler and Eschweiler
Dairy Cattle Center	Dairy Cattle Instruction and Research Center	1815 Linden Drive	33,289	1953	Law, Law, Potter and Nystrom
Walnut Street Greenhouses	Walnut Street Greenhouse Range	515 Walnut Street	40,352	1954	Weiler and Strang
Commerce	Commerce, School of Business, Mark Ingraham Hall	1155 Observatory Drive	96,369	1954	Law, Law, Potter and Nystrom
Camp Randall Memorial	Camp Randall Memorial, Athletic Practice Building, The Shell	1430 Monroe Street	93,318	1954	Fitzhugh Scott
Zoe Bayliss House	Zoe Bayliss House	915 West Johnson Street	11,603	1955	Weiler and Strang
David Schreiner House	David Schreiner House	123 North Orchard	9,255	1955	Weiler and Strang
Harvey Street Apartments	Harvey Street Apartments, University Cabin Court	2900 Block Harvey Street	30,266	1955	Grant Kittle
Nursery School	Nursery School, Pre-School Lab	1440 Linden Drive	6,703	1956	Weiler and Strang
Wisconsin Center	Wisconsin Center	702 Langdon Street	90,183	1956	Bernard, Foeller, Stafford and Jahn
Holt Dormitories	Holt Dormitories, Cole Hall, Sullivan Hall, Holt Commons	625 Elm Drive	119,449	1957	Mittlebusher and Tortelot

Building Name	Aliases	Address	Size (GSF)	Date Built	Architect
Eagle Heights	Eagle Heights, Pharmaceutical Gardens	Eagle Heights	1.4 million	six stages from 1956 - 1966	Gausewitz and Cashin (groups 1-6) Eugene Wasserman (groups 7-9)
Bacteriology	Bacteriology, E. B. Fred Hall	1550 Linden Drive	93,623	1953	Brimeyer, Grellinger and Rose
Genetics Research Barn	Genetics Research	1910 Linden Drive	11,271	1957	Law, Law, Potter and Nystrom
Poultry Research Laboratory	Poultry Research Lab, Halpin Hall	1925 Observatory Drive	7,443	1957	Law, Law, Potter and Nystrom
Charter Street Heating Plant	Charter Street Heating Plant	115 North Charter Street	83,495	1958	Boddy, Benjamin and Woodhouse
Elm Drive Dorms	Elm Drive Dorms (A, B, and C), Bradley Hall, Goodnight Hall, Friedrick Center, Continuing Education Center	1905 (Bradley), 1925 (Food Research), 1945 (Friedrick), 1975 (Goodnight) Willow Drive	230,575	1958	Mittlebusher and Tortelot
New Chadbourne Hall	Chadbourne Hall	420 Park Street	143,604	1959	Stanley Nerdrum
Agricultural Engineering Shop	Agricultural Engineering Shops	540 Elm Drive	31,512	1959	S. A. Witzel
Mathews Chemistry Laboratories	Mathews Laboratories for Chemistry Research, Chemistry Research Unit I	111 West Johnson Street	87,320	1960	Grellinger and Rose
Lowell Hall	Lowell Hall, Wisconsin Guest House	610 Langdon Street	134,494	1960	Eugene Wasserman

Building Name	Aliases	Address	Size (GSF)	Date Built	Architect
Extension Building	University Extension	432 North Lake	74,606	1960	Brust and Brust
Susan B. Davis House	Susan B. Davis House	917 West Johnson Street	12,000	1961	Weiler and Strang
High Energy Physics	High Energy Physics Lab, Office of Ground Department	2135 Herrick Drive	8,617	1961	Karel Yasko
Social Science	Social Science, Social Studies	1180 Observatory Drive	199,801	1961	Law, Law, Potter and Nystrom
Van Vleck Hall	Edward Burr Van Vleck Hall	480 Lincoln Drive	108,239	1961	Flad and Associates
Genetics	Genetics Building	445 Henry Mall	54,771	1961	Siberz and Purcell
Limnology	Limnology, Hydrobiology Lab	680 North Park Street	13,233	1961	Kaeser and McCleod
Henry Rust House	Henry Rust House	115 North Orchard Street	11,828	1962	Shinji Yamamoto
Hi Ray Hall	Hi Ray Hall, 1308 West Dayton Street	1308 West Dayton Street	8,948	1962	Krueger Kraft and Associates
Veterinary Science	Veterinary Science, Animal Health Building	1655 Linden Drive	43838	1962	Ames, Torkelson and Nugent
A. W. Peterson Building	Peterson Building	750 University Avenue	73,622	1962	Frelich, Angus and Associates
McArdle Laboratories	McArdle Memorial Laboratory For Cancer Research, McArdle Labs	450 North Randall Street	95,130	1962	Shutte, Mocon and Phillips
Extension Services	Extension Services, Photomedia	45 North Charter Street	22,359	1962	William Horne
New Law Building	Law School	957 Bascom Mall	141,874	1963	Karel Yasko

