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THE BADGER QUARTERLY

University
News For

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Wisconsin
Alumni

Volume 1

January, 1939

Number 1

Celebrate U.W. Founders' Day Feb. 6

Need More State Aid to Maintain Strong U.

Although it "noted with satisfaction the excellent relations between the University, the alumni and people of the state, the harmony within the faculty and the close cooperation between faculty, deans, president, regents and state officials," the University committee of the University of Wisconsin in its annual report made public recently maintained unequivocally that "the state of Wisconsin cannot maintain its University with the high relative standing which it has enjoyed in the past without providing more adequate support."

Pointing out that the state is "facing a difficult situation with heavy, new demands on its limited financial resources," the report warned that "if it is impossible to provide more adequate funds for the support of the University it will be necessary to be content with a University of lesser strength."

The University committee which submitted the report is one of the most powerful of the faculty's standing committees. Elected by ballot the members represent the entire faculty. The committee's report was adopted by the faculty at its November meeting. Members of the committee who signed the report are: Prof. Farrington Daniels, chairman; Profs. John D. Hicks, George W. Keitt, Hans H. Reese, Raymond J. Roark, and Henry R. Trumbower.

Enrollment Up 40%

Pointing to the more than 40 percent increase in State University enrollment in the last five years, the committee asserted that during a period of economic cur-

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Discuss Many Problems at U. Farm Meet

Conferences devoted to timely and important farm and home problems are to occupy the attention of Wisconsin farmers and homemakers when they meet for the 1939 state Farm and Home Week at the University of Wisconsin, January 30 to February 3.

Each of the five days is to be devoted to consideration of special topics, announces Warren W. Clark, in charge of program arrangements. Monday, January 30, has been designated as Agricultural Conservation day; Tuesday, Dairy day; Wednesday, Live Stock Health day; Thursday, Farm Finance day; and Friday, Rural Life and Recreation day.

National and state agricultural

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Report Reveals Average Student Expense \$455

Questionnaires submitted to 429 of the University of Wisconsin students who received employment last year from the National Youth Administration, federal educational aid program, revealed that the average cost for NYA students for one year's attendance at the State University is approximately \$455.

This figure corresponds closely to the \$450 figure which the Student Employment Bureau and the Registrar's office of the State University considers an average minimum expenditure for the school year for a student who does not have to pay the out-of-state tuition.

Of the group, 49 spent less than \$350 for their academic year while

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Ask Funds for Dairy Herd, Science Wing

Requests for funds to build adequate facilities for social science students and purchase an adequate dairy herd will be requested of Gov. Julius P. Heil and the 1939 legislature, the University Board of Regents decided recently.

The board voted to have Pres. Clarence A. Dykstra urge the new legislature to provide a building or wing for school of commerce and economics students now jammed into North hall and Sterling hall.

Regent Arthur J. Glover, Ft. Atkinson, was delegated to impress upon Gov. Heil the need for a

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See Pages 4-5

Believing that all Wisconsin alumni and citizens of the state are vitally interested in the needs and future of their own State University, the editors have devoted several pages of this issue of *The Badger Quarterly* to the University's needs as set forth in Pres. C. A. Dykstra's explanation of the University budget requests from the State for the 1939-41 biennium. This material, along with other information in the form of charts, tables, and several articles, is found on pages 4 and 5 of this issue.

Celebrates 80th Birthday



JULIUS E. OLSON

Showered by scores of congratulatory messages from this country and abroad, and honored by a torchlight parade by the University Norse club and a special concert by the Grieg Male chorus, Julius E. Olson, University professor-emeritus of Scandinavian language and literature, recently celebrated his 80th birthday at his home.

Joining in wishing him anniversary greetings were the king of Norway and the Norwegian government, the University of Oslo, Norse fraternal, literary, social and religious organizations, editors and publishers of Scandinavian language newspapers in the United States, presidents of Lutheran colleges and scores of other friends and acquaintances.

U.W. Placing More in Jobs, Reports Show

Employment of the University of Wisconsin's 1938 graduates has greatly exceeded early estimates, according to University officials.

More than 85 per cent of seniors who graduated from 10 of the University's schools or colleges are now on payrolls throughout the country. A nation-wide survey made recently in 84 American universities and colleges indicate that 75 per cent or more of the June class has been placed.

Three University departments reported 100 per cent employment of their graduates. Eleven mining engineers found jobs soon after graduation, and the entire class of 33 civil engineers also is employed.

Placement of civil engineers is divided almost evenly between private concerns and government-

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Nation-Wide Broadcast Climaxes 90th Birthday

Classes Answer Call to Arms in Member Drive

Thirty-one classes have answered the call to arms in the Alumni Association's current membership campaign. These groups cover the span from the Class of 1893 through last year's graduating class, 1938.

Firmly resolved that their current rebuilding program could be put into high gear with the cooperation of the individual classes, the association administration asked the various class officers to initiate some sort of campaign within the class. The last 45 classes to graduate were contacted.

The classes taking part in this campaign and their class representatives are as follow: 1893, Charles B. Roger; 1894, Mrs. Carl Johnson; 1896, John R. Richards; 1897, Fred H. Clausen; 1899, George I. Haight; 1900, C. V. Hibbard; 1901, L. H. Tracy; 1903, William H. Haight; 1904, John S. Lord; 1906, Otto L. Kowalke; 1907, A. J. Goedjen; 1908, Ernest F. Rice; 1909, Glen E. Smith; 1912, Basil I. Peterson; 1914, Rubens F. Clas; 1916, Milton B. Findorff; 1917, Harry A. Bullis; 1918, Frank V. Birch; 1919, Walter E. Malzahn; 1922, Guy Sundt; 1923, Rollie Williams; 1924, Walter Frautschi; 1925, Glen Bell; 1926, John Esch; 1928, Harry Thomas; 1932, H. Douglas Weaver; 1935, Frank Klode; 1936, Caryl Morse; and 1938, George W. Rooney.

Wisconsin and its State University will go on the air from coast to coast on Monday night, Feb. 6, with a half-hour radio program which will be the climax of the program celebrating the University of Wisconsin's 90th Founders' Day, according to an announcement made by A. John Berge, executive secretary of the Wisconsin Alumni association at the University.

The nation-wide radio program will be the third annual Founders' Day broadcast which the alumni association has sponsored in the last three years as a highlight of the University's celebration of its anniversary. The program will be broadcast from 9:30 to 10 p. m. (CST) Feb. 6, over the red network of the National Broadcasting company, Mr. Berge announced.

Heil, Dykstra Speak

The program will feature as speakers two of Wisconsin's foremost personalities — Gov. Julius Heil and Pres. C. A. Dykstra of the State University, Mr. Berge said. The University's student concert band of 100 pieces, under the direction of Prof. Raymond F. Dvorak, will provide the music for the program.

The program will go on the air from the Memorial Union building on the Wisconsin campus, following a faculty-alumni dinner to be held in the Union's Great hall that evening. The speeches will be put on the air right from the speakers' table at the dinner, and the band will also broadcast from Great hall, so that those attending the dinner will see and hear the entire program as it goes on the air.

Many Clubs to Meet

Again this year, as in the past, Wisconsin alumni clubs in cities throughout the state and nation will hold Founders' Day dinners in their own communities at the same time that the campus dinner is being held in Madison, and following their own local programs, these distant alumni groups will tune in on the nation-wide Founders' Day program broadcast from the campus of their Alma Mater, Mr. Berge said.

The University of Wisconsin Founders' Day this year celebrates the 90th anniversary of the opening of the University's first class on Feb. 5, 1849, under the supervision of the University's first professor, John W. Sterling. The first class consisted of 17 students and its meeting place was a rented red brick building erected in 1847 for the Madison "Female Academy."

Thirty-eight radio stations scattered throughout the United States are expected to broadcast the na-

(Continued on Page 2)

Over 1,000 at Milwaukee Alumni Fete

More than 1000 alumni living in and about Milwaukee gathered at dinner on the night of December 7 to pay their respects to Harry Stuhldreher, Wisconsin's dynamic football coach and athletic director. The dinner was held in the spacious Milwaukee auditorium. About 400 more alumni and friends gathered in the balcony of the building to hear the speeches after dinner was served.

Prof. Ray Dvorak and his University band were present and

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Physicists Gain Information on Force Holding World Together

New and more accurate information concerning atomic force, which is generally credited by scientists with being responsible for the stability of matter and thereby "holding the world together," was divulged by two University of Wisconsin physicists in papers presented before the American Physical society meeting in Washington, D. C., recently.

The two physicists, Professor Gregory Breit and Raymond G. Herb, described experiments conducted at Wisconsin during the past two years with high voltage

"atom-busting" apparatus, which yielded to them valuable information as to what goes on inside the atom, one of science's most mysterious present-day problems.

Shooting protons, which are electrically charged particles, at protons with the terrific electrical force of 2,400,000 volts, the physicists determined, concerning the new atomic force which was discovered only a few years ago, that such force:

1. Comes into play when two protons are only one tenth of a millionth of a millionth of an inch

apart, and

2. That the force which propels the two protons together when they are that close to each other amounts to a fall through 11 million electrical volts.

Hailed as Important

These discoveries are hailed as important in the scientific world because they reveal for the first time exactly how near two nuclei must be to each other before they attract each other with almost irresistible force, and because the distance within which the force sets in and its terrific energy are

for the first time measured accurately.

In his analysis of the "atom-busting" experiments in which Prof. Herb was assisted by three other Wisconsin researchers, D. W. Kerst, D. B. Barkinson, and G. J. Plain, Prof. Breit found that the force between two protons is nearly the same as between a proton and a neutron, which is a neutral fundamental particle not electrically charged.

"This agrees with experimental data obtained previously with high voltage apparatus at the Depart-

ment of Terrestrial Magnetism in Washington, D. C., he declared. "Recent work of our experimental group at Wisconsin shows, however, that the distance within which two protons act on each other with constant potential energy cannot be so great as physicists had previously supposed, and it determines the exact force which finally propels them together."

Force Discovered in 1934

The new atomic force which the Wisconsin physicists have been

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1,200 Attend Annual U. W. Grid Banquet

More than 1200 rabid football fans sat down to the third annual Football banquet sponsored by the Madison Businessmen's association in December in the University fieldhouse. The entire football squad, the coaching staff, and high school players were special guests.

Featured speakers of the evening were Coach Harry Stuhldreher and Lou Little, head coach at Columbia. Gov. Julius Heil spoke briefly and urged full co-operation with Stuhldreher and the coaching staff. He urged the high school boys present to come to Wisconsin, their logical choice of school, and offered to go out and get the players Wisconsin wanted if the coaches would only give him the assignment.

Under the able guiding hand of Dr. W. S. Lorenz, as toastmaster, the banquet proceeded in fine shape. Dr. Harold Bradley of the Wisconsin athletic board spoke on behalf of the faculty. "Bill" Purnell, former Haresfoot director, staged a bit of pageantry in honor of the 50th anniversary of Wisconsin football and presented the first piece of the huge "birthday" cake to Louis Sumner, a substitute on the first Wisconsin team in 1888.

James Masker, veteran Big Ten football official, told of some of the highlights of officiating in the football games in the mid-west and of some of the difficulties confronting the officials today. Lou Little praised Stuhldreher's great work at Wisconsin and said he was looking forward to the time when Wisconsin and Columbia meet at New York in 1940.

Stuhldreher praised the boys who worked for and with him. He called the Northwestern game the greatest victory he had ever had. He gave the graduating seniors gifts from the Madison Businessmen's association and announced the elections of Vince Gavre and Howard Weiss as honorary co-captains and of Weiss as the most valuable player on the squad. This is the second year Weiss has been accorded that honor.

Following Stuhldreher's speech, Kenneth Bellile, Wisconsin's Phi Beta Kappa backfield player, responded in behalf of the players.

