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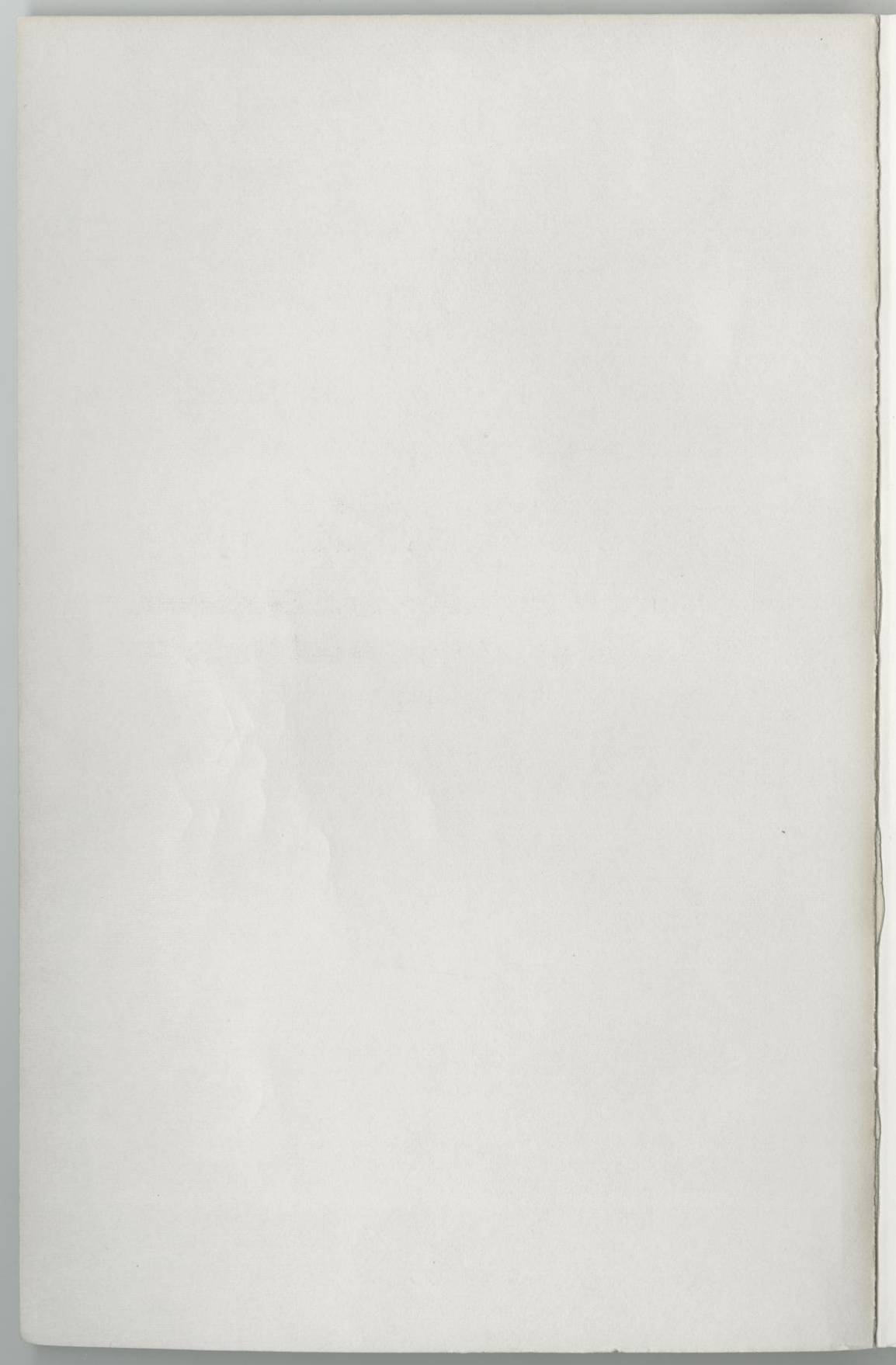
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# JUBILEE!

A History of the  
College of Engineering  
The University of Wisconsin-Platteville  
1908-1983



**Thomas B. Lundeen**



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By  
Thomas B. Lundeen

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1983

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# *Preface*

When Governor James O. Davidson appointed R. I. Dugdale of Platteville to the Wisconsin Mining Trade School Board in 1907, he allegedly said, "It is a poor boys' school. It must be kept practical and I don't care how easy it is to get in or how difficult to get out." Many of the students and graduates of the school may not agree with the "getting in," but may well agree with the "getting out." From its modest beginning to the present, the school's reputation for excellence has continued.

On 27 January 1908, the Wisconsin Mining Trade School opened with three full-time faculty, two part-time faculty, and eleven students. A long-anticipated goal had been achieved. Periodically during the nineteenth and the early twentieth centuries, proposals for the establishment of a Wisconsin Mining School had been brought forth, but it was not until 13 July 1907, that a mining school was established by legislative and executive action. (See Appendix I.) Therefore, 1983 marks the Diamond Jubilee of what the Wisconsin Mining Trade School, after many name changes, has become today: The College of Engineering in The University of Wisconsin-Platteville. There have been many ups and downs in the school's history, and this is an account of some of those trials and triumphs.

The writing of history has many pitfalls, and certainly the writing of institutional history has more than its share. Documentation of the early history of the Mining School is sparse

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and is not always reliable. Few records exist of a time when a handful of faculty worked six days a week and taught six to eight courses without clerical assistance. It is possible, too, that, given the small enrollment for decades, record keeping was thought to be irrelevant since everyone knew everyone. Records which did exist were accidentally or deliberately destroyed. It is known, for example, that truckloads of material were discarded in 1966 during the move from the original Mining School building (now renamed Rountree Hall after John H. Rountree, an early Platteville settler and benefactor) to the new Ottensman Centennial Hall of Engineering-Science. Nevertheless, archives, government documents, minutes of regents' meetings, newspapers, Mining School, college, and university publications, and correspondence, telephone, and personal interviews have made it possible to reconstruct, at least in part, a history of the Wisconsin Mining Trade School. The State Historical Society of Wisconsin library staff and the staff of the Legislative Reference Bureau, Madison, were also especially accommodating.

Any undertaking of this nature is possible only with assistance and information supplied by many people. Chancellor Emeritus Warren Carrier and acting Chancellor Ralph Curtis and their administrations must be recognized for arranging released teaching time, research and secretarial assistance, and office space. Edward O. Busby, dean of the College of Engineering in The University of Wisconsin-Platteville, and faculty in that college, and Jerome P. Daniels, director of the Elton S. Karrmann Library, The University of Wisconsin-Platteville, and its faculty and staff have cooperated fully in many requests for information. In particular, Agnes Boll and Mary Freymiller of the Karrmann Library Wisconsin Room were most helpful. Carol Kies, registrar, and the personnel in the registrar's office, and Paul Ipsen, alumni director, and Geraldine Schulte in the alumni office, were helpful in supplying names and addresses. Ipsen also generously contributed editorial and imaginative suggestions.

Philip Buchanan, Andrew Baumann, and especially James E. Pugh and Rex Wickland, gave considerable assistance in the technical aspects of this production. Helen Silko and Mary MacCulloch Ipsen were indispensable in editing and giving secretarial assistance as well as providing inspiration. As a research assistant, Mark Johnson had the ability to locate the impossible stray date, event, or fact. More than any others, as a team, these three made possible this book.

Many of the facts, versions of events, and interpretations included in this effort have been dependent upon the fragile reed of human memory. Nevertheless, the author assumes responsibility for the contents. Many people were contacted, some of whom asked not to be cited by name, and all must be thanked for their contributions. Among the many are the following: Florence Alleman; Robert Alleman, W.M.S. '22; E. R. (Dick) Barden, N.S. '22; Robert Block, P.S.T.C. '40; Phoebe Boebel, W.S.C. '56; Agnes Boll, P.S.T.C. '36; Ervin A. (Sandy) Brecke, W.M.S. '34; Marguerite Broughton; W. A. (Al) Broughton; Harriette Burris, W.M.S. '44; Eila Butterworth; Irwin I. (Slug) Chaitin, W.I.T. '46; George Chryst; Robert E. Clarke, W.I.T. '46; Arthur J. Cooke; Nancy Curtis; Mary DeNure, W.S.C. '56; Dale Dixon, W.M.S. '36; Richard J. Dobson, W.M.S. '33; Joyce Ebert; Ross Fiedler; Richard G. (Pete) Gamble; David Gardner, P.S.T.C. '37; William P. Gardner, P.S.T.C. '37; Carl H. Gausewitz; Dana Gempler; Charlotte Geyer, P.S.T.C. '35; Harold Geyer, P.S.T.C. '34; Richard Goodell, P.S.T.C. '37; Carol Goodrich; Joe Grimes, W.M.S. '34; Madeline Grimes; Marius (Pete) Gronbeck, W.I.T. '48; Beverly Hannan; Walter Hannan, W.I.T. '49; Harry Harms, W.M.S. '31; Ilah Harvey; Carl Hayden, W.M.T.S. '14; Richard Heidenreich; Charlene Ingebritsen; Laura Johnson, P.N.S. '18; Grace Jones; Ruth Jones, P.S.T.C. '48; Isabel Karrmann, P.N.S. '18; W. Phil Karrmann, W.S.C.I.T. '62; Orton F. Keyes; Carol Kies, W.S.C.I.T. '61; Hazel Kindschi, P.N.S. '19; William Kissner; Alvin W. Knoerr,

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W.M.S. '37; Emily Kopp, P.S.T.C. '32; John Kortas, UW-P '72; Carl Krog, W.I.T. '47; John Krogman, UW-P '76; Mary Kurth; Robert Lacke, W.I.T. '52; L. James Leidl, P.S.T.C. '51; Lloyd Linden; F. J. Lofy; Milton Longhorn, P.S.T.C. '29; Wayne R. Loy; Rachel Mahun; William Maurer, W.I.T. '58; Earl McCullough; Raymond R. (Pat) Medley, W.M.S. '36; Helen Melcher; Darlene M. Mellor; Donald A. (Heinie) Miller, W.M.S. '32; Deane Millman, W.M.S. '21; James Mott; John Orth, W.I.T. '40; Deborah Parker; Angeline Pett, P.S.T.C. '29; Charles Pettyjohn, W.M.S. '32; Dorothea Wilgus Pickard, P.N.S. '21; Robert Reeder; Hugh T. Richards; John Rindlaub, W.M.S. '28; Harold Robbins, W.M.S. '28; Ray Rosenthal; Charles Saloutos, W.S.C. '52; Milton Shute; Robert J. Southey, W.M.S. '35; J. C. Spradling, W.M.S. '31; Henry Stoll; Merle Strouse; Leonard R. Suhr, W.M.S. '25; Meyer Taylor, W.M.S. '39; Gary Tuescher, WSU-P '66; Bjarne R. Ullsvik; Yuan-Ling Wang; Dean Williams, P.S.T.C. '39; Agnes (Tip) Ziegert.

For identification purposes: W.M.T.S. represents Wisconsin Mining Trade School; W.M.S., Wisconsin Mining School; W.I.T., Wisconsin Institute of Technology; P.N.S., Platteville Normal School; P.S.T.C., Platteville State Teachers College; W.S.C., Wisconsin State College; W.S.C.I.T., Wisconsin State College and Institute of Technology; WSU-P, Wisconsin State University-Platteville; UW-P, The University of Wisconsin-Platteville.

And finally, all engineers, wherever you may be, this little book is dedicated to you.

Thomas B. Lundeen  
Platteville, Wisconsin

1 May 1983

# *The Wisconsin Mining Trade School, 1908-1915*

By the year 1907, there were dozens of operating mines in the lead-zinc area of southwestern Wisconsin. Rich in several minerals, this area, roughly seventy miles long and forty miles wide, comprised principally the Wisconsin counties of Grant, Iowa, and Lafayette.<sup>1</sup> As early as the seventeenth century, if not before, it had been mined for its resources, first by native Indians and later by European immigrants. It was not until the nineteenth century, however, that mining became more than surface mining and that the needs of a rising industrial nation demanded increased mineral production. Theretofore, mining operations were often part-time, erratic, and not overly technical or refined. In the later nineteenth century, just as agricultural techniques were being revolutionized, there was also an awareness of the need to improve methods and to increase mineral production. The establishment of the Wisconsin Mining Trade School to teach practical mining was a consequence of that awareness; it became necessary to train engineers to operate and manage the mines.

Earlier, in 1889 and in 1893, unsuccessful attempts were made to establish a mining school in Wisconsin.<sup>2</sup> These attempts failed for a variety of reasons, not the least of which were the questions of location and financing. The obvious argument put forth by partisans of a mining school to be located in southwestern Wisconsin was that the mines were here. The

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opening of the Enterprise shaft in Platteville in 1899 and the high production of that mine seemed to substantiate the argument, plus the fact that many additional mines were operating in the vicinity.<sup>3</sup> Financing a mining school alarmed many at the turn of the century when the national and the state economies were not too sound. Powerful political forces in government, in education, and the private sector were strenuously opposed to a mining school.

The earliest serious account of the origin of the Wisconsin Mining Trade School was written by Dean W. Richards and published in the 1926 *Miner*. His account is reprinted without editing in Appendix II. Richards was a teacher of calculus, machine drawing, and physics at the Mining School 1923-1938. He was also an "engineering poet," and died in 1940.<sup>4</sup>

One of the most formidable opponents of the establishment of the Mining School at Platteville, as Richards and others have written, was Charles Van Hise, president of the University of Wisconsin 1903-1918. Among his many accomplishments, Van Hise was a leader in the new study of microscopic mineralogy, structural and historical geology, and before his presidency was chief of the Wisconsin section of the United States Geological Survey. He was also the first person to take a Ph.D. degree from the University of Wisconsin, and thus was both a product of the university and the first alumnus to become its head.<sup>5</sup> Stressing excellence and quality, Van Hise had strong ideas and ideals about higher education. He opposed any further expansion of the normal schools, the first of which had been established in Platteville in 1866, and solicited support in his quest from Beloit, Lawrence, Milton, and Ripon, all private colleges.<sup>6</sup> He apparently believed that all advanced studies (i.e., beyond two years) should be located in Madison and any Wisconsin mining school should be located there as well. The university in Madison already had a college of engineering which offered courses in mining and metallurgy, among other disci-

plines. At the end of the nineteenth century and during the early twentieth century, the college of engineering was the fastest growing college in the university.<sup>7</sup> To continue that growth, in June 1907 the regents of the University of Wisconsin approved the establishment of a mining engineering course at Madison, only weeks before the state legislature and Governor James O. Davidson approved the establishment of the Wisconsin Mining Trade School at Platteville.<sup>8</sup>

As great a president as Van Hise undoubtedly was, perhaps he had miscalculated his opposition, which continued decades after he had gone. Many individuals, plus time and circumstance, helped defeat the visions Van Hise and his successors had of centering all advanced studies in Madison. Originally, there was a compromise (Section 392q of the statute establishing the Mining School) that "The dean of the College of Engineering of the University of Wisconsin shall be consulted concerning the course of study, and the same and all modifications thereof shall be approved by him." This stipulation was apparently followed in the formative years of the Mining School but, by the 1920s, this part of the statute was largely ignored.

Many people, local and statewide, deserve recognition for the founding of the Mining School. Foremost among them is Robert I. Dugdale, publisher and editor of *The Grant County News*. Born near Platteville, Dugdale was deeply interested in mining as a boy, spending hours playing about the mines operated by his father. Frequently his Fourth of July and circus money was obtained from selling lead he and his brother had gathered from old dumps.<sup>9</sup> He continued his interest in mining until his death in 1956 at the age of 88. Always interested in civic and community affairs, Dugdale was an original member and secretary of the Mining School Board 1907-1916 and 1921-1928, and was a regent of the Platteville Normal School, which became the Platteville State Teachers College in 1927.<sup>10</sup> Using his newspaper as a rallying point, Dugdale began the crusade to

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have a mining school located in Platteville. The three Platteville newspapers, *The Grant County News*, *The Platteville Journal*, and *The Platteville Witness and Mining Times* all carried many articles and stories supporting the establishment of a mining school at Platteville. According to *The Grant County News*, twenty-one area persons went to Madison 18 April 1907, to participate in committee hearings on the proposed mining school.<sup>11</sup> (See Appendix II for the list of names.)

Meanwhile, mining communities such as Benton, Hazel Green, Linden, Rewey, and Shullsburg also launched supporting campaigns. The Mechanics and Manufacturers Association of Wisconsin endorsed the plan.<sup>12</sup> A group of about eighty Milwaukee businessmen and merchants visited Platteville and endorsed the mining school project.<sup>13</sup> James Huff Stout, businessman, educator, lumberman, philanthropist, politician, regent of the University of Wisconsin, and state senator gave his powerful support to the proposal. Stout, founder and benefactor of Stout Institute, Menomonie, Wisconsin, today The University of Wisconsin-Stout, was a nationally recognized figure in vocational training.<sup>14</sup>

James W. Murphy was another of the earliest and strongest proponents of the Platteville Mining School. Born in Platteville in 1858, he was the youngest ever to graduate from a state normal school, doing so in 1873. After teaching in area schools for five years, he took a mining law degree from the University of Michigan and returned to Platteville to pursue a prominent civic and professional career. He served at various times as district attorney of Grant County, supervisor on the Grant County Board, mayor of Platteville, member of Congress, and founder and president of the Platteville Lead and Zinc Company.<sup>15</sup> His speeches and his prominence in both government and business undoubtedly gave weight to the cause.

Duncan McGregor, assemblyman from Grant County, and E. E. Burns, state senator from this district, guided the mining

school bill through the legislature. McGregor, Platteville Normal School president 1879-1894 and 1897-1904, successfully opposed Van Hise who was the only one to appear in opposition to the bill. Burns, author of the bill, was also the chairman of the Senate finance committee which undoubtedly influenced its passage, since one of the arguments against establishing a mining school at Platteville was the cost factor.<sup>16</sup>

By the turn of the century the Platteville Normal School had outgrown its building at the corner of Main and Elm streets. The original Platteville Academy, created in 1839 and built in 1841 at the corner of Bonson and Cedar streets, still stands as a private residence. In 1853 a blue limestone building was constructed to be the new home of the Academy. Built in five months' time at a cost of \$10,000, the Academy grew so rapidly that additions were made in 1868, 1873, 1881, and 1891. In 1893, because of falling icicles, two vestibules were added to the east entrances of the building. The structure's exterior is virtually the same now as it was then; the interior has been remodeled many times in the past seventy-five years.<sup>17</sup> This area's first recorded earthquake on 6 May 1909, necessitated refacing the building's east and west walls.<sup>18</sup>

Ever-increasing enrollments confirmed the need for a new Normal School. In 1907 the doors of the new Normal (Main and Old Main to later generations) opened several blocks west of the original school. The State of Wisconsin had a problem, as does the city of Platteville today, seventy-five years later: What to do with that building? Some, such as A. W. Kopp, N.S. '95, later a prominent attorney, congressman, and judge, saw a solution to the dilemma. He pointed out that the old Normal School property, consisting of three acres and purchased by the city of Platteville in 1847-1848 for \$1,210, was worth fully \$100,000 and could be purchased for \$15,000. What better use for it than a mining school?<sup>19</sup> Kopp drew support from all sides and several days after the Wisconsin Mining Trade School became a real-

ity, Governor Davidson signed a \$30,000 appropriation bill, of which \$15,000 was to purchase the property and \$15,000 to equip and operate the school.<sup>20</sup>

The 1907 statute called for a three-member Wisconsin Mining School Board responsible for the control and management of the school. The state superintendent of public instruction was to serve as president of the board, and two residents of southwestern Wisconsin were to be appointed by the governor. The state treasurer was named treasurer of the board. While the statute specified the first meeting should be in Platteville on 15 July 1907, the board did not meet until 9 August of that year.<sup>21</sup> Subsequent meetings were held in either Madison or Platteville for the remainder of the year in order to open the new school in January 1908.

Apart from transferring the former Normal School building and property to the state, making some badly needed building improvements, and advertising for students, it was necessary to appoint a director who in turn would hire faculty and establish the curricula. The board decided that the head of the school should be a mining engineer versed in the use of modern machinery and a "general hustler."<sup>22</sup> After several week's search, Robert B. Brinsmade of Salt Lake City was appointed the director. Brinsmade was a graduate of Washington University, St. Louis, and held a master of engineering degree from Lehigh University. He had a long list of credentials as a mining engineer in this country and in South America.<sup>23</sup> Brinsmade came to Platteville in December and began his work as director, instructor in mining, and curator of a mineral museum proposed in the 1907 statute. His first appointment was Harold C. George from Pennsylvania, who held degrees from Pennsylvania State College and Western University of Pennsylvania. At the time of his appointment as instructor in surveying and mechanics, George was superintendent of the Columbia Lead and Zinc Mining Company in Platteville.

Henry Kleinhammer, a graduate of the Realschule, Hanover, Germany, and a Platteville architect, carpenter, and joiner, was engaged to teach woodworking. Two part-time faculty were also employed: G. L. Nicklas, M.D., a Platteville physician and surgeon, to lecture on hygiene and first aid, and George Dobson, to teach mathematics.<sup>24</sup>

This was the faculty of the Wisconsin Mining Trade School which welcomed eleven students on 27 January 1908. One of these five faculty, as every older graduate knows, will probably be remembered longer than anyone else associated with the Mining School. George Dobson, affectionately known to one and all as Dobbie (though he apparently preferred to be called Mr. Dobson or Sir by his students), had an unusual career.<sup>25</sup>

Born in 1884, Dobbie attended local schools and in 1904 received a teaching certificate from the Platteville Normal School, where he had played end in football. From 1904-1906 he taught mathematics at Benton, Wisconsin, and in 1906-1907 he taught math at Sumner, Washington.<sup>26</sup> He returned to Platteville to become one of the first eleven students to enter the Mining School, to teach mathematics part-time, and to coach football. He was one of five making up the first graduating class of the Mining School in 1909 and continued as a faculty member, teaching chemistry and assaying until his retirement in 1948. He died a year later. Because he did not have a four-year degree, Dobbie was encouraged by the Mining School Board of Regents to take a B.S. degree, which he did in 1941 at age 57, after taking two classes (woodworking and tests and measurements) at Platteville State Teachers College.

Many people have spoken and written about Dobbie as a colorful and effective classroom teacher and not one negative comment has been heard or read. As many know, Dobbie stories are legion; he was, at one and the same time, a distinguished and legendary individual. Carl Hayden, also a local boy, born in 1893, had Dobbie as his teacher in the fifth grade at the

Laboratory School and in the Mining School and remembers him as a "lively and sensitive" teacher.<sup>28</sup>

Harriette Burris and Carl Krog, among others, have reported on Dobbie's teaching proficiency as well as his kindness and concern. Burris has recalled one incident when she did so poorly on a chemistry examination that she cut class the next day to avoid embarrassment. When she did return to class, Dobbie told her that he had destroyed her examination because he thought she wouldn't want it returned. Carl Krog claims that anyone could learn chemistry from Dobbie; he was that excellent a teacher.<sup>29</sup>

Richard Dobson, Dobbie's son, remembers that with a "certain amount of arm-twisting," fifty per cent of the student body turned out for football. He also recalls that "among other inducements was the increased probability of a passing grade in chemistry."<sup>30</sup>

Harold Robbins told a story about Dobbie's chemistry class. During a review, Dobbie asked a student the symbol for acetic acid. The young man said he didn't know, whereupon Dobbie asked several others who, not wanting to embarrass the first student, said they didn't know. So Dobbie tried a new approach: "If it is twenty miles from Dilly to Dally, how far is it from Dally to Dilly?" The student thought and thought and finally said he wasn't sure because it was only a week from Christmas to New Year's but almost a year from New Year's to Christmas. Dobbie dismissed class for the day.<sup>31</sup>

Irwin Chaitin has reported that one day, after piling on the homework in chemistry, Dobbie told the class, "I am only trying to teach you how to eat steaks instead of hamburger later on in life." Chaitin remembered and brought up his children on this maxim. Two of the Chaitin offspring became medical doctors, one an architect, and one the president of a corporation. As Chaitin writes, "not bad for a bit of homespun philosophy out of Platteville."<sup>32</sup>

Apparently Dobbie thrived on axioms and formulas and expected his students to thrive on them also. His insistence that all of his students know the Principle of Le Chatelier is remembered to this day.<sup>33</sup> According to *The Geode*, Dobbie told his students his own personal philosophy: "Persistence plus Patience plus Activity equals Success."<sup>34</sup> Another Dobbie classic, frequently heard at the dinner table, was, "No thank you. I have a great sufficiency. Any more would be a superfluency of abundance."<sup>35</sup>

Charles Pettyjohn tells the following:

Professor Dobson's career as a teacher also had great historical content. He could angle, arch, or fast-ball a brown liquid into his spittoon in chemistry class across his marble top demonstration table, an accomplishment that never failed to gain 100 per cent attention from the students.

A somewhat noisy expulsion of unmentionable odoriferous gas from one of his students drew guffaws from the rest of us but turned into a learning experience that has stayed with me to this day. He calmly said, "Will each person, as he notices the effects of that incident, please raise your hand." Hands went up immediately near the center of the room, then a little further out, then at the outer edge. When Dobbie talked about the diffusion of gases and the activities of molecules in gases, we knew immediately what he was talking about without a \$10,000 piece of apparatus to demonstrate.

Some other things learned in his lab included such great scientific items as learning that a hose from the water mixing faucet, if at just the right temperature, could be placed in a student's rear pocket and, if I remember correctly, the record was 1.5 minutes' flow before detected. Gas pressure in his lab was low enough so

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that we could blow into the gas line and watch the bunsen burners lose their flame down the line from the blowhard.

From the beginning, the goal of the Mining School was to train youth to become practical miners. To enroll in the original two-year mining course as a regular student, one had to have a diploma from an eighth-grade school. Those matriculants without a diploma were examined in arithmetic and English. Fifteen was the minimum age for acceptance; students eighteen years of age or older were admitted to take partial courses by special arrangement with the director.<sup>36</sup>

Tuition was free to Wisconsin residents and \$50 a year for all others. Needy students were given permission to delay payment of tuition till two years after graduation. Laboratory fees from \$12 to \$22 were charged for each of the four semesters and students furnished their own textbooks and notebooks, drafting instruments, overalls, etc. at a cost of \$15 a year. Private room and board could be had for about \$3 per week. The total cost for a school year, including incidentals, was estimated to be \$200. Work opportunities in nearby mines were available for students sixteen or older at about 25 cents an hour; because of the heavy classroom schedule, working students were limited to fourteen hours underground weekly. All were required to work in the mines during the summer months.<sup>37</sup> The academic program was rigorous, as shown by the course listing on the next page. There was little provision for substitute or optional courses, although, because some students had had course work elsewhere, exceptions were made. "C" in the chart refers to morning classroom work and "F" and "L" refer to field and laboratory work generally held in the afternoon.

A limited number of students who could not afford these costs were allowed to cook and sleep in the basement and the third floor of the Mining School.<sup>38</sup> This practice continued into the 1930s when it was stopped because of safety regulations.

## TWO-YEAR MINING COURSE

### First Year—First Semester

COURSE NUMBERS	COURSES	PERIODS PER WEEK			
		FIRST QUARTER		SECOND QUARTER	
		C	F & L	C	F & L
IV.—1	Algebra	5	...	5	...
IV.—3	Plane Geometry	5	...	5	...
VI.—1	Chemistry	4	6	4	6
VIII.1 & 2	Hygiene and First Aid	1	...	1	...
II.—1	Shopwork	...	4	...	4
III.—1	Freehand Drawing	...	2	...	...
III.—2	Mechanical Drawing	...	4	...	6
VIII.—3	Gymnastics	2	...	2	...
I.—6	Mining Visits	Easter Field Week			
I.—7	Practical Mining	Summer Vacation.			