Building Name	Aliases	Address	Size (GSF)	Date Built	Architect
New Gymnasium	Natatorium, Gym Unit I, Gym Unit II, New Gym	2000 Observatory Drive	216,517	1962	Grassold and Johnson
Mifflin Street Warehouse	Warehouse, Warehouse II, Wisconsin Supply Building	630 West Mifflin Street	76,241	1963	Unknown
Russell Labs	Harry L. Russell Laboratories, Russell Labs	1630 Linden Drive	154,217	1963	J. J. Flad and Associates
Brogden Hall	Psychology Building, Brogden Hall	1202 West Johnson Street	114,895	1964	Shattuck, Siewart and Associates
Biotron	Biotron	2115 Observatory Drive	89,273	1964	Grassold and Johnson
Primate Center	Wisconsin Regional Primate Center	1223 Capitol Court	31,187	1964	Herbst, Jacoby and Herbst
Southeast Dorms	Southeast Dorms, Sellery Hall, Witte Hall, Ogg Hall, Gordon Commons	Sellery: 821 W. Johnson; Ogg: 716 W. Johnson; Witte: 615 W. Johnson; Gordon Commons: 717 W. Johnson	644,421	Sellery: 1963; Witte: 1964; Ogg: 1965; Gordon: 1966	J. and G. Daverman
Schuman Shelter	Intramural Warming Hut	2025 Willow Drive	960	c. 1962	unknown
Glass Lab	Glass Laboratory	46 North Randall Street	4,015	c. 1963	Unknown
Physical Plant Garage	Physical Plant Garage	21 North Park Street	16,623	1945	Lewis Siberz
Zoology Research	Zoology Research	117 West Johnson Street	42,764	1963	Kloppenburg and Kloppenburg
Daniels Chemistry Building	Daniel Chemistry Building, Chemistry Units 2, 3, and 4	1101 University Avenue	219,457	1965	Grellinger and Rose

Building Name	Aliases	Address	Size (GSF)	Date Built	Architect
Alumni House	Alumni House	650 North Lake Street	15,149	1966	Berners, Schober and Jahn
Primate Holding Building	Primate Holding, Monkey House	Vilas Park Zoo	3,866	1965	Herbst, Jacoby and Herbst
Bock Labs	Molecular Biology and Biophysics, Robert M. Bock Labs	1525 Linden Drive	70,055	1965	Durrand and Bergquist
Computer Science	Computer Science and Statistics, Statistics and Numerical Analysis	1220 West Dayton Street	239,815	1965	Weiler and Strang
Van Hise Hall	Van Hise Hall, Language Building, Classroom Building #1	1220 Linden Drive	226,011	1965	Frelich and Angus
Middleton Medical Library	Middleton Medical Library	1305 Linden Drive	44,917	1965	Graven, Kennedy and Iverson
Elvehjem Arts Center	Elvehjem Art Center, Elvehjem Museum of Art	800 University Avenue	94,227	1965	Harry Weese
Meteorology	Meteorology and Space Science, Atmospheric, Oceanic and Space Science	1225 West Dayton Street	143,241	1966	Grassold, Johnson, Wagner and Isley
Humanities	South Lower Campus Facility, Humanities	455 North Park Street	294,017	1966	Harry Weese
Crew House	Crew House	680 Babcock Drive	14,018	1966	J. J. Flad
Engineering Research	Engineering Research Building, ERB	1500 West Johnson Drive	155,663	1967	Berner, Schober and Kilp
Picnic Point Bath House	Picnic Point Bath House	Picnic Point	1,564	1967	Kaeser and McLeod
Steenbock Library	Steenbock Memorial Library, Agricultural Library	550 Babcock Drive	11,562	1967	Weiler, Strang and McMullin