Farm-Home Meet Studies Problems

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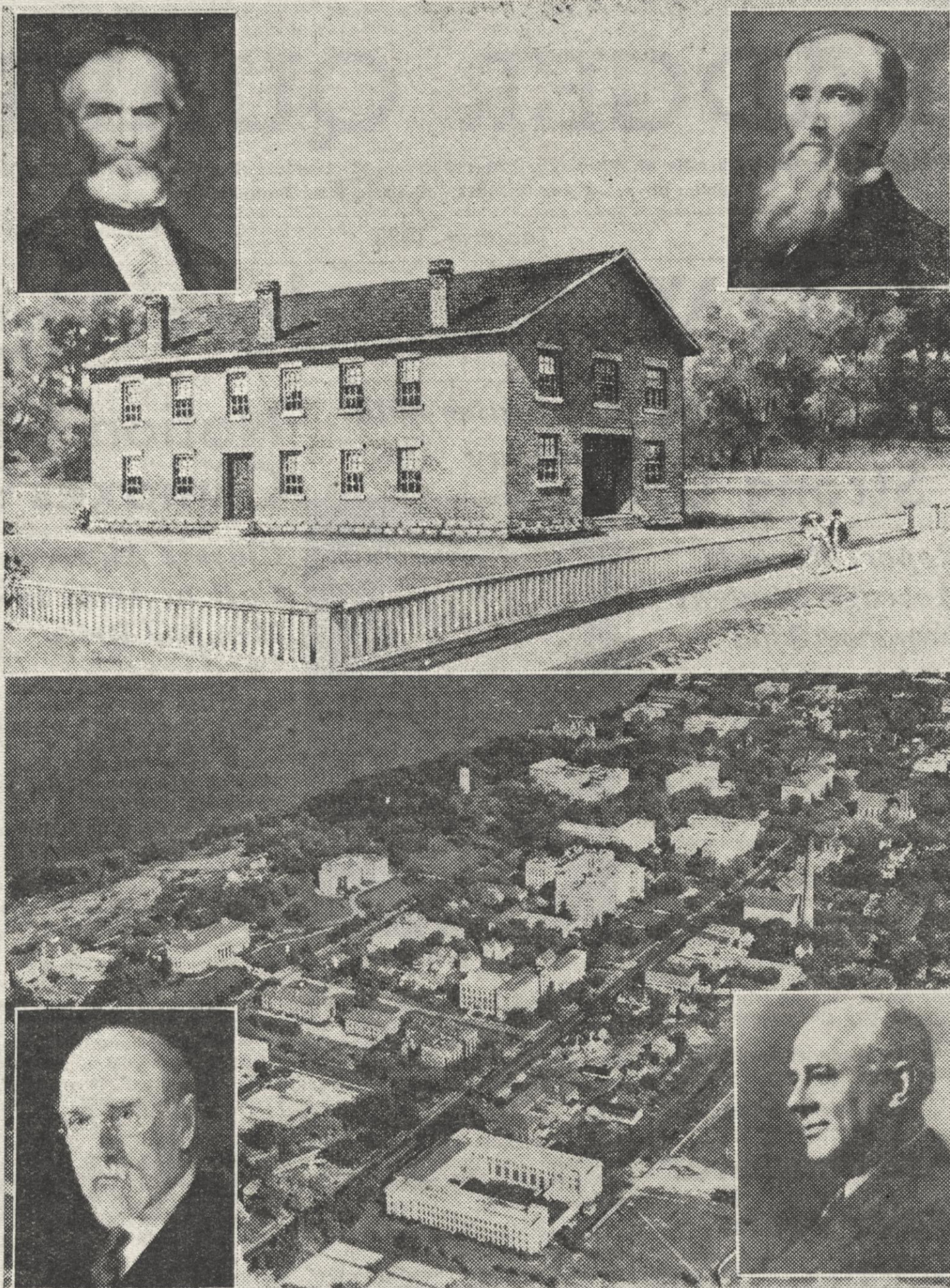
Leaders invited to confer with Wisconsin farmers during the week include R. M. Evans, Washington, D. C., administrator of the AAA; J. W. Bateman, Baton Rouge director of the Louisiana Agricultural Extension Service; F. F. Hill, governor of the Farm Credit Administration, and H. G. Moulton, Brookings Institute, both of Washington, D. C.; Ralph Bridgeman, consultant in parent education, New York University; and Mrs. Raymond Sayre, Home and Community chairman, American Farm Bureau Federation.

Included in the program for Badger homemakers are special sessions dealing with low-cost house construction, proper use of insulation, heating, lighting, and installation of water systems, as well as conferences on rural art health education, and nutrition. Supplementing the women's program is a series of home economics exhibits.

To permit consideration of detailed questions of concern to farm and home plans for 1939, special programs dealing with many important subjects were planned. These include special sessions on agronomy, agricultural economics, farm engineering, livestock management; dairy herd improvement, dairy manufacture, insect problems, home economics, vegetable growing, poultry, rural life, soils, and veterinary science.

A number of special features are planned for Farm and Home Week visitors. These include the state grain show, the state rural drama festival, a "Little International" livestock exposition and an exhibit of fox pelts by the Wisconsin Fox and Fur Breeders' association.

From 1849 to 1939!



February 5th is the 90th anniversary of the founding of the University of Wisconsin, and we present this group of photographs in commemoration of the event. The top picture shows the Madison Female Academy in which the University's first class of 17 students met, under the supervision of Prof. John Sterling, on Feb. 5, 1849. The bottom aerial view shows the Wisconsin campus as it appears today. Four of the University's eleven

presidents during the 90-year period are shown. They are, upper left, John H. Lathrop, first chief executive of the University who served from 1848 to 1858; John Bascom, upper right, president from 1874 to 1887, under whom the University made great material progress; Charles R. Van Hise, lower left, who served from 1903 and 1918, during which the University enjoyed its greatest expansion; and C. A. Dykstra, lower right, president of the University today.

Average Student Expense Is \$455

(Continued From Page 1)

36 spent \$600 or over. For the majority of the students, food and lodging comprised the major expenditures with the average cost of room \$106, and \$160 for food. Students reported individual expenditures for food from \$15 to \$320 and from \$25 to \$200 for lodging, with those who did their own cooking or received supplies from farm homes able to spend far less for food than the average.

While only 14 of the group reported expenditures for dependents, a surprising average of \$123 for each of them was noticed. The range went from \$20 to \$300, with two students reporting figures of \$400 spent for dependents last year. An equally wide range was reported in insurance expenditures. Here the amounts varied from \$3.65 to \$120 with the average at \$25.

While the average recreational costs were \$21 for the year, individual reports ranged from \$2 each to four students who each spent \$100 for the period.

These individual divergencies from the average figures explain why it was possible for 282 students to complete the year with a total income during the school year outside of NYA of from \$1 to \$49 while 16 students had outside incomes ranging from \$400 to \$599. The average outside income revealed was approximately \$175.

More Than 1,000 at Milwaukee Alumni Meet

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gave the banqueteers a splendid program of music and entertainment. Several of Wisconsin's famed flag throwers accompanied the band and showed the crowd some of the finer points of this ancient Swiss art.

Toastmaster and club president Rubens Clas introduced President Dykstra who spoke briefly on the building program now in progress on the campus. "Dirt is flying on the campus once again," he said. Seeing the smiles on many of the faces he hastened to add that the dirt was really earth flying from the steam shovels busy on the many projects.

Speaking of Stuhldreher, Dykstra said, "He's doing a grand job—a grand job on the campus and a fine job off the campus. We hope he stays with us for a long time." Stuhldreher was presented with a fine ovation from the crowd. In his talk he stated that he was satisfied with the season's outcome and deeply gratified at the praise that had been heaped upon him. He offered no alibis for the "bad days" and praised the team for the fine work it had done.

"It might be that the season lasted one week too long," he said. "Maybe we should play Minnesota in the middle of the season and wind up with a team we could be sure of beating. But the way football is these days the only teams we could be sure of would be Vas-

New Directory Lists 5,500 Engineer Grads

Over 5,500 graduates of the University of Wisconsin's College of Engineering are listed in the latest issue of the Alumni Directory recently published by the college. This marks the eighth publication of this complete directory of Engineering Alumni of the State University, the seventh issue having been printed in 1928.

Of this total, approximately 5,300 of the graduates will be found throughout the United States in various sections of the country. The remaining 200 are scattered through 25 countries of the world. Large numbers of them are located in Canada, Mexico, China, the Philippine Islands, and South America, while others may be found anywhere from South Africa to Norway.

sar or Wellesly."

Still optimistic, he continued to say that "some day we're going to sneak up on those fellows and take them."

Following his speech Stuhldreher presented trophies to the members of the all-Milwaukee and all-Suburban Milwaukee first and second teams. At the conclusion of this ceremony pictures of the Wisconsin-Northwestern game were shown on a special screen while Coach Stuhldreher made running comments about the plays.

U. W. Man Serves

L. R. Jones, emeritus professor of plant pathology, and former head of the plant pathology department at the University of Wisconsin college of agriculture,

'U' Needs New Gym, Athletic Board Reports

Construction of a modern and adequate gymnasium and a shell building for indoor activities are two great needs of the University of Wisconsin's physical education and athletic departments, the athletic board revealed in its annual report to the University faculty.

The report, approved and accepted by the faculty, reviewed the fact that the athletic department is not only entirely self-supporting, but that "circumstances have for a very considerable time been such that it must provide for any increase in its facilities." The report listed the stadium, paid for at a cost of about \$250,000, and the men's fieldhouse, now being amortized out of athletic department earnings.

Projects Welcome

It also pointed out that the department, from its own income and with the aid of a WPA grant, now has under way a project improving the University's athletic plant facilities, including the addition of 7,000 seats to the stadium, a new baseball diamond; surfacing the area west of the field house for parking space and tennis courts, and the building beneath the stadium of a considerable addition to present sports facilities.

"The addition to our facilities indicated above are welcome," the report declares. "Nevertheless those facilities are extremely inadequate to our needs. The department does not possess the space necessary to accommodate the growing numbers participating in our various sports; it should have a shell building for indoor activities of various kinds; and, finally, but by no means least, the University has great need of a modern and adequate gymnasium. The filling of these various needs is a problem of the immediate future."

Program Statewide

"As an adjunct of the educational program of the University the work of the department of intercollegiate athletics has a statewide significance," the athletic board asserted. "This is not merely because the University is the University of the entire state but because the intercollegiate program of the University is inevitably reflected in the interscholastic programs of the secondary schools of the state."

"The department considers it an obligation to give such assistance and guidance as it can in the development of a sane and healthy interscholastic program within the state. The board takes satisfaction in the representation the University has had in this respect through the staff of the department."

38 Stations Carry Program

(Continued From Page 1)

tion-wide radio program. The stations, located in 24 states and blanketing the entire nation, follow:

List Stations

WEAF, New York; WNAC, Boston; WTIC, Hartford, Conn.; WJAR, Providence, R. I.; WTAG, Worcester, Mass.; WCHS Portland, Me.; KWT, Philadelphia; WDEL, Wilmington, Del.; WFBR, Baltimore; WRC, Washington; WGY, Schenectady; WBEN, Buffalo; WCAE, Pittsburgh; WTAM, Cleveland; WWJ, Detroit; WSAI, Cincinnati; WBAP, Fort Worth, Tex.; KTHS, Hot Springs, Ark.; KPRC, Houston, Tex.; WIRE, Indianapolis; WMAQ, WCFL, Chicago; KSD, St. Louis; KSTP, Minneapolis, St. Paul; WHO, Des Moines; WOW, Omaha; WDAF, Kansas City; WMC, Memphis; WSB, Atlanta; WBRC, Birmingham, Ala.; WJDX, Jackson, Miss.; WSMB, New Orleans; KVOO, Tulsa; WKY, Oklahoma City; WFAA, Dallas, Tex.; KTBS, Shreveport, La.; KARK, Little Rock, Ark.; WOAI, San Antonio, Tex.; and WIBA, Madison.

served as a director of the National Academy of Science, at its recent meeting at Chapel Hill, North Carolina.

Dedicate Next Alumnus Issue to U. Founders

Members of the Wisconsin Alumni Association are eagerly awaiting the February issue of THE WISCONSIN ALUMNUS, which for the first time in association history will be dedicated to the founders who made the University of Wisconsin a reality.

Wrapped in its now traditional cardinal cover, the Founders Day edition will be packed full of interesting articles, both current and historical, about the University and its alumni. Heading the list of contributors will be Pres. C. A. Dykstra who will explain the complicated University budget and how and where the school gets its funds with which to operate.

Robert S. Allen, a member of the class of 1921, and co-author of the syndicated "Washington Merry-Go-Round," will contribute an article about the Wisconsin alumni prominent in the administrative circles in Washington, D. C. Dean Chris Christensen will have an article on the new bio-chemistry building and the importance of its construction.

Wisconsin women, prominent in radio broadcasting will be featured in the regular alumnae article by Henrietta Wood Messenich. The March of Time, Vic and Sade, Betty and Bob, and Back Stage Wife have Wisconsin alumnae playing featured roles in their production.

An article by Walter Monfried, '26, will pay tribute to the late Charles R. Van Hise, one of the University's most outstanding presidents. Roy Luberg has prepared an interesting story about the intriguing laboratory school for children which the University conducts during the annual summer session.

In addition to these features and the regular University and class news divisions of the ALUMNUS, there will be presented special pictorial spreads showing the entire building program now in progress, the work of the control laboratories of the Research Foundation, the current Short Course for agricultural students, and the new atom-busting laboratory at work.

Non-member alumni may reserve a copy of this edition by mailing the coupon at the bottom of page 7. The supply will be limited to those who are members of the Association and those who send in these special reservation blanks. The supply of the Centennial issue of last summer was exhausted in a short time. Don't be left without your copy of this Founders Day issue. Mail your reservation blank today.

Publish U. W. List of Doctoral Theses

The Carnegie Institution, division of historical research, is publishing at Washington, D. C., a list of 51 doctoral dissertations now in preparation among graduate students in history at the University of Wisconsin.

The Wisconsin studies, many of them on subjects which will offer background for understanding important economic, social, and political problems, is part of a complete list of doctoral theses in progress in all major American universities. The bulletin is prepared annually by the institution in an effort to keep the public informed on activities in historical research.

In many cases the findings made in the theses add material facts to historical knowledge which can be published in part or in full in book form.

Study Soil Conservation

Allotment of \$10,437 to a WPA project for preparation of data on soil conservation and floods at the University of Wisconsin was approved recently by the federal government. The project will be under supervision of the federal soil conservation service and will be conducted at the University. Purpose of the project will be to study records to compile data on the condition of soil erosion and floods throughout the state.

Inquiry Reports



Above are shown the eight reports published so far by the University's Science Inquiry, which is explained in an article on the editorial page of this issue.

Med School Pioneers in Anesthesia Study

A pioneer in the field 11 years ago, the University of Wisconsin Medical School now has a full time department of anesthesia, including a professor, an instructor, and seven graduate residencies in anesthesia each year.