### Second Semester

COURSE NUMBERS	COURSES	PERIODS PER WEEK			
		FIRST QUARTER		SECOND QUARTER	
		C	F & L	C	F & L
IV.—2	Algebra	3	...	3	...
IV.—5	Plane Geometry	5	...	5	...
IV.—4	Solid Geometry	...	...	5	...
V.—1	Physics	5	6	5	6
VII.—1	Mineralogy	2	3	2	3
III.—3	Mechanical Drawing	...	3	...	...
V.—3	Graphical Statics	...	...	...	3
II.—2	Shopwork	...	4	...	4
VIII.—3	Gymnastics	2	...	2	...

### Second Year—First Semester

COURSE NUMBERS	COURSES	PERIODS PER WEEK			
		FIRST QUARTER		SECOND QUARTER	
		C	F & L	C	F & L
I.—1	Mining Machinery	5	...	5	...
III.—4	Mining Drawing	...	6	...	6
V.—2	Physics	5	3	5	3
IV.—6	Surveying	5	3	5	3
I.—4	Mining Laboratory	...	4	...	4
VIII.—3	Gymnastics	2	...	2	...
IV.—7	Practical Surveying	Easter Field Week			
I.—7a	Practical Mining	Summer Vacation.			

### Second Semester

COURSE NUMBERS	COURSES	PERIODS PER WEEK			
		FIRST QUARTER		SECOND QUARTER	
		C	F & L	C	F & L
I.—2	Mining Methods	5	...	5	...
VII.—2	Geology	3	...	3	...
VII.—3	Lithology	...	...	2	3
I.—3	Economics of Industry	2	...	...	...
V.—4	Elementary Mechanics	3	...	3	...
I.—5	Mining Laboratory	...	10	...	10
VI.—2	Assaying	...	6	...	3
V.—5	Mechanics of Materials	2	...	2	...

From the beginning, students were expected to be “earnest, faithful, truthful, and polite.” Apparently every student was told, and reminded periodically, that “he who wishes to command must first learn to obey.”<sup>39</sup> One graduate from the 1920s and another from the 1940s recall that at least once a semester students were told these guides to personal deportment—“in no uncertain terms.” Those not willing to adhere to these strictures were dismissed.

Students were usually tested twice each quarter by written examinations four hours in length, and a grade of 70 was passing; under certain circumstances, those not scoring 70 were allowed a re-examination. Unexcused absences and tardiness also affected grades.<sup>40</sup>

All students were expected to participate in athletics. The slogan, “Everybody out,” possibly thought up by Dobbie, was first shouted in the early teens and was still heard in the 1950s. The objective was to give every student “rigorous bodily training necessary for a successful mining career” as opposed to team games. According to the *First Catalogue, 1908-1910*, foot ball (*sic*) would not be played. It is impossible to explain this contradiction now but it is known that football games were played in 1908.

One reason why football was played from the beginning of the Mining School was undoubtedly because of Dobbie. Dobbie had known football virtually his entire life. With some editing, one story about his introduction to football follows. (The reader may presume that the story originally came from Dobbie himself.)

It all happened about 47 years ago when a man whose name was Percy Carter brought football to Platteville. Mr. Carter, who at the time attended Harvard University, began to teach the boys at the Normal School how to play this game of football. By some coincidence, or perhaps prompted by destiny, little George Dobson,

then in the third grade, was in the audience watching the aforementioned Mr. Carter teach football to the college boys, and watching the boys play.

"What do you call this game?" asked George.

"Football," replied a bystander.

"Nice game," echoed little George.

George went home and started a backyard football team. The boys had no football, so they manufactured one out of old overalls sewn together and stuffed with rags. This wasn't a very good ball for kicking, but then football was mostly a game of advancing the ball by running. Football differed then from the game we know today. For instance, the offensive team had to gain five yards in three plays as compared to ten yards in four plays now. Also, the player was never considered tackled until he called, "Down," and, too, there was nothing wrong with pushing your own teammate when he was carrying the ball.

Dobbie played in his first organized football game when he was in the eighth grade. After that, he went on to high school and then to college at the Normal School where he played end. Following his playing days at Normal, he enrolled at the Mining School and became the coach of the Miner team on which he also played. And that is how it all started.<sup>41</sup>

Almost inevitably, the close proximity of the Mining School to the Normal School led to considerable rivalry, often friendly and wholesome, but sometimes not. The purposes and course offerings of the two schools differed greatly, and obviously so did the students. The Mining School was exclusively male until the mid-1930s whereas the Normal had always been co-educational. Many stories could be told about dating competition. Both schools had special names for one another, some unprint-

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able; they also had names for their students. Stories about chickens and pigeons being released in both schools, cows and goats tied to pianos and desks, tombstones (no doubt "borrowed" from Grindell's Monument Works) planted in front of the Normal School, paint splatterings, brushing glue on car seats, are legion. The clandestine and often nocturnal escapades and pranks in those earlier days were generally juvenile but harmless, and certainly added color to the times.

Probably with some justification, the administrations of both schools attempted to keep their students separated as much as possible. Laura Johnson, among others, recalls that Normal School girls were discouraged from dating Mining School boys. When Normal School students walked downtown, they were supposed to walk on the south side of the street and Mining School boys were supposed to walk on the north side.<sup>42</sup>

Normal School presidents John Livingston (1904-1909), William J. Sutherland (1909-1915), and, at least in his early years, Asa M. Royce (1916-1942), seem to have been especially concerned about relations among students of the two schools in a day of *in loco parentis* attitudes. All decreed that Mining School dances were off-limits to Normal School students and vice versa. Carl Hayden has recorded that one reason he attended both schools at the same time was because of his love of dancing and, as a student at both schools, he could go to both schools' dances.<sup>43</sup> (Robert Alleman, E. R. Barden, Arthur Butterworth, Guerdon Eberhardt, and Lloyd Linden, currently assistant chancellor for student affairs, are among others who attended both schools.) Sutherland, who died in office, seems to have been particularly alarmed about inter-school relations. In an anonymous letter, for which there is no explanation of any sort, is a curious statement: "I have no doubt that President Sutherland, for personal reasons growing out of his difficulty with the Mining School, will do his best to get the Committee to locate the new Bldg. near the present Normal Bldg. He will probably get men

to see the Committee, and no doubt entertain the Committee at his home that day. I know how such things are done.'"<sup>44</sup> (The building was completed in 1916 and is now known as Ullrich Hall.)

The year 1909 was also memorable as a year of another physical, albeit non-athletic, contest between Mining School and Normal School students. What began as an incident quickly became a cause and almost as quickly, when cooler judgment prevailed, led to a degree of civility between the two schools.

The first week of March was full of class spirit and school spirit at the P.N.S. Tuesday morning a Senior banner was flying from the roof of the school building. At the end of the 8 o'clock class a crowd of Juniors started to get it down. Entrance to the attic was obtained through the window over the opening left for a future stairway in the southwest corner of the third floor. But thoughtful Seniors had spiked the trapdoor to the roof, and while the Juniors were prying it loose, several Seniors arrived in the attic and a general melee resulted, which was interrupted by the arrival of Messrs. McGregor, Russell, and Churchill. The contestants were put to rout by these doughty warriors—but one Junior, taking a bold chance, climbed out an open window, and reached the roof over the eaves trough, secured the contested banner, safely returning to the attic and then to a vacant room where the banner was prepared to be smuggled out of the building.

When school opened Wednesday morning, Senior banners hung from each chandelier in the main room. A Junior had succeeded in tearing down four when he was stopped by the janitor following instruction of the faculty, relative to injury of property by the students. Nothing was done until opening exercises when all the

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hundred and more Juniors left the main room and marched the halls giving yells and demanding that the banners come down. Different members of the faculty endeavored to convince the Juniors that they should (must or be severely dealt with) come into the main room. But as each one would get well started talking, the rebellious class would give that teacher several rousing cheers and move on. This kept up for twenty minutes when the entire class entered the main room to hear what acting President McGregor had to say about the matter. President Livingston had come to school that morning to say farewell to the school previous to leaving for an extended trip in the west and it was in sympathy with his dangerous condition that the Juniors entered the main room, and after addresses by Mr. McGregor and President Livingston, the Seniors agreed for the same reason to take down their banners.

They immediately proceeded down town with them and flew them from every convenient flag pole. At noon the Mining School students made an attempt to take one of the banners and, in the dispute resulting, Chief-of-Police Draper found what he considered cause enough to place two of the participants, Jenkin Ellsworth and Frank Reagan of the Mining School under arrest, on the charge of assault and battery, the assaulted and battered person not being named in the warrant. Each boy was placed under \$50 bail to appear on trial the next day, Thursday.

Thursday morning, President Livingston left on the 8:45 train. The entire student body, headed by the band and accompanied by the faculty, marched from the school to the depot, gave our president a rousing send-off with hearty wishes for the recovery of his health,

and marched back to the school. Then about twenty boys headed for the court room with Ellsworth.

Reagan was already there with the Mining School boys and court was called to order. Attorney Block, the defendants' attorney, congratulated the two schools on the fine spirit they had shown and moved that the cases both be dismissed, which was done. The students of both schools united in a cheer for Mr. Block and one for Mr. McGregor, after which they made a noisy demonstration on Main Street (they were not arrested) and adjourned until 9 p.m., when all assembled around a big bon-fire at the rear of the Mining School, singing and giving the yells of both schools. As the flames reached toward the sky and with a crowd of over one hundred looking on, a hundred young men circled the fire singing

Cheer! Cheer! the gang's all here  
Mustn't say the naughty word,  
Mustn't say the naughty word,  
Cheer! Cheer! the gang's all here  
Mustn't say the naughty word now.

After the war dance was over, the crowd dispersed, the boys going their several ways.<sup>45</sup>

Despite these prohibitions, threats, and warnings, anyone reading Normal School and Mining School alumni directories will notice, by matching names, that indeed there was collaboration between students of the two campuses. It is difficult to believe that, in a place as small as Platteville, people were ignorant of what was going on.

Rivalry between the two schools also inevitably extended to the gridiron. While they occasionally scrimmaged against each other, in reality the two schools played only nine official games: in 1909, 1912, 1919, 1920, 1921, 1922, 1923, 1924, and 1925.

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Of these nine games, the Mining School won three, the Normal School won two, and four were tied. The games were generally the last of the season for both teams and were the big games of the year. Games were played on one of three fields: the area now occupied by Brigham and Gardner Halls, the Badger Fair Grounds north of town (later renamed Legion Field), or the field north of the present day Platteville Middle School. Later the Miner's Field on North Washington Street (in time renamed the George R. Dobson Memorial Field) was a playing field. The practice field was the open area still in existence behind the Mining School. Several thousand alumni, students, and townspeople flocked to the playing field to watch, as several alumni have reported, "the bucket of blood." Perhaps as much or more than any other events in the two schools' histories, football games brought out strong feelings. By 1926 administrations of both schools prohibited further contact sports because of fear of injuries.

There was also a Miners' basketball team by 1909, but apart from practice games, the two schools did not play one another until February 1920. The schools played a total of twelve games, the last in February 1926. The Normal won all twelve games; the closest the Miners came to victory was 20-19 in the next-to-last game the schools played.

Carl Hayden remembers the early athletic endeavors of the Mining School. Having played fullback for the Normal School 1910-1912, he played that position for the Mining School in 1913. Normal School players were known as Normals, Normies, or Normalites, among other names. Mining School players were known, at least among themselves, as the RAMS (Ragged-Ass Miners) in a day when uniforms and equipment were almost unknown.<sup>46</sup> Later, the Miners were known as The Red Men, The Red Machine, and even The Crimson Tide.

In a day when rules of eligibility were scarcely heard of, more than one janitor filled in as a player. Dobbie himself re-

corded in 1948, the year of his retirement, that the "saddest (event of those early years) was when I told the boys to tackle any man walking around the field with the ball. We were penalized because one of the Miners tackled the opposing center as he carried the ball in from out of bounds. It probably cost us the game because several penalties were added on for arguing, carrying us back from a scoring threat deep into our own territory."<sup>47</sup>

Charles Pettyjohn remembers that, not too many years later, William Zeller, '32, a "football flash," caught a kickoff and, seeing the opponents bearing down on him, punted the ball back to them. There was a ten-minute recess while the referees read the rule book and finally decided it was legal.<sup>48</sup>

As the older of the two schools, the Normal had a decades-long tradition which loyal alumni clung to fiercely: the tradition of the Sacred Bell. Over the years publications of both the Normal School and the Mining School often refer to the Sacred Bell. Cast in 1870 in Troy, New York, the bell weighs 1,390 pounds and was originally placed in the cupola of the Normal School building in the late nineteenth century. It was "... a faithful friend to every student who attended the school. In those early years it awakened the students at six o'clock in the morning; at eight forty-five it sounded the assembly call; at seven P.M. it called to study; and at nine P.M. it sounded the release from the routine of daily work. It also tolled for athletic and oratorical victory or defeat."<sup>49</sup> When the old building was vacated in 1907 and the move was made to the new Normal School building, the fate of the bell was in question. Duncan McGregor, a resident member of the Normal School Board of Regents, declared that the Normal School should have the bell, as it was a matter of transferring equipment from the old building to the new one.

In the eyes of many Normal School alumni, faculty, and students, the bell was their bell and must be transferred before

the Miners moved into the building. To that end, a Normal School faculty committee was formed to work out plans for the move. It was decided that a student group, which gave itself the name the Big Eight, should assume the responsibility. One of their leaders, Thomas Jones, N.S. '09, recalled years later that "... we were nearly always busy doing *something* around the old Normal." Receiving assistance from faculty and townspeople, the Big Eight lowered the bell from its cupola and on Halloween, 1907, presented the bell to an all-school assembly in the main auditorium in the new Normal School. The building had no facilities for hanging the bell so it was stored away under the west stairs where some feared it might be forgotten.<sup>50</sup> The Normal School student newspaper, *The Exponent*, lamented in December 1907 that "The bell must live with us and be the mentor of our school, and when we have passed beyond the realm of normal schools, may we know that the old bell still plays her part as an important factor in the life of P.N.S."<sup>51</sup>

Those who regretted the fate of the Sacred Bell reckoned without the enthusiasm and the exuberance of youth. For almost fifty years Normal School and Mining School students engaged in a seemingly never-ending struggle over who had the right to the bell. As alumni of both schools have reported, the bell probably went back and forth on West Main Street more often than any student. The issue was resolved when the bell was installed high on the south side of the new theater building, beyond reach of all hands, it was thought. Several years later, however, a large red M appeared on the bell. Exactly how that M got there remains a mystery, although one theory is that the job was done by lowering someone from the roof of the building.

Apparently, some Miners believed that they needed their own bell, because in the 1950s, they acquired one from a college in Iowa with which the Miners competed in basketball and football. This bell is now kept in the basement of Ottensman

Hall except for special occasions such as Homecoming, when it is a traditional part of the Miners' float.

Athletics aside, the first year of the Mining School's existence ended on a mixed note. For one thing, despite heavy advertising throughout the state, enrollment was not what had been anticipated. As Richard D. Gamble has written in his book, *From Academy to University 1866-1966*, the Mining School had no direct feeder program nor an established professional tradition. The panic of 1907 which ignited a brief nationwide economic depression, also affected business and industry and mining activities in particular.<sup>52</sup> Even so, the required report from the secretary of the Wisconsin Mining School Board to the governor is strongly optimistic. (See Appendix IV.)

When rumblings about the cost of maintaining the Mining School began to reverberate around the state in 1908-1909, once again those who had originally fought for the establishment of the school went into action. And, once again, influence and tenacity produced results when the state legislature in 1909 appropriated \$16,000 for continuation of the school.

It was also in 1909 that the first five graduates took their certificates or diplomas from the school and, with the exception of 1912, enrollment and graduates increased. Both graduates of the class of 1912 merit some attention. One of them, Arthur S. Butterworth, has reported in a brief memoir:

While attending the Normal School I also attended the School of Mines and thereby was able to graduate from this latter school in 1912. I think that probably my enrollment in both of these schools at the same time did much to bring about the harmony between the two schools that has so marked their progress. Each school insisted that I belonged to the other.

I have always been especially proud of my record at the Mining School. I graduated next to the highest in

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standings in my class. The other member of the class ranked next to the bottom of the class as I remember.<sup>53</sup>

Butterworth went on to work successfully as a mining engineer, a civil engineer, a gas technician, a broker, a utility appraiser, and finally an industrialist. His change in careers and living locations is similar to that of other engineers of the times who moved about frequently. He has recorded that

Somehow or other I seemed to do right well and in no time at all I was being shunted all over the United States to look at sick gas plants. I remember that in 1920 I had a resident's hunting license in Maine, an automobile license in Virginia, paid my income tax in Pennsylvania, and had household goods stored in five different states but hadn't been in any state long enough to vote for President.<sup>54</sup>

Butterworth may also be remembered by some as one of the designers of the original school emblem imbedded in the northeast entrance of the Mining School building. This emblem, along with the bell, the flagpole, Laughton Memorial and sundial, the crystal balls, and the M, remains one of the most beloved relics of a nostalgic past. The following account, printed in its entirety, may be of interest.

One evening in 1911 Arthur Butterworth, '12, Walter Buss, '11, and Eugene DeWitt, '11, sat discussing the creation of a suitable design which could be used as the "sign" of the school. One of the men had happened to come across an advertisement of the Willmer-Morgan-Seymour Company which had just placed a new gas producer on the market. The company had used in its advertisement the monogram WMS, derived from the first initials of the company name. The men traced it in an oval outline so that it could be read when turned upside down as well as right side up.

They contacted Frank Sangster who was teaching at the Platteville High School and who was experimenting with soft metal and plaster moulds. Several castings were made of the monogram cast in plaque-form, but these were too large and crude. Therefore, its form was modified and several castings of the latter form made by a Chicago company.

With further experimentation and modification the men got the emblem in a circular form with the name Wisconsin School of Mines engraved in the outer rim and with a pick and shovel crossed in the center to represent the tools of the mining trade. However, the emblem did not appear balanced with just the pick and shovel so a maul, also a mining tool, was later added to form the emblem as it is today. The only thing that remained to be done was to change the name in the border—the official name of the school was determined to be the Wisconsin Mining School; therefore, with a change of name the emblem has been handed down from class to class in its present form.

Because of the excellent work accomplished by its creators, the emblem has been chosen as the permanent seal of the school. With that idea in mind a huge replica of it has been laid in the floor in front of the chemistry laboratory at the northeast entrance of the school. It was constructed of brass and red cement under WPA (Works Progress Administration) supervision. The maul, pick and shovel were cast in one piece out of bronze. Casting of this piece was undertaken by William (Rudy) Rudwell, '34, of Kenosha, Wisconsin. Pins, watch fobs, cigaret cases, and similar mementoes stamped with the seal are in great demand by the students and the office finds it difficult to keep a varied supply on hand at all times.<sup>55</sup>

The other 1912 graduate was an Armenian by the name of Aredes Kuludjian who, in 1915, was employed by a cyanide mill in Colorado.<sup>56</sup> No further information about him is available. Kuludjian began a tradition which has continued for seventy years. With the exception of wartime years, from his time to the present, foreign students have been enrolled in engineering at Platteville.

With the legislative appropriation, once again the Mining School seemed on a fairly secure footing. Brinsmade retired as director in June 1908 and was replaced by George, who left in 1910. George successively served in academic positions at the University of Oklahoma and the University of Pittsburgh. In time, his association with the latter school proved valuable to a number of Mining School graduates.<sup>57</sup>

Ralph E. Davis, who held an engineering degree from the University of Wisconsin, was named director of the Mining School. Davis served the school well and later loyally befriended and employed many Mining School students. Perhaps one example of Davis's support will suffice. (This particular example is given in its entirety in Appendix V because so many Mining School alumni have spoken and written about Davis and Ernie Clarke.)<sup>58</sup>

The last year in the history of the Wisconsin Mining Trade School witnessed two major events. In the fall a new program was initiated which undoubtedly provided great benefits to area mining operations, often a dangerous occupation. Through the cooperation of the United States Bureau of Mines, training in mine rescue and first aid was given at the Mining School.

The north basement was fitted up to serve as a model mine for the mine rescue training. The rooms were bratticed off so that air currents could be controlled, and various rooms filled with smoke and ammonia gas. The ventilating tunnels were used to represent mine drifts. The training consisted of the operation, care, and the use of the self-contained breathing apparatus

of the Proto-Fleuss type. After becoming proficient in the use of this apparatus, the men were given practice in using it under extreme conditions. Forty men enrolled in the mine rescue work—three mine superintendents, two engineers, four mine foremen, two machine men, twenty-six students, and three others.

The purpose of the first aid training was to instruct the men in giving intelligent assistance to an injured workman, especially in the care of fractures, burns, and of men overcome by gas. Seventy-three men enrolled for the first aid training—twelve mine superintendents, seven engineers, fourteen mine foremen, two miners, twenty-six students and twelve others. At the completion of the training a demonstration was given at Platteville, three teams demonstrating the first aid methods, and two teams demonstrating the mine rescue work.

One of these teams was sent to several towns in the mining district to give demonstrations of the United States Bureau of Mines methods. Demonstrations were given at Benton, Galena and Livingston. A patient was chosen, supposedly having been caught by a fall of rock. The patient was treated for dislocated hip, broken arm, and severe shock. He was placed on a navy stretcher, carried to the shaft and taken to the surface without removal from the stretcher. The mine crew was able to observe this work to advantage. A demonstration of first aid work was also given, which over one hundred people witnessed. At Galena and Livingston demonstrations were given in first aid work only.<sup>59</sup>

Also in the fall of 1914, the first Engineering Club was formed. The club was established to provide opportunities for formal discussion of current engineering work and practice in formal and extemporaneous speaking. Ten charter members from the class of 1914 drew up a constitution, elected officers, and secured a club room on the second floor in the original building. With the support of faculty and townspeople, the

room was converted from a classroom into the most attractive room in the building. It became a meeting place for faculty, students, and townspeople. It was also theoretically the only room in the building where smoking was allowed. Students who were not doing well in their classes or students who were guilty of violating some school rule or regulation were banned from the club room, a penalty apparently regarded as serious.<sup>60</sup>

From the beginning of the school in 1908, area engineers, miners, and others were called upon to present lectures to their colleagues and to students. These lectures were presented either in the late afternoon or at night, and student attendance was required. Such presentations were sponsored by the Engineering Club. The 1914-1915 academic year included seventeen lecturers dealing with various phases of mining engineering.

By 1915, the Mining School was clearly proving itself. Two professors were added to the faculty and the enrollment was the largest to date. Many newspaper accounts attest to the success of the school. Assisted by improvement in the national economy, it was acquiring a state and national reputation. The future looked bright.

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1. For a more complete account of the earlier history of the lead-zinc mining area, see Dale R. Fatzinger, *Historical Geography of Lead and Zinc Mining in Southwest Wisconsin 1820-1920: A Century of Change* (Michigan State University: An unpublished Ph.D. dissertation, 1971); Richard D. Gamble, *From Academy to University 1866-1966* (Platteville: Wisconsin State University, 1966); John G. Gregory, ed., *Southwestern Wisconsin: A History of Old Crawford County*, 4 vols., (Chicago: The S. J. Clarke Publishing Company, 1932); Costello N. Holford, *History of Grant County Wisconsin* (Lancaster: The Teller Print, 1900).
  2. *The Miner*, 1926. No issue of *The Miner*, the Mining School yearbook, 1915-1918, 1920-1926, has numbered pages.
  3. *Wisconsin State Mining Trade School Bulletin*, vol. 1, no. 2, (Platteville, Wisconsin, August 1908), p. 3.
  4. Letter from Hugh T. Richards, son of Dean W. Richards, 14 September 1982.
  5. Allen G. Bogue and Robert Taylor, eds., *The University of Wisconsin—One Hundred and Twenty-five Years* (Madison: The University of Wisconsin Press, 1975), p. 62.
  6. Merle Curti and Vernon Carstensen, *The University of Wisconsin—A History 1848-1925*, 2 vols. (Madison: The University of Wisconsin Press, 1949), vol. 2, p. 259.

## The Wisconsin Mining Trade School, 1908-1915

7. *Ibid.*, vol. 1, p. 660.
8. Regents' Biennial Report, 1907-1908, p. 142.
9. *The Geode*, 20 May 1926. *The Geode* began publication in 1925. From that date until the present, there have been fourteen different mastheads. In the interests of simplicity, the title *The Geode* will be used throughout this publication. It was not the regular practice to number pages in *The Geode* until 1937. Pages are also irregularly numbered in *The Exponent*.
10. See Appendix III for a listing of Mining School and Normal School name changes, Mining School directors, presidents, deans, and college and university presidents and chancellors.
11. *The Grant County News*, 24 April 1907, p. 1.
12. *Ibid.*; *The Grant County News*, 20 February 1907, p. 1.
13. *The Platteville Witness and Mining Times*, 26 June 1907, p. 1; *The Grant County News*, 26 June 1907, p. 1.
14. *Dictionary of Wisconsin Biography* (Madison: The State Historical Society of Wisconsin, 1960), pp. 340-341.
15. *The Geode*, 27 April 1926.
16. *The Grant County News*, 24 April 1907, p. 1.
17. *The Platteville Journal*, 4 September 1953, p. 1; *The Geode*, 24 February 1958.
18. *The Grant County News*, 26 May 1909, p. 1.
19. *The Grant County News*, 24 April 1907, p. 1.
20. *The Grant County News*, 17 July 1907, p. 1.
21. *The Platteville Witness and Mining Times*, 14 August 1907, p. 1.
22. *The Grant County News*, 14 August 1907, p. 1.
23. *First Catalogue*, p. 5.
24. *Ibid.*
25. Research indicates four different ways of spelling his nickname: Doby, Dobby, Dobie, and Dobbie. Because the latter is the most used by *The Geode* and other sources, this is the one which is used here.
26. *First Catalogue*, p. 5.
27. Registrar's office records, The University of Wisconsin-Platteville.
28. Carl Hayden interview, 16 October 1982.
29. Harriette Burris interview, 12 October 1982; Carl Krog interview, 15 October 1982.
30. Letter from Richard J. Dobson, 8 January 1983.
31. Letter from Harold E. Robbins, 23 September 1982.
32. Letter from Irwin Chaitin, 20 October 1982.
33. Principle of Le Chatelier: If a stress (such as a change in concentration, pressure, or temperature) is applied to a system in equilibrium, the equilibrium shifts in a way that tends to undo the effect of the stress. Or: if a stress is applied to a system in equilibrium then a change takes place which tends to restore the equilibrium condition. Information supplied by W. R. Loy, professor of chemistry, The University of Wisconsin-Platteville.
34. *The Geode*, 29 March 1929.
35. Information supplied by Mary Ipsen.
36. *First Catalogue*, p. 24.
37. *Ibid.*, pp. 24-27.
38. *Ibid.*, p. 28.
39. Ervin A. Brecke interview, 29 October 1982.
40. *First Catalogue*, p. 29.
41. *The Geode*, 15 December 1941.
42. Laura Johnson interview, 25 November 1982.
43. Carl Hayden interview, 16 October 1982.
44. Letter from William Kittle, secretary of the Normal School Board of Regents, to R. I. Dugdale, 8 August 1914. Administrative Subject File, 1907-1959, Series 98/1, Box 2, Karrmann Library Archives, The University of Wisconsin-Platteville.

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45. *The Exponent*, vol. 9, no. 4, 1919.
46. Carl Hayden interview, 16 October 1982.
47. *The Geode*, 23 February 1948.
48. Letter from Charles Pettyjohn, 24 September 1982.
49. *The Exponent*, 7 March 1960.
50. *The Geode*, 21 April 1938; Milton Longhorn, ed., *During Seventy-Five Years: A History of the State Teachers College, Platteville, Wisconsin, 1866-1941* (Platteville: Printed locally, 1941), pp. 69-71.
51. *The Exponent*, December 1907. This *Exponent* article gives a fascinating and much more detailed account of the history of the transfer of the Normal bell which may interest readers.
52. Gamble, *op. cit.*, p. 158.
53. *The Geode*, 21 April 1938.
54. *Ibid.*
55. *Ibid.*
56. *The Miner*, 1915.
57. Letter from Donald A. Miller, 26 October 1982.
58. An autobiographical memoir of E. E. Clarke, contributed by his son, Robert E. Clarke.
59. *The Miner*, 1915.
60. *Ibid.*

## *The Wisconsin Mining School, 1915-1939*

The year 1915 saw two highly significant changes in the history of the Mining School. One indicated a shift in the function and purpose of the school, and the other, its increasing maturity. Dropping the word "trade" from the original and legal title of the school showed that it was moving more directly into training engineers as opposed to technicians. Adding a required third year to the curriculum in 1917 meant that the school was moving towards the more prestigious norm of college status. It was the first school in the United States to offer a three-year course in mining engineering, upon completion of which a student received a diploma.<sup>1</sup>

At the same time there was some discussion about combining the Mining School and the Normal and placing all state institutions of higher education under the control of the University of Wisconsin. While this was not done in 1915, future decades did witness several significant changes in the structure of higher education in Wisconsin.