Building Name	Aliases	Address	Size (GSF)	Date Built	Architect
Nielson Tennis Stadium	Nielson Tennis Stadium	1000 Highland Avenue	130,736	1967	Walton and Walton
Union South	Union South	227 North Randall Street	109,041	1968	Weiler, Strang and McMullin
Helen C. White Hall	Helen C. White Hall, College Library	600 North Park Street	343,009	1969	Fitzhugh Scott
WARF Building	WARF Building, Surge Space	610 North Walnut Street	131,725	1969	J. J. Flad
Vilas Hall	Vilas Hall for the Communication Arts	821 University Avenue	247,778	1969	J. J. Flad and Associates
Animal Science	Animal Science	1675 Observatory Drive	124,973	1970	Grellinger, Rose, Klumb, Rappl and Haas
Noland Zoology	Lowell E. Noland Zoology Building	250 North Mills Street	92,541	1970	Somerville and Associates
Teacher Education Building	Teacher Education Building	225 North Mills Street	97,020	1971	Burroughs and Van Lanen
Educational Science	Educational Science	1025 West Johnson Street	181,248	1971	Durrant, Deininger, Dommer, Kramer and Gordon
Waisman Center	Waisman Center for Mental Retardation and Human Development	1500 Highland Avenue	174,777	1971	Johnson, Wagner, Isley and Widen
Weeks Hall	Weeks Hall for Geological Sciences	125 West Dayton Street	112,923	1972	Graven, Kenney and Iverson
West Campus Heating Plant	West Campus Heating and Chilling Plant	505 North Walnut Street	33,340	1973	Sample and Potter
Wendt Library	Wendt Library, Engineering and Physical Sciences Library	215 North Randall Street	72,918	1974	Strang Partners

Building Name	Aliases	Address	Size (GSF)	Date Built	Architect
Clinical Science Center	University Hospital and Clinics	600 Highland Avenue	1,500,000	1973	Hellmuth, Obata and Kassabaum
Dairy Forage Center	North Central Dairy Forage Research Center	1925 Linden Drive	58,898	1980	Flad and Associates
Veterinary Medicine	School of Veterinary Medicine	2105 Linden Drive	237,671	1981	Flad and Durrant Group
SERF	Southeast Recreational Facility, SERF, Gym III	715 West Dayton Street	147,874	1982	Pfaller, Herbst and Associates
Stores	UW Stores/Extension Services	30 North Murray Street	57,532	1985	R. C. Shutter
Merit House	Merit House, Merit Hall, Stone Hall	919 West Dayton Street	19,375	1985	JVOS group
McClain Facility	McClain Football Facility	1440 Monroe Street	155,872	1986	Bowen, Williamson, Zimmerman
Fleet Car Office	Fleet Car Office	10 North Murray Street	1,096	1986	John Paulson
Police and Security	Police and Security, Protection and Security	1429 Monroe Street	17,391	1988	Ross, Thomas, Potter
Band Storage	Band Storage, Athletic Storage	2250 Observatory Drive	3,903	1966	Unknown
Southeast Campus Ramp	Southeast Campus Ramp, "Taj Ma Garage"	620 West Johnson Street	149,384	1990	HSR Associates
Livestock Laboratory	Livestock Laboratory, Large Animal Holding	1810 Linden Drive	34,905	1989	Gus Martinson
Grainger Hall	Grainger Hall, School of Business	975 University Avenue	504,252	1990	Zimmerman and TAC
Biotechnology	Biotechnology, Genetic and Biotechnology Center	425 Henry Mall	140,000	1993	Hammel Green and Abrahamson