In 1927 with the graduation of the first class of doctors from the State University, it was decided to include some demonstration lectures on the subject as part of the regular curriculum. It was to be a joint department established by the Medical School and the Wisconsin General Hospital. Previous to this, the usual procedure for Medical schools throughout the country was to have the youngest addition to the staff give a few lectures on the subject of anesthetics without any practical demonstrations whatever.

Department Grows

At the State University, however, the department has been growing consistently until now the subject is thoroughly covered by medical students both graduate and undergraduate during their entire stay at the institution. It is hoped by the department that through such extensive training the science of administering anesthetics to abolish pain during surgery will be undertaken in this country by physicians and surgeons as it is in England, rather than by nurse technicians.

With the founding of the science of anesthetics in England in 1846, the work in that country fell into the hands of some of its greatest scientists, including John Snow. Through them, the technique of administering drugs to human beings for operation purposes was developed within the medical profession itself with the result that anesthetics are administered by doctors who specialize in that only.

In this country, the work was undertaken by dentists and chemists rather than by members of the medical profession. Ignored by regular experienced medics, it fell to the lot of the youngest doctor assisting in the operation to administer the anesthetic. Gradually the work was taken over by nurse technicians with whom it still remains in this country except in a few exceptions like that at the hospital at the University, where it is done by physicians specializing in the field.

First Used Cyclopropane

Typical of the research work done by the department in addition to its instructional duties, is the study made of the gas, cyclopropane. Tested first on animals by Dr. V. Henderson in Toronto in 1929 and 1930, it was first administered to surgical patients in Wisconsin General Hospital. Since

then it is widely used in many parts of the world. Many of its known advantages and disadvantages have been brought to the attention of the medical profession through work reported from the hospitals and laboratories of the medical school, especially the departments of physiology and pharmacology, and anesthesia.

Physicians trained at the State University are now directors of similar departments at New York University, Albany Medical College, University of Pennsylvania, and University of Texas. Former students are part of the teaching staffs in the medical schools of Columbia, Georgia, and Stanford Universities. Still others are in private practice along anesthetic lines, while medical graduates from Australia, South Africa, India, Sweden, Norway, England, South America, Canada, and Mexico, as well as the United States, have taken advantage of the training at the University of Wisconsin.

Contribute Loan Fund

A student loan fund as a memorial to the late E. R. Jones, former chairman of the department of agricultural engineering, has been subscribed and remitted to the Board of Regents of the University of Wisconsin, announces F. B. Trenk, chairman of the memorial committee. The sum, which is expected to approximate \$1,200,

'89 Class Already Planning Reunion at Commencement

It won't surprise most alumni to learn that the Class of 1889 is again far in the van of the annual parade of reuniting classes for 1939. Under the guidance of the indefatigable George I. Haight of Chicago, 1889 has always done things in a "big" way.

Anticipating their reunion on June 16-17-18 this year the class has published a complete directory of all living members in a handy pocket-size edition. The directory has been sent to every member of the class in an effort to build greater enthusiasm for the June meeting. Further follow-ups are planned from time to time.

This year the Class of 1889 will be the honored fifty-year group, celebrating its golden jubilee. The Class of 1914 will celebrate its twenty-fifth anniversary. Among other classes which are expected to reunite in June are 1894, 1904, 1909, 1919, 1920.

Altho it is too early to announce definite plans for the Reunion weekend, it suffices to say that the Alumni University will again be held just prior to Alumni Day. Definite subjects and speakers will be announced in the next issue of the QUARTERLY. The annual Senior-Alumni dinner, Baccalaureate, and the Commencement exercises on Monday will again feature the weekend.

Grant Funds for New Women's Dorm

Approval of a \$201,088 PWA grant for a new University of Wisconsin women's dormitory was announced in Washington recently.

It is proposed that the dormitory be constructed along with another the grant for which has previously been approved. Site for the two buildings is the lake-front property near Observatory Hill, east of the new group of men's dormitories.

Preliminary work on the project has already been completed and construction is now under way. The construction work is to be completed by next fall. The total project amounts to more than \$700,000 of which about \$300,000 represents the PWA grant.

Gets Old Book

O'Donnell's Irish Testament was recently added to the University of Wisconsin library. The Irish Testament is not only a translation of the New Testament but is one of the first books printed in Gaelic. It was published 335 years ago and since 1703 it had adorned the shelves of the earl of Denbigh, a Welsh lord. This book is one of the two perfect copies in existence. The other volume is in the possession of a professor in Dublin.

has been contributed by friends, former students, and associates of the late Prof. Jones, as a loan fund to be made available to agricultural students at the University of Wisconsin.

U.W. Needs More Aid from State

(Continued From Page 1)

tailment sacrifices have been inevitable, but warned that if the sacrifices are continued, it will just as inevitably reflect upon the quality of the University.

"Although the new responsibilities due to increased enrollment can be met most cheaply by increasing the teaching loads throughout the University it must be emphasized strongly that such a policy will inevitably result in a lessened research productivity and a lower standard of faculty scholarship," the committee maintained. "Research is the best insurance for live teaching and the national and international reputation of a department, earned through productive scholarship, is the most effective means of attracting good students and outstanding teachers. Must Replace Scholars

"The University of Wisconsin has been recognized as outstanding in many fields. Ratings of Universities published sometime ago may have lulled us into a belief that the old excellence was invulnerable. Because of a time lag of ten or fifteen years between the development of a situation and its general recognition a University may retain, for awhile, a standing based on its past attainments. Thus a weakening of its staff due to accident or change of policy may not become apparent until it is both difficult and expensive to rectify the situation.

"The state of Wisconsin cannot maintain its University with the high relative standing which it has enjoyed in the past without providing more adequate support," the report asserts. "There is a constant competitive demand for leaders in every field. Unless outstanding teachers and scholars, who are lost to us are replaced by others of equal caliber and unless substantial encouragement is given to promising young men and women the quality of our faculty will inevitably fall."

Need Strong Faculty

"The maintenance of the high relative standing of the University needs the help of greater financial support from the state, but it needs no less the wisdom and courage of the faculty," the report explains. "Promotions should be given only to those who demonstrate unusual ability. Elevation to permanent positions ought to be reserved for the most promising—otherwise a university becomes crystallized in mediocrity. Selections of outstanding young men and women should be made from as large a field as possible and not too heavily from those trained only at Wisconsin."

The committee noted that a considerable part of the support of the University comes now from sources other than state taxes and declared that "we are particularly grateful to the Wisconsin Alumni Research Foundation for the substantial aid which it has given for research." Not only with grants for special research projects in the sciences and the support of the University Press, but in many indirect ways has this source of income enriched the life of the University, the committee reported.

Explains U. W. Workers' School

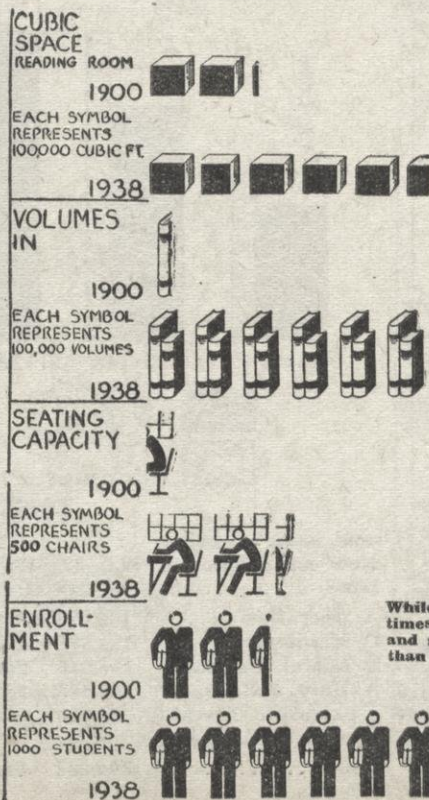
An era of greatly improved employer-employee relationships will result from educational efforts of the University of Wisconsin school for workers in industry in another decade if the school is allowed to continue and expand, E. E. Schwarzauber, its director, recently declared.

"If we are allowed to continue," he said, "we are going to see a stabilization of employer-employee relationships realized that no other state will have. Already, in fact, the whole nation is watching us and we in the school have received from many outside locations requests for information.

"We don't want to see our school destroyed by misinformation. We don't want people to think that we are a group of propagandists trying to raise hell in a community."

LIBRARIES

CHART 1



While enrollment has increased six times, library reading room space and seating capacity have no more than trebled.

Dykstra Presents "Rock Bottom" Budget for U. W.

The operating and building needs of the University of Wisconsin for the coming 1939-41 biennium are clearly revealed in a letter written by Pres. C. A. Dykstra to Gov. Julius P. Heil and presented to the governor at the executive budget hearings held in December. The letter, which constitutes a statement of the University's financial needs from the state for the coming two years, follows in full:

To the Honorable Julius P. Heil Governor of Wisconsin

Herewith is presented for your executive consideration the requests of the University for operation, maintenance and capital expenditures during the 1939-41 biennium as determined by the Board of Regents. These requests have been carefully pruned, first by the Deans, then by the President, and then by the Board itself, and they now represent what the Regents believe is the minimum amount that the University will need to meet its responsibilities.

It needs to be pointed out that the budget of the University is much more than a statement of expenditures made for an educational institution located at Madison. It is true that the University serves some 12,000 students on its own campus, but it has been made responsible also through the years by the State for services that were once performed by departments of the government and which, from time to time, have been set up at the University in the interest of economy and effectiveness.

What we call "campus services" include teaching, research, and administration which have to do with undergraduate, graduate and professional training of students who come to Madison. The "public services" include those enterprises through which the University serves the people of the state off of its campus. These are represented by the work of the Extension Division, both general and agricultural, by the agricultural experiment station, by the investigation of problems important to the State and by such undertakings as the Psychiatric Institute, the State Laboratory of Hygiene, the General and Orthopedic Hospitals, the work of the State Geologist, the Radio Station, and the cooperating services with the Highway Department, the Department of Agriculture and Markets and many others. Not only in funds granted the University and in personnel appointed is this University responsibility very considerable but a challenging amount of space on the campus is given over to these "off-campus" services.

DIFFERENTIATE SERVICES

Attention should also be called to the fact that certain services right here on the campus such as the operation of the Union, the Department of Dormitories and Commons, and Intercollegiate Athletics must be shown in any financial statement presented by the University. These are all balanced and revolving operating accounts and do not require appropriations from the State. This is true also for the revolving operating funds in the College of Agriculture. Although the State makes no appropriation for these services, they do add to the apparent cost of running the University and in the popular mind make the total budget of the University seem quite formidable. Because of your experience you will immediately see that board and room paid by the students, for instance, are individual expenditures and have no bearing on the State budget as such. The fact that more than \$1,000,000 are spent in the State Hospital, located on the campus, does not mean that the University as an educational institution is getting this money. Here, also, is an expenditure that is absorbed by the individuals and communities which are served by this State health program.

Requests for State appropriations fall into two large divisions: those for what we shall call "campus services" and those for the "public services" rendered throughout the State. The requests for the second half of the biennium are slightly larger than for the first half for quite obvious



PRES. CLARENCE A. DYKSTRA

"We believe this is a rock bottom budget and if the University is to continue an institution in which the people have great pride it is incumbent upon the University authorities to ask the regularly elected representatives of the people for the support necessary to carry out an effective program of education and service for the young people and for the citizens of the State as well."

reasons, the chief of which is the continuing growth of the student body and the need for a continually increasing staff to take care of the teaching problem.

CAMPUS SERVICE REQUEST

For what we may call "campus services" the Regents request for the year 1939-40 \$3,371,313, of which sum \$804,335 is charged to Physical Plant and Maintenance, the Heating Station and the Electric Sub-Station. This leaves, then, a net request from the State of \$2,567,478 for teaching service, libraries, and general services of the University at Madison. For the "public services" including organized research, Extension Division, and general public service including the radio station, the Regents request for 1939-40, \$1,171,354. The total requests for the coming year, exclusive of new construction and land, therefore, amount to \$4,543,167. This is a net increase of \$589,962 over the current expenditure.

This increase is analyzed item by item in supplementary analysis to be presented to you. For your information at this point it may be stated that of this sum \$202,152 is for an increase in what is called 1-A, General Operation. \$89,049 is the increase requested for General Maintenance, and \$86,616 is for increase in Miscellaneous Capital. All of the other itemized increases have to do with the State services. One item of \$51,500, for instance, is for the purpose of aiding the fur farmers of Wisconsin to find out why those who are raising foxes for the market are having such high losses by death. Among other increases in this general field is that asked for by the School for Workers in Industry set up by the last Legislature. An increase is also asked for the Psychiatric Institute, the responsibility of which is continually added to by Legislative action. Those illustrations should suffice to indicate that almost half of the total requests of the University for increases in appropriation are for general services rendered to the people of the State.

COMPARE FIGURES

It might be of interest at this point to pick out a few comparative figures going back to the early twenties when the student enrollment was approximately half of what it now is. These figures are state appropriations (omitting student fees) and they are illuminating to all who have the impression that the university cost to the state is a rapidly mounting burden. (See Table I)

The administration of the University knows full well that to ask for any increase at all during difficult financial times may seem

presumptuous. It is, therefore, incumbent upon the University to make a solid case not only for expenditures which have been made during the current biennium but to bring forth unimpeachable evidence that it needs more than it has been having. A brief picture of the University and its present status should therefore be helpful at this point. Such a picture should begin with the problem of student load. The rapid and accelerating growth of the University can best be read in the following table:

SHOW STUDENT GROWTH

Student Enrollment	
1888	612
1918	4286
1928	9675
1933	8423
1938	11552

These figures do not include short course students or those enrolled in the Extension Division, the School for Workers in Industry, or the Summer Session. If these were added the figures for 1938 would be about 45,000. (See Table 2, Page 5).