Apart from an increased number of technical courses which a third year offered, two new courses were included which reflected the changing needs of the times. James E. Kennedy, Dobbie's brother-in-law, was added to the faculty to teach Spanish, which shows the increasing employment of Mining School graduates in the American southwest and Central and South America. Spanish was an elective until the late 1920s.

David E. Gardner, a local attorney and sportsman, was engaged to teach commercial law part-time, indicating that the legalities of mining operations were becoming more businesslike and complex.<sup>2</sup>

A number of factors contributed to the school's growth in the years immediately preceding World War I. Undoubtedly, the addition of a third year to the curriculum attracted more students. National and area economic conditions had also improved considerably since the panic of 1907. Mining job opportunities increased with a thriving economy and the accelerating needs of a wartime situation.

But there was also the fact that engineering, as a profession, was becoming increasingly specialized. In the late nineteenth century a move in that direction was underway and by the twentieth century, academic disciplines such as civil, chemical, electrical, and petroleum engineering and allied fields were inserted into engineering curricula. The Wisconsin Mining School successfully competed with other engineering schools in keeping abreast of these developments and helping to satisfy public needs and demands.

Mining School graduates and students did not necessarily pursue mining as an occupation or profession. A wide-ranging article, "Miners Enter Many Fields," reports that in the first decades of this century about twenty-five percent of Mining School graduates and students were later employed in mining or geological work, twenty percent in highway work, twenty percent in petroleum engineering, twenty percent in chemistry or metallurgy, ten percent as sales engineers, draftsmen, or surveyors; five percent sought higher education in any number of different professions.<sup>3</sup> While the article does not make clear whether these figures are based upon findings from the Wisconsin Mining School or from nationwide research, there is little reason to doubt that these figures were applicable to Platteville's graduates and students.

It was also during the decades of the teens, twenties, and thirties that enrollment increases brought a strong feeling of camaraderie and *esprit de corps* among the faculty and students of the Mining School. Probably present from the beginning of 1908, such feelings and sentiments matured in time and became more overt. Brotherhood characterized student life both in and out of the classroom. Through the years these feelings have been a vital part of Mining School history. One cannot deny that when the students worked, they worked hard, and when they played, they played hard.

As a girl who grew up in Platteville, Dorothea Wilgus Pickard remembers these years and has recorded them in a soon-to-be-published volume entitled *My Roses in December*. Mrs. Pickard's father was James Alva Wilgus, professor of history and allied social sciences on the Normal School faculty from 1893 until his retirement and death in 1939. In her delightful memoirs, Mrs. Pickard recalls the pleasures and the sorrows of those years.

She remembers the temporary tennis courts back of the Mining School which had come into use about 1910. Until a decade or so ago, between that building and the present Sigma Tau Gamma fraternity house stood a private fenced residence (now the fraternity parking lot) occupied by two maiden sisters. From time to time a tennis ball would disappear over the fence onto the lawn — never to be retrieved, since the sisters resented the proximity of the Mining School grounds. One wonders what happened when a football passed over the fence.<sup>4</sup>

Mrs. Pickard also remembers a quick walk up one block of Second Street in broad daylight with a girl friend. (Originally named Grocery Street and then Central Avenue, Second Street has also been known to many as Saloon Street.) She writes: "Even if this was forbidden territory for both of us, we thought there was safety in being together." And, after they had reached safety: "I am sure our fiercest desire then was that our parents

would never hear of our adventure; our second thought was how great it was going to be to tell our friends what we had done, embroidering the incident here and there. . . . I had no desire to repeat the performance." According to Mrs. Pickard, Mining School dances had also been forbidden territory. "Dad had always taken a firm stand on the Mining School dances, but at last, the year I was seventeen and almost eighteen, he relented. I was excited to go to my very first Mining School dance."<sup>5</sup>

By 1917 and United States entry into World War I, those halcyon days were over. Inevitably the war had an enormous impact on the Mining School. Conscription started in 1917 and almost immediately the enrollment declined by dozens; there was talk of closing the school. By midsummer 1918, preparations were being made to establish a Student Army Training Corps (S.A.T.C. or, according to local wits, Stick Around Til Christmas or The Saturday Afternoon Tea Club) made up of both Mining School and Normal School students.<sup>6</sup> *During Seventy-Five Years*, a book prepared under the editorial direction of Milton Longhorn (for many years a university administrator and teacher of history), includes a section on the S.A.T.C. program which is partially repeated here.<sup>7</sup>

The induction was not a simple affair. Dozens of forms had to be completed and accepted by the proper authorities before the young men became bonafide members. A student in the S.A.T.C. was to take, first, military drill; second, the war issues course; third, English. Besides these he could elect any other subject fundamental to a college education, such as language, natural science, mathematics, and agriculture.

S.A.T.C. men were under military discipline. Their schedule was fixed, with reveille at 6:45; drill 7:30-9:30; recitation 9:30-11:30 and 12:30-4:30; athletics 7:30-9:30; taps and lights out 10:00. In all respects these men were soldiers in an army training camp.

Barracks and mess hall were set up in the building of the Wisconsin School of Mines. Over 100 men were housed in the Mining School building and the newly erected building now known as Ullrich Hall. In addition to barracks, kitchen, and mess hall, two reading rooms and a large auditorium for social occasions were set aside for the corps. The athletic field of the Normal School was selected for drill and military exercises. When unfavorable weather conditions made the use of the field inadvisable the gymnasium in Ullrich was utilized. The school farm of 25 acres served as a maneuvering grounds. The Dr. Wilson Cunningham Hospital (currently known as the Block Building) founded by a prominent area physician-surgeon, was just east of the Mining School and became the medical headquarters of the S.A.T.C.

V. M. Russell of the Normal School was appointed quartermaster and H. B. Morrow of the Wisconsin School of Mines was supervisor of kitchen, mess hall, and barracks. Lieutenant R. E. Curran of Camp Grant took charge of military training while Lieutenant Barney Sidney Freistein, Fort Sheridan, served as head of personnel work. The United States government permitted an expenditure of one dollar per day for each student for food and barracks requirements.

. . . Life in the S.A.T.C. camp was far from dull. A fourteen-piece band was organized and Normal Coach Grausnick began building a powerful company football squad. The S.A.T.C. squad played only one game and fell to defeat before the LaCrosse unit 46-0. The December 13 issue of *The Exponent* has this to say about the game: "Taking into consideration the fact the Platteville team had only a week to practice, and

LaCrosse had been playing since September, the former team did as could be expected."

Vaudeville shows, dancing parties, and music concerts were weekly affairs but all was not fun among the soldier boys. Here is an extract from a journal of a Platteville S.A.T.C. man: "Monday night in our barracks will be memorable as a night of groans. Groans to the left of me, groans to the right of me, groans everywhere, all due to the vaccination and shots which we had undergone in the afternoon. Whether unlacing shoes or making our bunks, groans were the accompaniment; and these groans lasted long after lights had been put out and heavy sleeping had begun."

. . . With the unit still not completely organized there came the glorious tidings of peace. On the morning of November 11 the long-looked-for day of the Armistice arrived and the world was about to enter upon its reconstruction period. The whole school, as well as the city, turned out for the big parade which started the True American Way celebration. The S.A.T.C. boys, in uniform, one hundred eighteen strong, followed the company band which led the huge parade. . . . This all happened on Monday, November 11. . . . And thus, the Platteville schools contributed their share to the welfare of the state and nation in the time of crisis.

As Mrs. Pickard has recorded, with the arrival of the S.A.T.C., "life became almost unbearably exciting" with dozens of young, handsome, uniformed men in town. Because the unit was formed in October 1918 and the war ended a few weeks later, the excitement was short-lived.<sup>8</sup>

When the United States declared war against the Central Powers in April 1917, Harvey "Big Smoke" Weidman, '16, an employee of the Wisconsin Zinc Company, undertook to recruit

a volunteer company of the Wisconsin National Guard in Platteville. The recruiting office and company headquarters were established in the Mining School. A number of both Mining School and Normal School students enlisted in what became known as Company I. According to the 1918 *Miner*,

On the morning of August 11, 1917, Company I lined up in front of the Mining School building for the last time. The whole city turned out to pay honor and respect to the gallant youths who were the first to respond to their country's call. Two hundred three men made up the company and a handsome lot they were, the pick of the community physically and second to none in those qualities of mind and heart that kindled the spirit of '76 and '61. As Captain Weidman proceeded with the roll call, a feeling of suppressed emotion permeated the great crowd of spectators. That response of names meant more than "present." It meant spirit, it meant courage, it meant loyalty, it meant patriotism. It meant that 203 young men from this community stood ready and willing to sacrifice opportunity, comfort, and home ties for their country's sake and for the cause espoused by their native land in the great world war. With the last roll call completed, the "forward march" was sounded and the motion of the men as they strode down the street to the tunes of martial music made every spectator's heart beat faster in sympathetic vibration. The feeling that welled up within one cannot be expressed or described. It can only be experienced in order to be appreciated.

On arriving at the depot the men, quiet and orderly, boarded the train awaiting them, and without ceremony or ostentation other than farewell salutes to eager and anxious friends, the men of Company I were enroute

to Camp Douglas, being the first lap of their first movement on the way "over there."

On September 25th the company was transferred to Camp MacArthur, Waco, Texas, and mustered into the Federal Service as Co. E, 107 Am. Train, 32nd Division. Leaving there in February 1918 for Camp Merritt, New Jersey, they embarked for "somewhere in France," where they are now in active service. Our faith in these men is best expressed in the words of their Captain, "They are the best bunch of men that God ever let live."

The tragedy of war also brought about physical changes to the Mining School grounds. While the exact number of students who served in the armed forces is unknown, three died during the war or later as a consequence of the war. The three were Frank Vivian Laughton, '16, James Leslie Paull, '14, and William E. Weber, Jr., '15. In 1919, Katherine Stiles Laughton, Frank Laughton's widow, established a scholarship fund of one thousand dollars in her husband's name. The fund was divided into ten scholarships of one hundred dollars to be awarded annually to deserving students.

On Armistice Day 1922 Mrs. Laughton presented to the Mining School a memorial bronze tablet bearing the following inscription: "In Memory of Frank Vivian Laughton, James Leslie Paull, William E. Weber, Jr., graduates of the Wisconsin Mining School who served with honor during the World War 1914-1918 and who gave their lives that liberty might not perish." The tablet was originally mounted in concrete at the foot of the flagpole on the campus.<sup>9</sup> In 1926, a new flagpole was erected and the tablet was moved to a large concrete star on the northeast corner. Later, in 1932, a sun dial, built by the Public Works Administration, was added to the star.<sup>10</sup> The 82-foot flagpole still stands on the concrete base built by maintenance engineer,

Carl Wraae, and has the school insignia on the face side with the dates 1907 and 1926 on the two adjoining sides.

Throughout the history of the Mining School, two individuals, Carl Wraae and Karl Veit, merit attention as maintenance engineers. Carl Wraae served as maintenance engineer in the 1920s and erected the flagpole, designed and made a football dummy for the Red Machine, and etched a portrait of Abraham Lincoln which he presented to the school.<sup>11</sup>

Karl Veit migrated from Germany to the United States after World War I and worked as a maintenance engineer at the Mining School from 1936-1967 when he retired. A generation and more of engineering graduates will no doubt remember his crustiness, but also the great pride he took in his work, keeping the venerable building in shipshape condition. More than one student and faculty member will recall being told to "wipe your feet before you walk on my floor!" Irwin Chaitin recalls the time when Veit apprehended a number of students behind the school who were trying to burn dynamite.<sup>12</sup> Veit also worked on the extensive remodeling of the building in 1935 and in 1941, when W.P.A. workers laid steel beams under the floors and concrete and maple flooring was installed.<sup>13</sup> Architectural blueprints were drawn up in 1938 to construct a large laboratory and classroom building north and east of the original building, but funding for the project was not available.<sup>14</sup>

Other traditions began to evolve as the Mining School developed. While the exact date is not known, some time about 1914 the students decided to adopt school colors and chose red and white.<sup>15</sup> In 1916, a school song was composed entitled, *The Red and White*. The words to the song, given below, were by H. H. Armsby, a teacher of mathematics and surveying, 1916-1917, and the music was composed by Armsby and a student, W. E. Bauer. Bauer is listed as a senior in the 1916, 1917, and 1920 editions of *The Miner*.

## JUBILEE!

Verse 1    In the hills of old Wisconsin  
              Those hills so strong and grand  
              There stands my Alma Mater dear  
              The best in all the land.  
              Her colors gay are red and white  
              And manhood is her rule  
              Sturdy and strong are all the sons  
              Of Wisconsin Mining School.

CHORUS    Here's to good old red and white  
              WISCONSIN MINING SCHOOL  
              We sing her praises day by day  
              Our pledges to her renew (Rah—Rah)  
              Her sons are true and strong  
              Loyalty is the rule  
              And as time rolls along  
              Still we ever will long  
              For WISCONSIN MINING SCHOOL.

Verse 2    Her sons go forth to seek for fame  
              For wealth and happiness  
              And as they go they take with them  
              Our hopes for their success.  
              They ne'er forget the dear old school  
              No matter where they roam  
              Where e'er they go they always know  
              The Mining School means home.

Verse 3    May we all be true and loyal  
              And add to our school's fame  
              And may no act of ours bring shame  
              To one who loves her name.  
              So here's a toast to our old school  
              Forever may she stand  
              The same forever as today  
              The best in all the land.

*The Red and White* remained the official Mining School anthem through the existence of the Wisconsin Institute of Technology, although it was sometimes forgotten and had to be revived from time to time. In 1951 the words to the song were revised by Mrs. Robert Kuehneman, a local musician, to conform to the new name of the school. Later in the 1950s the song was revived by W. R. Loy, who replaced Dobbie as chemistry teacher and was the school's music director.<sup>16</sup>

The war also brought about the beginning of one of the great traditions of the Mining School, which those associated with the school will never forget. In April 1918 James Kennedy, who taught accounting and languages, received a letter from a fellow engineer soliciting contributions for the war fund of the 27th Engineers, a mining regiment. Kennedy brought the letter to the attention of the Engineering Club. Because faculty and students were unable to contribute from their own pockets, it was decided to stage an entertainment for the community and charge admission. It was also decided to apportion the proceeds among Company I, the 27th Engineers, and the Red Cross. What started as a modest undertaking quickly mushroomed into a major event. Perhaps in honor of Company I, by then stationed in France, the name *La Grande Camouflage* was chosen.

With the assistance of a large number of area residents and some Normal School students, the War Carnival, as it was also called, took place in the Mining School. The entire building was given over to the festivities one weekend in late April. There was a variety of entertainment: games of chance, food stalls, and a Ten Cents A Dance dance hall. Florence Alleman, wife of Robert Alleman, recalls participating in this event as a dance hall girl while a teenager. She vividly recalls how exciting and thrilling it was for a young girl.<sup>17</sup> *The Grant County News* reported, "War Carnival a Gigantic Success. Greatest Entertainment Ever Staged In Southwestern Wisconsin. Mining School Fellows Are The Boys Who Know How." In view of the net

proceeds, this may not have been hyperbole because \$255.25 was contributed to Company I, \$255.25 to the 27th Engineers, and \$50 to the Red Cross. In 1918 dollars, this was indeed a considerable sum of money.<sup>18</sup>

The Engineering Club was justifiably proud of its accomplishment and decided to sponsor another fund raising benefit, this time for themselves since the war had ended. To this end, a Hard Time Dance was held in April 1920 which featured a Hard Time Police Court and a Hard Time Kitchen. While the financial results of this function are not known, it was apparently successful for the profits were used to purchase uniforms for a newly organized baseball team.<sup>19</sup>

Who could foresee what *La Grande Camouflage* and the Hard Time Dance would lead to? According to several sources, Dobbie realized the fund raising potential of both. One problem confronting Coach Dobson was that no state funds were available for athletics. Therefore, he hit upon the idea of a yearly event to raise funds. What followed were, apart from the later proms and the Miners' Balls, perhaps the best remembered of all social events in the earlier years of the Wisconsin Mining School, the Explosions. Dobbie was the guiding hand behind every Explosion. Richard Dobson has written, "Father was the major domo and was everywhere. I remember him hawking streamers and confetti at 5 cents a package."

At a meeting of the Engineering Club in February 1921, eight names were submitted for the fund raiser. The eight names and votes cast follow: Lucky Dog Carnival (6), The Mardi Gras (6), The Outcrop of the W.M.S. (7), Pay Streak Carnival (8), *La Grande Camouflage II* (9), The Miner's Frolic (13), The Miners' Roundup (16), and The Miners' Explosion (19). In a run-off vote between the top two names, The Miners' Explosion won by a vote of forty to four.<sup>20</sup>

Beginning in 1921 and held on a weekend in either April or May through 1930, the Explosion was *the* social event on the

Mining School calendar. Through the years preparations for the Explosions became increasingly elaborate. Probably by word of mouth more than any other way, the fame of the Explosions spread across the Midwest and attendance and profits soared. All Mining School students were expected to participate in planning and producing the Explosions. Townspeople and Normal School students assisted in the productions, which required a great deal of work.

While the attractions at the Explosions varied somewhat year to year, there were usually a number of similar features. Admission was generally ten cents, and after entering the building, participants were confronted by wheels of chance, the prizes being kewpie dolls, candy, or picnic hams. Students provided musical entertainment and the Camp '49 Girls were partners for five or ten cents a dance in what was called, strangely enough, The Bowery. In the early 1920s, music was often supplied by Karrmann's Mound City Harmonizers, a student band formed and directed by Robert Karrmann, '21, whose musical talents paid his way through the Mining School.<sup>21</sup> A prize of five dollars was given to the evening's best waltzers. There were also theatrical shows produced by Dobbie.

A shooting gallery was also a major attraction and, until stopped by state authorities in the later 1920s, boxing and wrestling matches were held in the afternoon and evening. Often there was a fortune teller, a hypnotist, a haunted tunnel, and a bowling game. Florence Alleman recalls that by 1921 she was in charge of hoop ringing canes with the call, "The one you ring is the one you win."<sup>22</sup> There was always at least one restaurant, a ladies' Rest and Tea Room and, in those prohibitionary days, a bar in the Club Room which, as the 1921 *Miner* reports, "proved to be an oasis where camels did not congregate. Hootch as she is made was demonstrated to the thirsty patrons by the proprietors, with the aid of a generous (unlikely) supply of sulphuric acid, zinc, and a hydrogen generator." Close by was

a Lovers' Retreat. Leonard Suhr, '25, recalls that one year the bar was operated by Lloyd Biddick, '25, George Drinkwater, '28, and Claire Howell, '25. The three coined their own enticing pitch—"Come in and see Biddick, Drinkwater, and Howell."<sup>23</sup> Perhaps for reasons best left unexplained, the Club Room bar came to be known as the Little Hell Bar.

As part of the Explosions, it was thought necessary to advertise the event. Therefore, weeks in advance students went out to surrounding communities within a fifty-mile radius to boost the Explosions by placarding the area. In 1927 a fifteen-man band was organized to perform for what came to be known as Booster Trips. Apparently, this added attraction was successful because in 1928 the band had expanded to eighteen players and by 1930 had grown to include Normal School and high school students.<sup>24</sup>

Another way the Miners promoted the Explosions was to ask openly for support by reminding area business people that faculty and students spent approximately \$150,000 a year in Platteville. A 1925 issue of *The Geode* observed that 1,671 people that year paid admission to the Explosion and that "many Platteville people were very good patrons and others were not. The Miners believe in reciprocity." It was also pointed out by supporters of the Explosions that the event was valuable to the school by publicizing the institution and to the students by giving them practical experience in planning and organizing, letter writing, and accounting.<sup>25</sup> Nevertheless, there were those who, at the end of the Roaring Twenties and the onset of the Great Depression, believed that life should be lived in a more decorous style.

One event of the 1928 Explosion was a community dog show. Two prizes were to be given; first prize was a large chocolate cake and second prize was a box of cigars. A boy growing up in Platteville had his heart (and stomach) set on winning that chocolate cake and decided to enter his pedigreed airedale dog

which his parents had given him. The day of the show, only the airedale was entered, whereupon the organizer and mastermind of the Explosion decided to enter his mongrel mutt. The outcome was almost inevitable; the mongrel mutt won the chocolate cake and the purebred won the box of cigars. The owners? None other than Dobbie and Dale Dixon!<sup>26</sup> Those who recall Dobbie's penchant for cigars and Dale's love of chocolate will well appreciate the humor and the irony of the results. While it is not certain, this may well have been the first real contact between two who later became perhaps the most loved and remembered teachers in the history of the Mining School.

Donald Miller well remembers the last Explosion in the spring of 1930 because he was in charge of a security patrol to maintain law and order. Sadly, the 1930 Explosion was the last; the administration declared that the event was too damaging to school equipment and too time-consuming for students.<sup>27</sup> There is one final memory of the Explosions in an anonymously composed poem first published in the 1922 *Miner* and republished in the 21 February 1944 *Geode*.

#### The Miner's Explosion

Once upon a midnight dreary, someone pondered  
long and weary,  
Over many a quaint and curious volume of  
forgotten lore;  
As he nodded, nearly napping, suddenly there  
came a tapping,  
Of an idea gently rapping, rapping at his chamber door,  
'Tis some fancy there, he muttered, tapping at my  
chamber door,  
Only this and nothing more.

Deep into the darkness peering, as he sat there  
wondering, fearing,  
Doubting, dreaming dreams no mortal ever dreamed before;

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But the silence was unbroken, and the stillness  
gave no token,  
For the word was yet unspoken, which shall live  
forevermore.

But the idea so persistent, as he sat there,  
knocked, insistent,  
Kept on knocking, gently knocking, there upon  
his chamber door,  
Then with fear and trembling yearning and his soul  
within him burning,  
As he heard the idea whisper, whisper at his  
chamber door,  
“No one home, I’ll come no more.”

He threw open wide the portals, that were never  
meant for mortals,  
Opened wide the portals, leading to the soul’s  
most inner door;  
And the idea came in tripping, joyful, laughing,  
never slipping,  
But the only words it uttered were, “Th’ Explosion  
Evermore.”

Quickly then he sought his cronies, who were  
working hard on ponies,  
Working hard on paper ponies, safe behind their  
fast-barred doors;  
As they sat there laughing, joking, some abstaining,  
others smoking,  
Right into their midst he bounded, as though fast  
pursued or hounded,  
Breathless his idea propounded, “Let’s discuss it,  
nothing more.”

So where no one could come poking, laughing,  
planning, joking, smoking;

Safe from prying eyes or pails of water coming  
through an open door,  
Came the mighty realization that would stir the  
world and nations,  
That would stir all Miners' circles as they never  
were before,  
For the idea crystallizing, wrought with planning  
and surmising,  
Gave birth to an institution that was never known  
before,  
Born "Th' Explosion." Ne'er before.

So we fellows present this token, of our feelings,  
thought and spoken;  
Feelings more profound, than others that were ever  
felt before,  
And now that we have spoken, we're not laughing  
now or joking,  
We would wish it every token for success forevermore,  
Live "Th' Explosion!" Evermore.

Beginning in 1929 the Great Depression also played a part in ending the Explosions. The Mining School faculty and students were almost always in need of funds and could not risk expenditure of capital. While early Explosions were financially successful, later they were only marginally so. The Depression did not affect the enrollment in any serious way. Indeed, while exact numbers are not available, it is possible that the Depression actually helped to increase enrollment. As today, fewer job opportunities were available so many students continued their education. It is known that from 1929 to 1930 students entering the Normal School (by then renamed Platteville State Teachers College) increased about one hundred. Those were the days, remembers Charles Pettyjohn, when the rough, tough Miners wore corduroy pants unwashed for the entire school year as a

sort of badge of manhood. He believes this could also help to explain why there was little fraternization with the Other Place, especially during the daytime.<sup>28</sup>

In human lives, as in institutional lives, certain years stand out, and certainly 1919-1920 were key years in the history of the Mining School. With the end of the war, returning students brought new life and vigor not only to the school but also to the community. Ralph Davis left academic life to establish successfully his own engineering consulting business. Until his death he maintained loyalty to the Mining School and the university. Through the years he also provided professional positions for dozens of graduates and students who remember him with great affection. Homer B. "Buck" Morrow, who had been a member of the faculty since 1908, succeeded Davis as director. For the next twenty-one years, under his capable and stern administration, the Mining School progressed. Dozens of graduates also remember Buck Morrow with great affection.

In her memoirs, Dorothea Wilgus Pickard records what was the single most memorable event in 1919. In her words, Probably the highest point in the football season was the Normal-Mining School game. We felt that if the Miners defeated us, such a defeat would be the "lowest degree of humiliation." During assembly periods we had pep rallies as part of the program with cheers, songs, and speeches by members of the team, the faculty, and the students. Some of us girls who had become self-appointed cheerleaders felt "nifty" in our navy pleated wool skirts, white middies under one of the players' white letter sweaters with a big pale blue "P" on the front. We borrowed the sweaters from various players, perhaps boyfriends; the fit was precarious, but we wore them with great pride. Head bands were the fashion; we wore navy ones around our foreheads with bows or tails in back. On the afternoon of

the Miners' game, school closed early; the entire student body gathered, following the band to the field, cheering, yelling, singing—a state of near hysteria!

The 1909 game and a game a decade later were perhaps the two major athletic confrontations between the Mining School and the Normal. The 1919 game attracted possibly the largest number of spectators ever to attend a sporting event in Platteville.<sup>29</sup> The game was apparently thought to be so important that the Miners imported a famous University of Wisconsin football star to help Dobbie coach the team. Edwin R. Stavrum was the captain of the university freshman team in 1912 and played varsity football, earning his "W" in 1913, 1914, and 1915. He was graduated from the university in 1916.<sup>30</sup> Stavrum was well-known for his utilization of the Minnesota Shift, a particular football strategem developed at the University of Minnesota in 1900. Players jumped into a new position at the instant the ball was put into play, thus outflanking the defense which usually was caught flat-footed. The shift gave its perpetrators both momentum and blocking angles, perhaps the two crucial elements in a successful running game at a time when passing was virtually unknown.<sup>31</sup> According to Carl Krog, Dobbie's game strategy was to gain three yards per play. Despite Stavrum and the Minnesota Shift, the game ended 0-0.

Perhaps the single best-known story concerning Dobbie was when one of his football players, Thomas Cordingly, '35, faked an injury during a game and fell spread-eagled to the ground. Dobbie rushed onto the field with his well-worn leather first-aid valise, popped it open, and a chicken jumped out and ran across the field to the merriment of everyone but Dobbie.<sup>32</sup>

The two schools played again six successive years, the results being two Miner victories, two Normal victories, and two ties. According to the 1922 *Miner* yearbook, the 1921 game is noteworthy as the first time the Normal ever scored points against the Miners, winning 7-0. Deane Millman punted 75 yards in the

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1921 game.<sup>33</sup> The 1923 and 1925 games were highlighted by some phenomenal punting on the part of Leonard Suhr. Suhr averaged 60 yards punting in the 1923 game and, in the 1925 game, booted the pigskin several times for 75 yards and once 84 yards. Suhr has written, "The ball in those days was somewhat different than now in that it was of greater circumference around the middle. We tended to kick on third down in our own territory. We had no face masks and there was no such thing as roughing the kicker."