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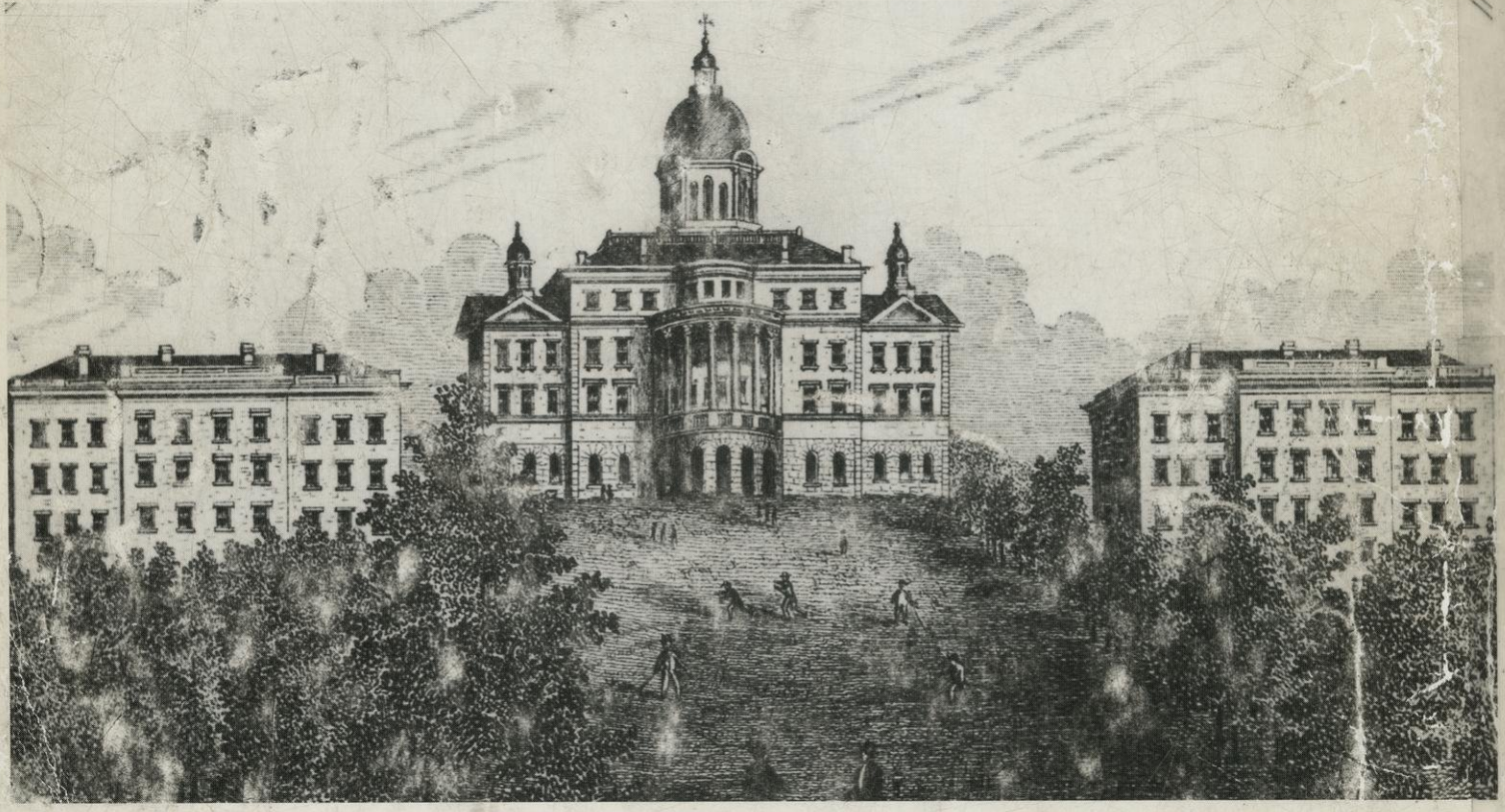
The campus c. 1880. The Historical Society would soon (1900) replace the neighborhood in the foreground of the picture. Just visible at the right of the picture is old Science Hall which would burn in 1884. Bascom Hall would lose its dome in 1916. This picture was taken from the roof of a home near the corner of Lake and State Streets.



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