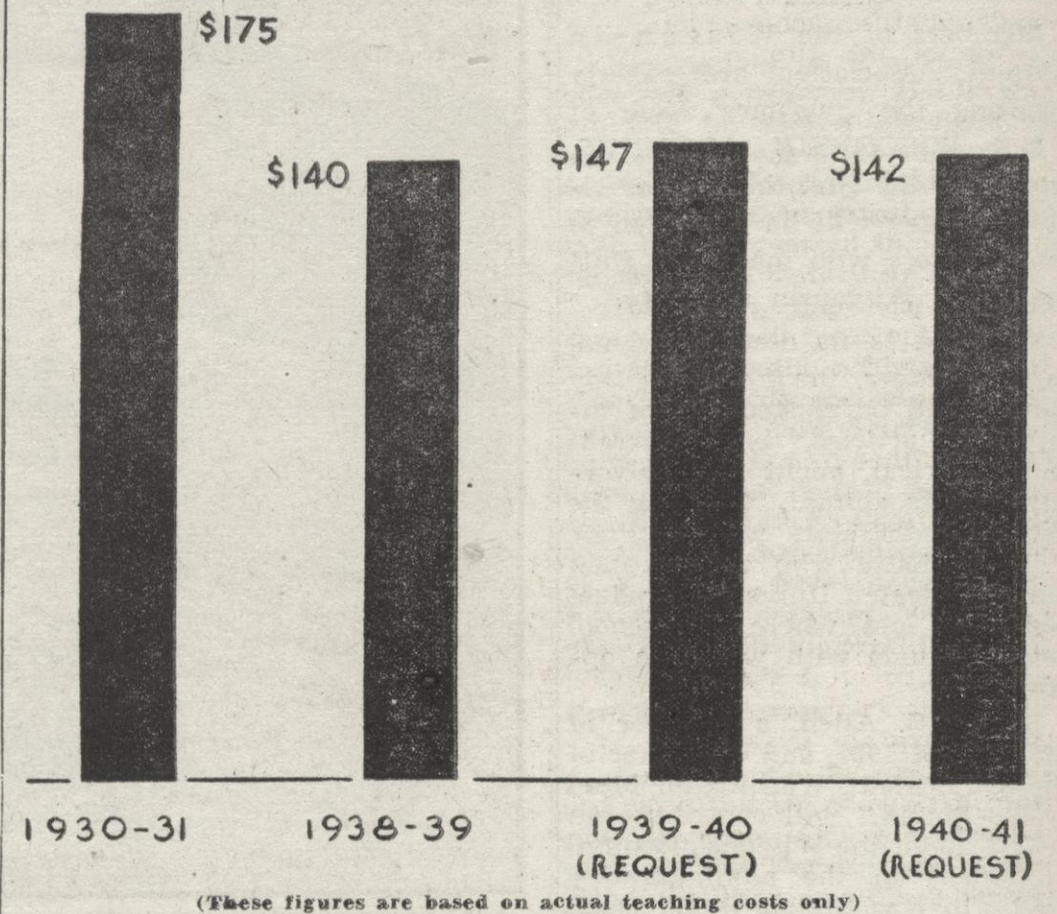
Except for the first item in the above table there is presented 20 years of student enrollment growth. Because these figures are taken in five and ten year periods, the enrollment of 10,000 for 1930 and 1931 is omitted from the tabulation. It should be given, however, because it was the high enrollment before the depression descended upon the campus.

Manifestly, if students are to be taught the University must have a staff to teach them. It is fair, therefore, in this connection to assume that the teaching problem at the University during the next biennium will affect at least 1,000 more than the highest registration we have had to date. Whether during the coming biennium we have 12,500 students or 13,000 no one can say with precision. In any event, a college of 1,000 students, our assumed increase over this year's figures, is a considerable institution and requires a large staff and a great deal of equipment. To care for this increased teaching load and to improve present over-loaded conditions we ask that the state appropriation for General Operation be increased some \$200,000. A portion of this is for minor salary adjustments for some members of the staff and the remainder is for the purpose of increasing the number of the teaching staff.

ASK MAINTENANCE FUND

It must be kept in mind that the University has a large plant which needs to be operated and maintained. The University is quite a city comprising a population of some 14,000 including stu-

TREND OF DIRECT TEACHING COSTS PER STUDENT TO STATE



dents and staff. Its land area is some 2400 acres or about four square miles. Its buildings and equipment are inventoried at some \$20,000,000. It uses 2,000,000 gallons of water a day and when it is reasonably cold burns 200 tons of coal a day. It has 10 miles of utility tunnels and conduit, 6 miles of water mains and some 13 miles of roads and paths. Its plant operating and maintenance costs, therefore, amount to a very considerable sum. Ordinarily business men and engineers proceed upon the theory that a 2 per cent maintenance cost is pretty near the required expenditure. In 1938 the maintenance costs at the University ran to 1.18 per cent instead of the normal figure of 2 per cent. Appropriations for maintenance during the last few years have been very small with the result that the item for deferred maintenance is growing rapidly. For this reason a request is made for an increase in the maintenance appropriation of \$89,049. It is incumbent upon the University authorities to keep up the State property to the very best of their ability. Realizing this obligation we present this figure recognizing that it is still quite too low. The item of \$86,616 requested as an increase for Miscellaneous Capital is made necessary because of the long slack period through which we have lived during the last ten years. Much of our equipment is completely, or almost completely, worn out; much of it is in need of replacement. A visit to the

University plant will confirm this statement.

REASONS FOR REQUESTS

It will be noted that in spite of the increased responsibilities which have been undertaken by the University in the last few years appropriations made by the Legislature for the current biennium were well below the appropriations of nine years ago when we had 1,500 fewer students. The requests for the coming biennium, insofar as they relate to campus activities, will be about on the level of 1930 and 1931 although the plan is to take care of some 2500 more students. The request for increases in the appropriation for public services is due to the fact that the State has shouldered the University with more and more service. Examples may be found in the field of agricultural research and extension, the development of the radio, the increased burden in connection with the public health of the State, the transfer of the Library School to the University, and the establishment of the School for Workers in Industry and the proposed School of Public Welfare Administration. Including all of these new activities the total requested increase over 1930-31 appropriations for operation, maintenance, and miscellaneous capital is \$303,303. The increase over the expenditures of the current year is \$589,962.

Any discussion of the requests now being made by the University should keep the fact in mind that even if the requests are granted in full, the members of the teaching staff of the University will still be on a lower salary schedule than they were a decade ago. Many members of the faculty are receiving at the present time from \$500 to \$1000 less than their appointment called for when they came to Madison. Even though all waivers have been restored in the classified service, the average salaries for the non-academic employees of the University are less also than in 1928-29 by \$69.36. It must be remembered that in a very real sense the University is in competition with our neighboring universities in the recruitment of members for the staff. Their treatment and reasonable compensation, therefore, are important if we are to retain those faculty members who achieve distinction and are being sought by other universities. The State will do itself a disservice if it allows the caliber of the faculty of the University to suffer deterioration.

SALARIES NOT HIGH

At present there are on the full time staff of the University 610 regular teaching and research members ranging in rank from professor to instructor. The average salary for the instructional staff is \$3,468, and it should be remembered that this average compensation is for men and women who have spent years in preparation for their life work. Many of this staff are in the professional

(Continued in Column 2, Page 5)

GENERAL APPROPRIATIONS FROM THE STATE EXCLUDING APPROPRIATIONS FOR LAND AND NEW CONSTRUCTION

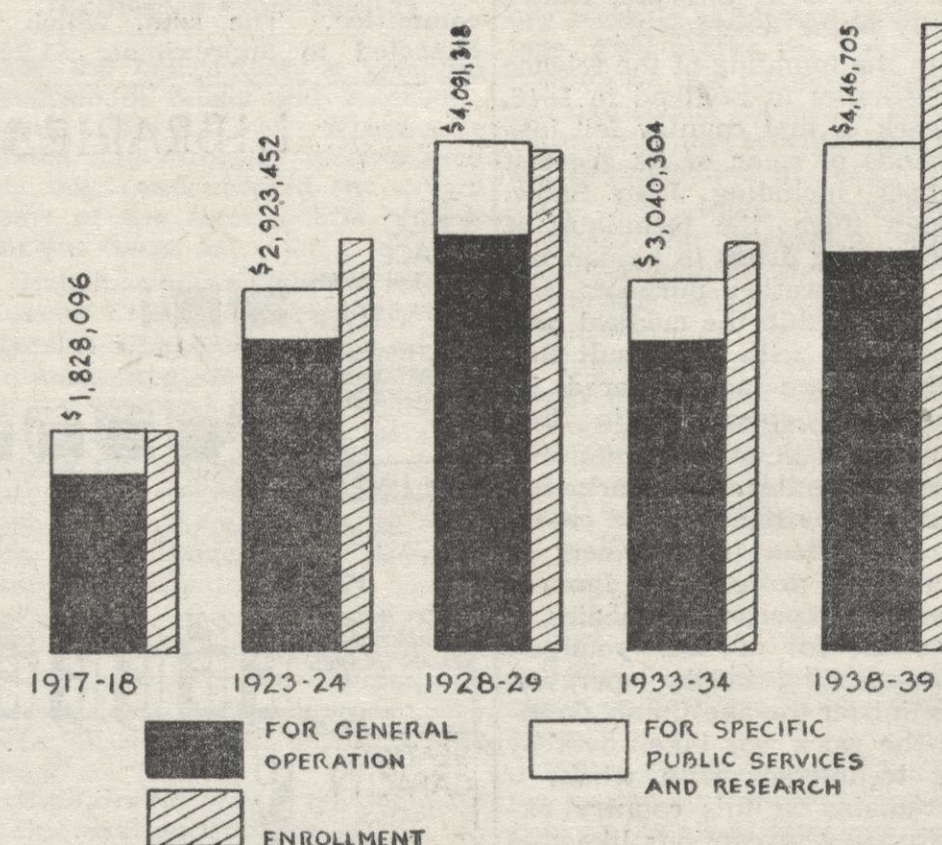


TABLE I

Grand total, excluding	1921-22	1927-28	1930-31	1938-39	Request
New construction & Land	3,097,369	4,141,584	4,239,864	3,953,205	4,543,167
1-A Operation	2,180,375	2,878,869	2,990,663	2,746,119	2,962,905
1-C Maintenance	154,825	175,000	175,000	175,000	264,049
1-D Miscel. Capital	195,610	200,000	225,000	175,000	261,760
2-A Univ. Ext. Oper.	205,500	285,500	292,100	255,304	290,202
9 Scientific Invest.	30,000	50,000	50,000	40,000	50,000
New Construction & Land	304,831	762,200	450,000	193,500	2,157,500

Research Aids State Agriculture, Industry

This year, 1939, is the fiftieth anniversary of one of the greatest scientific achievements ever made at the University of Wisconsin, the discovery and development of the Babcock Milk Test, which has, to say the least, exerted a great influence upon the dairy industry of Wisconsin.

The milk-tester was developed in 1889 by Prof. Stephen M. Babcock, and really provided the foundation for the state's dairy industry. The discovery was the first great scientific contribution of the University to the state. Prior to that time, because of lack of funds and facilities, little science research work was conducted on the campus.

During the 1890's and especially after 1900, research work was expanded throughout the University. Much of this expansion was in direct response to demands made upon the University by various groups in the state, through the legislature. Also, in 1903, Dr. Charles R. Van Hise became president of the University, and expressing the belief that the boundaries of the campus should be the boundaries of the state, he carried forward the policy of having the University serve the State in all possible ways—through education, science research, and public service.

Under this impetus, science investigation expanded throughout the University, and many projects were carried to successful completion, resulting often in direct benefit to Wisconsin agriculture and industry. Among these contributions were the following:

A new steel-making process, the desulphurization of iron ore, the development of a new submarine detector, the development of new and more exact designs for the construction of railroad bridges, completion of experiments with reference to the use of reinforced concrete in construction work, the development of a new and more economical method of mixing concrete, the Babcock milk test, the Steenbock process of ultra-violet ray treatment of foods, the curd test, the milk sediment test, the butter moisture test, the casein and ice cream overrun test, the development of Wisconsin's pedigree seeds, development of new and stable methods of commercial canning, and the development of a remedy for goitre infection of the thyroid gland in pigs, thus saving a great deal in losses to hog-raising farmers.

To a very great extent, Wisconsin farming as it is carried on today is based on research conducted at the University Agricultural Experiment station. Whether a farmer learned modern methods at the college of agricul-

Present "Rock Bottom" Budget

(Continued From Page 4)

schools. A considerable percentage of the whole staff would be rated as experts in their particular fields. It must be apparent that those who teach the young men and women of Wisconsin at the University are not overpaid for their important service, and it should be remembered that their hours are unusually long besides. It is also worth noting that professional salaries are considerably lower than the salaries paid in institutions of comparable importance and distinction. Our salaries on the whole are less than they were ten years ago and meanwhile living costs are continually rising. Moreover it is a matter of common knowledge that living costs in Madison are higher than in any other city of the State.