The poetic ability of E. R. Barden, a Mining School student after his graduation from the Normal School, reflected the savagery of the game when he wrote:

The football player heard the call of the quarterback  
ring clear,

It was his turn to take the ball and trust to his head  
gear,

He tucked the oval 'neath his arm, and plunged into  
the line,

You'll find him on the second floor, ward 12,  
bed 29.<sup>34</sup>

Because of the roughness of the games and fear of serious injuries, the two schools never played football with one another after 1925. Apparently, too, hard feelings between the two schools developed in early 1925 when the administration of the Mining School accused the Normal School administration of influencing a Mining School athlete to transfer to the Normal. Charges and countercharges of dishonesty and disloyalty were launched, one school against the other. Finally, the issue was settled when the student in question wrote a "To Whom It May Concern" letter claiming that his decision to transfer from one school to the other was of his own initiative and that neither administration nor the coaches played any part in his decision.<sup>35</sup> The student was graduated from Platteville State Teachers College in 1927.

Nevertheless, there was amiability off the gridiron as at the end of the 1925 season when the Platteville Elks Club hosted a banquet for both teams. An account of that evening's activities has been immortalized by the legendary Roundy Coughlin, who was guest speaker at the banquet. Roundy needs no introduction to older generations. Younger generations should know that he was a sports columnist for *The Wisconsin State Journal* from 1923 to 1971, and one of the most colorful and loved personalities the State of Wisconsin has ever known. He retired in 1971 and died later that year. Readers must understand that Roundy had his own inimitable journalistic style. His account of the evening follows, reprinted exactly as it was published in 1925.<sup>36</sup>

PLATTEVILLE ELKS FETE GRIDDERS;  
ROUNDY IS GUEST

Was a guest of the Platteville Elks of Lodge 1400 who gave a banquet to the Platteville Normal football team and the Platteville school of Mines football team. It was the finest affair of its kind I ever attended.

That Platteville is some town for a town its size there isn't a thing in this state in its class talk about your real go getters they are in that town. Just think of it they got 240 members in that Elks lodge for a town that size it seems impossible. And every member is a real booster for the Normal and Mining School I'll say and they are back of the teams win or lose. That town has some real go getting fools I tell you real live hustlers and up and at 'em and Platteville will always be a live town with that spirit.

Talks were given by Coach Keyes of Normal and Dobson of the Mining School each player was introduced and the coaches gave a very few nice words about each boy that was fitting and making it a real night for all.

Asa Royce, president of the Normal School gave a real talk I'll say and he was the hit of the night after his wonderful speech. A brilliant talker, a fine personality and about as nice a man as you ever meet and back of the boys to the limit in there athletics. He sure is a big thing to make the Normal a success. He only comes to Madison about once a month the boys say that is plenty as he is a reckless driver.

Capt. Drinkwater of the Miners gave the boys a laugh. He got up and forgot his speech and told the crowd he was awful sorry he forgot it as he was practicing on it since September. Capt. Horton thanked the Elks for the fine banquet on behalf of his team.

F. Conley the Darlington lawyer, was the toastmaster and he must of been working on this affair for six months as he was sure good and he put over the thing with a bang. He had some hot shots for them all and he caused many a laff. I always heard he was such a shrewd smart lawyer, this night proved it was true, easy. This affair showed you he's a smart Irishman.

Adam Miller the mayor of the city was there strong and got up and gave a talk that was short but awful good—yes, and he ate plenty also I'll say.

Arthur Parish is a real reader he sure had some stuff there that was the class he pulled the house down with his stuff.

J. H. Lewis got up and went on the war path about Platteville high school not having football for there students. Lewis had the dope and it is dime to doughnuts he started the high school in that city for football next fall. He started excited and ended excited. What more could be fairer.

Arthur Cobb, a former congressman, told a story about Conley that rocked the rafters and I'll bet Conley is out looking for him now.

They had an orchestra there some dancing and it was about the best night you could put in. This is the stuff that counts for the schools. I will never forget that night and no Normal school player coach or Mining School player or coach ever will. That is the kind of spirit that was there.

Dave Gardner, a former Wisconsin athlete, gave a talk. Dave forgot to get shaved before the affair and the gang was calling him Santa Claus. Anyway Dave came out from behind the brush and gave a fine talk.

Red Harvey, the "Red" Grange in that section, was up and at 'em all the time he is secretary of the Elks and the boys got to come across with there dues to Red. He came to banquet with a rabbit's foot in his pocket he must of had hard luck lately.

Jim Luce is the undertaker that is no town for an undertaker it's to live.

### THE BIG BOY

Bob Karrmann who is the Esquire of the Elk's Lodge was all smiles you can't meet a finer fellow no matter where you travel than this Bob Karrmann, he's a prince. He wore a blue suit and it was too bad that he did—he let about all the beans he started for his mouth get on that vest.

Hank Bartley was there strong the best booster in them parts for the schools and there sports. Bill Schindler was the chef and the way they were using them nose bags he is some cook, I'll say. Dr. Wheeler was on the

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committee and he says he's the best little committee in the world.

Don Fiedler is up on his gas. He fills my tanks before I left for home and says that's all right. Rockefeller will pay for that.

Clara Schlater is some pianist—she had you shaking a wicked shoulder all during the banquet the way she tickled them ivories. A little girl fifteen years old named Goldpenny was elegant and she got a big hand she was clever. Miss Mittendorf sang a few songs and had to come back time after time she was so good.

Roundy gave the address at last and that was plenty I guess. They put me on last as they knew when I got done nobody would stick around. What more could be fairer.

The Elks give this every year to the two teams and it sure is wonderful to see such fine spirit and fine sportsmanship prevail as was at this banquet. It was an honor to be a guest at such an affair.

While the Mining School and the Normal School played practice basketball games for years, it was not until February 1920 that they played scheduled games. From then until 1926, the two teams met twelve times and the Normal won every game.<sup>37</sup>

Indoor baseball, as it was called, was played during the winter months in the Mining School gymnasium. The game was played with a large ball, more like a softball than a baseball.<sup>38</sup> Several teams composed the Indoor Baseball League including the Wisconsin Zinc Company, the Vinegar Hill Zinc Company, the City Team, Kaump House, and the Miners. The schedule was so arranged that each team played an equal number of games with each of the other teams. It was difficult for the teams to find sufficient time to play so, after fifteen games, the League

was disbanded. The Miners won first place with a perfect record.<sup>39</sup>

Outdoor baseball presents a confusing picture. The sources available, such as local newspapers and student publications of both the Mining School and the Normal, do not agree as to when games were played, who won, or the scores. The first mention of a Mining School baseball team is in 1917 when *The Miner* and also the Normal School yearbook, *The Pioneer*, list a game between the two schools. No score is given in either the 1917 or the 1918 publications or in local newspapers. It is probable that the game was not played, as the 1920 *Miner* and the 1920 *Pioneer* both report that the game scheduled between the two schools was the first they had ever played. The same sources also agree that three of five scheduled games were played in April and May 1920 and that the Normals won two of the three, although different scores are given. Uncertain evidence indicates that over the years, the Miners and the Normals played at least twelve or thirteen times, the final game in 1933. The overall record appears to be eleven or twelve Normal victories and one Miner victory.<sup>40</sup>

Throughout the decades, Mining School teams in all sports also played area high schools and, on occasion, area colleges and institutes. Some schools paid the Miners to play in athletic events, but the Miners could not reciprocate because of lack of funds. One football game was played in 1922 and the Miners, with just thirteen players including substitutes, were walloped by Luther College (Decorah, Iowa) 57-0. Of the thirty-nine Luther players, eight were carried directly off the field to the hospital and most of the other substitutes were used to replace men injured too severely to play the rest of the game.<sup>42</sup>

During the period between the wars and after, there was considerable shuffling of athletic conferences, especially among smaller colleges and schools. For example, the Mining School, with its various name changes, belonged to four different

athletic conferences between 1932 and 1959. The first of these was the Tri-State Athletic Conference. First mention of this was in February 1928 when *The Geode* reported a rumor that eight colleges from Wisconsin (The Wisconsin School of Mines, Milton, Northwestern, and St. Johns), Illinois (Elmhurst, Wheaton, and Mt. Morris), and Iowa (Lennox) were planning an athletic conference. The next mention is four years later when a 1932 *Geode* reported that five colleges (the Mining School, Milton, Northwestern, Mt. Morris, and Wartburg, then at Clinton, Iowa) had formed a Tri-State Intercollegiate Conference to play one another in football, basketball, and baseball. A year later, Mt. Morris withdrew and Mission College of Plymouth, Wisconsin, joined the conference. In 1934 Aurora College (Illinois) joined. This group lasted until 1940 when it was superseded by the second of the four conferences, which will be dealt with in its proper place.<sup>43</sup>

The Miners' participation in the Tri-State Athletic Conference was quite successful. In 1932 the Miners were the first conference football champions, and in 1933, they shared the title with Northwestern and Milton.<sup>44</sup> Again, in 1936, the Miners won the title and permanently gained possession of the trophy.<sup>45</sup> The Miners' 1939 season ended with no defeats and one tie. They played one game less than Northwestern, which also had a near perfect record; therefore, Northwestern was declared to be the champion.<sup>46</sup> In 1940 the Miners, with a five and one record, tied Mission House for the title and were ranked the 135th college football team in the nation, the highest known national ranking any Mining School team achieved.<sup>47</sup> But the Miners were not always successful. Richard Dobson recalls one game with St. Norbert in Green Bay.

We had a pretty good team but were completely out-classed and soundly beaten. In the closing minutes of the game a Miner substitute was sent in. He was a perfect physical specimen, even looking like a football

player on the cover of *The Saturday Evening Post*. The problem was that he didn't like contact. At any rate, we were behind 40-0 and completely demoralized when he came into the game, patted us on the back or butt, and said, "Come on, gang, we can beat them yet."

Those Miners never gave up. The 1937-1938 and 1938-1939 Miners' basketball teams also won the Tri-State Athletic Conference titles.<sup>48</sup>

Undoubtedly, one reason for the athletic prowess of the Mining School teams was the interest Dobbie had shown in keeping abreast of the latest game techniques and strategies. He attended coaching workshops and seminars whenever possible and he knew and worked with nationally-recognized coaches such as Knute Rockne of Notre Dame and Pop Warner of Stanford University.<sup>49</sup>

Orton F. Keyes, Normal School coach from 1920-1927 (and a member of The University of Wisconsin-Platteville Athletic Hall of Fame since 1977) has this memory of Dobbie: "Coach George Dobson was my counterpart during my regime, and was considered a very capable coach by his contemporaries. He was a leader in his time in football strategy with his six-man defensive line." Apparently the relationship between the two coaches, Keyes and Dobbie, was amicable. Richard Dobson has reported, "Notwithstanding (the rivalry), Father and the Normal School coach, Orton Keyes, were good friends through the years." Keyes has written, "Yes, there was strong rivalry between the Mining School and Teachers College students, and the residents of the area, as would seem natural and healthy. But it was a friendly attitude as evidenced by the amicable rivalry, for the most part, between the student bodies of each school. Would it not be a natural thing for the all-male student body at the Mining School to be interested in having the company of the pretty coeds at the Teachers College?"

From the beginning of athletic contests, and especially that of football, the Miners wanted their own playing field. The area

behind the Mining School was not large enough to accommodate teams and spectators. After years of discussing the problem during the teens, '20s, and '30s, finally in 1938 land was purchased several blocks northwest of the school on North Hickory Street. A topographical survey of the site was conducted by the two women in the school, Fay Bible, '38, and Nancy Morrow, '38. Thirty men employed under the auspices of the W.P.A. began to clear and shape the field with a long-range plan of creating a stadium bowl. A seating capacity for three thousand spectators was planned.<sup>50</sup> The end of the W.P.A. and the oncoming war brought all work to a halt but by 1946, planning recommenced. It was suggested that the project be a memorial to the 375 alumni and former students of the school who took part in the war, fourteen of whom lost their lives.<sup>51</sup> A drive for stadium funds was conducted in 1948, 1949, and 1950 with little success. Dobbie died in 1949 and it was proposed to name the field the George Dobson Athletic Field.<sup>52</sup> Finally, in 1951, the thirteen-year project was completed with the exception of seating and dressing room facilities. These facilities did not materialize, however, because of the merger eight years later and the construction of Williams Fieldhouse and the Ralph E. Davis Pioneer Stadium. Nevertheless, the George Dobson Athletic Field, known today as Miners' Field, is widely used by university intramural teams, the university marching band, and as a playground.

As the Mining School slowly progressed, there were increasing student demands that they, too, should have some say in the policies of the school. Apart from athletics, the Engineering Club was virtually the only organization in which students could participate. The members therefore decided to expand their interests. In 1915, with faculty approval and support, an Annual Board was created to publish ". . . a book which would later serve as a pleasant reminder of our school days; a book which we hope may prove of interest to our alumni and friends." The

book was entitled *The Miner*, and the first issue was dedicated to Director Ralph Davis. With the exception of the year 1919, *The Miner* was published annually from 1915 through 1926. It was a compendium of pictures of faculty, students, school organizations, and news events, and monographs concerning the mining and engineering professions. It also provided valuable opportunities for faculty and students to learn journalistic and writing skills. Most of the material makes fascinating reading today, even to the non-engineer. It helped establish close relationships among faculty, students, and alumni in a school where such closeness was always emphasized. Art deco designs and color turned later issues of *The Miner* into works of art.

The 1924 *Miner* merits special attention because it is concerned with one of the most unforgettable personalities ever associated with the Mining School. In 1920 there appeared on campus a large black and white bulldog who was adopted by the students as a mascot and given the name of Jiggs. For the next four years, Jiggs became a campus and town celebrity. His photograph appears in *The Miner* twelve times from 1920 to 1924. Jiggs was allegedly from Lancaster and no one seemed to know just how and why he came to Platteville<sup>53</sup>. He lived mainly in the Mining School but was willing to board and room with any friendly local household. Stories about Jiggs almost surpass in number stories about Dobbie.

E. R. Barden remembers a deer head hanging in the Club Room of the Mining School. It has recently been learned that the deer head was presented to the school in 1919 by none other than Carl Hayden.<sup>54</sup> Students would tease Jiggs by petting the deer head and saying, "Nice deer, Jiggs," whereupon Jiggs would frantically attempt to climb the wall to tear into the deer head.<sup>55</sup> Agnes Boll recalls that Jiggs appeared to enjoy movies. He tagged along with the students and plunked himself in the middle of the aisle, forcing everyone to walk around him.<sup>56</sup>

Perhaps the most attention Jiggs ever received was in 1920

when he violated a 1919 city ordinance that decreed dogs were not allowed to run at large in the city of Platteville between May and October; fines were \$5 for the first offense and \$10 for the second.<sup>57</sup> Jiggs was apprehended, and shortly thereafter in a front page story entitled, "Jiggs in Jail," a local newspaper publicized the scandal: "Jiggs spent Monday night in the city lockup—tight? No, but roaming the streets. Jiggs is the Mining School dog and he has not been staying at home as he should have since the dog ordinance went into effect. So he was locked up. The Mining School boys came to his rescue and he was released the next day."<sup>58</sup>

Unfortunately, Jiggs also had his enemies. One was Chief, Dr. Cunningham's German shepherd. E. R. Barden recalls that Jiggs engaged in "awful fights," and the 1922 *Miner* records that in November 1921 Jiggs lost a ten-round bout with Chief. Another of Jiggs' enemies was the city night marshal who, according to several sources, did away with Jiggs in late 1923 or early 1924. Apparently, the two had a good basis for mutual dislike. Whatever the actual fate of Jiggs, he was well remembered, for the 1924 *Miner* was dedicated to him with a full page picture and, facing it, a poem, "To Jiggs," composed by Dean Willard Richards, the engineering poet.<sup>60</sup> His poetic tribute to Jiggs follows:

To Jiggs

He came and went but spake no idle phrase  
 To mar our rating of his quiet sense  
 Of comradeship. Nor ever by his gaze  
 Made pride a barrier to confidence.  
 Say not that his was just a canine mind.  
 Perhaps 'twas so; but let him rather warn  
 Us not to scan too keen and frailty find  
 Or fellowship of imperfection scorn.

Rebuffed by learned and pedagogic pride,  
 We turned to him and frank relief we found.

Nor was there need our ignorance to hide  
Of "functions," "stress" or "strata" underground.  
Though dog he was, he knew to be a friend  
Was all we sought of him, and was content  
Friend dog to be. So gladly would we bend  
Above his unknown grave nor grief repent  
That loss is fresh and ever keen  
That Jiggs no more with us is seen.

Surely not too many yearbooks or school annuals have been dedicated to dogs.

Rather sadly, however, *The Miner* was discontinued with the 1926 issue because of its production costs. The previous year the Engineering Club initiated a second publication which has survived to the present day. *The Geode*, given its title by a student, Peter Finstad, in 1925, is named after crystallized material often found as the core of certain kinds of rocks. From its beginning, *The Geode* differed considerably from *The Miner* as was intended. *The Geode*, which has had fourteen different mastheads, was and is more of an information sheet and newspaper. Through the years the number of issues published yearly has varied greatly, depending, one assumes, on how much time and effort faculty and students could afford to give to its preparation and publication.

*The Geode* has always been primarily a student publication but with faculty advisers available in time of need. One name identified more than any other with *The Geode* is Reverend R. R. Doering, who came to Platteville in 1920 as pastor of the First English Lutheran Church and joined the Mining School faculty in 1922 as a part-time teacher of English and composition.<sup>61</sup> As many Mining School alumni have reported, Reverend Doering impressively and impassively guided the destinies of *The Geode*. "Reverend Doering's calm, mild-mannered but forceful personality is a constant inspiration to all those who work with him or study under him."<sup>62</sup>

Harry Harms put out sixteen issues of *The Geode*, more than any other editor save one (Victor Posta, '28, edited nineteen issues), when he served as editor from 1929-1931. The issue published just before he became editor reports that he was "steady and entirely dependable." Perhaps one reason Harms became editor was to try to improve the caliber of humor so often associated with college and university student publications. In the first issues of the 1929 *Geode*, the following is included in the column, *Miner's Muck*: "Harry Harms, son of Mr. and Mrs. Harms of this city, is engaged to Miss Rose Quartz, daughter of Mr. and Mrs. Quartz of Room 301 of the Wisconsin Mining School." In a later column is the story of an irate parent who threatened, "I'll teach you to make love to my daughter." Harry Harms: "I wish you would, old boy. I'm not making much headway."

Carl Krog, a *Geode* staff member after the war, recalls writing poetry for *The Geode* in a well-known local recreational establishment (the Black Cat—now known as the Hoist House) and later submitting his masterpieces to Reverend Doering for approval. According to Krog, Reverend Doering was unfailingly helpful and sympathetic.

A reading of *The Geode* from 1925 to the present reveals several interesting facets of the publication. The issues of the 1920s and the 1930s are quite different in style and content from the issues of the 1960s and 1970s. The earlier issues are far less serious than the later issues. A war, an unsettled world, student unrest, and perhaps a less certain future all contributed to a more somber tone. There is, however, one feature of *The Geode* which has remained unchanged for almost sixty years. *Geode* humor, or what is supposed to pass for humor, has not changed. In 1980 there was a bit of a campus flap about the inclusion of a small item which offended some readers in our now more sexually sensitive society. The item appeared in *Geode* issues in 1953, 1961, 1965, and 1974 without objections. *O tempora, O mores!*

One of the special features of the academic and social lives of inter-war engineering students was what were known as Senior Trips. These week-long trips began in 1925 and continued annually in the spring until 1943, when the war intervened. The purpose was to gain first-hand knowledge of business, industry, and museums which had been studied in preceding years. Generally, the itinerary covered Milwaukee, Chicago, Gary, and occasionally other sites. Visits were made, for example, to Allis Chalmers and Schlitz Brewing in Milwaukee; electrical power plants, the Field Museum, and the Board of Trade in Chicago; and steel mills in Gary. Richard Dobson's account of the 1933 Senior Trip follows:

The first stop on the 1933 Senior Trip was, naturally, the Schlitz Brewery. As the class entered the plant gate, a janitor-type came running out, waving us back and saying in a heavily accented voice that no jobs were to be had. Professor Pett, the conductor of the trip, protested, "No, no, we have permission to go through the brewery," and produced a letter. The janitor-type looked at it suspiciously and telling the group to wait, disappeared into a makeshift office. After a considerable wait, he reappeared and announced that he would conduct the group through the brewery. He did a creditable job of it, explaining the various steps for making beer. I vividly remember one workman at the barrel-filling facility. He had a long straight nose. His job was to smell the open bung hole in order to test whether the barrel had been cleaned properly. Before long, the group ended up in the tap room which was, after all, the primary purpose of the visit. Free beer was dispensed for an hour or more, whereupon the group reluctantly left to visit the Allis Chalmers plant. Beer had not been legal for many weeks, and obviously, we were not expected at the brewery, which was busy fill-

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ing the pent-up demand stemming from the recent declaration that 3.2 per cent beer was not an alcoholic beverage.

There was a bar across from the seedy hotel where we stayed. Beer was five cents per glass and there was a free lunch of chips and braunschweiger at the end of the bar. Many of us were there until closing. I couldn't face braunschweiger for twenty years after that night.

The remainder of the trip was less memorable. We traveled by several cars available to the more affluent members of the class plus Professor Pett. Francis Piquette, ('31) drove, as I recall. We visited a steel mill in Gary and a cement plant in central Illinois. Coal mines in southern Illinois were added later.

From all reports, those who participated in Senior Trips agree it was one of the more interesting events of their academic careers.

In addition to the Senior Trips, there were also day excursions to area mines. Joe Grimes and Meyer Taylor have reported that they learned as much about the profession of mining engineering from the field trips as they ever learned in the classroom.<sup>63</sup>

Taylor also remembers when he was student manager of the football and basketball teams in the late 1930s. One year when they played Wartburg College, then located in Clinton, Iowa, the football team acquired a number of watermelons on their way to the game. At halftime, the Miners were eating the watermelons when Dobbie, emphasizing a point to his losing team, kicked a melon which turned out to be rotten and splattered everyone in sight.

Student interest in school governance was also expressed when, in 1924, a Student Senate was formed. That body differed radically from what younger readers would call a Student

Senate; the body of eight was composed of four students and four faculty with Dobbie elected its first president. According to the 1926 *Miner*,

The object of the Senate was to take general charge of student affairs and government; to provide the needed rules and enforce them with penalties; to dismiss a student from school, with faculty approval; and to control the Student Loan Fund. By this organization, many faculty-student disputes have been settled, but the extreme step of dismissing a student from school has never been needed.

Perhaps the most useful work of the Senate was the control of the Student Loan Fund. This fund was placed in the Senate's charge soon after its organization and loans ranging from \$25 to \$100 were made at various times to students who would, otherwise, have been forced to discontinue their school work.

The Student Senate continued sporadically for years and, like most governments, was sometimes effective and sometimes not.

Students also asked for and received a charter for the first social fraternity in the history of the Mining School and, in 1924, the Beta Chapter of Sigma Delta Phi was established. Beginning with ten charter brothers, the fraternity had increased to twenty-two by 1925. It was founded upon principles of creating a brotherly spirit and inducing needed energy for all school activities; the highest ideal of all was to promote scholarship.<sup>64</sup>

John Rindlaub, a brother in the fraternity, remembers the activities as being primarily social, sponsoring musical entertainments and dinner dances. He also recalls that most of these ventures were not financially successful which is why the fraternity was short-lived.<sup>65</sup> Recruitment of pledges was apparently neglected and graduation took a heavy toll of the membership in 1925 and 1926, so that by the latter year, the fraternity had

ceased to function. The last mention of Sigma Delta Phi in *The Geode* is in the spring of 1926.

The Engineering Club, which had been so active from its origin in 1914, also fell on hard times by the late 1920s. There was some dissension among the membership for reasons which are not clear today, but it is known that there was a problem in respect to the care and upkeep of the Club Room and the behavior there of several students. By a vote of 47 to 4, the club abolished itself.<sup>66</sup> Two days later a new Engineering Club was organized with the previous constitution and officers.<sup>67</sup> Dances and other entertainments and *The Geode* continued to be sponsored by the Engineering Club as late as the spring of 1927 when officers were elected. From that time onward, however, there is no mention of the club. John Rindlaub recalls that it died out as a result of apathy.<sup>68</sup>

Meanwhile, busy minds were at work planning and plotting ways of welcoming incoming freshmen. First year students were known, of course, as freshmen; the two upper classes were juniors and seniors. To create greater student spirit and to help freshmen get acquainted, upperclassmen decided that the 1927 freshmen should have the honor of wearing green caps for the first six weeks of classes, after which the caps would be destroyed in a large bonfire.<sup>69</sup> At the end of this period, a quantity of material was gathered and deposited behind the Mining School for the cap burning when the city fathers intervened and forbade the fire, much to the chagrin of the Miners.<sup>70</sup> The fate of the green caps the following year was about the same as in 1927.<sup>71</sup> By 1929, the short-lived tradition was apparently abandoned as *The Geode* tersely observes, "Green Caps not in Evidence," nor are they mentioned again in Mining School publications.

What followed almost immediately is one feature of student life which several generations of Miners would perhaps prefer to forget: freshmen initiation. Such rituals probably took

place before, but the first publicized initiation was in 1930. By all accounts, the ritual generally followed much the same format year after year.

Early in the fall semester, freshmen were summoned to City Park for the evening. Requested to appear in pajamas or less, they were often paddled, their heads barbered and painted with a red M; they were questioned on a variety of topics, required to sing songs, push peanuts around the park while on all fours, and often paraded down Main Street to the local cinemas and displayed to the audiences. Some years hayracks were used with the freshmen supplying the horse power. Other years rides out of town were offered with the understanding the freshmen would walk back to town to retrieve their shoes.<sup>72</sup>

*The Geode* consistently maintained that freshmen initiations were necessary for the "good of the students" and brought about a greater feeling of school spirit and loyalty. Inevitably, however, such activities had their critics, not only from the freshmen victims, but also from Mining School administration and faculty and townspeople. In 1939 a faculty Committee of Safety was appointed to oversee the initiations and also to monitor and prohibit the more unusual initiation rituals.<sup>73</sup> Nevertheless, with the exception of World War II years, it is known that freshmen initiations continued into the 1950s.

As Jiggs was the Mining School mascot in the early 1920s, a German shepherd named Rex became the mascot in the 1930s and 1940s. Like Jiggs, Rex became a well-known personality to both town and gown. Owned by Nick, '33, and Susie Wunderlin, Mining School secretary in the 1930s and 1940s, Rex was born on New Year's Day 1936. *The Geode* of 26 February 1945 reports,

In his early days he learned many tricks in the art of self-defense through the untiring efforts of not only his master but two housemates by the names of Knoerr and Medley (the same two who first traced the M in

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the snow in 1936.) Since his early days, he has been very considerate in allowing others to share his house.

One of his favorite sports is fishing on the Mississippi River. And don't think he isn't progressive, once while in a speed boat contest he attempted to jump from his boat to the leading boat, but was unsuccessful and landed in the drink.

He hasn't served in the Armed Forces but he is truly a veteran of many battles. He has suffered numerous defeats at the hands of many Miners when he has been caught napping on a throw rug.

His secret adoration at present is a Bureau of Mines employee named Renwick, who alienates affection by bringing him steak bones, the leavings of which Susie must clean up. The ration program does not affect him, however, if allowed to roam a farmer's field he willingly demonstrates his love for pork.

He awaits the return of many foster masters, as well as Nick, who now serve their country.

In 1947 Rex was put to sleep because of failing health and eyesight.

One significant development which began in the 1930s and continues today was making engineering co-educational. There was perhaps a tongue-in-cheek attempt to do so in the 1920s according to a 1927 *Geode*, which published the following letter addressed to Mr. H. B. Morrow:

Dear Sir:

I have been receiving all of your interesting literature, papers, letters and pamphlets and must say I am most thankful for them. I am an all-around athlete, taking a prominent position as far as my ability allows me. In one of your books you sent me shows pictures of

your different teams which looks very good to me, and if you will guarantee that I can be put on your baseball, football, and basketball teams I agree to come to your Mining School, would sign up for fall terms. Yours respectively,  
Miss Marlene Dillon  
P.S. Now laugh.