If the University is to measure up to its obligation and responsibility to the State, not only must it provide a reasonable increase in the teaching

ture, or got his information through the agricultural extension service, or simply imitated his neighbors' practices, the fact remains that most of the methods he uses, as well as the crops he grows, were developed at the Wisconsin station.

It is difficult to give an exact figure of the total number of lines of research now under study at the University. The work is being carried on in a number of fields, such as, for instance, on cancer, tuberculosis, animal and plant nutrition, and many other problems. It is estimated that about 500 projects are under way throughout the University under the supervision of the Graduate school; that an additional 500 studies are being conducted in agriculture; and that from 500 to 600 investigations are under way in engineering, law, medicine, and letters and science, making a total of more than 1,500 research projects.

A University Research committee, selected from the faculty, guides the University's research work, brings together projects which promise mutual benefits, and promotes original investigations in all branches of knowledge and to utilize these discoveries for the benefit of civilization.

Although primarily designed to support fundamental research without regard to application, almost 65 per cent of the projects now under study at the University are connected in some way with problems of the state of Wisconsin.

staff, receive additional funds for equipment and maintenance, but it must have more space in which to work. Classes are crowded beyond the point of teaching efficiency and this fact is due in some part to our lack of space in which to hold classes. Moreover many students are denied the opportunity to get into classes which are vital to their programs. (Chart 2).

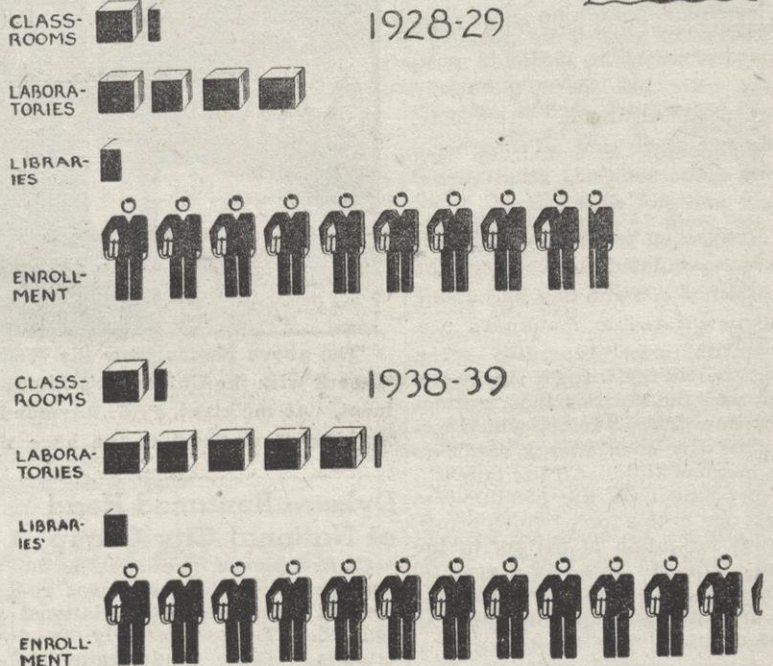
There is presented herewith a statement of the immediate building needs of the University. Foremost among these needs is an undergraduate library. This need has been felt for fifteen years, and the Legislature fifteen years ago in recognition appropriated something like a half million dollars for the enlargement of library facilities on the campus. For reasons which it is not necessary to go into here, this appropriation lapsed and nothing has been done since to enlarge our reading room facilities. For all practical purposes the State has done no building on the campus for some ten years. It is high time that a regular program be initiated and that the State put into buildings and equipment on the campus of the University something like \$2,000,000 a year for the next two bienniums. Besides the Library we need desperately, space for the Home Economics Department and Extension Division, a new Dairy Building, additions to the engineering facilities, certain other agricultural buildings and a building to house the Social Sciences. The departments of physical education and athletics point out that the University has no modern gymnasium facilities whatsoever. The present gymnasium and armory was built when we had a student body of some 2,000. Wisconsin has almost the only university which can be mentioned which does not have a reasonably modern gymnasium. There are scores of local high schools in the State which have such modern facilities. Students coming from these well equipped high schools find it hard to believe that the general equipment of the University, including athletic facilities, is so far behind what they have been used to at home. (See Chart 1, Page 3.)

Summing up this brief letter which transmits to you the requests of the University for the coming biennium, may I emphasize the fact that the requests for general operation of the University at Madison approximate the appropriations made for this same purpose some nine years ago when there were 2,500 fewer students to be cared for, and that there are increases for maintenance and for capital and for some of the many services which the University performs on a state wide basis. (See Chart 4, Page 7).

We believe this is a rock bottom budget and if the University is to continue an institution in which the people have great pride it is incumbent upon the University authorities to ask

CHART 2 CUBIC SPACE AND ENROLLMENT

FOR SPACE EACH SYMBOL REPRESENTS 1,000,000 CUBIC FEET
FOR ENROLLMENT EACH SYMBOL REPRESENTS 1,000 STUDENTS



Off-Campus Public Services Cover State

the regularly elected representatives of the people for the support necessary to carry out an effective program of education and service for the young people and for the citizens of the State as well. The only alternative that we can see has two implications: (1) to say to the young people of the State that they cannot come to the University in such numbers, and (2) to say to the people of the State that certain services, which a legislature has called upon the University to do, must be reduced or eliminated. The responsibility for decision in the premises lies with the Governor and the Legislature.

If, after a careful analysis of the State budget it is the considered judgment of the Governor and the Legislature that the appropriations to the University must be curtailed, the University administration would appreciate an opportunity to discuss with you the distribution of the necessary reductions by appropriation accounts and the effect that such reduction will have on the educational program of the State and on the services performed by the University for the citizens of Wisconsin.

The higher education of Wisconsin youth is a function of the State according to the determination of the pioneers who passed the first legislation creating the University of Wisconsin a hundred years ago. Many responsibilities and functions have been added to the State obligations since that time. It is for the people to determine whether the educational program of the State must be curtailed in order to carry on these newer functions or sufficient revenues be provided to take care of both the old and the newer undertakings.

Respectfully submitted,
C. A. Dykstra, President
For the Regents of the
University of Wisconsin

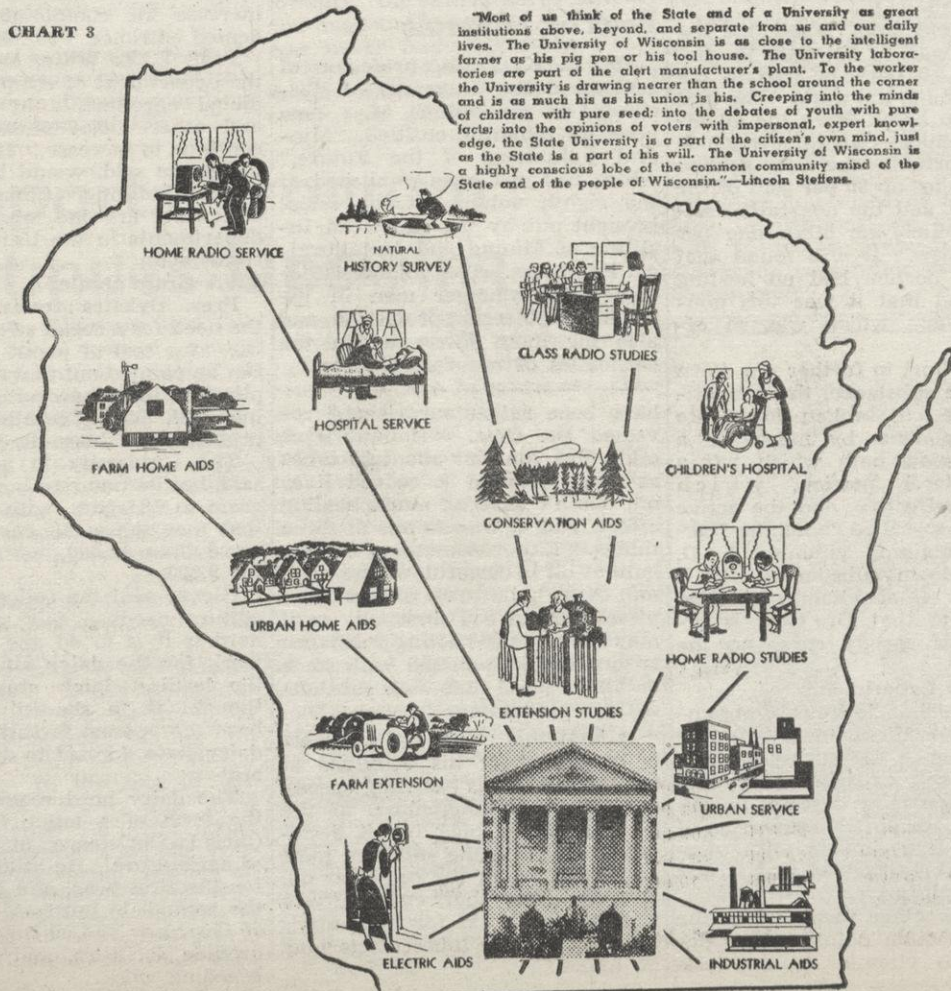
The University of Wisconsin was not projected into the field of public service on a large scale until after 1900. When Dr. Charles R. Van Hise became president of the University in 1903, he brought to the presidency a new idea of a State University's work—a conception that a University should be the servant of the state to which it belongs, and that it should apply all its facilities and resources in an effort to help solve the day-to-day problems of the people of the State.

This conception became known as "The Wisconsin Idea" in education. During his entire administration from 1903 to 1918, Van Hise worked for the expansion of this idea. It is recorded that he once said: "I shall never rest content until the boundaries of the campus have become the boundaries of the state."

Among the more important public services conducted by the University are: the State Hygienic laboratory; the State Geologist; the Wisconsin General Hospital; the Wisconsin Orthopedic hospital for children; the Psychiatric Institute; the Electrical Standards Laboratory; the Extension Division with its many services; the Bureau of Business Research; the manufacture and distribution of legume cultures, Swiss cheese cultures, tuberculin, and vaccines and test fluids used by veterinarians in the diagnosing and prevention of various animal diseases; 4-H club work; state limestone testing laboratory; the state soils laboratory and radio service. The University is also the headquarters for the Wisconsin Geological and Natural History survey, on the staff of which faculty members work, and which is now helping to solve state conservation problems.

These various public services, and the way they spread network-like over the State to reach into the farms, industries, and homes of Wisconsin, are illustrated graphically in Chart 3.

CHART 3



"Most of us think of the State and of a University as great institutions above, beyond, and separate from us and our daily lives. The University of Wisconsin is as close to the intelligent farmer as his pig pen or his tool house. The University laboratories are part of the alert manufacturer's plant. To the worker the University is drawing nearer than the school around the corner and is as much his as his union is his. Creeping into the minds of children with pure seed; into the debates of youth with pure facts; into the opinions of voters with impersonal, expert knowledge, the State University is a part of the citizen's own mind, just as the State is a part of his will. The University of Wisconsin is a highly conscious lobe of the common community mind of the State and of the people of Wisconsin."—Lincoln Steffens.

TABLE 2

	1928-29	1930-31	1933-34	1937-38
Regular Session	9,746	10,001	7,957	11,552
Summer Session	5,065	5,171	3,059	4,552
University Extension	19,976	23,401	20,800	26,609
Short Courses	228	156	145	392
Workers' School	40	40	45	2,300

Totals 35,055 38,769 32,006 45,405
This table reveals the number of students who studied in the various divisions of the University during the years given, and shows the rapid increase in the last few years. Even these figures, however, do not give a complete picture of the University's educational work in any one year, because they do not include figures as to attendance of state citizens at the various short service courses sponsored by the University each year. Several score of these courses are held annually, ranging in length from one or two days to several weeks. During last year, these courses were attended by 30,000 Wisconsin citizens. In addition, a total of 1,183,000 state citizens attended the 7,865 meetings held by county agents and extension specialists from the University during the year, making a grand total of 1,258,405 Wisconsin citizens who were served by the University of Wisconsin through its educational work during the past year.

Physicists Get Information on Atoms

(Continued From Page 1)

studying for the past two years was discovered in 1934, but until now, little has been definitely known concerning it. Previously, only two other kinds of force were known to mankind, gravitational force and electrical force.

Many scientists the world over have speculated concerning the possibility of some day harnessing the new force to mankind's use. Scientists now generally agree that the energy thrown out by the sun and the stars is the result of this new atomic force, which explains why such energy seems to be inexhaustible. All life on earth is dependent on the evolution of heat due to this force, which brings about formation of helium in the sun. The sun acts like a gigantic power plant burning hydrogen into helium and supplying heat to the earth.

Has Enormous Power

To illustrate the enormous power of this new atomic force, if a pound of hydrogen were changed into helium, the energy resulting from the atomic action of these two forces would, if it could be harnessed, supply the University of Wisconsin with all its electric power for 50 years.

The University's "atom-busting" equipment which was used in this latest important experiment is located in the basement of Sterling hall on the campus. It consists of a new type Van de Graaff electrostatic generator, which had already been developed at Wisconsin, and a 12-foot molded porcelain tube or proton gun, through which protons are strongly propelled by high voltage at a target of whatever element is to be disintegrated. Both the generator and proton gun are housed in a 20-foot steel tank, five and one-half feet in diameter.