The first two women to enroll (in 1935) were Fay Bible and Nancy Morrow, daughter of Director Buck Morrow. Later they married Mining School graduates Virgil Schroeder, '28, and Oliver Anderson, '38. *The Geode* in 1936 editorialized about women and engineering, which may be of interest now when there is more concern about equal rights.<sup>74</sup>

Charles Pettyjohn has related the following anecdotes about life at the school:

Professor Clarke had us locating Platteville by shooting the sun. That's when I discovered that the Mining School was actually west of the Mississippi (by my calculation). When he took us out to do a survey underground in a mine, we stayed in a local farmhouse. They had the best well water I ever tasted. It came from a rusty, long-handled dipper. It took Hubert McNoun and me over six months to get over trench mouth that came with that wonderful water. (Have you ever used hydrogen peroxide as a mouth wash for six months?) His mine rescue course sent us around the block with the McKay breathing apparatus on our backs, then still breathing that rarified atmosphere an additional block with an additional 160 pounds. That experience left us with tremendous appreciation of the mine rescue business.

I remember Morrow's dissertation to the graduating class. He implied that we were now professional men

and that we might encounter a horrible thing called a labor union in our outside less-sheltered lives. He didn't tell us exactly what to expect but contact could produce symptoms similar to the plague, T.B., or worse. About six years later, my job in the lab of an oil company was shut down and all of us were offered jobs in the refinery which we gladly accepted. The plant was unionized and none of the union members would speak to us. After two weeks I went in to see the Superintendent to tell him that the only way I would be able to learn anything was to join the union. To my surprise, he advised me to join but not just to pay dues, to actually make a learning experience from the contacts. Three months later I sat across the table from him, bargaining for a union contract. He glared. Six months later I became secretary of the Oil Workers Union #210, CIO. Every night I prayed that Buck Morrow would forgive me but I needed the money, and the contract I had helped put together paid me top refinery wages while out of the plant on union business. One year after that, I became the Secretary of the Trade Union Council, all of the CIO unions in Gary, East Chicago, and Whiting. I reported to work at the plant one hour per month. I organized the first CIO convention in Indianapolis. When I got back from that learning experience, the boss called me into his office. He congratulated me on my activities but got sort of red in the face and finally blurted out, "I told you to work at it (the union). I didn't tell you to run the damn thing." He offered me my job back in the lab and I managed to stay in managerial non-union positions forever after. I doubt if I would have taken the cutback in salary if it wasn't for fear of meeting Buck at the pearly gates.

We did a little study that didn't make the medical journals that showed that people who worked around the Cuba City Sulfuric Acid Plant had few chest disorders. Reason—the acid fumes created an environment hostile to the usual bugs. I next went to Michigan Tech to finish my degree. Got caught in a snowstorm and spent the night alongside a vat of ammonia leaching copper from stamp sand. Could hardly breathe, let alone sleep, so asked about chest infirmities hoping to be a big shot, explaining the advantages of breathing acid fumes. To my horror, none of them had chest problems either. Dobby used to tell me that I sometimes reasoned with insufficient premises.

From the beginning of the Mining School, dances were an important part of extra-curricular social life. It was not until the 1920s, however, that dances came to be scheduled on a fairly regular basis. There were Thanksgiving dances, Christmas dances, commencement dances, and ultimately what came to be known as proms and, still later, M-Balls. Harold Robbins has contributed an account of how this came about:

In 1926 some of the students wanted to hold a dance at the school. Morrow decided that it would not be proper to have it there because it would not be a school function. The students then decided to hold the dance at a downtown hall but Morrow did not like this either so the dance was called off. The students were upset about this. Morrow sent word that he wanted to see me in his office. What he wanted to ask me was why the students were so upset. We talked for about an hour. I explained my viewpoint that we needed some social functions at the school. In the end he said, "Okay. But let's all talk it over and, whatever we do, let's make it the best." I replied that what we needed most was good music and decorations. The next day he

called in the leaders who wanted the dance and asked that I come along. As a result of this meeting, it was decided that at least two dances per year would be given at the school as school functions and that only name bands would play. At that time name bands would play in Chicago and then go on tours, playing one night stands within driving distances. That worked out fine because Platteville was close by.

I was in charge of the decorations for the first dance. We got the loan of a very large crystal ball from a hall and, as it was springtime, we went out near the Platteville mound and cut down six wild crabapple trees in full bloom. That evening during the dance, the band leader came to me and said he had been playing for years at many universities and that this evening was the best of all. Everybody was happy and, for a number of years, the school had these dances. It was Morrow who insisted on the best.

Indeed, Morrow did insist, and got the best dance bands possible. From the 1920s through the 1940s, the two great dance palaces in Chicago were the Aragon and the Trianon—one on the north side, the other on the south side—both of which catered to a “very refined class of people.”<sup>75</sup> Morrow and his successor, Milton Melcher, would determine the quality of the bands which played there and bring them to Platteville. The list of great name bands which played at Mining School dances, or proms, is almost mind boggling. Among them were Henry Busse, Woody Herman, Art Kassel, Al Katz and his Kittens, Wayne King,<sup>76</sup> Red Norvo (with the Rocking Chair Lady, Mildred Bailey, as soloist), Ted Weems (featuring Perry Como as soloist), and Lawrence Welk. Irwin Chaitin remembers the latter in particular when his band played for the 1941 spring prom and cost \$600.

Charlotte Geyer, whose father, Charles Stoops, was a Min-

ing School regent from 1927-1950, and whose husband, Harold Geyer, was a regent in the 1950s, recalls that, unless one was on "the list," tickets were next to impossible to obtain. The dances were usually held on the second floor of the Mining School and capacity was limited. Charlotte also remembers the strange phenomenon of the lights going out between dance sets.<sup>77</sup>

Joyce Goke, who was a Mining School secretary from 1951-1954, later married a Mining School graduate, Cletus Ebert, '54. She recalls that when she was a young girl growing up in Platteville, she and hundreds of other people would sit on the lawn listening to the music.<sup>78</sup>

John Rindlaub claims that the first crystal, or mirrored, ball used at the 1926 dance was borrowed from a dance hall in Fenimore. The following year he and William Goke, '28, made a mirrored ball using parts of a cream separator which caused the top half of the ball to rotate in one direction and the bottom half to rotate in another. So pleased were they with their work that the next year, 1928, they made a more elaborate ball. For a dance given in 1930 yet another crystal ball was created; this one was studded with 2,831 mirrors cut in five different shapes.<sup>79</sup> Darlene Mellor recalls that, when she was a secretary at the Wisconsin Institute of Technology in the early 1940s, the ball was treated with great care. Used only one evening a year, it was locked in a secret place the rest of the time, safe from pranksters.<sup>80</sup> The 1930 ball was used for thirty years and then in 1960 was inverted and mounted on a portable stand seven feet high. It was driven by a motor and gear box in the base. Four colored spotlights were played on the ball, and the base was decorated with red Ms and 60s. As part of the sixtieth anniversary of the school in 1968, a fiberglass ball weighing sixty pounds and five feet in diameter was created which, according to the April 1968 *Geode*, is "the largest ballroom mirror-covered sphere in the world." Walter Hannan, a civil engineering faculty mem-

ber since 1957, oversaw the construction of the ball which was made by his father. This ball is still in use today whenever M-Balls are held.

The single most tangible symbol of the Mining School is, of course, what is purported to be the world's largest man-made block letter M. Mining schools throughout the United States have chosen to designate themselves with Ms placed on the most visible sites possible, and certainly the availability of nearby mounds offered the Mining School an irresistible opportunity. What the Sacred Bell meant to the Normal School, the M has meant to the Mining School and to the College of Engineering in The University of Wisconsin-Platteville.

At a December 1924 meeting of the Engineering Club, it was "moved and seconded that the placing of a letter M on the mounds (*sic*) be brought to a vote for the approval or disapproval of the student body, the feasibility and details to be worked out later." A committee of five students was formed to investigate the project.<sup>81</sup> At a subsequent meeting of the club in February 1925, it was reported that the investigation had not taken place.<sup>82</sup> For reasons not known, there is no further mention of a proposed M until 1936 when two students, Alvin Knoerr and Raymond Medley, had the happy thought of creating one. Knoerr, who was a faculty member of the school in 1939 and 1941 teaching physics, mathematics, ore dressing, power plants, and engineering drawing, and later achieved prominence as editor of the *Engineering and Mining Journal*, tells his own story of the making of the M.

During the winter preceding the first stone construction of the M, Pat Medley and I traced out the biggest M we could on the face of the mound by tramping down heavy snow. It took several trips in parallel to widen out the path so that it would show up at a distance. Shortly before sundown we walked back to Platteville and were happy to note that the M could be discerned at a distance.

As we approached Platteville, we noticed a huge ring around the sun—much larger than ordinarily seen. This was caused by crystals in the upper atmosphere which produced the sun dog. One of the severest cold spells ever experienced by Platteville followed, resulting in the freezing of water and heating pipes in quite a few homes. This freeze contributed to the life of the snow M and to its visibility, because a noticeable amount of dust or other material accumulated in the frozen pathway to make it more visible.

I was with a group of underclassmen on a Sunday afternoon during the spring that followed when someone suggested that we build a stone M. I said, "Let's not make it one of those skinny letters that high schools put on hills all over the country." Everybody agreed and somebody suggested that we make it the biggest M in the country, and another classmate volunteered that the Colorado M was about 200 feet high.

So we paced off a vertical distance and found that a leg in excess of 200 feet could be formed. Then it was decided to concentrate all of our efforts in gathering and placing stones on a single leg, the right leg, to make as much of a showing as we could with one afternoon's work. Lines were formed so that stones as gathered could be passed through a chain of hands to be placed on the right leg which had been marked out roughly, but in a straight line. On our way back to Platteville, we were happy to note that a clear stone gash marked the mound and that an impressive stone M could indeed be built.

The amazing fact is that one of the largest Ms was actually built by one of the smallest mining schools in the country. When Pat and I had worked at Climax

in Colorado during the previous summer as student miners, we resented the way some of the Colorado students would look down on Platteville Miners as being inferior. Maybe that had something to do with the decision to outclass Colorado as M builders.

A few days after we had built the first leg, Director H. B. Morrow asked me what we were up to on the mound and we told him we were going to build the largest stone M in the country. Director approved of the idea immediately and said, "We haven't had a field day in a long time. Maybe this would be the time to start one to build an M."

The real valuable lesson that the M taught was the reward that one gets by establishing exceptionally high goals and working energetically, enthusiastically, and confidently to achieve them. We should encourage college students to formulate career objectives way beyond the present objective of just getting a job.

Thank you for inviting me to fill in some details to round out the building of the M—a goal which I saw grow from a dream in the minds of a few students into a reality.<sup>83</sup>

After receiving permission from the mound owner, William Snow, the field day was held under the general supervision of Gerald Pett, better known to all as Profie Pett, who had joined the Mining School faculty in 1924, teaching classes in minerals engineering. Students used picks, crowbars, and wheelbarrows to move the estimated four hundred tons of limestone to form the M, the dimensions of which were made to correspond with the dimensions of the school monogram. Meanwhile, Morrow and Dobbie drove out miles from the mound to observe the work and returned periodically with instructions to correct any distortion which the slope of the mound gave to the M.<sup>84</sup>

Through the decades, the M has been cemented, limed, and white-washed, and in 1969, a huge slab of rock which had marred the perfection of the letter was removed by dynamite. Except during the years of World War II, the M has been cleaned and whitewashed annually on a day well known to all engineers, M Day. After a day's work in the 1930s and 1940s, many students adjourned to Elmo Tech and, in more recent years, to Tech Tea for Potosi medicated water. In October 1937, the M was lighted for the first time for the Miners' Homecoming and this practice continued annually until 1942 when it was discontinued because of the war. In 1946 the lighting of the M was reinstated to coincide with the spring prom. Depending upon the whims of the times, the M has been lighted at least once a year, either spring or fall, and occasionally in both seasons.

The M received international attention when, in May 1949, *Life* magazine, then having a worldwide circulation of approximately 25 million readers, gave the letter a two-page picture story. *The Geode* of that month reports the event as follows:

On Friday afternoon, April 29, 1949, Francis Miller, LIFE photographer, took pictures of the M-lighting crew as they loaded the truck with 250 empty oil cans and corn cobs which had been soaked in kerosene, and other odd equipment (*sic*). Miller's pictures and story were published in the May 23 issue of *Life*.

On arriving at Snow's Platte Mound farm, the committee members placed the cobs and cans at 10-foot intervals on the M. Aerial shots of the labors of the hardworking men were taken during the afternoon.

When final preparations were completed at 5 o'clock, a security guard took over to prevent any "premature disturbances."

At sundown, President Melcher formally opened the festivities by lighting the torch which was relayed 4.6

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miles out to the M. Mr. Melcher told the first carrier, "We are a school which tends to hide its light under a bushel. Tonight we will again remove the cap from our light and display is so that all may see it glow in proper perspective. Carrier! Accept this torch, hold it high and speed it away to another lighting of our monogram."

Twenty-three men and 24 minutes later, the last runner, following a police escort, chugged up to the base of the huge letter with the torch. There, eight smaller torches took the light, and the flares outlining the M were lighted. From a distance it looked as if the Miners were unfolding a giant M out of nothing.

After being lit, the letter was visible from three states: Iowa, Illinois, and Wisconsin, and the cars lined the roads for miles around.

Upon the death of William Snow, the ninety acres on which the M is situated became the property of L. R. Clausen who generously donated the property to the Wisconsin State College and Institute of Technology. In 1961 a monument was constructed commemorating this magnanimous gift and the property was renamed Clausen Park.<sup>85</sup> Even though the name of the school has changed through the years, the spirit for which the M stands has not.

For greater administrative efficiency, a change was made in 1937 when, in a special session of the legislature, all Mining School "functions, powers, and duties" were transferred from the regents to the State Superintendent of Public Instruction (Reorganization Order No. 10 of Governor under Chapter 9, Laws of Special Session). Two years later the law was repealed and all Mining School "functions, powers, and duties" were restored to the regents.<sup>86</sup>

Because the Mining School had a three-year program until

1951, some students chose to matriculate at another mining school in order to take a bachelor of science degree. Profie Pett, a 1926 graduate of the Missouri School of Mines, established a program whereby Platteville Mining School students could take a B.S. degree from the Rolla school.<sup>87</sup> The first Platteville student to do so was John Rindlaub.<sup>88</sup> From then until the establishment of a four-year program at Platteville, dozens of Mining School students flocked to Rolla. Many former pre- and post-World War II students have reported on their one year there. Ervin Brecke and Carl Krog recall that campus fraternities courted them vigorously because Wisconsin Mining School graduates had the reputation of raising the fraternities' grade points. Krog also remembers that the professors at Rolla were increasingly amazed that Platteville students could sleep through classes and do so well on their examinations. According to Krog, the explanation was very simple—they had been well taught at the Wisconsin Mining School.<sup>89</sup> Other mining schools such as Michigan Tech, Montana, Colorado, the University of Pittsburgh, and the University of Wisconsin also attracted students seeking a B.S. degree.

Some Mining School graduates chose to pursue a career immediately after taking the three-year course at Platteville. The class of 1928, for example, is especially interesting in this and other respects. The class included the following: Donald Carden, William Goke, Richard Krog, Glenn Moore, Victor Posta, John Rindlaub, Harold Robbins, Virgil Schroeder, and George Sullivan. Interviews with several of the above indicate that the class was especially close knit. They were friends through school and have remained so throughout their lives. They were all heavily involved in campus activities. When they graduated in 1928, several in the class were inspired to invite Governor Fred Zimmerman to a dinner dance. Elaborate preparations were undertaken for the event. The dinner was prepared and served by the ladies of the local Congregational church. The folded menu,

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a yard long and illustrated, was drawn on blueprint paper for each guest. The night of the dinner, with Governor and Mrs. Zimmerman in attendance, the program commenced at six o'clock with the singing of *America* followed by an invocation, banquet, musical selections by Glenn Loyd's orchestra, presentation of the graduates, introduction of guests from all over southwestern Wisconsin, and an address, "On Wisconsin," by the governor. Dancing in the decorated building from nine to one concluded the evening's festivities.<sup>90</sup>

Two members of the class, William Goke and Victor Posta, left shortly thereafter for South America. Goke worked as a petroleum engineer in Venezuela from 1928-1932 and Posta worked as a geologist in Venezuela from 1928-1936.<sup>91</sup> Harold Robbins was truly a world citizen in view of his travel and work as a mining engineer in fifty states and 134 countries on six continents. From 1933 on, he spent more time out of the country than in. The active and distinguished career of Robbins is a model for all Mining School graduates—indeed for all engineers everywhere.

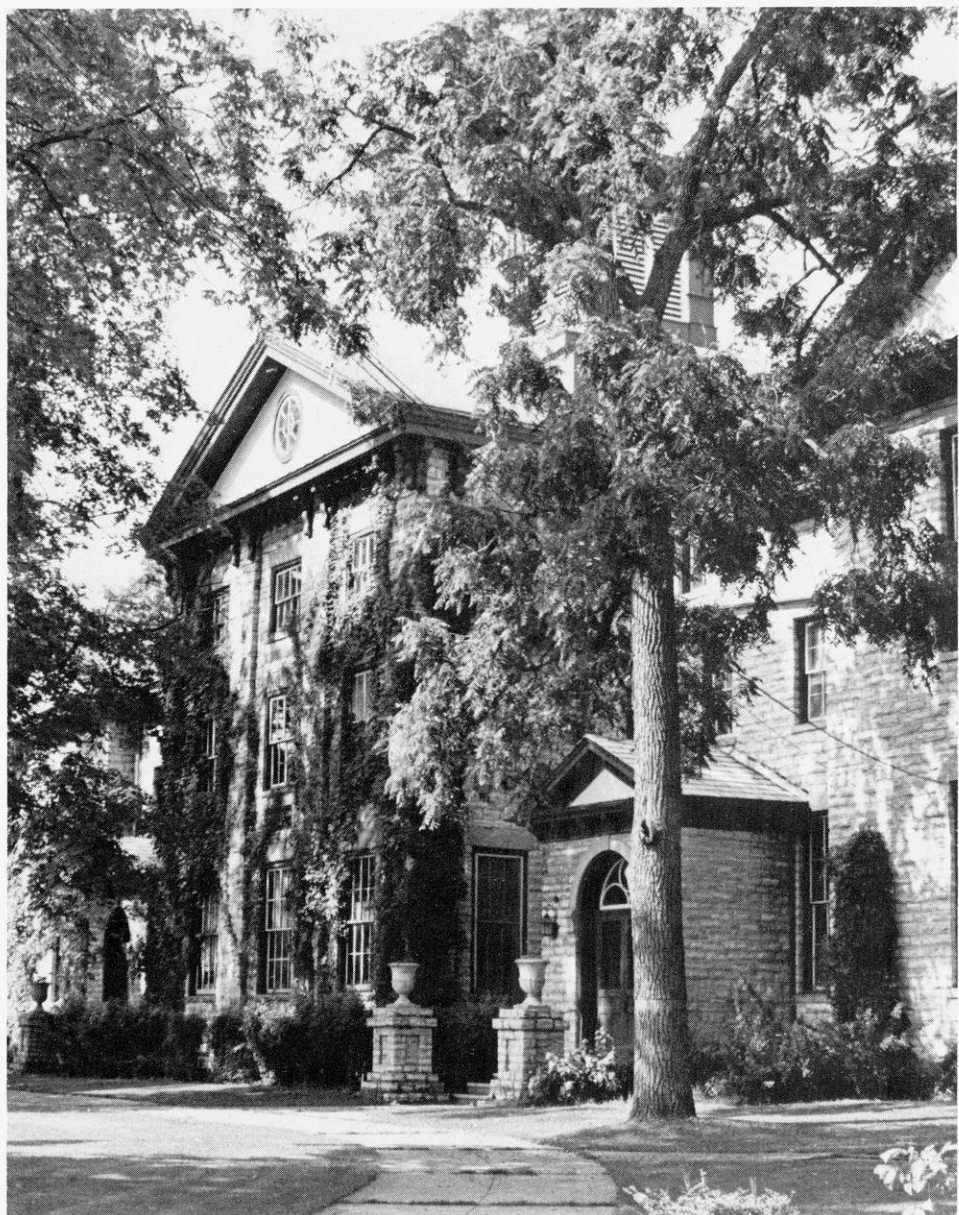
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1. *Wisconsin Laws of 1915*, C. 560.
  2. *Bulletin of the Wisconsin Mining School*, 1916-1917, 1917-1918, 1918; *The Miner*, 1917-1921.
  3. *The Geode*, 25 February 1935.
  4. Dorothea Wilgus Pickard, *My Roses in December*, from an original unpublished manuscript, 1983, pp. 84-85.
  5. *Ibid.*, pp. 90-91, p. 228.
  6. E. R. Barden interview, 12 September 1982; Hazel Kindschi interview, 6 October 1982.
  7. Longhorn, *op. cit.*, pp. 70-74.
  8. Pickard, p. 206.
  9. *The Miner*, 1923.
  10. *The Geode*, 27 May 1946.
  11. *The Geode*, 28 September 1926; 21 October 1926; 28 February 1927.
  12. Letter from Irwin Chaitin, 12 October 1982.
  13. *The Exponent*, 19 November 1963.
  14. Karrmann Library Archives, The University of Wisconsin-Platteville.
  15. Carl Hayden interview, 16 October 1982.
  16. *The Geode*, 27 February 1956; W. R. Loy interview, 9 September 1982.
  17. Florence Alleman interview, 14 September 1982.
  18. *The Miner*, 1918.

## The Wisconsin Mining School, 1915-1939

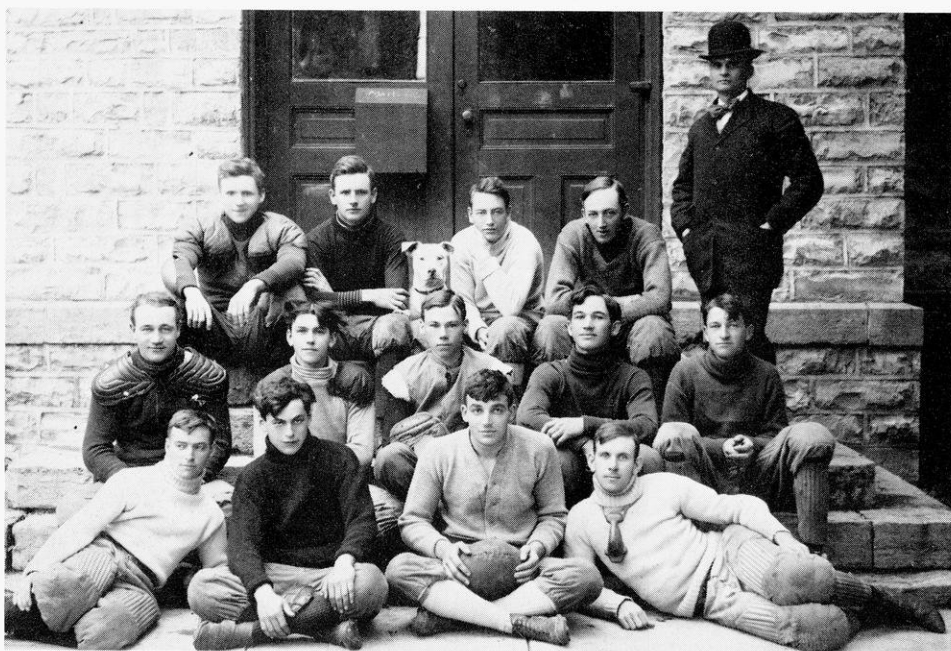
19. *The Miner*, 1920; *The Grant County News*, 30 April 1920, p. 1.
20. Engineering Club Records 1914-1921, Karrmann Library Archives, The University of Wisconsin-Platteville.
21. Isabel Karrmann interview, 2 November 1982. Mrs. Karrmann, Robert's widow, recalls the time when Bob was playing an engagement at the old Julien Hotel in Dubuque and needed an extra player. He managed to get Wayne King, a famous name well-known to older generations.
22. Florence Alleman interview, 14 September 1982.
23. Letter from Leonard R. Suhr, 5 October 1982.
24. *The Geode*, 24 March 1927; 27 March 1928; 28 March 1929; 17 April 1930.
25. *The Miner*, 1926.
26. Dale Dixon interview, 24 September 1982.
27. Letter from Donald A. Miller, 26 October 1982.
28. Letter from Charles Pettyjohn, 24 September 1982.
29. *The Platteville Journal*, 19 November 1919; p. 8; *The Platteville Witness and Mining Times*, 26 November 1919, p. 1.
30. Information supplied by James A. Mott, program supervisor, The University of Wisconsin-Madison Athletic Department, courtesy of George Chryst, The University of Wisconsin-Platteville athletic director and football coach, 5 November 1982.
31. Ivan N. Kaye, *Good Clean Violence* (New York: J. B. Lippincott Company, 1973), p. 35.
32. Letter from Charles Pettyjohn, 24 September 1982; William Gardner and Meyer Taylor also supplied some information for this anecdote.
33. Deane Millman interview, 18 September 1982.
34. *The Miner*, 1924.
35. Administrative Subject File, 1907-1959; Karrmann Library Archives, Series 98/1, Box 5, The University of Wisconsin-Platteville.
36. *Wisconsin State Journal*, 3 December 1925.
37. *The Pioneer*, 1910-1926; *The Miner*, 1922-1926.
38. E. R. Barden interview, 12 September 1982.
39. *The Miner*, 1917.
40. *The Miner*, 1917-1926; *The Pioneer*, 1917-1959.
41. Dale Dixon interview, 24 September 1982.
42. *The Miner*, 1923; *The Platteville Journal*, 8 May 1958; *The Geode*, 14 April 1958. All three publications describe this game; the last two credit the incorrect victor.
43. *The Geode*, 16 December 1940.
44. *The Geode*, 14 December 1932; 20 December 1933.
45. *The Geode*, 22 December 1936.
46. *The Geode*, 16 December 1939.
47. *The Geode*, 16 December 1940.
48. *The Geode*, 21 April 1938; 21 April 1939.
49. *The Exponent*, 19 November 1963.
50. *The Geode*, 21 October 1938.
51. *The Geode*, 26 February 1946.
52. *The Geode*, 24 April 1950.
53. Florence Alleman interview, 12 October 1982.
54. *The Grant County News*, 23 May 1919.
55. E. R. Barden interview, 12 September 1982.
56. Agnes Boll interview, 14 September 1982.
57. *The Grant County News*, 25 April 1919.
58. *The Platteville Journal*, 19 May 1920.
59. E. R. Barden interview, 12 September 1982.

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60. Information supplied by Hugh T. Richards, son of Dean Willard Richards and professor of physics at The University of Wisconsin-Madison, letter 14 September 1982.
61. *The Geode*, April 1965; May 1978.
62. *The Geode*, 14 April 1958.
63. Joe Grimes and Meyer Taylor interviews, 21 October 1982.
64. *The Miner*, 1925.
65. John Rindlaub interview, 27 August 1982.
66. Engineering Club Records, Karrmann Library Archives, The University of Wisconsin-Platteville, 21 February 1924.
67. Engineering Club Records, Karrmann Library Archives, The University of Wisconsin-Platteville, 23 February 1924.
68. John Rindlaub interview, 24 October 1982.
69. *The Geode*, 30 September 1927.
70. *The Geode*, 15 November 1927.
71. *The Geode*, 29 September 1928.
72. *The Geode*, 21 October 1930; 17 October 1932; 30 October 1933; 31 October 1934; 21 October 1935; 16 October 1936; 25 October 1937; 21 October 1938; 21 October 1939.
73. *The Geode*, 21 October 1939.
74. See Appendix VI.
75. *Chicago Tribune Magazine*, 11 September 1982, p. 10.
76. Harry Harms has in his possession a memento from Wayne King. Written on the back of an unused check is the following: "May you Miners of Wisconsin class of 1931 find Gold!! Diamonds!! and Happiness. Wayne King."
77. Charlotte Geyer interview, 9 September 1982.
78. Joyce Ebert interview, 7 October 1982.
79. *The Geode*, 18 December 1930.
80. Letter from Darlene Mellor, 12 January 1983.
81. Engineering Club Records, Karrmann Library Archives, The University of Wisconsin-Platteville.
82. *Ibid.*
83. Letter from Alvin Knoerr, 22 October 1982.
84. *The Geode*, May 1963.
85. *The Geode*, 28 April 1961.
86. *Wisconsin Laws of 1939*, C. 413.
87. Marius Gronbeck interview, 9 September 1982; Angeline Pett interview, 11 October 1982.
88. John Rindlaub interview, 27 August 1982.
89. Ervin Brecke interview, 29 October 1982; Carl Krog interview, 15 October 1982.
90. Karrmann Library Archives, The University of Wisconsin-Platteville.
91. Wisconsin Mining School Platteville Alumni Directory, 1939.



**The Mining School, now Rountree Hall**



**The Miners' Football Team, 1909; Director Buck Morrow is wearing a derby and Dobbie is stretched out far right front.**



**The R.A.M.s, 1912. Carl Hayden is second from left, top row; Coach Dobbie is fifth from left, top row; Professor Ernie Clarke is fourth from right, top row; Director Ralph E. Davis is first on right, top row.**



S.A.T.C. Color Guard, 1918



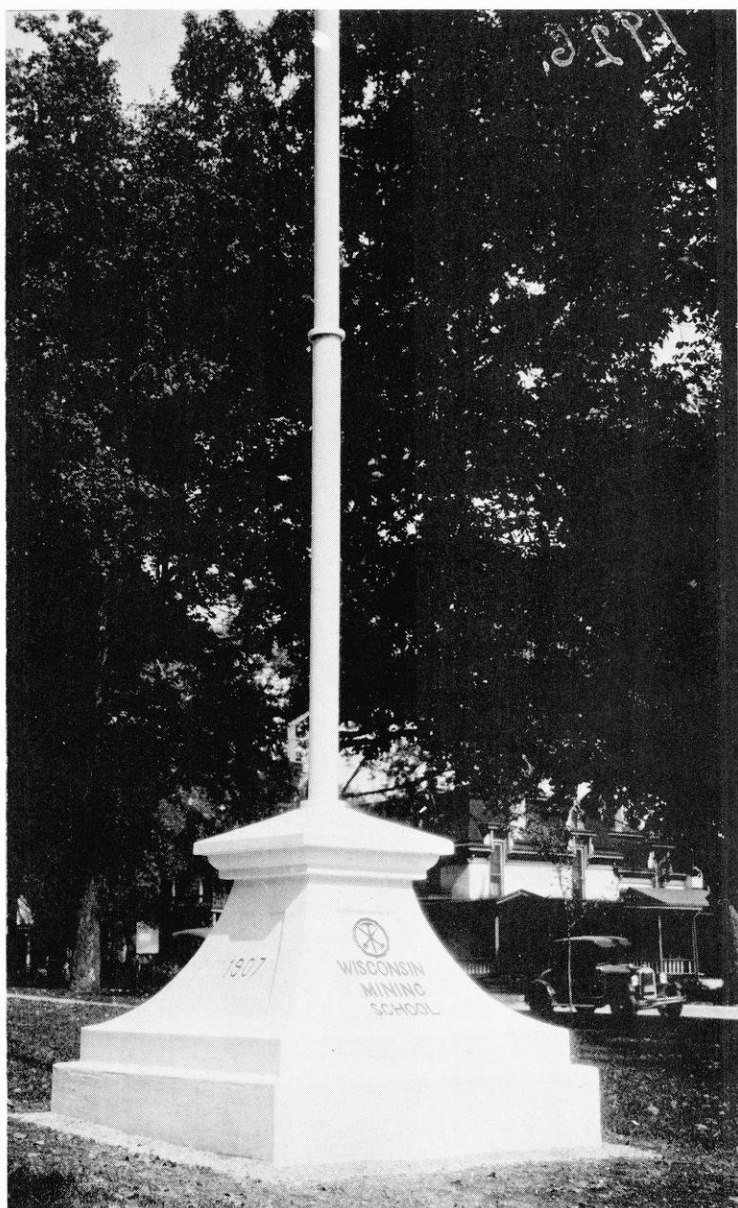
**S.A.T.C. Mess, 1918**



**The 1919 Miner-Normal Football Game which ended 0-0**



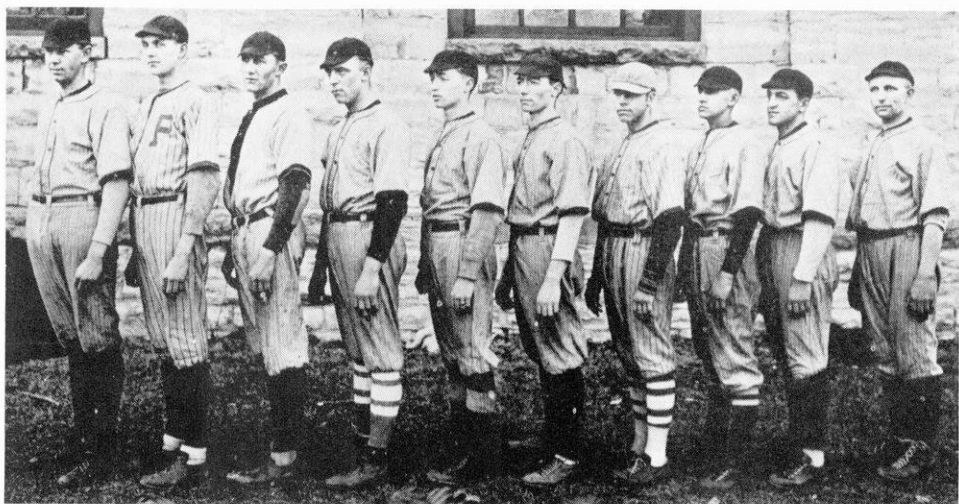
**The Laughton Memorial and Sun Dial**



**The flagpole**



Jiggs

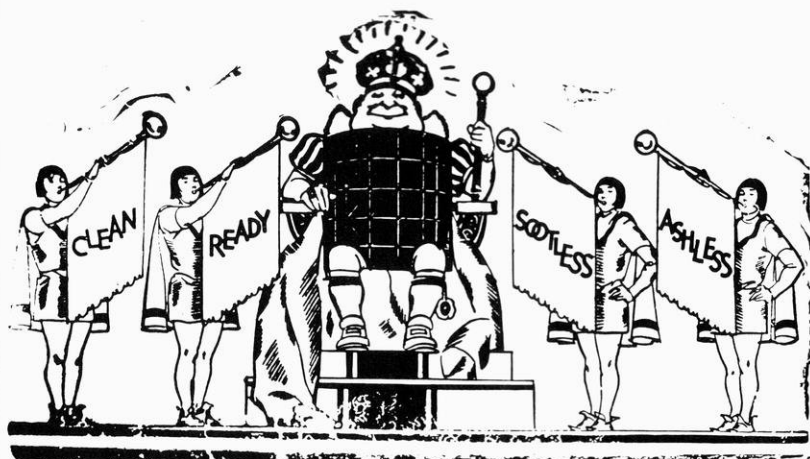


**The 1923 Miners' Baseball Team. E. R. (Dick) Barden is second from the left.**



***La Grande Camouflage Dance Hall Girls, 1918; Courtesy of Florence Campbell Alleman who is in the middle of the front row.***

## Gas The Monarch of Fuels



*Miners' Explosion, May 14-15-16, 1925*

Leave your name at the Model Kitchen to win the prize Saturday Night

### MENU

#### BUSINESS MENS' LUNCH

Roast Beef or Roast Pork Sandwich	
Mashed Potatoes	Brown Gravy
Pickles	Vegetables
Coffee	

**45 CENTS**

Waffles with Maple Syrup .....	.20
Hamburger sandwich .....	.15
Wiener sandwich .....	.10
Egg sandwich .....	.10
Cheese sandwich .....	.10
Cold Meat sandwich .....	.15
Coffee .....	.05
Milk .....	.05
Pie .....	.10
Ice Cream .....	.15
Pie ala mode .....	.20

**Fold Me Up And Take Me Home.**

**An Explosion Menu, 1925**



**The Little Hell Bar, The Explosion, c. 1925**

# Miners' Explosion

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## May 6-7-8

---

### Athletic Benefit

---

#### Big Bowery Dance

With Prize Dance Each Evening

---

#### Athletic Show

Featuring the Best Athletes in This Section

---

#### Famous Restaurant

And Lunch Room. The Best Place in town to eat

---

#### Wonderful Burlesque

Read the other side of this bill

---

#### "Little Hell" Bar

Where Liquid Refreshments Are Served

---

Tea Room, Palm Garden, Shooting Gallery, Keno Game,  
Doll Rack, Crazy House, Bowery Dance, Balloon Game,  
Country Store, Lovers Retreat and many other  
interesting forms of amusement

---

#### The Place to Have a Real Good Time

---

Admission is Just One Good Dime

---

If the Miners Don't Show You a Good Time, They  
Will Cheerfully Return Your Money

---

Everything You Ever Saw at a Carnival  
and a Whole Lot More

---

Read the other side

**May 6 - 7 and 8**

**George R. Dobson**

Presents

**MISSSES BERRY, THOMPSON and KOBDISH**

**The Talented Trio**

with an all star cast of America's Greatest Comedians in the  
new and original farce comedy

**“Foiled By Heck”**

AT

**Miners' Explosion**

**Cast of Characters**

Reuben Hanks, a nearly self made man .....	“SUNSHINE” LECLAIR
Miss Matilda, Who did the rest .....	GEORGIANA KOBDISH
Irene Hanks, a perfectly lovely daughter .....	EVELYN THOMPSON
Clarence Clodd, hero in homespun .....	CHAS VON BAUMBACH
Olivia DeLaVere, the plaything of fate, poor girl .....	HELEN BERRY
Sylvester Brewster, the viper's heart .....	RAYMOND KRAMER

**Tilley and His Fun Makers**  
MUSIC AND SONG

**Tommy, Georgie and Berry**  
in  
LATEST SONGS AND DANCES

**Sunshine & Johnson**  
CHARLESTON ARTISTS

**Season's Comedy Scream**

**Admission 15 and 25 cents**

Director .....	Geo. R. Dobson
Musical Director .....	Miss Angie Marshall
Stage Manager .....	Jack Rindlaub
Electrician .....	Art Higgins

Read the other side



**The Club Room**



**The M**



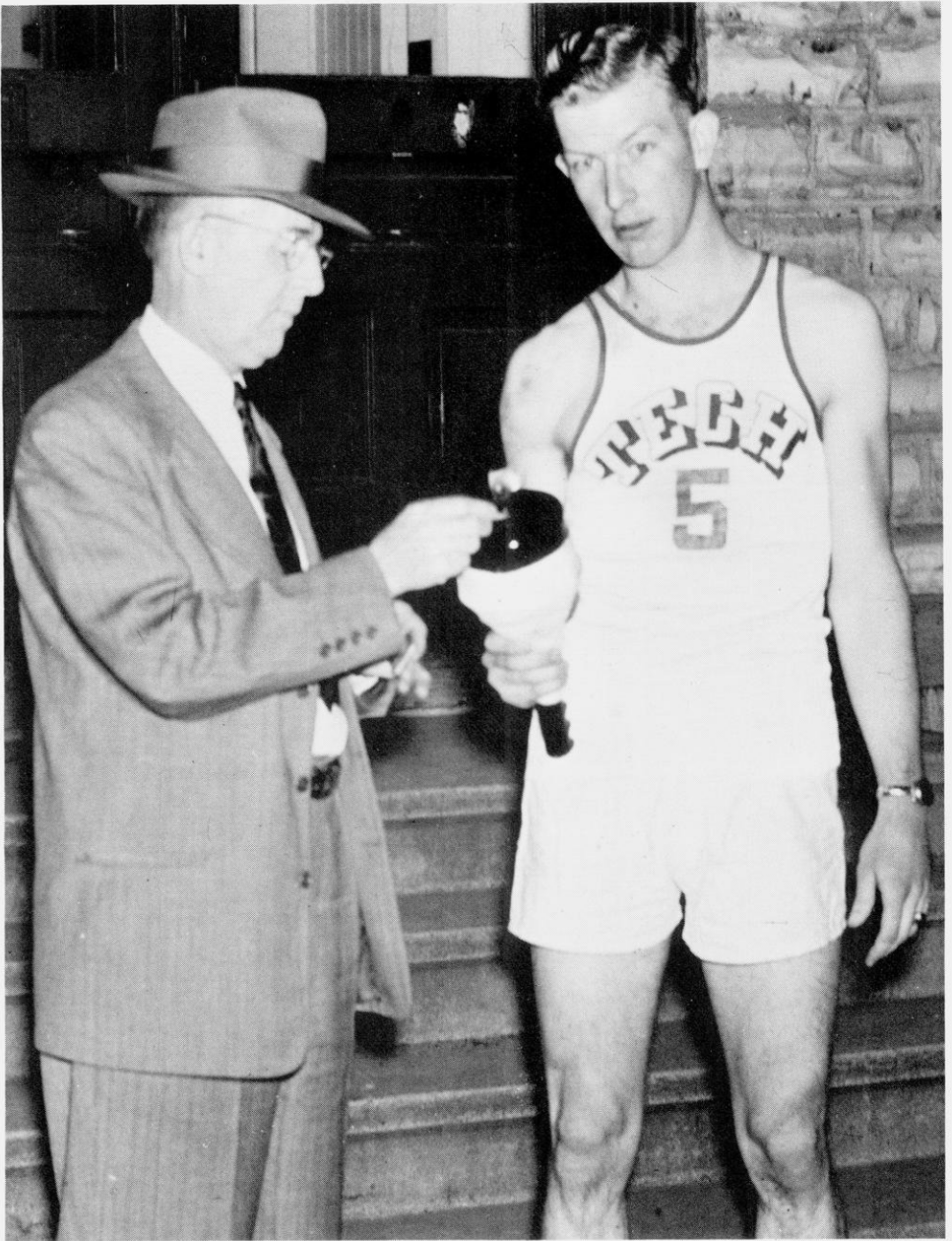
Preparing the M

6



Whitewashing the M (?)

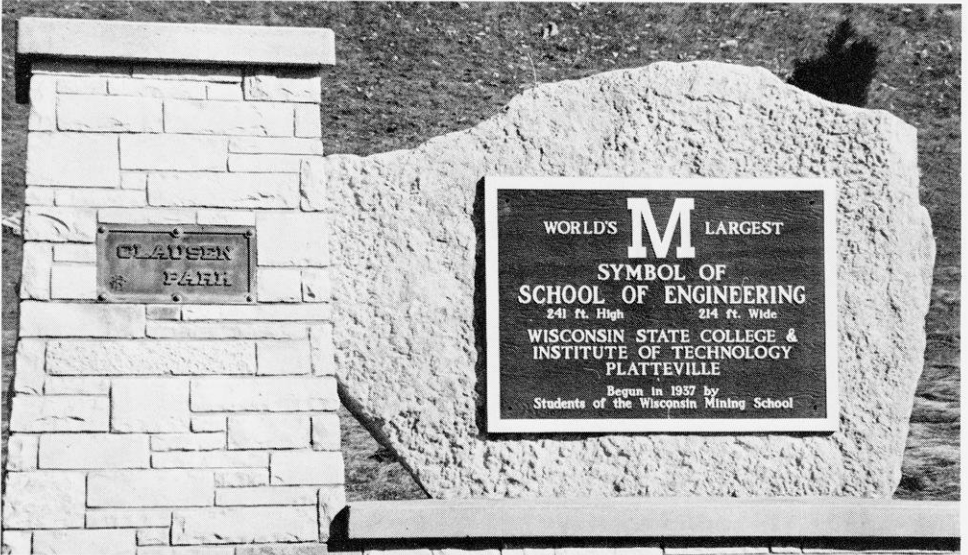
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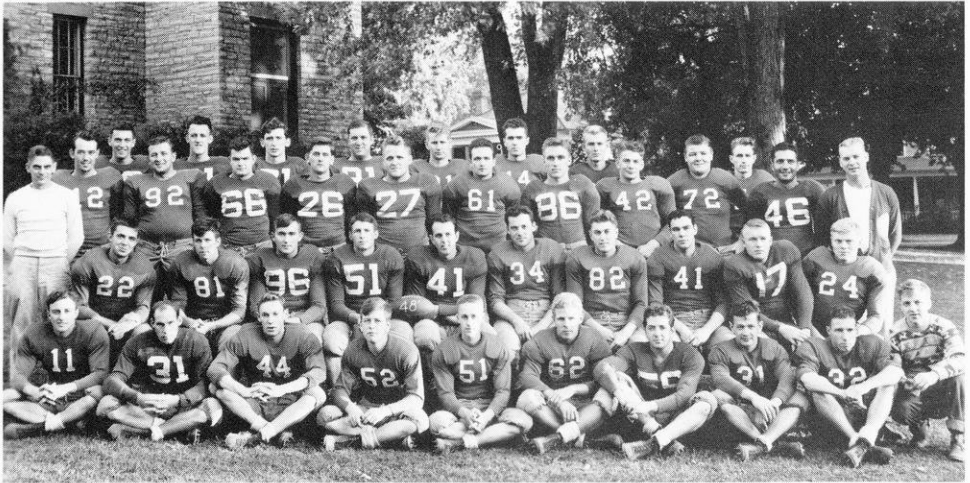
President Melcher lighting the M torch to start the relay to the M, c. 1950



**The lighted M**



**Clausen Park and the M marker**



The W.I.T. 1948 football team; Coach Dale Dixon is second row, far left.



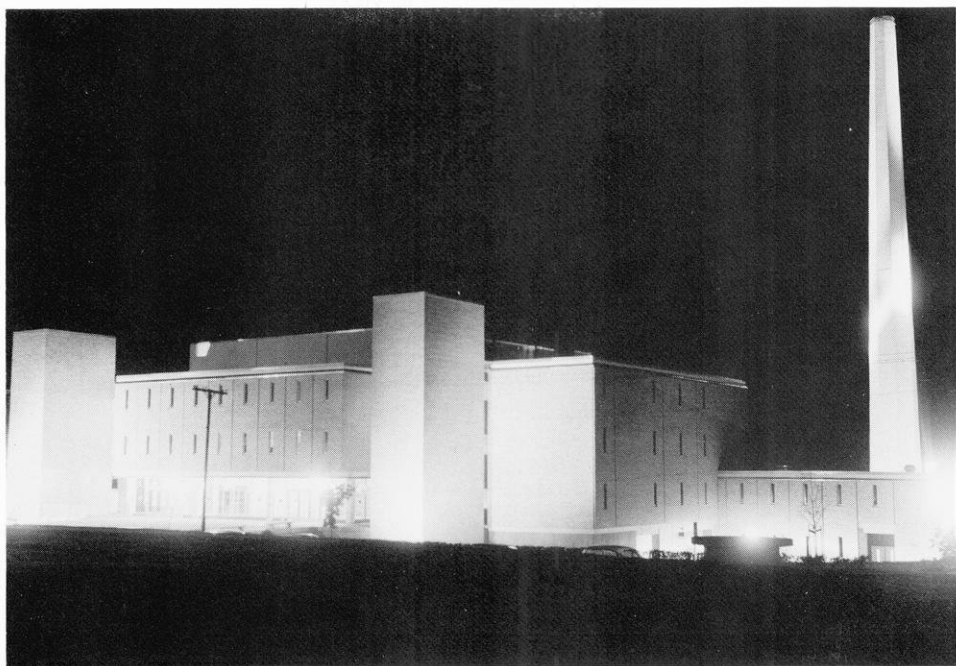
The W.I.T. Pep Band, c. 1954



**The W.I.T. Men's Chorus, W. R. Loy conducting, c. 1954**



**Mining School Ephemera, 1958**



**Ottensman Centennial Hall of Engineering-Science**





# *The Wisconsin Institute of Technology, 1939-1959*

Despite the manifold problems from its beginning, the Mining School persevered. It did not necessarily prosper, but it continued to produce engineers who entered into an increasingly large number of occupations. A 1953 report prepared by the faculty reveals the variety of these occupations, and though not complete, it is included here:<sup>1</sup>

8 research engineers	67 mining engineers
8 junior petroleum engineers	10 senior petroleum engineers
6 district petroleum engineers	5 division petroleum engineers
4 area petroleum engineers	20 highway engineers
33 Wisconsin highway engineers	1 appraisal engineer
11 engineer I	3 general mining superintendents
7 engineer II	9 mine captains
11 engineer III	5 consultants
4 engineer IV	3 in private mining
1 highway commissioner	2 ready-mix concrete plant owners
7 production engineers	3 G.S. 7 (U.S.G.S.)
2 G.S. 9 (U.S.G.S.)	18 chief engineers
6 mill superintendents	3 chief metallurgists
1 salesman	3 ceramic engineers
13 sales engineers	3 private oil producers
1 private appraiser	6 manufacturing company owners
1 sand and gravel company owner	2 construction company owners
1 engineering company owner	9 mine managers

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6 safety engineers	2 chief geologists
1 chemical engineer	11 associate professors
7 civil engineers	3 manufacturing supervisors
4 structural engineers	5 sales managers
1 subsurface geologist	19 construction engineers
3 assistant chief engineers	3 millmen
2 maintenance engineers	7 quarry superintendents
6 general superintendents	3 assistant city engineers
1 assistant research director	1 editor of mining magazine
9 metallurgists	1 chief geophysicist
1 field editor	1 chemist
1 associate editor	1 mine foreman
1 city engineer	3 geologists
1 electrical engineer	1 office manager
1 draftsman	2 works managers
1 field engineer	4 B.M. 9 (U.S. Bureau of Mines)
1 district manager	1 insurance manager
1 research director	1 purchasing agent
1 abstract office owner	2 sanitary engineers
3 plant superintendents	1 design engineer
1 state mine inspector	

This fragmentary document also reveals that through the decades there were ever-broadening engineering demands. The regents and faculty of the school were prepared to meet these demands by extensive curricula revisions from time to time. While financing was always a problem, in one way or another changes and improvements were constantly made to upgrade the quality of education, and thus the quality of the graduates.

There was persistent concern over the cost to students. From the beginning, studies were made periodically to ascertain what those costs were. It will be recalled that it was considered a "poor boys' " school. Life was difficult and it was hard to make ends meet. Some old grads remember surviving by shooting Normal School campus squirrels and swiping chickens and apples from

the college farm. Despite a heavy class schedule, initially all students worked. When the area mines were operating, they worked there. Many others did odd jobs to stay in school.

Samuel F. Bowlby, '26, sold his blood to get through school. According to one account, he constantly smelled of onions because he believed that eating onions replenished his blood. The odor of onions discouraged more than one opponent on the football field.<sup>2</sup> After leaving school he climbed the ladder of success, becoming a vice president of Shell Oil Company and president of the Western Oil and Gas Association. Before his death in 1976, he was a leading citizen of Los Angeles, taking an extremely active part in civic affairs. He was one of the first four recipients of the Distinguished Alumnus Award from The University of Wisconsin-Platteville.<sup>3</sup>

John Orth, another example, barbered to help support himself. Later he took a degree from the Missouri School of Mines and from 1946-1975 was a faculty member at his alma mater. In a student cost survey conducted in January 1939, he recorded his student living expenses for that year. His room and board and recreational and miscellaneous expenses amounted to \$360 and his tuition, fees, books, and school supplies amounted to \$55. This same survey, based upon reports of one hundred students picked at random, revealed that the average student age was 20.47 years; forty-eight percent did light house-keeping, and the average cost to student per day was \$1.19 or about \$435 a year. According to the survey, this figure also was valid for the preceding decade.<sup>4</sup> Another study conducted in 1945 shows that it was also valid in the early '40s, but the costs began to rise sharply by the mid-40s.<sup>5</sup>

Not only was the school administration concerned about costs to the student, it was concerned about student costs to the State of Wisconsin. Figures for the latter are not available for the school's earlier years, but figures are available beginning in 1919-1920. Excluding the first year after World War I, and

1941-1942, the first year of American participation in World War II, the cost per student averaged \$256.<sup>6</sup> Since then, of course, the cost has risen considerably. The comment is made repeatedly that, "This was extremely low for the type and quality of education offered."<sup>7</sup> From 1909 on, the subject of closing the school seemed to come up every few years. Two main arguments against closure were the low cost to students and the low cost to the state. Both arguments were obviously successful and accepted by state officials.

The last major contribution made by Buck Morrow was in 1939 when he began a campaign to change the name of the school once again. The nature of the school had changed considerably since 1915 when it was named the Wisconsin Mining School. The increasing number of civil engineering majors, particularly highway engineers, indicated the name of the school was misleading. Morrow suggested that the name Wisconsin Institute of Technology would be appropriate. He also asked that the curriculum be strengthened and expanded to a four-year course. In a letter to State Senator E. J. Roethe, he wrote,

You know that many of our graduates have been going to Rolla (Missouri School of Mines) after graduating here, just to receive their degrees. In this connection I wish to have it noted that Rolla has just increased its non-resident tuition from \$80 to \$200 per year. But the most outstanding significant fact is that Rolla requires 154 credit hours for graduation from their *four-year course* while the Mining School requires *176 credit hours* for graduation from our *three-year course*.<sup>8</sup>

In the Administrative Subject File, 1907-1959, there is an interesting document. Unsigned and undated, although probably prepared by Morrow in 1939, it is given here in its entirety.

1. The bill is a rewrite of the sections now in the statutes relating to the Mining School.
2. The reason for changing the name is that many of

our graduates are working at other occupations than mining, as shown in our Alumni Directory.

3. A letter from the Personnel Director of the Wisconsin Highway Commission reveals that in the last two years 94 of our young men were employed at highway work . . . . 39 of them were listed as permanent employees.

As a consequence of Morrow's action, in 1939 the legislature changed the name of the school to Wisconsin Institute of Technology.<sup>9</sup> The plea to add a fourth year to the course of study was not heeded at this time. The reasons are not clear, although a letter in the Administrative Subject File from Morrow to State Assemblyman W. H. Goldthorpe implies that the College of Engineering at the University of Wisconsin opposed the proposal. The fourth year would have to wait another decade.

Two years after this partial success, Morrow resigned as director of the Wisconsin Institute of Technology and Milton A. Melcher became the executive of the school with the title of president. Before his death in 1961, the two rival schools had merged and his title was dean of engineering.

Graduated from the University of Minnesota in 1923, Melcher became head of the geology department in the Wisconsin Mining School that same year. He always said that he learned more geology here than he did throughout his university days. As professor of geology, he organized the geology museum, edited school publications, and served as faculty adviser to many school organizations. The students of Platteville's two institutions may have had their differences, but in 1925 when Melcher married Helen Hess, it was proof that there was some degree of compatibility between the two for she was kindergarten teacher at "the other school."<sup>10</sup>

Under Melcher's presidency, W.I.T.'s prestige increased and its curriculum improved. Students usually carried up to thirty credit hours a term. In 1942, this heavy schedule was reduced

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to a maximum of twenty credit hours per semester, thereby placing the school on the same level as large universities. Needless to say, this reduction was heartily approved by the students.<sup>11</sup> Many sequence courses were added to the curriculum. Courses such as electrical engineering and organic chemistry were added to give W.I.T. a broader curriculum, and to train technicians in the shortest possible time for the many vacancies left in industry by the war.<sup>12</sup> According to the April 1943 *Geode*, a new non-credit freshman surveying course was introduced that year specifically for a woman student, Gail Peterson, N.S. '46, to enable her to receive a commission in the navy. To meet war-time demands, a summer session was offered that year for the first time in the school's history.<sup>13</sup> Apparently it was not successful because it was not offered again for a number of years. In 1945, two- and three-year courses in highway engineering were offered.

Another furtive attempt was made to close the school in what the December 1940 *Geode* referred to as a "whispering campaign." Apparently so much credence was given to this attempt, that Governor J. P. Heil and local assemblyman W. H. Goldthorpe thought it necessary to issue statements on the matter. Both statements, reprinted from that *Geode*, follow:

It has come to the attention of the Governor that a whispering campaign implies that Gov. Julius P. Heil is going to close the Wisconsin Mining School, now known as the Wisconsin Institute of Technology, located at Platteville.