U. W. Gets Additional PWA Funds for Union

Marking another step toward the goal of completing the new theater and arts addition to the Union by the summer of 1939, Pres. C. A. Dykstra announced recently that the federal government had allocated another \$30,000 to the project for equipment.

With the funds already available, this leaves \$33,000 still to be secured for equipment by July 1. The Memorial Union Building Committee, headed by Fred H. Clausen '97 of Horicon, is carrying on the campaign for subscriptions among faculty and alumni. Contributors of \$100 life memberships are to receive preference in reserving seats for functions in the new theater.

Favored by a mild weather during the fall and early winter the stone walls of the new \$900,000 structure have risen rapidly and it is now almost entirely closed in. Work on the interior is expected to proceed without interruption throughout the winter. Equipment will be purchased as funds become available.

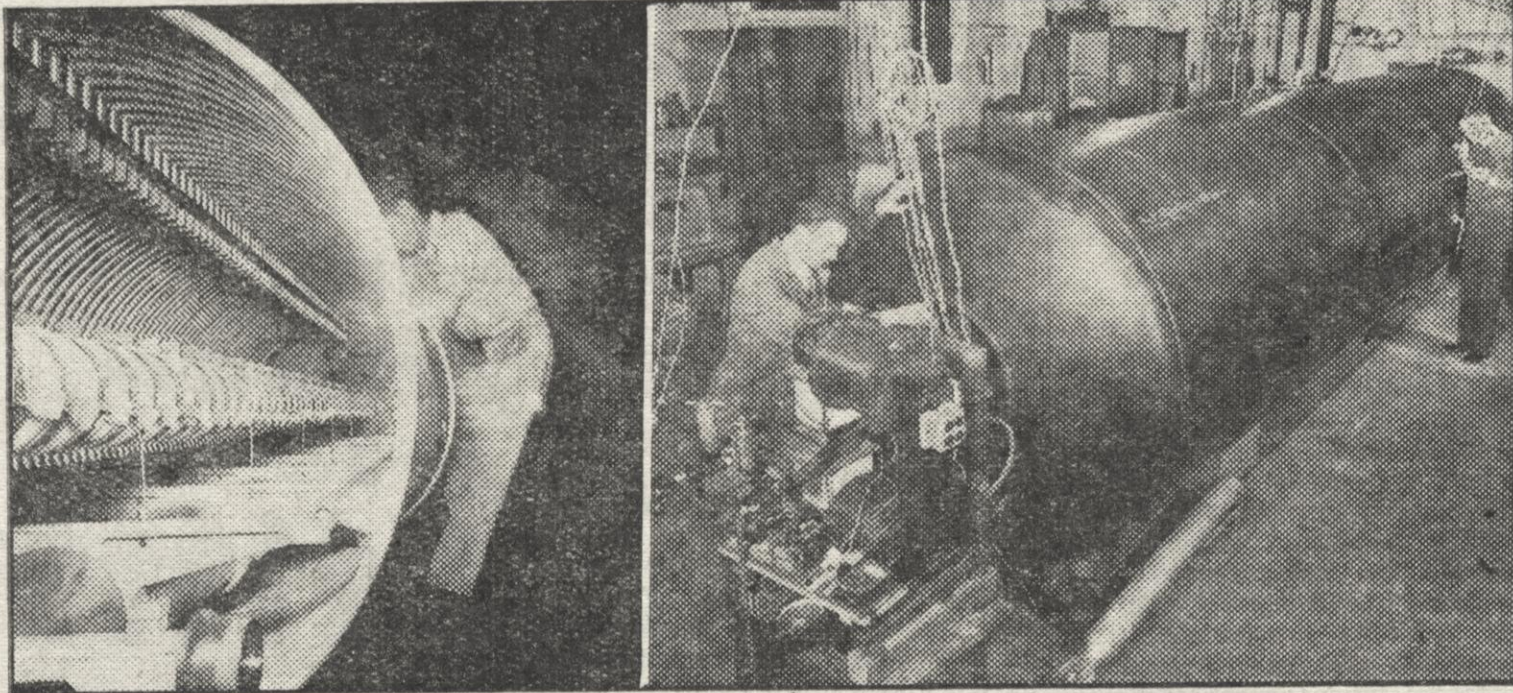
50th Memorial Volumes Available

The University library has more copies than it needs of the memorial volume published in 1904 at the time of the celebration of the 50th Commencement of the University. They are offering these extra copies to interested alumni at the cost of packing and mailing, 50 cents.

This volume contains the program and all the addresses delivered during the Commencement period of 1904 which also witnessed the inauguration of the late President C. R. Van Hise. The book is about an inch thick, bound in red cloth, and printed on a very fine grade of book paper.

Orders for the book may be placed with L. C. Burke at the University library or with the Wisconsin Alumni Association, 770 Langdon St.

Atom-Busters at Work



The above photos show the Wisconsin physicists at work with the University's "atom-busting" equipment. At the right, Prof. Raymond Herb is shown working at one end of the huge steel tank which houses the atom-busting equipment. The photo at the left, is a interior view of the tank, showing the 12-foot porcelain proton gun through which protons are shot at their atom targets at the terrific speed of 15,000 miles per second.

Dykstra Renamed Head of National City Group

C. A. Dykstra, president of the University of Wisconsin, was re-elected president of the National Municipal League recently by a unanimous vote of delegates attending the league's 44th annual convention.

Henry L. Shattuck, Boston, and Miss Marguerite M. Wells, president of the National League of Women Voters, were named vice-presidents to serve as officers with Pres. Dykstra.

Pres. Dykstra has also been serving during this past year as president of the American Political Science association, having been elected to that position in December, 1937, at the association's annual meeting in Philadelphia.

Zona Gale, Noted Author, Badger Alumna, Dies



MRS. ZONA GALE BREESE

Zona Gale Breese, noted author and widely known alumnus of the University of Wisconsin, died of pneumonia on Dec. 27 in a Chicago hospital. She was 64 years old. Funeral services for the famous novelist were held Dec. 30 in Portage, Wis., where she was born Aug. 26, 1874, and had made her life-long home.

Zona Gale's career as an author began when, at the age of seven, she "published" her first works of fiction and poetry, which she illustrated herself. Since then she had written more than 25 novels, plays, books of essays and short stories. Her last book, published last July, was "Frank Miller of Mission Inn," a biography. Known to the nation and the world as one of America's leading authors, she won the Pulitzer prize in 1921 for her work, "Miss Lulu Bett." Her literary leanings were evident during her student days at the University of Wisconsin, from which she was graduated in 1895.

In recognition of her attainments Miss Gale was awarded an honorary degree by the University in 1929. Previous to that time she had served her University and State as a member of the Board of Regents. She had always taken great interest in the University and its students and faculty, and her will contained a bequest of \$1,000 to establish a student loan fund at the University.

U. W. Finds That "Vitamin Fraction" Cures Skin TB

A "vitamin fraction" found in cod liver oil, containing vitamins A and D and several mysterious constituents as yet unidentified, has been found to effect speedy cures among guinea pigs infected with "lupus tuberculosis," that form of the disease which appears as ulcers on the skin, scientific investigations conducted at the University of Wisconsin have revealed.

Experimenting with guinea pigs since 1936, Dr. Horace R. Getz, instructor of medical bacteriology at the State University, has come to definitely hopeful conclusions regarding the use of cod liver oil therapy as a means of healing the tuberculosis skin disease.

Dr. Getz first received a degree in biochemistry from Wisconsin before entering medicine. He joined the medical bacteriology department in 1934, and inspired by work done by Dr. Andrew L. Banyai at the Muidale Sanatorium in Wauwatosa, Wis., determined to use his background in chemistry and delve deeper into the possibilities of the cod liver oil treatment.

Effects Rapid Cures

His first task was to verify earlier clinical observations. To accomplish this, guinea pigs were infected with lupus tuberculosis, and the characteristic skin ulcers resulted. The guinea pigs were then treated with cod liver oil applications. Ordinarily, in 75 per cent of the cases, lupus infections in guinea pigs persist for six to eight weeks. However, the treated animals were cured of their infections in 30 to 36 days. In the present stages of the experiment, Dr. Getz is able to effect a cure within 28 days for 75 per cent of the cases, and even less for the remaining 25 per cent.

"Our next step," explained the doctor, "was to attempt to discover which parts or part of the oil were doing the work. The first attempt to break down the oil into its chemical constituents yielded two portions—the fatty portion which makes up 99 per cent of the whole oil, and the non-fatty residue of which the other one per cent consists. It was found that the fatty portion had no healing effect, and that it was this non-fatty residue which was so effective."

In an effort to further pin down the active substance, the non-fatty residue was broken down into two components by means of a dry ice snow bath which left a heavy sterol portion, which proved ineffective, and the active part, the so-called "vitamin fraction," containing vitamins A, D, and unknown substances. It is with this final vitamin fraction concentrate that Dr. Getz is effecting his speedy cures on the animals.

Continues Experiments

Since he was desirous of obtaining the speediest, most effective concentrate of the curing portion, he has been experimenting with this fraction in an attempt to discover the actual healing portion of the oil. Experiments with vitamin D clearly showed that it was not the substance.

"On the other hand, while the healing portion points rather definitely to vitamin A, the tests

Job Placement Committees Meet

Ever anxious to build the placement work of the Alumni association, John S. Lord, '04, brought T. Luther Purdom, director of the Michigan Bureau of Appointments and Occupational Information, to the Wisconsin campus recently for a meeting with the Alumni association and the University placement committees, and placement officials of the University.

Main objects of the meeting were to hear Dr. Purdom describe the methods used in placement work at Michigan and to discuss ways and means of making the joint placement committees' work at Wisconsin more effective. It was also hoped that this and similar meetings in the future would lead to furthering cooperation between the University faculty and the Association committees.

Dr. Purdom praised the work of the placement committees to date and then went on to stress the importance of certain phases of placement work. He brought out the necessity of a central registration office at which all job seekers and employers could register their needs. He believed that alumni should register at this office regardless of the fact that their employment needs may not be immediate nor pressing. He stressed, too, the needs for more adequate vocational and personality training in a university, stating that most people lost their jobs through reasons other than lack of training or inadequate education.

Book on Minerals

Dr. C. K. Leith, professor of geology at the University of Wisconsin, is the author of a new book on minerals entitled, "Mineral Valuations of the Future," which has just been published as the eighth volume of the series brought out by the American Institute of Mining and Metallurgical Engineers. The volume is designed for younger men in the mining engineering profession, and also for those interested in the economics of natural resources.

have been rather surprising," revealed Dr. Getz. "Halibut liver oil, which contains about 25 times as much vitamin A as cod liver oil, doesn't have as much healing effect. This can mean one of three things. Either something in the halibut oil is harmful; or the vitamin A in halibut oil differs from vitamin A in cod liver oil; or it may be that the healing substance is vitamin A combined with some or all of these unknown substances in our 'vitamin fraction.'"

It is at this point that Dr. Getz is concentrating his activities at the present. He is effecting speedy cures in this tuberculosis of the skin on guinea pigs, but is desirous of isolating the smallest, most active portion of the cod liver oil, with the hope that, eventually, a new scientific aid for humanity's fight on human tuberculosis may be found.

Gives \$5,000 for U. W. Scholarships

A gift of \$5,000 to provide two annual scholarships of \$100 each which will go to two outstanding Dane county high school graduates each year was accepted by the University of Wisconsin Board of Regents recently.

The gift was given to the State University by Victor Albright, president of the Randall State bank of Madison. Under the terms of the gift, the principal of each Dane county high school is to send the name of the student who ranks highest scholastically each year in his school to the Committee on Loans and Undergraduate scholarships of the University. When all the names are in from all of the high schools in the county, the committee will then select by lot the two winners of the two scholarships.

In a communication to the regents, Mr. Albright explained that he was establishing the scholarship fund for three reasons: to urge boys and girls to do their best work in high school; to encourage and assist boys and girls to secure a University education; and to impel students to do good work in their University courses.

U. W. Community Gives \$800 to Red Cross

University of Wisconsin faculty members, employees, and students have contributed over \$800 thus far to the American Red Cross, it was recently revealed by the Madison chapter of the organization. Students have contributed \$167 of this amount, Harriette Wright, Madison, student roll call chairman, reported, with the men's dormitories yet to be heard from. The remaining \$637 has been turned in by faculty members and employees to Prof. Ray Owen and Mrs. Florence Healy, roll call co-chairmen.

Ask Funds for Dairy Herd, Science Wing

(Continued From Page 1)

\$150,000 appropriation to provide the college of agriculture with a dairy herd and adequate facilities large enough to permit breeding experimentation.

Ask Commerce Wing

A delegation of commerce school students appeared to supplement previous petitions for additional quarters. Prof. F. H. Elwell, director of the school, said it should be given a wing of a new social science building. The only alternative, he contended, would be to raise admission standards.

A boost in requirements from 1.3 to 1.5 for commerce students, would cut down the number but increase the complaints of those denied entrance, Prof. Elwell said.

Prof. E. E. Witte, chairman of the department of economics, predicted enrollments in economics and other social sciences would continue to increase. The best solution, he said, would be a social science building. Commerce and economics are the most crowded departments in the University, he contended.

PWA Grant Denied

Pres. Dykstra freely admitted the need for a social science building, at a cost of about \$1,500,000. But he pointed out that a PWA application for a new wing to Sterling hall, to help alleviate the problem, had been denied.

The University in general, he said, has had no real building program in 10 years, with the result that now it has an enrollment of more than 11,500 but room only for 9,000.