Governor Heil emphatically denies this statement and stated this morning that he has no intention of depriving the youth of Wisconsin the opportunities afforded to them at the Wisconsin Institute of Technology. Governor Heil stated . . . that he recognizes that this school is able to, and does serve many boys and girls

whose families are not endowed with wealth, and it should and will be retained during his administration.

\* \* \*

A whispering campaign is reported to be current at Platteville to the effect that the undersigned has made a statement that the Mining School, now known as the Wisconsin Institute of Technology is to be closed.

This report is absolutely false. It is propaganda pure and simple—especially simple—and it illustrates the depths to which the opposition will grovel in the heat of a political campaign in their efforts to weaken my candidacy for reelection as your assemblyman.

The Mining School is here to stay. I will fight against its discontinuance to the last ditch. Governor Heil in a statement made today says that the Mining School will continue to function as long as he occupies the Governor's chair.

I introduced and pushed to passage and signature the law which provides for broadening the scope of the school, giving advanced courses and granting degrees, so that it would not be necessary for the boys to go elsewhere at additional expense to get their degrees. Honestly submitted,

W. H. GOLDTHORPE

Your Assemblyman

What happened in 1940 is minor, however, compared to what happened in 1945. Because of the war, enrollment dropped drastically—from thirty to eleven to seven students by 1944. As a consequence, the cost of maintaining the school skyrocketed. According to a 1945 survey, there were eighty-nine students in 1942-1943 at a cost to the state of \$403.22; one year later there were thirty students, each costing the state \$994. Clearly, the argument that the school was a low-cost operation was no longer valid.

In 1945, the state legislature's Joint Finance Committee took a long, hard look at the situation and cut the school's appropriation entirely from the proposed budget. Some members of the committee were apparently unaware of the nature of the school. Others were ignorant of the fact that the bulk of the students were fighting on far-flung battle fronts and intended to return after the war. It was also suggested once again that W.I.T. and Platteville State Teachers College be combined. In view of their different functions and services, neither institution favored the idea. According to *The Platteville Journal* of 22 March 1945, southwestern Wisconsin was "terribly wrought up" over the news.

In fact, constitutionally and legally the school was closed for a few days. Once again its supporters mustered their forces and stormed the state capitol to save the school. Among those who argued successfully to fund the school were Melcher, Mining School Regent Charles Stoops, Assemblyman Goldthorpe, State Teachers College Regent Elton S. Karrmann, Senator (later Regent) Foster Porter, and a contingent from the Teachers College. As a result, an appropriation of \$62,000 was granted with the further understanding that, should enrollment increase, additional funding would be forthcoming.<sup>14</sup> The war ended months later, enrollment doubled and quadrupled the next several years, due in part to the G.I. Bill, and the school was saved.

Undoubtedly Melcher's crowning achievement as president of W.I.T. came in 1952 when the state legislature approved a four-year program which enabled the school to award bachelor of science degrees in both mining and civil engineering.<sup>15</sup> One of the school's biggest stumbling blocks had finally been removed.

Many old grads fondly remember Melcher both as teacher and administrator. The irrepressible Charles Pettyjohn has written the following about him:

I nearly flunked petrology. Professor Melcher was a no-nonsense, excellent teacher. At the beginning of the course he indicated that petrology was not an exact science but that a rock "looked like" a granite, a schist, etc. In the final exam I was the only student who wrote, "IT LOOKS LIKE" at the top of the paper after examining the specimens in the test. I failed the test but Melcher called me up front and marked it for passing because of that phrase. I liked Melcher!

In crystallography I had about a 67 average that required 70 to pass. I ruined my eyes studying for the final exam. When class started he told about four of us not to take the exam. To me that meant that even with 100 I could not get up to passing. When I found he was marking on a curve and that I had a fairly decent grade, I was a happy student. Curve marking was unheard of to us and probably most of the teaching profession. I liked Melcher!

None of us ever quite forgave him for putting a quartz specimen with a 1/4-inch cube of yellow metal, obviously pyrite, into one of his mineralogy exams. Of course the pyrite was really gold and everyone missed it. None of us would believe that gold came in pieces that large, at least in a school.<sup>16</sup>

Two generations later, a similar incident occurred. John R. Kortas recalls that W. A. Broughton, head of geology 1948-1979 and registrar 1949-1959, tested his students in identifying halite, a mineral which has a salty flavor. But the good professor actually used rock salt for the test. Never believing that it could be real salt, all the students missed it.<sup>17</sup>

Irwin Chaitin recalls an anecdote about Melcher. In Chaitin's words:

It was common practice for students to invite stray dogs into the school. At one of Milt Melcher's economic geology classes, a stray walked into the room and sat down in front of the desk. During the lecture the dog proceeded to perform his bodily function on the floor, and upon viewing this, Melcher stated, "The dog just gave me his opinion of the quality of the lecture and I hope the rest of you don't feel the same."<sup>18</sup>

Darlene Mellor remembers Melcher, her boss, as a kind and thoughtful man who always listened to radio operas on Saturday afternoons.<sup>19</sup>

On the "Day of Infamy," 7 December 1941, Melcher somehow got the W.I.T. students together in the gymnasium and told them not to panic and leave school to join the armed forces, but rather to wait until they were conscripted. His pleas were heeded by some but not by the majority.<sup>20</sup> While impossible to prove today, it is claimed that W.I.T. had the highest percentage of men and women serve in World War II of any institution of its size in the United States. Represented in all branches of the armed forces, 375 alumni served their country. There were ninety-nine army officers, twenty-nine naval officers, and seven air force officers. This must also be a remarkably high percentage—perhaps a record of sorts. Fourteen made the supreme sacrifice.<sup>21</sup>

Four years of the war altered the W.I.T. enrollment not only numerically but also by sexes. By 1942 two girls were enrolled in school, Harriette Alleman and Catherine Fulkerth. They served as *Geode* editors in 1944 and recall that it was not exactly an exciting time to be a student. Virtually all athletic and social events were canceled, although after considerable effort a hay-rack ride allegedly was enjoyed mid-winter in 1944.

Harriette Alleman earned her W.I.T. diploma in 1944, the only student to do so that year. In 1945 she became the second woman to earn a mining engineering degree from the University of Wisconsin. (The first to do so was author Emily Hahn.)

Daughter of Robert Alleman, Harriette married James Burris, '46, son of John W. Burris, '11; their son, John, graduated in 1977. John W. Burris's son, Donald, received his degree in 1938. Thus, three generations of the Alleman-Burris families have graduated from the school to date.<sup>22</sup>

One event which took place near the beginning of the war is remembered by dozens of W.I.T. and Teachers College students. In fact, it almost rivals anecdotes concerning the Sacred Bell and the M. In 1920, Congressman James G. Monahan made arrangements for a captured German cannon, made in 1911 and used in World War I, to be sent from the federal arsenal in Rock Island, Illinois, to the city of Platteville. A 4.1-inch field piece, the cannon was accepted by the city and mounted on a base at the southeast corner of City Park. With the solicitous aid of a handful of Miners, the cannon found its way to the Mining School campus early one morning. There it saw service in another war, this a bloodless one between the two schools. For a considerable time, the Miners' right to the cannon was repeatedly contested as was, of course, the right of possession to the Sacred Bell. Like the bell, the cannon was periodically convoyed on nocturnal trips to various points in the immediate vicinity, escorted at different times by students of each school.<sup>23</sup>

At Homecoming in 1937, the college bonfire was ready to go when it suddenly started itself, even though students were guarding it. It seems a group of Miners had installed electrical apparatus under the flammable material. To retaliate, the Teachers removed the cannon from its station and conveyed it to a watery grave in the creek on West Main Street. Learning the fate of their historic relic, the Miners retrieved it early the next morning. At a college assembly the following day, President Asa M. Royce, who lived on Main Street, reported, "I heard the artillery moving west around 10:30 and I heard it moving back east about 1:00 last night."<sup>24</sup> But the story of the cannon does not end here. On Halloween eve 1942, a dynamite charge was placed

in the muzzle of the cannon. Dozens of diverse individuals—both Miners and Teachers—claim responsibility. As a consequence, nearby windows in the Mining School neighborhood were shattered. The remaining pieces of the cannon were donated to the next scrap iron drive.<sup>25</sup> Born of war in Germany, it very likely died of war in Germany.

Years later, in 1958, the cannon was replaced by a heavy air piston drill “. . . of a type now seldom seen except in some of our large western mines.”<sup>26</sup> The drill remains in its place today, a memento of the Wisconsin Mining School and the Institute of Technology.

Another fracas between the two schools came in 1951 when the goal posts of the college football field were dynamited to smithereens. One account reveals that a certain Mining School professor posed a problem to a class one day: If one wanted to destroy an H-shaped structure, where would one place the dynamite? The students learned fast. The Teachers retaliated by storming the Mining School and pouring wax and plaster into key holes. At this juncture, President Melcher and Chester O. Newlun, president of the college, counseled a truce. A committee of five students from each school was formed to work out a program for a more harmonious relationship. Unbeknownst to either president, the Teachers College student who led the attack on the Mining School was named chairman of the committee. Peace was restored and years later that student chairman became a prominent member of The University of Wisconsin-Platteville faculty.

Certainly one of the best-known persons identified with the Wisconsin Institute of Technology is Dale C. Dixon who joined the faculty in 1939. Locally born and reared, Dixon graduated from the Mining School in 1936 and from the University of Pittsburgh in 1938. (Harold C. George, Mining School director 1908-1910, had become dean of the School of Petroleum Engineering and made it a point to encourage Mining School gradu-

ates to attend Pittsburgh. Donald A. Miller, who took his degree from Pitt in 1934, was one of those. Like Dixon, Miller is a local boy and a well-remembered athlete. According to a 1958 *Geode*, Miller was instrumental in planning the casing of the world's deepest oil well in Pecos County, Texas. He is currently president and general manager of Don A. Miller Consultants, Inc. in Oklahoma City.)

When Dixon returned to his alma mater he assisted Dobbie in teaching chemistry and coaching athletics. From 1942 to 1945 he was a turret officer on the battleship *U.S.S. Tennessee*. He returned to his previous position at war's end and acquired the nickname Do Over Dixon because he had a habit of marking unsatisfactory assignments, "Do Over. D.C." He also taught history in the basketball locker room. It was there that the Miners learned how the U.S. really won the war.<sup>27</sup> In later years he was head of the Minerals Engineering Department, director of engineering placement, and twice served as acting dean of the College of Engineering.

During his years of service to his school, Dixon coached football, basketball, baseball, golf, and track. After Dobbie's retirement in 1948, he became unofficial athletic director.

From time to time other faculty assisted in coaching. Keith Faherty, '54, a professor of civil engineering and chairman of the department, 1966-1979, coached basketball from 1957 until the 1959 merger. C. W. "Larry" Ottensman, who joined the faculty in 1939, coached golf. Ottensman later became chairman of the Civil Engineering Department and was dean of the School of Engineering from 1963-1966. Golf seems to have been especially popular with both students and faculty. The first team was organized in 1947 and golf continued until the 1959 merger of the two Platteville schools. While there were several conference matches, apparently most matches were with the Teachers; the Miners triumphed with six victories and one defeat. Sports such as bowling and tennis, mainly intramural, were played briefly

in the late 1930s and the early 1940s. Track was also offered briefly before and after the war. Conference meets were held and there was competition with the Teachers College and the Platteville High School. There were no sports during the war years because there were so few male students and transportation was not available. Carl Krog recalls being recruited by Dobbie to play football in 1941, but he was too skinny and became football manager. His major assignment was to supply hot coffee for the players at halftime. Though the coffee was liberally laced with brandy, Dobbie never seemed to notice because he was always chomping on a cigar, which may have affected his sense of smell. After wartime service, Krog returned to school and became one of four members of the 1946 track team, excelling in the half mile and the 440.<sup>28</sup>

Throughout these years there were many shifts and reorganizations of the athletic conferences in which the school participated. The Tri-State Athletic Conference, which began in 1932, came to an end in 1940 and was renamed the Badger State Conference, lasting until 1948. That same year another change occurred when the Badger-Illini Conference was established. Three Illinois colleges, Aurora, Concordia, and Lewis joined with Milton, Mission House, UW Extension-Milwaukee, Northwestern, and W.I.T. to make a total of eight members. The following year Lewis, located at Lakeport, Illinois, withdrew from the conference. Concordia withdrew in 1956 and was replaced by Lakeland College. In 1957 a fourth organization was formed: the Wisconsin-Minnesota Conference. Six Wisconsin schools joined with Northwestern (Minneapolis) and Bethel (St. Paul) to make up this final conference in which W.I.T. participated until the 1959 merger.<sup>29</sup>

The Miners were often victorious in the two major sports. In football they took first place or tied in 1939, 1940, 1942, and 1957.<sup>30</sup> In basketball, the Miners took first place or tied in 1939 and 1940.<sup>31</sup> Several players were given special recognition for

their athletic prowess. For example, Bruce Myers, a standout linebacker, was awarded honorable mention on the 1957 Little All-American team.<sup>32</sup> In 1955, Ralph Faherty, '59, broke the school basketball scoring record with thirty-three points in a game with St. Procopius College, Lisle, Illinois.<sup>33</sup>

Throughout the history of the Mining School, athletics was the most popular extracurricular activity. Other activities also attracted the attention of students and faculty. As early as 1915, a six-member orchestra, consisting of two violins, cello, clarinet, flute, and drums, was formed; it apparently continued until war reduced enrollment.<sup>34</sup>

After the war, pep bands began making sporadic appearances, locally and in surrounding communities, to promote the Explosions. The bands also performed at football and basketball games and at local Dairy Day, Halloween, and Christmas parades. The players generally numbered from ten to several dozen, and on occasion included local high school students and, perhaps surprisingly, players from "the other school." Their uniform was a bright red jacket and corduroy trousers; a later fad dictated denim trousers.<sup>35</sup> In time, the pep bands acquired a motto of their own, "You're Darned Tootin'."<sup>36</sup> With a heavy academic and work schedule, practice time was limited, which is probably why one pep band member reported, "In regard to our repertoire, we never had to worry about running out of music because the tunes we played never sounded the same twice."

The bands were apparently always conducted by students. R. J. "Jack" Jones, '48, was inevitably called Spike Jones, after the well-known and popular band leader of the 1940s. A local boy, Jones enrolled at W.I.T. in 1941, entered the service the following year, and returned at war's end to take a three-year degree. He took his B.S. degree from Rolla and in 1950 an M.S. degree from the same school. In private industry for a number of years, Jones later earned a Ph.D. in mining engineering at

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the University of Wisconsin and then returned to his alma mater in 1967; he died three years later.<sup>37</sup> His wife, Ruth, recalls a basketball game with Wartburg College (Waverly, Iowa) when the Wartburg band director, very impressed with the pep band's polka-playing, approached Jack to ask, "What's the size of your regular band?" There was none, of course.<sup>38</sup>

Vocal music came into prominence in the late 1940s and the early 1950s under the direction of W. R. Loy, who replaced Dobbie as chemistry teacher in 1949. In the winter of 1951-1952, Loy organized a Tech chorus. The membership varied from one to three dozen, and like band members wore red and performed at social functions and commencement exercises, gave Christmas concerts, and toured area high schools in order to garner publicity for the school.<sup>39</sup> In the 1950s Loy also organized a male quartet which was known as the Four W.I.T.S and performed locally and in nearby towns.

Radio and camera buffs both founded clubs in the 1940s. The radio club was organized by students of the freshmen class in 1940, their goal being to build receiving sets. Apparently the club had a sizable membership and was quite popular; the school administration contributed a basement room for a workshop and meeting room.<sup>40</sup> The radio club ended with Pearl Harbor.

The camera club, formed in 1949 with W. R. Loy as faculty adviser, was also given a basement room to serve as workshop and meeting place. It purchased a camera and other equipment which was shared with *The Geode*. By the mid-1950s, student interest waned and the camera club passed out of existence.<sup>41</sup>

For greater administrative efficiency, on 1 July 1955, the W.I.T. Board of Regents ceased to exist under the provisions of Chapter 37, Laws of 1955. The law increased the membership of the Board of Regents of State Colleges to thirteen. Harold Geyer, formerly secretary of the W.I.T. board, was named by Governor Walter J. Kohler with the advice and consent of the senate as one of the additional regents.<sup>42</sup>

By 1958, the Mining School faculty, alumni, and students felt justified in celebrating their golden anniversary. Despite manifold vicissitudes from its origin in 1908, the school had overcome opposition, fiscal and otherwise, and was expanding and prospering. Under the general chairmanship of Profie Pett, elaborate plans were undertaken for a successful celebration 9-10 May 1958. What many faculty and loyal alumni and perhaps some students had anticipated for years was about to take place. Those who knew of the impending merger of Platteville's two colleges were aware that the golden anniversary would be the last independent celebration in the history of the Mining School.

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1. Karrmann Library Archives, The University of Wisconsin-Platteville.
  2. Letter from Richard J. Dobson, 8 January 1983.
  3. *The Geode*, 31 May 1960.
  4. Karrmann Library Archives, The University of Wisconsin-Platteville.
  5. *Ibid.*
  6. *Ibid.*
  7. *Ibid.*
  8. *Ibid.*; letter from H. B. Morrow to E. J. Roethe, 6 September 1939.
  9. Wisconsin Statutes, Section 41.27, Code 20.35, 1939.
  10. *The Geode*, 30 October 1961.
  11. *The Geode*, 30 April 1942.
  12. *The Geode*, 26 February 1943; 30 October 1961.
  13. *The Geode*, 30 October 1943.
  14. *The Platteville Journal*, 22 March 1945; Harold Geyer interview, 13 December 1982.
  15. *The State of Wisconsin Blue Book*, 1952, p. 341.
  16. Letter from Charles Pettyjohn, 13 October 1982.
  17. John R. Kortas interview, 17 January 1983.
  18. Letter from Irwin Chaitin, 20 October 1982.
  19. Letter from Darlene Mellor, 12 January 1983.
  20. Letter from Irwin Chaitin, 20 October 1982.
  21. *The Geode*, 11 December 1945; 14 April 1958.
  22. Robert Alleman and Harriette Burris interviews, 12 October 1982.
  23. *The Geode*, 30 October 1942.
  24. *The Exponent*, 19 November 1963.
  25. *The Geode*, 30 October 1942.
  26. *The Geode*, 19 May 1958.
  27. *The Geode*, December 1980.
  28. Carl Krog interview, 15 October 1982.
  29. *The Geode*, 21 April 1941; 12 April 1948; 19 December 1949; 17 December 1956; 8 April 1957.
  30. *The Geode*, 16 December 1939; 14 December 1942; 17 December 1957.
  31. *The Geode*, 21 April 1939; 24 February 1940.

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32. *The Geode*, 27 February 1956.
33. *The Geode*, 28 February 1955.
34. *The Miner*, 1915.
35. *The Geode*, 16 December 1940.
36. *The Geode*, 15 December 1958.
37. *The Geode*, October 1967; May 1970.
38. Ruth Jones interview, 23 October 1982.
39. *The Geode*, 26 May 1952; 14 December 1953; 22 February 1954; 28 February 1955; 25 April 1955; 17 December 1956; 13 May 1957.
40. *The Geode*, 16 April 1940; 22 October 1940.
41. *The Geode*, 24 October 1949; 27 February 1950; 22 December 1950; 28 February 1955.
42. *The State of Wisconsin Blue Book*, 1956, p. 471.

## *The Later Years, 1959-1983*

Perhaps the single most important event in the history of the Mining School was the merger of Platteville's two post-secondary schools in 1959. Although the possibility of merger had been discussed off and on since 1909, at no time was it talked about as much as during World War I, World War II, and the Korean War, when enrollments dwindled. Those who supported the proposal argued that the cost of maintaining the schools would be reduced, and that greater administrative efficiency would be achieved. They also claimed that students of both schools would benefit by an expanded curriculum. Those who opposed the proposal argued that the purposes and functions of the two schools were so radically different that any combination of schools was out of the question. There was also the generally unspoken fear that, if merger did occur, both schools would lose their historic and traditional identities. Alumni, faculty, and, to a lesser degree, students were sentimentally divided on the issue.

Nevertheless, by the mid-1950s, it was increasingly clear that merger was a strong likelihood. Not only were proponents of merger speaking out more openly, but state executive and administrative officials were actively campaigning for such a move. A bilateral exchange of courses and credits was initiated, with liberal arts elective courses being the most popular with Wisconsin Institute of Technology students.<sup>1</sup> With the opening of the Asa M. Royce Residence Hall in 1958, students of the two schools were brought closer together when forty-three Miners were among the original residents.<sup>2</sup>

Finally, on 18 September 1958, the Board of Regents of the Wisconsin State Colleges requested that a joint committee of administrators and faculty of the two schools be formed to work out details of a merger. The chairman of the committee was

Bjarne R. Ullsvik, newly-appointed president of the college; vice-chairman was Milton Melcher of the Wisconsin Institute of Technology, later the first dean of the Division of Technology. Three faculty members from each school (Roger Guiles, Glen Gundy, and Milton Longhorn from Wisconsin State College-Platteville and W. A. Broughton, C. W. Ottensman, and J. C. Spradling from the Wisconsin Institute of Technology) made up the committee. Assisting this group were nineteen other faculty members from the two schools. After many meetings, the work of the joint committee was completed by the spring of 1959.

Among the more important decisions and compromises the joint committee recommended to the Board of Regents, the governor, and the legislature were the following: The new name of the merged institution would be Wisconsin State College and Institute of Technology at Platteville and its students known as the Pioneers; the bell would remain the symbol of WSC-P and the M would continue to identify W.I.T., with the understanding that in the future, an insignia would be designed (as has been done) to combine the two symbols; all traditions such as lighting the M, the Miners' Ball, Junior Prom, etc., would be open to all students and events such as Homecoming would be combined; the historic colors of each school (light blue and white for the Teachers and red and white for the Miners) would be abandoned and new colors, orange (traditionally the academic color of engineering) and blue (the color of education) were adopted; it was agreed that textbooks could be either purchased or rented; business procedures, records, admissions, registration, student affairs, library facilities, and curriculum organization were to be coordinated, combined, and made uniform.<sup>3</sup> The sixteen-page report was forwarded to the Board of Regents and sent on to the legislature and the governor, who approved the merger effective 1 July 1959.

What had transpired was perhaps best expressed sentimentally but rationally by Melcher himself, who was reported as

touching his breast and saying, "In my heart, I'm not completely happy. But here (touching his head) I know that it's right."<sup>4</sup>

Alumni have attributed the success of the merger to many individuals on both the state and local levels, but Ullsvik and Melcher deserve the most credit. Ullsvik, president one year preceding the merger until his retirement as chancellor in 1975, has reported that, while some changes and compromises were necessary, the merger was not as difficult as many may have believed.<sup>5</sup>

Student reaction to the merger was highly favorable. In the 1959 fall issue of *The Geode*, an editorial records that, while merger brought about a loss of identity and perhaps some pride, it also brought about a number of extracurricular activities and scholastic accreditation. The last known student hijinks occurred on the eve of the Student Center dedication when someone cemented into the new building another cornerstone on which was inscribed an M and the year 1959. That cornerstone was replaced overnight in time for the dedication services the following day. Roger Guiles, P.S.T.C. '31, administrative dean at Wisconsin State College-Platteville and later president and chancellor of The University of Wisconsin-Oshkosh 1959-1974, presided and declared that the original cornerstone was the permanent one.<sup>6</sup> One old Mining School graduate has described the incident as the Miners' "last hurrah."

In 1976 a member of the faculty, whose first name is Barbara, showed her displeasure at a display of male chauvinism on a mining engineering homecoming float by pelting it with eggs. The incident provoked a flurry of letters to the editor of *The Exponent* for several weeks. Later, the student organization retaliated when it announced that it had adopted St. Barbara as its official patron saint. Barbara lived in the third century A.D. and, according to one account, converted to Christianity against her father's wishes and was put to death. Another version claims she escaped and found refuge with miners and became

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their protectoress against sudden, unrepentant death, often the fate of miners. To raise money and to publicize the school, the student organization produced and sold red and white buttons inscribed in part, "St. Barbara's Day, Dec. 4."<sup>7</sup>

What rivalry lingered after merger came by way of inter-departmental competition, mainly between the Miners and the Civils. According to the December 1969 *Geode*, in October the Miners had blasted a slab of rock which had always marred the M. While several Civils showed up to harass the Miners, the latter had the last laugh when the Civils had to clean up the rock debris the next M Day.

At the time of merger, the Division of Technology stood second in its enrollment of mining engineering students in the United States, the Colorado School of Mines being first. According to Circular 55, issued by the United States Office of Education, the Pioneer Division was forty-first in civil engineering enrollment. In all, there were one hundred one students majoring in mining engineering and two hundred twenty-five in civil engineering.<sup>8</sup> Because of these numbers and in order to broaden the education of engineering students, in 1960 a significant revision of the curriculum was introduced for incoming freshmen. Required courses were changed and a variety of courses in the humanities and the social sciences was added.<sup>9</sup> Also added in the 1960s and 1970s were majors in agricultural, electrical, industrial, and mechanical engineering which, with civil and mining engineering, meant that the choice of any of the six could lead to a bachelor of science degree.

The first of several administrative changes came in 1961 with the death of Melcher. He had given thirty-eight years of loyal service to his school and his name was commemorated when a residence hall was named after him in 1966. His successor, Edward C. Lawson, held degrees from Brooklyn Polytechnic Institute and Rensselaer Polytechnic Institute and resigned after one year to establish an engineering curriculum at the University of Nigeria.<sup>10</sup> Lawson's replacement, C. W. "Larry" Ot-

tensman, came to Platteville in 1936 as a member of the Civilian Conservation Corps, and had been a member of the Wisconsin Institute of Technology faculty since 1939, teaching civil engineering courses. A 1933 graduate of the University of Wisconsin, Ottensman later worked on dam design and construction. As a naval officer in World War II, he worked on airborne radar development in a radiation laboratory at the Massachusetts Institute of Technology and later in Washington, D.C.<sup>11</sup>

When the Wisconsin State Colleges were given university status in 1964, WSCIT became Wisconsin State University-Platteville, and the Division of Technology became the School of Engineering, then five years later the College of Engineering. When the university and state university systems were placed under the jurisdiction of one board of regents in 1971, the school was named The University of Wisconsin-Platteville.

For many years, it was apparent that the old Platteville Academy building could not accommodate rapidly rising enrollments or provide necessary classroom and laboratory space. Because of this, plans were made for an entirely new engineering building. At a cost of \$2,500,000 and after more than two years in construction, Ottensman Centennial Hall of Engineering-Science opened in September 1966, coinciding with the one hundredth anniversary of the founding of the state's first normal school in Platteville. The building was named after Ottensman who died in March 1966.

His successor as dean was a Wisconsin native, Edward O. Busby, a radio technician petty officer in the navy from 1944-1946. He was awarded a B.S. degree from the University of Wisconsin in 1950, and afterwards earned an M.S. and a Ph.D. from the same university. In the 1950s Busby worked for the Wisconsin Highway Commission, as an assistant city engineer at LaCrosse, as a sales engineer, and as an instructor and administrator at the University of Wisconsin. Without question, he has helped direct and has seen more changes in the College of

Engineering than any of his eight predecessors. His work was recognized when in 1982 he was named outstanding engineer of the year by the Wisconsin Society of Professional Engineers.