Glover said the college of agriculture needs a fair sized dairy herd if it is to do any important work for the dairy industry. As the leading dairy state, Glover thought it "a shame" Wisconsin has "the poorest facilities" of any dairy state, for aid to dairy farmers.

The dairy herd request was in the form of a letter from Dean Chris L. Christensen of the college of agriculture. He asked \$100,000 for the first year, and \$50,000 for the second, to purchase a herd of 50 Guernsey and 50 Holstein cows, provide facilities, and carry on breeding work.

Urge Badger Industries Use U. W. Facilities

Leaders of Wisconsin business and industry are invited to consider the extent to which the University of Wisconsin's College of Engineering may aid in solving their individual technical and research problems in a letter sent to industrial leaders in all parts of the state by Pres. C. A. Dykstra recently.

The letter inaugurates on a statewide scale a new industrial survey of research possibilities in industries in Wisconsin, established by the University last fall. The new project is under the direction of Dr. James B. Friauf, physicist and engineer, who has joined the University's engineering staff to conduct the survey, which is designed to increase the University's services and scientific contributions to state industry.

In his letter to state business and industrial leaders, Pres. Dykstra wrote:

"One earnest desire of this administration of the University of Wisconsin is to place the facilities of the University even more effectively at the service of the people of the state in every appropriate way.

"This letter is to invite the leaders of Wisconsin business and industry to consider the extent to which our College of Engineering may aid in solving their individual technical and research problems. Moreover, an actual experience in investigating practical problems and in research is necessary in a first-class engineering college, both to stimulate the faculty and to train suitably gifted students for research in industry.

"We believe that much of such effort may wisely be expended upon those specific problems and researches the solution of which will be of real value to Wisconsin business and industry as well."

Pres. Dykstra asked the industrial leaders to indicate their interest in the new project to Dean F. Ellis Johnson, of the College of Engineering, who would arrange individual conferences for them with Dr. Friauf. Many letters have already been received commenting favorably on the service and promising the co-operation of industries in setting research problems for the engineering college.

Issue Largest U. W. Directory

The familiar red-covered University directory, the largest in the history of the institution, came off the presses in November containing the names, addresses and classifications of 11,438 students; 1,738 administrators and members of the faculty and assistants, and the names and locations of 310 campus organizations.

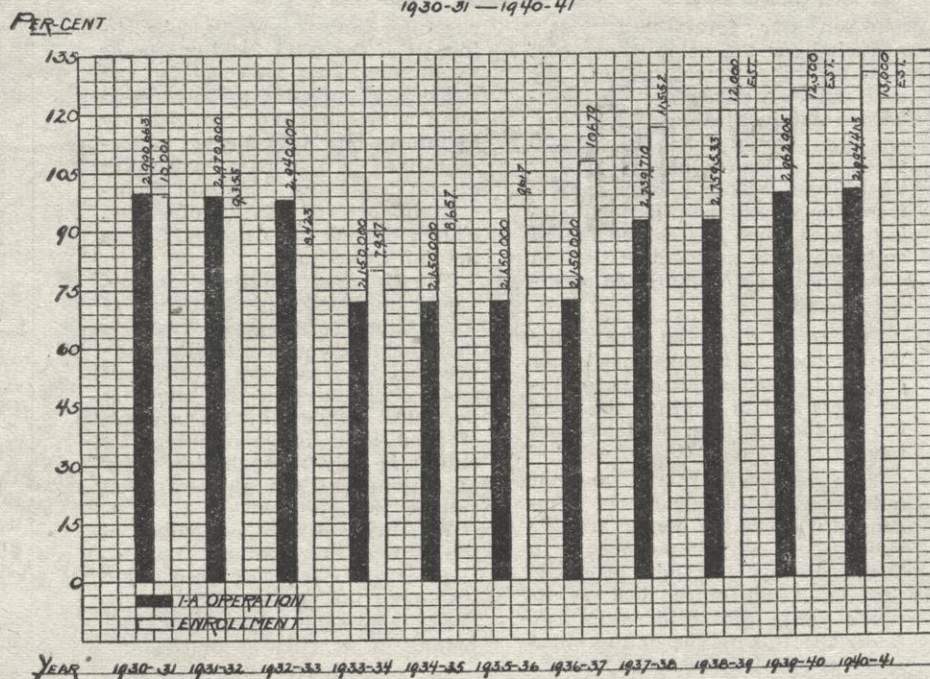
When first issued way back in 1858, the directory contained the names of seven faculty members and a student body of 138.

U. Sports Program Continues Upswing

Football at Wisconsin this fall continued the upward sweep which started with the coming of Harry Stuhldreher as director of athletics and head coach in 1936. Wisconsin surprised all competent critics by its 1938 showing. Victories were scored over Marquette, Iowa, Indiana, U. C. L. A. and Northwestern and the Badgers' defeat of the Northwestern Wildcats by a score of 20-13 was one of the major upsets of the season. Losses were to Minnesota, Purdue and Pittsburgh.

At the opening of the season, all competent critics consigned Wisconsin to a low berth in the second division, many stating that the Badgers would be lucky to win two games. In the face of this estimate, the team was good enough to enter its final game against Minnesota with the conference championship resting on the outcome. Unfortunately, Wisconsin struck Minnesota on one of its great days. The result, a 21-0 defeat, is history and the chief consolation is the opinion of the

CHART 4
UNIVERSITY OF WISCONSIN
COMPARISON OF I-A OPERATION AND ENROLLMENT
1930-31 — 1940-41



Preserve Democracy, Responsible Government

The American people are in dire need of a social goal to which they can aspire with confidence, a governmental structure which can meet the public strains and stresses of present and future, and a citizenship which can be trusted to act responsibly. C. A. Dykstra, president of the University of Wisconsin, told members of the American Political Science Association meeting in Columbus, Ohio, recently.

As president of the association, Mr. Dykstra delivered the presidential address on the subject, "The Quest for Responsibility," at the 34th annual meeting of the national group whose members are specialists in political science from colleges and universities in all parts of the country.

Delivering his address on the 100th anniversary of the birth of the great English political scientist and statesman, James Bryce, noted author of "The American Commonwealth," Pres. Dykstra asked for a reconsideration of the well-known Bryce formula, "the cultivation of patient and impartial thought," in probing the difficulties facing the nation and the world today.

"We live today in a world which is still seeking a way of responsible action, and the difficulties involved have multiplied increasingly in the last quarter century," he explained. "The turn of the wheel has brought us to a series of experiments in group or collective responsibility throughout the world. We find ourselves and the world in a confusion which we do not seem to resolve—a fog which we cannot penetrate. We do not even find time to try the Bryce formula, 'the cultivation of patient and impartial thought.' And yet it was never more necessary.

"On every hand are the witch doctors with their panaceas. On every rock sits a siren trying to

take our minds captive. We ride wave upon wave of popular passion, each more threatening than the last. Classes, groups, and special pleaders clash with each other in their efforts to control the common agents of collective action. Everywhere immediacy is in the saddle; we yield to the desires or needs of the moment. The future has no appeal, nor do we care for its promise. Today must fulfill our demands though the heavens fall. The result is that we are living recklessly and irresponsibly the world over."

Asserting that "we moderns attack no new problem when we set out again on the quest for responsibility," but that "we merely use new terms for old ideas," Pres. Dykstra outlined six "imperatives" which must be faced if democracy and responsible government are to be perpetuated. These were:

1. We must discover and proclaim a social and economic program which will provide for Americans the essence of economic security and the personal freedoms which were inherent in our earlier system of democratic opportunity and as we supposed guaranteed by a responsible constitutional government;
2. We must accept the principle that the common agent of the popular will—the people's government—will be forced to undertake as public functions what the common need requires.
3. We must make a conscious and continuous attempt to adapt the structure of our government to the changing environment in which political institutions work.
4. We must recognize that, in spite of theoretical divisions of the field of governmental power, many of the problems facing our people have become national in their scope and they must be met in some large part by a national attack.
5. We must promote an understanding of the democratic method and its implications; and
6. Most important of all in its final implications we are faced with the youth problem and its relation to responsible democratic institutions.

Anti-Pellagra Discovery at U. W. Praised

Hospitals and clinics throughout the nation are now making use of a discovery made in the laboratories of the University of Wisconsin that nicotinic acid contains the pure form of the anti-pellagra vitamin. The discovery made by Conrad Elvehjem, of the staff of the Wisconsin Agricultural Experiment Station, was first used in treating black-tongue disease of dogs, caused by the same dietary deficiency as human pellagra. Elvehjem's work was recently written up in a national magazine.

Since then, medical authorities have proved the tremendous importance of the discovery in that nicotinic acid treatment has been found to bring about prompt cure of this disease which records of the U. S. Public Health Service show has proved fatal to a large proportion of its 400,000 victims in the United States. The discovery is considered all the more remarkable in view of the fact that pellagra, in advanced stages, has been considered an incurable disease.

Since the original discovery by Elvehjem and his co-workers, Wisconsin investigators have tested the effectiveness of many compounds chemically related to nicotinic acid. They have found a number of compounds that are about as effective as nicotinic acid. They have also discovered that a considerable number of other compounds gave no beneficial effects when administered in doses up to three or four times the effective dose of nicotinic acid.

The importance of the Elvehjem discovery was recently shown when, according to press dispatches, 39 of America's leading scientists sent to Spain a shipment of nicotinic acid to be used in treating 40,000 sufferers of pellagra. In making this contribution the scientists expressed the belief that the discovery was one of the greatest triumphs of modern science.

U. W. Placing More in Jobs Reports Show

(Continued From Page 1)

tal jobs, while all mining engineers are working for private concerns, Dean A. V. Millar of the engineering school reported.

The University's department of physical education, a rigorous course, graduated 26 women, all of whom have jobs, according to Blanche M. Trilling, director of the course. Eighteen of them are now teaching physical education, while the remainder are engaged in dance and physiotherapy work.

Lawyers Do Well
Surprisingly, virtually the entire class of Law school graduates is employed. Prof. John Stedman, in charge of placement, revealed that 113 of the 116 seniors who completed the law course are now working.

The University's department of high school relations, in charge of placement for school of education students, reports that of 180 seniors requesting placement through the school, slightly more than 60 per cent of them have jobs. It reported that it also had placed 140 other students, including graduates and those not majoring in education.

Prof. Henry L. Trumbower, director of employment for commerce and economics department graduates, declined to give definite figures of placement because of incomplete records, but he said that "a majority" of the seniors are now in jobs.

Other fields of engineering have likewise found placement conditions much improved, Dean Millar said. All but two of the 30 graduated chemical engineers have received jobs. About 25 per cent of these usually go in oil refinery work, he reported.

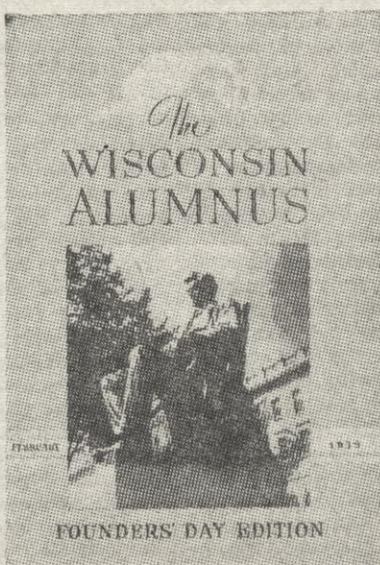
Report on Engineers
The large electrical companies are taking fewer men than in previous years, the electrical engineering department reported. Approximately 75 per cent of the 42 seniors are now working, many for small companies.

Until 1928 the large concerns, representing manufacturing, communication or public utility interests, employed about three-quarters of the graduates. At present only about 20 per cent receive bids from the larger companies.

Mechanical engineering department officials reported 93 per cent of their graduating class of 57 now placed. Employing concerns are widely scattered, they said, although a California oil company took five men from the June class.

Chicago Alumnae to Meet Feb. 19

The members of the Chicago Alumnae club cordially invite all alumnae and their friends to join with them on Sunday, Feb. 19, from 4 to 7 p. m. for tea and for a fleeting journey to Mexico. The affair will be held at the headquarters of the Chicago Home for the Friendless, 5016 S. Drexel blvd., Chicago. Miss Thelma Jones, member of the club, will show her colored films of a recent trip to Mexico, and there will also be a display of Mexican art objects, and an exhibit of camera studies made by members of the club.



FOUNDERS' DAY EDITION

The February issue of the WISCONSIN ALUMNUS will commemorate the 90th birthday of the University of Wisconsin. February 5, 1849, Prof. John W. Sterling met with Wisconsin's first class, consisting of 17 students, in a rented red brick building erected in 1847 for the Madison "Female Academy".

Special articles appropriate to Founders' Day will be included in this issue of the WISCONSIN ALUMNUS in addition to the University news, class news and other features regularly found in this new magazine. See for yourself how the Wisconsin Alumni Association keeps its members posted on campus and alumni news by mailing the blank below for a copy of this FOUNDERS' DAY EDITION.

Wisconsin Alumni Association,
770 Langdon St., Madison, Wisconsin.
Please send me the Founders' Day Edition of the WISCONSIN ALUMNUS.

Name Class
Address
City State

The Badger Quarterly

Published quarterly by the University of Wisconsin as an informal report of its activities to its Alumni, Parents of its Students, and to other Citizens of the State.

January, 1939

Entered as second class matter at the postoffice at Madison, Wis.

EXECUTIVE EDITOR. ROBERT FOSS
ALUMNI EDITORS. . . . JOHN BERGE
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From The President--

In October I told you something of the proposed building program on the campus. I can now report that work is under way on eight projects, two of which are multiple in character—five units of men's dormitories and five women's dormitories. In terms of costs these projects run almost to \$3,500,000 of construction. This is in addition to the three mep's houses opened in September and the additions to the stadium and athletic facilities now going forward as a W. P. A. project.

If any of you want a slight part in this program, there is an opportunity to help out in furnishing and equipping these student houses. Materials for curtains for the men's houses will require about \$500 more than there is in the gift fund at present. \$200 will furnish one room and \$1,000 will take care of a reception room in any one unit. The other day a check for \$1,000 came in to help out on the new Law Library. The donor, a lawyer, does not want us to give his name. So you see the habit is growing, even if slowly.

There is so much in this issue which comes from the presidential pen which may interest you that this editorial ought, in all conscience, to be very brief. There is room however to wish you all a happy New Year. And so, here is the wish together with an expression of hope that you will come back soon to see with your own eyes the new facilities which will help make the students a bit more comfortable.

C. A. DYKSTRA.

Science Inquiry

Answer Science's Questions

Science, during the past century, has answered many of the world's most pressing technical problems, but only since 1933 the University of Wisconsin's newest and most unique science set-up, called the Science Inquiry, has furnished answers to important questions as to the social and political implications of science arising from the work of both natural and social scientists.

Established in 1933 by Wisconsin faculty members as a means of surveying both natural and social science research accomplishments and needs in various fields of human endeavor, the Science Inquiry, after only 5 years, has proved itself successful in removing both duplication and gaps in scientific research, at the same time bringing together both natural and social scientists in various related fields of research for co-ordinated attacks on single human problems.

A "DEPRESSION BABY"

In a way, the Science Inquiry was a depression baby at the University. The depression years 1931-34 saw thinking people throughout the land asking questions concerning politics, economics, sociology. Not only ways of living but traditional institutions and policies were subjected to criticism and analysis. In the field of science, researchers were asking questions concerning the seeming lack of correlations between the work of the natural and social sciences; they say the apparent lack of integration and co-ordination between individuals and departments in science; and they saw not a little duplication in the work of scientists on projects in various science fields.

At the University of Wisconsin four men of science sat down around a table in the fall of 1933 to consider the social implication of modern science. These faculty members were: Profs. Edwin B. Fred, dean of the graduate school; Chester Lloyd Jones, department of commerce and political science; Harry Steenbock, professor of agricultural chemistry, and C. K. Leith, professor of geology.

Later these men were joined by

Alumni—Your Duty!

When our forefathers wisely provided for the establishment of a state university at or near the seat of government, they envisioned a great institution of learning, one that would take its rightful place as a leader among similar institutions. They knew then, from the experience of neighboring states, that the establishment and growth of such an institution would not be accomplished without struggle.

For more than 80 years the University of Wisconsin has never ceased its constant struggle to better itself and to improve the calibre of its teaching, students and faculty.

This year will mark another milestone in the history of Wisconsin. Legislative years are always of utmost importance in University history. Quite properly, this 1939 legislature, just as its predecessors did, will want to know the full details of the operation of the University, its courses, finances, accomplishments and program. The legislators would be remiss in their duty if they failed to study carefully every aspect of the University before deciding upon the budget request presented by President Dykstra.

It is in connection with this desire on the part of the legislators to be fully informed about the University that we as alumni can render valuable services to both the University and the state. We have at our disposal, in this issue of the Badger Quarterly, the full details about the University's needs and its budgetary requests. It is our duty to read these pages

carefully and critically, absorbing all of the vital facts necessary to an intelligent approach on the subject. Then, with these facts at hand it becomes our explicit duty to inform our duly elected representatives in the state legislature of our desires for adequate financial support of the University. This is the job for all of us. Let us not shirk our duty.

The University authorities, too, would be derelict in their duty if they failed to properly evaluate their faculty, courses, and procedure that they may be as efficient and constructive as is humanly possible. After all, we are all pledged to a common enterprise and it is only through this unity of action that the greatest good can be accomplished.

Whether you are a member of the Wisconsin Alumni Association or not, each of you might well take this opportunity to sincerely subscribe to the first four planks in its current platform:

1. To cooperate in maintaining Wisconsin's leadership among American universities;
2. To assist in securing every reasonable financial support that the needs of the University require;
3. To support the administration of the University in carrying out its educational policies and program of expansion; and
4. To develop a citizenry adequately and correctly informed regarding University affairs.

Those of us active in University affairs have pledged our loyal support to these precepts. Won't you do the same?

HOWARD T. GREENE, '15.

Prof. L. R. Jones and Noble Clark of the college of agriculture.

From the deliberations of this small group was born the Science Inquiry, the general purpose of which was to guide informally a review of the teaching and research work in the natural and social sciences of the university in terms of their relation to the political, social, and economic problems of the time, and particularly of the state.

LISTS AIMS OF INQUIRY

In a recent report to Pres. C. A. Dykstra, the more specific objectives of the Science Inquiry are outlined as follows:

To ascertain the extent to which the natural scientists of the university are considering, and should consider, the implications of their work, and how such consideration is reflected in teaching, research, extension, and outside activities;

To see what, if any, gaps or duplications existed in the university's activities in the fields under investigation;

In general, to see that wherever possible the university makes its attacks upon problems comprehensive so that instead of fragmentary findings resulting from existing departmentalism there might emerge at least the beginnings of integrated programs, with improved perspective and balance, and with the application of these problems to state needs kept to the front; and

To achieve, if possible, even more complete cooperation and coordination among the physical sciences in the university.

Almost immediately upon its inauguration, the Science Inquiry caught the favor of both the natural and social scientists on the Wisconsin faculty, and from its very beginning it succeeded in concentrating the attention of much of the university staff on scientific problems facing not only the state but the nation as well.

Problems on which the Inquiry has already focused its attention are: conservation, crime, transportation, international relations, public utility and power relations, technological unemployment, communication, and consumption from the point of view of the producer and consumer. Many other subjects, such as child development, plant improvement, reorganization of local government, social delinquency, and public health, have been suggested for future study by the Inquiry.

In attacking these human problems, the Inquiry has been directly responsible for the holding of hundreds of meetings during the past 5 years of interested faculty groups from various departments of the university. Sometimes as many as 20 faculty members from almost as many departments would meet to consider some phase of one problem. Thus has the Inquiry succeeded in cutting across departmental lines in aiming the university's research man-power and facilities at the solution of some complex problem of science and its social implications.

By bringing faculty members from

various departments together for study of a common problem, the Inquiry has helped to reveal gaps and duplications in both teaching and research in the university, and as a direct result, courses of study in some departments have been modified and changed, new courses and inter-departmental courses and majors have been established, and research programs have been strengthened, better integrated, and more coordinated.

Up to the present time, the university has published eight of the studies which have been made under the Science Inquiry. Of these, six are in the field of conservation. The titles of these publications are: The University and the Erosion Problem, Conservation of Wisconsin Waters, Conservation of Wisconsin Wildlife, Conservation of Wisconsin Minerals, Wisconsin Forestry, and the Regional Approach to the Conservation of Natural Resources.

Additional reports now being prepared in the conservation series are: Nature and ownership and financing and its affect on conservation of natural resources; Legal and administrative aspects; Soil maintenance; and Recreational policies as related to environment.

It has already been suggested that, with the completion of the conservation series, the reports should be brought together in a single volume, since there is no other publication covering so many different phases of the conservation problem, nor is there any other institution in the world in which the problems have been actively considered for so many years from so many points of view.

OTHER PUBLICATIONS

The two other publications already published by the Inquiry are entitled: The University and the Fight Against Crime; and The University and Transportation. Other reports now in preparation include: Survey of International Relations; Public Utility and Power Regulations; Technological Unemployment; Communication; and Consumption from the Point of View of the Producer and Consumer.

Men of science at Wisconsin believe that the first 5 years of the unique Science Inquiry have resulted in a real gain in collective thinking by faculty groups on the complex natural and social science problems facing this modern age; that it has brought about the formulation of reports and agreements on many new research projects which will be of definite aid to science investigations at Wisconsin in the future; and that it has evolved a group consciousness on the part of the faculty of common human problems which already is having a notable influence on the direction and emphasis of individual activities in teaching as well as research at the University of Wisconsin. In short, the Science Inquiry is Wisconsin's pioneering answer to the complex problem of applying science to modern social needs.

Learning Program

(CONTINUED FROM OCTOBER ISSUE)

In the October issue of this publication there was published an article explaining a plan for group study of social problems and their available solutions. The plan, proposed by L. C. Wheeler, '91, Milwaukee attorney, is sponsored by the Class of '91 and has been approved by the Wisconsin Alumni association board of directors. Because of lack of space, all of the topics for study and discussion could not be printed in the October issue, and these are now presented as follows:

CRIME PREVENTION — (UNOFFICIAL EFFORTS)

New Light on Delinquency, Healy and Bronner; Preventing Crime, Sheldon and Eleanor Glueck; Social Control of the Mentally Deficient, Stanley P. Davies; The New Psychology and the Parent, H. Crichton Miller.

CRIMINOLOGY.

Crimes Nemesis, Luke May; Criminology, Albert Longman; Principles of Criminology, E. H. Sutherland; The Criminal and His Allies, Marcus Kavanagh; Penology and Criminology, J. L. Gillin; Crime and Justice, Sheldon Glueck.

PERSONALITY AND PERSONALITY ADJUSTMENTS.

Psychological Diagnosis in Social Adjustments, Percival M. Symonds; Psychology of Adjustment, Laurence F. Schaffer; Psychology and Life, Floyd L. Ruch; Educating for Adjustment, Harvey N. Rivlin.

HEREDITY.

Periodicals, Journal of Heredity, Eugenics, The Eugenics Review, Eugenical News, The Quarterly Review of Biology.

Being Well Born, M. F. Guyer; The Child's Heredity, Paul Popenoe; Human Eugenics and Its Social Import, S. J. Holmes; The Trend of the Race, S. J. Holmes; Some Biological Aspects of War, H. R. Hunt; Tomorrow's Children, E. Huntington; Inbreeding and Outbreeding, East and Jones; The Inheritance of Mental Diseases, A. Meyerson; The Physical Basis of Personality, C. R. Stockard; Practical Applications of Heredity, Paul Popenoe; Eugenics, A. M. Carr-Saunders; Human Heredity, Bauer, Fischer and Lenz.

ENVIRONMENT.

Heredity and Environment, E. G. Coughlin; The Adolescent in the Family, By White House Conference; Mental Conflicts and Misconduct, Wm. Healy; Normal Youth and Its Everyday Problems, Douglas Thom; The Changing Psychology of Social Case Work, Virginia P. Robinson; The Psycho-analytic Study of the Family, J. C. Floyd; Child Guidance cases, Mary B. Sayles; The Nervous Child, H. C. Cameron; The Mental Growth of the Pre-School Child, Arnold Gesell; Children's Behavior and Teacher's Attitude, E. K. Wickman.

REASON—(The directing force of civilized advance.)

Revolt Against Civilization, Lothrop Stoddard; Religion of Man's Completion, Rudolph Binde; The Good Man and the Good, Mary W. Calkins; Scepticism and Animal Faith, George Santayana; Inside Experience, Joseph K. Hart; Social Psychology, Ellis Freeman; Folkways, William Graham Sumner.

EMOTION—(The Directing force of civilized advance.)

Emotion, The Basis of Civilization, Denison; Emotions of Man, Frederick H. Lund; Varieties of Religious Experience, William James.

Leverett C. Wheeler Class of 1891 for Wisconsin Alumni Association Committee.

Endorsed by Waller Carson, Class of 1917.

Copies of the proposed plan were mailed to all class presidents, club officers and members of the Class of 1891, Mr. Wheeler's class. In April of this year Mr. and Mrs. Wheeler distributed copies of the plan to various groups in and around Milwaukee with the following results:

It was adopted by the Discussion Group of the Twentieth Century Topic Club;

It was enthusiastically received at a meeting of the Wauwatosa Woman's Club and its adoption by one or more of the four existing departments or the organization of a special department for its adoptions, seems assured;

The Parent-Teacher Council referred it to its program committee to report on a recommendation for its adoption by all P. T. A.'s in the city; Mr. Kraemer, President of the Council, presented it to the recent state convention at Stevens Point and it will probably be recommended to all P. T. A.'s in the state;

The Board of Directors of the Milwaukee Alumni Club unanimously endorsed it at their meeting on May 17th.

In commenting on the plan, Howard I. Potter, president of the Alumni Association, issued the following statement;

"The 'Wheeler Plan' for group discussion offers alumni everywhere a splendid opportunity to pick up the threads of their education where they may have discarded them during the past hectic and turbulent years. I heartily recommend a thorough study of this plan to all alumni and particularly to those organized alumni clubs. As university graduates it is our duty to become intelligent leaders in our respective communities. This plan of discussion groups may be the means whereby we can fulfill this duty."

Mr. Wheeler has appointed the following committee to work with him in preparing the plans by which this program will be put into operation throughout the nation: Dr. J. C. Colbert, of the University Extension Division at Madison; R. F. Lewis, superintendent of schools at Waukesha; Edward C. Kraemer, Wauwatosa; Jefferson D. Burrus, Milwaukee; and L. C. Wheeler.