With expanding curricula and rising enrollments, professional organizations were encouraged and supported by both faculty and students. One of the earliest and most prestigious of those organizations was the American Institute of Mining, Metallurgical and Petroleum Engineers, A.I.M.E. Founded in 1871 "to promote the arts and sciences connected with the economic production of the useful minerals and metals," the organization was among the first engineering societies formed in the United States.<sup>14</sup>

A.I.M.E. has a long and checkered history at Platteville beginning in May 1920 when a preliminary meeting of the Wisconsin Local Section was held in Milwaukee. Several papers concerning technical aspects of mining were read to about eighty persons. In October 1920, the organization of the Local Section occurred at a meeting in Platteville. After a banquet at the Columbia Hotel (later renamed the Tracy Hotel and still later the Hearthside) the members inspected the Mining School. At a business meeting, steps were taken to draft a local constitution. Several papers were presented and the following day the members toured the Champion mine at New Diggings and the Vinegar Hill Zinc Mining Company office in Platteville. After a final meeting and discussion of the papers, the members adjourned. The Wisconsin Section bylaws were formally accepted at the December meeting of the board of directors. Only graduates were admitted to membership. There is no mention of A.I.M.E. in later editions of *The Miner* or in *The Geode* until 1936, but apparently the professional engineering chapter continued throughout those years. In 1936 four Wisconsin Institute of Technology alumni were elected to membership in A.I.M.E., and twenty-two students were accepted as student associates in 1928. This apparently precipitated considerable discussion over

the next several years about forming a student chapter, which required a minimum of fifty student associates. In 1939 three students entered the A.I.M.E. annual essay contest. Paul Kraai, '39, received recognition for producing the best paper and was awarded a copy of the A.I.M.E. transactions. The following year, Emile Dahlen, '40, won second place in the essay contest.<sup>15</sup>

Editorial after editorial appeared in *The Geode*, encouraging the establishment of a Wisconsin Institute of Technology student chapter. Finally, in 1941 the Wisconsin Tech Student Chapter A.I.M.E. was formed with thirty-one members and Profie Pett as faculty adviser.<sup>16</sup> (The requirement of a minimum fifty members was either forgotten or ignored.) In addition to a faculty adviser, an area professional engineer was chosen as counselor. By the end of the year, however, the student chapter was evidently failing, as an editorial in the December 1941 *Geode* complained that so far there had been no meetings, election of officers, or interest.

Ten years passed before the issue of a student associate chapter once again was raised. In 1951, the chapter was revived with professors W. A. Broughton and Carl R. Christiansen elected as joint faculty advisers. Bylaws were drawn up and sent to the A.I.M.E. National Executive Committee, and with the support of the Upper Mississippi Valley Section of the Society of Mining Engineers of A.I.M.E., the student chapter was approved in early 1952.<sup>17</sup>

By 1953, however, interest in the chapter began to wane again. The April 1953 *Geode* lashed out at poor attendance at the monthly meetings, and criticized the senior class for not serving in a leadership role. An editorial in the October 1953 *Geode* complained, "We have been mediocre and extremely lax in our support of this important organization. . . . We think the main reason is that so many of us do not realize the true value of membership in the A.I.M.E. . . . The A.I.M.E. is our fraternity!" Apparently the chastisement had its intended

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effect, because no subsequent issue of *The Geode* mentions the problem, nor do the minutes of the chapter meetings make any reference to lack of student interest or support. Indeed, the chapter became more energetic and spirited as time passed. In 1966 the chapter was renamed the Ward Beetham Student Chapter of A.I.M.E. in memory of a member who was killed in a nearby mine.

One event sponsored by the A.I.M.E., and later on occasion by the American Society of Civil Engineers, was a beard-growing contest. Beginning in 1948, a Whisker Club was formed with thirty members. The club was designed to "separate the men from the boys." Membership was one dollar and members agreed to grow beards until the advent of spring, March 21. Those who shaved before that date were fined five dollars.<sup>18</sup> In 1949, the name of the informal club was changed to the Beard Growers Association, and the beard removal date was switched to March 17, St. Patrick's Day.<sup>19</sup> Meeting in a downtown establishment, beard growers were judged in six categories: most colorful, longest, scroungiest, best try, best-groomed, and best-styled. As the April 1960 *Geode* reported, "It takes a lot of courage to grow a beard these days with the opposition using the battle cry, 'beatnik!'" Winners were awarded plaques or liquid prizes.

Apparently the contest reached its peak of activity in 1970 when Barbara Huner, '71, the first woman civil engineering graduate, and Beverly Hannan, secretary in the College of Engineering, judged the beards and composed the following poem to announce the winners:

The contest is over,  
We've made our choice.  
The beards you'll remove,  
Wives and girls will rejoice.

The first winner is for the longest,  
You see.

I'll bet Ken Buttry will say,<sup>20</sup>  
"Ha! They couldn't beat me!"

Next for the guy who made the best try,  
It's not thick and it's not long,  
In fact, Glen Houlberg is still wondering  
What in the world could have gone wrong.

Who's the best groomed?  
Who looks the most neat?  
We say John Toonen,  
Doesn't he look sweet?

Theirs might be the longest,  
The best—or both,  
But we really think Mel Kirchler  
Has the most novel growth.

Some beards are thick,  
Some beards are thin,  
But when it comes to the scraggiest,  
Larry Lange is sure to win!

Yes, the contest is over,  
They've won recognition and fame.  
Now, let's hope that tomorrow  
They won't look the same!

The activities of the chapter are much the same today as in the past. There are field trips, speakers, and movies and occasionally it sponsors picnics, suppers, and dances. A.I.M.E. always supports M-Days, M-Balls, and Tech Teas, and promotes summer employment for chapter members. The chapter was one of the first engineering organizations to encourage the placing of a marker near the M.

In 1972 the Platteville A.I.M.E. chapter was selected one of five outstanding student chapters in the U.S. and repeated

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the achievement the following year.<sup>21</sup> The national A.I.M.E. selected the Platteville chapter the national "Outstanding Student Chapter" for the year 1976-1977.<sup>22</sup> The contest was judged on the various activities that a student chapter sponsored throughout the year.

Civil engineering became increasingly popular in the 1930s through the 1950s and students in that major expressed a desire for an organization such as the mining engineers had. Because civil engineering was not yet accredited, affiliation with the American Society of Civil Engineers (A.S.C.E.), founded in 1852, was not possible. In February 1958, however, a local organization, the Civil Engineers Society (C.E.S.) was founded with Dean Ottensman and Walter Hannan as faculty advisers. Membership that first year was ninety-one, and plans were undertaken to work with the A.I.M.E. to prepare for the golden anniversary of the school.

Nine years later, when civil engineering was accredited, the C.E.S. was accepted as an affiliate chapter of the A.S.C.E., with about one hundred eighty members and Keith Faherty as faculty adviser. From its beginning, the Platteville chapter of A.S.C.E. was recognized as one of the superior chapters in the United States, and in a 1971 competition won the prestigious Ridgeway Award, given annually to the nation's most active and effective chapter out of the one hundred fifty chapters participating.<sup>23</sup>

Throughout the years, the academic as well as the social activities of the members of A.S.C.E. have been similar to those of the A.I.M.E. For moneymaking and publicity projects, the A.S.C.E. has sponsored events such as computer matchmaking dances (the October 1968 *Geode* proudly reported that two couples who had met at the 1967 computer matchmaking dance were engaged to be married), concrete canoe races, model bridge span contests, road rallies, and also actively participated in campus events such as Homecoming and winter carnivals. The current membership of A.S.C.E. is one hundred ten students.

In addition to A.S.C.E., in 1969 an honorary civil engineering fraternity (C.E.H.F.) was organized "to place a mark of distinction on those students who have upheld the honor of the department and who have exhibited the basic characteristics of a successful engineer."<sup>24</sup> Two years later, C.E.H.F. was chartered by the national civil engineering honor fraternity, Chi Epsilon. Membership eligibility is based upon ranking in the upper one-third of the junior or senior class. The principal work of the fraternity is to offer free tutoring services and to publicize the academic program offered by the College of Engineering. The fraternity also periodically conducts student evaluation of engineering faculty. The current membership is thirty-seven.

The professional-social engineering fraternity, Theta Tau, began life at The University of Wisconsin-Platteville in 1972 as Mu Beta Chapter with Harry Jebens as faculty adviser. Founded in 1904 at the University of Minnesota, Theta Tau was known originally as the Society of Hammer and Tongs and is open to all engineers meeting basic prerequisites. The chapter was colonized in 1973 and was recognized by the national fraternity in April 1975.<sup>25</sup> Participating in and sponsoring projects similar to those of other campus engineering organizations, Theta Tau consistently claims the highest grade point average of any campus fraternity. The fraternity also proudly claims credit for reviving the Miners' Ball in 1978. Identified by their white hard hats, the current membership of twenty-eight is advised by Professor William Kissner.<sup>26</sup>

The American Society of Agricultural Engineers (A.S.A.E.) was approved for the Platteville campus in 1973. Open to students of any class, the goal of the society is to give the agricultural engineering student an insight into the engineering profession as it relates to agriculture. The society conducts field trips to agricultural engineering-related manufacturing and farming facilities, hosts speakers to inform the chapter on current topics of interest, and attends sectional and national meetings, as well as sponsoring a variety of social events.<sup>27</sup>

As the enrollment of women engineering majors increased, and while they were not banned from any student engineering organization, women student engineers formed the Association of Women Engineers in 1975. A year later they received their national charter to become the Platteville student chapter of the Society of Women Engineers. The organization was formed to support women in engineering, to serve as a source of information for encouragement in continuing their education, and to help them in professional development. Founded nationally in 1950, S.W.E. opened its membership to men in 1976. By 1983 there were twenty-eight members which is about one-fourth of the total number of women majoring in engineering. S.W.E. members, perhaps apart from periodic fund-raising bake sales, enjoy the same academic and social activities as do their male counterparts.<sup>28</sup>

The S.W.E. has also been responsible the past several years for maintaining "the other M." In 1970-1971, a group of students asked permission to paint an M on the northeast patio of Ottensman Hall. The administration did not approve of the idea, whereupon under cover of darkness, the students proceeded to accomplish their plan. Since then, that M has been periodically painted by the S.W.E.<sup>29</sup>

Formed in 1977, the American Institute of Industrial Engineers (A.I.I.E.) is the only professional society for industrial engineers. It received its student affiliate charter in 1978 and, a year later, the Platteville chapter was the largest in the state. The chapter engages in activities similar to those of other student engineering organizations.<sup>30</sup>

The American Society of Mechanical Engineers (A.S.M.E.) was organized on campus in 1977, and a charter recognizing it as a student club was granted the following year. Until mechanical engineering is an accredited major, the local chapter will be recognized by the national society as a student club. Ross Fiedler was the original faculty adviser and was replaced by Henry Stoll in 1980. The academic and social activities of the

members are similar to those of other campus engineering organizations.<sup>31</sup>

In 1968, after years of debate and discussion which started in the early 1900s, the state legislature authorized the establishment of an architecture school. Wisconsin was the only Big Ten state without a school. After much talk and many negotiations involving virtually every branch of higher education in Wisconsin and in consultation with the American Institute of Architects, the school was established at The University of Wisconsin-Milwaukee. Other campuses in The University of Wisconsin System could establish, if they so desired, two-year programs of pre-architectural curriculum to serve as feeder schools to Milwaukee. From the beginning, The University of Wisconsin-Platteville decided to cooperate with the Milwaukee campus. President Ullsvik selected Carl H. Gausewitz, a registered architect and engineer, to head the program at Platteville and placed the curriculum in the School of Engineering.

Most two-year pre-architecture students from Platteville later matriculate at Milwaukee, while others have transferred to schools in California, Florida, Hawaii, Illinois, Iowa, Minnesota, Nebraska, Oklahoma, and Texas. To date, at least six two-year Platteville students have graduated and become registered architects.<sup>32</sup>

To recognize this new program, in 1970-1971 a Pioneer Architecture Club was formed with Gausewitz as its faculty adviser. Within a year, the club claimed forty members and in 1976 became a student chapter of the American Institute of Architects.<sup>33</sup> Meeting twice monthly, club members read papers concerning their own architectural interests. Despite a declining economy which affected the building industry particularly, the club remains on campus.

Associated General Contractors, organized in 1979 and chartered in 1980, is one of the newest engineering organizations on campus. Advised by William Kissner, the organization welcomes anyone with an interest in construction.<sup>34</sup>

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The most recent student engineering organization is the Institute of Electrical and Electronic Engineers (I.E.E.E.) which in November 1982 petitioned the national institute for a local chapter. The charter was granted in February 1983. With twenty-one charter members advised by Professor Richard Heidenreich, the chapter hosts programs concerning their interests, and has the immediate goal of raising \$1,000 for an electrical engineering scholarship.<sup>35</sup>

One final University of Wisconsin-Platteville College of Engineering organization is the Order of the Engineer, established here in 1976. The Order of the Engineer is a fellowship of engineers who are trained in science and technology and dedicated to the practice, teaching, or administration of their profession. Initiation into the order includes commitment to the Obligation, and acceptance of a stainless steel ring to be worn on the little finger of the working hand. Only those who have met the high standards of professional engineering training or experience are invited to accept the Obligation which is voluntarily received for life. This commitment is not a trivial act but is, rather, like the wedding of the engineer with his profession. The ring is worn as a visible symbol to attest to the wearer's calling and symbolizes the unity of the profession in its goal of benefiting mankind. The stainless steel from which the ring is made depicts the strength of the profession.

Immediately following every spring and fall commencement, faculty and students joining the order are initiated and profess commitment to the Obligation. As of 1983, there are about twenty faculty and six hundred student members of the order.<sup>36</sup>

Since 1966, the College of Engineering has sponsored an Engineering Exposition each spring featuring faculty, student, business, and industrial exhibits. All engineering departments and occasionally other university departments, such as physics, participate in the Exposition which usually coincides with the Miners' Ball and the lighting of the M. Upper midwest junior

high and high school students are invited to attend the Exposition and to participate in a variety of contests such as model car racing, model tractor pulls, and model balsa wood bridge construction. The Expositions have become increasingly popular, attracting hundreds of potential engineering students to The University of Wisconsin-Platteville.

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1. *The Geode*, 24 February 1958.
  2. *The Geode*, 27 October 1958.
  3. Karrmann Library Archives, The University of Wisconsin-Platteville.
  4. *Wisconsin State Journal*, 12 April 1959, p. 3.
  5. Bjarne R. Ullsvik interview, 7 April 1983.
  6. *Milwaukee Sentinel*, 1 May 1959, p. 6.
  7. *The Exponent*, 11 November 1976.
  8. *The Platteville Journal*, 1 October 1959.
  9. *The Geode*, 14 December 1959.
  10. *The Geode*, 29 October 1962; October 1963.
  11. *The Geode*, April 1966.
  12. *The Geode*, 14 December 1959.
  13. *The Geode*, 29 October 1962; October 1963.
  14. *The Geode*, April 1982.
  15. *The Miner*, 1921; *The Geode*, 27 February 1936; 21 February 1938; 21 February 1939; 26 May 1939; 21 October 1939; 27 May 1940.
  16. *The Geode*, 24 February 1941; 21 April 1941.
  17. *The Geode*, 29 October 1951; 17 December 1951; 25 February 1952. W. A. Broughton interview, 22 March 1983.
  18. *The Geode*, 12 April 1948.
  19. *The Geode*, 11 April 1949.
  20. Buttry is currently chairman of the Department of Civil Engineering.
  21. *The Geode*, March 1972; May 1973.
  22. *The Geode*, Winter 1977-1978.
  23. *The Geode*, April 1982; *The Exponent*, 4 May 1972.
  24. *The Geode*, March 1969.
  25. *The Geode*, October 1972; May 1975.
  26. *The Geode*, April 1982; William Kissner interview, 30 March 1983.
  27. *The Geode*, March 1976; December 1978; November 1982.
  28. *The Geode*, December 1975; April 1982; Rachel Mahun, professor of civil engineering, The University of Wisconsin-Platteville, interview, 22 March 1983.
  29. *The Geode*, January 1976.
  30. *The Geode*, April 1982.
  31. *Ibid.*; Henry Stoll interview, 23 March 1983.
  32. Letter from Carl H. Gausewitz, 24 February 1983.
  33. *The Geode*, December 1972; May 1972; December 1975.
  34. *The Geode*, April 1982.
  35. Information supplied by Richard Heidenreich, professor of electrical engineering, The University of Wisconsin-Platteville.
  36. Information supplied by Dean Edward O. Busby, College of Engineering, The University of Wisconsin-Platteville.



## *Epilogue*

From its modest beginning in 1908 with three full-time and two part-time faculty teaching eleven students, the College of Engineering at The University of Wisconsin-Platteville has expanded to forty faculty teaching 1,518 students in 1983. (The breakdown by department and number of students is as follows: agricultural engineering, 63 students; civil, 308; electrical, 294; industrial, 141; mechanical, 565; mining, 99; and pre-engineering in the fields of architecture, chemistry, and geology, 48.)<sup>1</sup> Engineering students currently constitute about one-third of the total enrollment. Surely no one in 1908 could have foreseen this increase or the proliferation of engineering specializations. From what some have called a shoe-box operation in 1908, with extremely limited budgets and facilities, the College of Engineering has expanded into a vigorous academic business recognized throughout the United States and, indeed, much of the world. In March 1983 the Wisconsin Building Commission, chaired by Governor Anthony S. Earl, approved a \$2.1 million addition to Ottensman Hall.<sup>2</sup> Clearly, the State of Wisconsin has faith in the future of the College of Engineering and The University of Wisconsin-Platteville.

This faith is sustained by an ever-increasing number of scholarships available to engineering students. Three Sahara Coal

Company scholarships were first awarded under the auspices of Carl Hayden in 1958. Since then, those scholarships have been supplemented by about seventy others for engineering students in all of the six majors. Dozens of others are also available which are not specifically for engineering students but for which they often compete successfully.<sup>3</sup>

Through the years many faculty have distinguished themselves by their research and contributions to their profession. The work of Profie Pett in developing techniques for reclaiming waste ore, and mine safety studies conducted by Marius Gronbeck, for example, have attracted wide attention in the mining engineering profession. Many of the faculty have acquired the title of Registered Professional Engineer. To achieve this honor, an engineer must have an undergraduate degree, four year's employment as a working engineer, and take a sixteen-hour examination in his field. Having satisfied these requirements, the candidate becomes a registered licensed, professional engineer.<sup>4</sup>

Certain engineering faculty families have shown considerable loyalty to the College of Engineering by sending their children to the College. Ernest Clarke, Dale Dixon, George Dobson, Ross Fiedler, Marius Gronbeck, Walter Hannan, John Jones, William Kissner, W. R. Loy, Milton Melcher, Homer Morrow, John Orth, Harris Palmer, Gerald Pett, Ray Rosenthal, and Roy Shaver have all sent one or more of their children. Economic considerations aside, they undoubtedly wanted to assure their progeny of a quality education. Dozens of alumni have also sent their children to Platteville.

Graduates of the school have distinguished themselves in the eyes of their profession and their alma mater. Since 1960, the university has awarded sixteen Distinguished Alumnus Awards to engineering graduates, out of a total of sixty-three recipients. Engineering recipients and the years of their presentation are Samuel F. Bowlby, '26 (1960); Harold E. Robbins (1961); Carl T. Hayden (1962); Donald A. Miller (1965); Clayton

F. Slack, '48 (1968); Joseph Zapata, '18 (1972); Edward C. Leonard, '48 (1973); Richard J. Dobson (1978); Robert Lacke (1979); William Kent, '42 (1980); William C. Maurer, '58 (1981); Emile Steinbach, '23 (1981); James Ludwig, '52 (1982); Robert Kupsch, '50 (1982); Dale Dixon (1983); Frederick Heiser, '37 (1983).<sup>5</sup>

The Athletic Hall of Fame, initiated at The University of Wisconsin-Platteville in 1972, has named seven engineering graduates out of a total of thirty-seven members in recognition of their athletic or coaching ability. The recipients and years of their recognition follow: John Soderberg, '33 (1972); George Dobson (Coach 1909-1949) (1972); Donald A. Miller (1974); Guerdon Eberhardt, '21 (1978); Paul Faherty, '30 (1981); Deane Millman (1982); Dale Dixon (Coach 1939-1942, 1946-1967) (1982).<sup>6</sup> Dale Dixon and Donald A. Miller are the only alumni of the university to receive both the Distinguished Alumnus Award and recognition in the Athletic Hall of Fame.

Engineers have also received international awards for diverse services to their profession. One example is Harold E. Robbins, internationally one of the best-known graduates, who was awarded the highest honor the government of Chile could bestow upon a foreigner. In 1958, he received the Order of Merit of Bernardo O'Higgins, First Class, in the Presidential Palace at Santiago. The award is named after the first president of Chile, who is known as the Father of his Country.<sup>7</sup> Robbins had looked forward eagerly to celebrating the Diamond Jubilee of his alma mater, but died in February 1983.

Despite many changes in engineering through the decades, one factor remains fairly constant. *Esprit de corps*, camaraderie, and a sense of family, while perhaps less intense than years ago, remain hallmarks of Platteville engineers. This spirit as much as anything else, assures the continued progress and success of the College of Engineering at The University of Wisconsin-Platteville. In the immortal words of Roundy Coughlin, "What more could be fairer?"

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1. Information supplied by the College of Engineering and the Office of the Registrar, The University of Wisconsin-Platteville.
2. *Telegraph Herald* (Dubuque), 9 March 1983, p. 18.
3. Information supplied by the College of Engineering, The University of Wisconsin-Platteville.
4. Information supplied by Dean Edward O. Busby, College of Engineering, The University of Wisconsin-Platteville.
5. Information supplied by the Chancellor's Office and the Alumni Office, The University of Wisconsin-Platteville.
6. Information supplied by the Athletic Department and the Alumni Office, The University of Wisconsin-Platteville.
7. *The Geode*, December 1958.

# *Appendices*

## Appendix I

No. 245, S)

(Published July 13, 1907.

### CHAPTER 573, LAWS OF 1907

AN ACT to create sections 392m, 392n, 392o, 392p, 392q, 392r, 392s, and 392t, of the statutes relating to the establishment of a state mining trade school and making an appropriation therefor.

The people of the State of Wisconsin, represented in Senate and Assembly, do enact as follows:

SECTION 1. There is created and added to the statutes eight new sections to read:

Section 392m. A school shall be established in the city of Platteville, to be called the Wisconsin Mining Trade School, for the purpose and under the regulations contained in this act.

Section 392n. The said school shall be under the control and management of a board of three members to be known as the Wisconsin Mining School Board, one of whom shall be the superintendent of public instruction, and two shall reside in the southwestern part of the state in what is known as the lead district, who shall be appointed by the governor of the state, one for a term of two and one for a term of four years, beginning with the first day of July, 1907, and thereafter for terms of four years who shall serve without compensation. Vacancies on the board shall be filled for the unexpired term.

Section 392o. The board shall hold its first meeting in the city of Platteville on the 15th day of July, 1907. Meetings may be called subsequently by two of said members in such manner as they may direct, and all meetings may be adjourned at the pleasure of the Board. A majority of the Board shall constitute a quorum for business. The superintendent of Public Instruction shall be President of such Board. At the first meeting of said Board or as soon as may be, said Board shall appoint some suitable person secretary to hold his office during the pleasure of the Board and shall fix times for regular meetings of the Board. The State Treasurer shall be the treasurer of

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the Board. No money shall be paid out, nor any contract be made, or any act done, involving the payment of money or the disposal of property, except in pursuance of a vote of the Board.

Section 392p. As soon as the means in its hands will permit without incurring indebtedness, said Board shall proceed to obtain a suitable location, and lease, purchase or erect such buildings, and procure such furniture, apparatus, library and implements as may be necessary for the successful operation of said school, and appoint a principal and other such teachers and assistant as the board may deem expedient, with salaries to be paid from time to time as it may agree and to regulate their duties, but no agreement shall be valid whereby such Board shall be prevented from discharging any one in its employ upon two months' previous notice.

Section 392q. The course of instruction shall be two years in length and shall embrace geology, mineralogy, chemistry, assaying, mining and mining surveying and such other branches of practical and theoretical knowledge as will, in the opinion of the Board, conduce to the end of enabling students of said school to obtain a knowledge of the science, art and practice of mining and the application of machinery thereto. The dean of the college of engineering of the University of Wisconsin shall be consulted concerning the course of study, and the same and all modifications thereof shall be approved by him. No student who shall have been a resident of the state for one year next preceding his admission shall be required to pay his fees or other charges for tuition or other purposes in said school, except for the cost price of materials actually consumed by such student in pursuit of any studies. The Board may prescribe rates for tuition for any student who shall not have been a resident as aforesaid, which shall not be less than fifty nor more than two hundred dollars per year.

Section 392r. The course of study, the terms and the hours of instruction shall be regulated by the Board, who shall also have the power to make all such rules and regulations concerning the admission, control and discipline of students and other matters, as may be deemed necessary for the good government of the institution, and convenience and transaction of its business, and also to grant diplomas upon the completion of the prescribed course.

Section 392s. No debt shall be contracted beyond or apart from the actual means at the disposal of the institution. The Board may dispose of or lease any property donated to the state for the purposes of said school. The Board shall not enter upon the business of mining, or pursue the same, except so far as it may be deemed necessary in the course of instruction, nor shall they purchase any lands beyond what are required for the reasonable accommodation of the school. The Board shall not sell, mortgage or otherwise dispose of any real estate purchased by them or donated by the state without the express authority of the Legislature.

Section 392t. It shall be the duty of the Board to provide for obtaining

a complete collection of the minerals of the lead region of Wisconsin and classify the same. The Board shall on or before the 1st day of December in each year preceding the regular session of the Legislature, make a report of its proceedings to the Governor, and shall transmit therewith a general report showing their receipts and expenditures during the period for which the report is made, as well as the general affairs of said School.

SECTION 2. There is hereby appropriated out of any money in the State Treasury not otherwise appropriated, the sum of thirty thousand dollars to be used by said Board for the purposes of this act.

SECTION 3. This act shall take effect and be in force from and after its passage and publication.

Approved July 11, 1907.

## Appendix II

1926

### ORIGIN OF OUR SCHOOL

By Prof. Dean W. Richards

Beginnings are of universal interest. The first robin in the springtime furnishes comment for a day. Where gold was first discovered in California is written on the pages of history. The signers of the Declaration of Independence are heroes to us because their pens marked the first overt act that began our separate national existence.

To us who make up Wisconsin Mining School, whether as students, faculty, alumni, regents, or citizens loyal to the schools of the state, the beginnings of the institution must have peculiar and abiding interest. It is therefore fitting that some of the more outstanding incidents and facts connected with the conception and inauguration of this school should be collected and definitely recorded while there are yet among us in active life many of those who by their vision and effort made the institution possible.

It should be emphasized that team-work won the initial goal of securing legislative sanction and state support for the institution. A team has its leaders and its wheel horses; but it is only the combined exertion of all that moves a massive load. To vary the figure, if one by his position aloft can see farther and so supply vision and another at the wheel can operate the rudder; yet is it the crew that mans and sails the ship. There is honor for each and gratitude to all who had part in bringing to pass as actual fact, Wisconsin Mining School.

In any significant undertaking, there is likely to be a favorable concurrence of events or factors that make the desired accomplishment possible. In this respect, Wisconsin Mining School is no exception. In the year 1905, the Platteville Normal School had so outgrown its building and equipment that the legislature appropriated money for an entirely new plant.

It became evident that when the Normal should move to its new quar-

ters, a large and useful educational plant would become vacant. This plant had originated in the three story stone structure built by Prof. J. L. Pickard for "The Platteville Academy" in the year 1853. By a series of four successive additions, it had come to be the building that, even though it was commodious, could no longer house the growing enrollment of the Normal. Naturally the thoughtful speculated as to what use the large building might be put. Here then was material opportunity that needed but a new purpose lodged therein to make it continue a living reality.

Let us now note a line of development that had brought about a need that suggested a purpose, which could change what without it would be but empty walls, into a living institution. It is a commonplace of state history that the first settlement of Southwestern Wisconsin was due to the lead mining industry. This was practically all of it surface mining. With the passage of years, time came when the deeper deposits began to be exploited. Commercial methods of reducing zinc ores arrived. The Enterprise Mine of the Platteville Lead and Zinc Co., was the pioneer deep mine in this region. This mine was located at the edge of Platteville.

The development of this mine lead to problems of mining engineering that requires machinery, skilled operation, and technical knowledge. Questions were continually arising for which there was no answer at hand and no ready source of information available. Few were found who were even partially trained to analyze the problems and solve the difficulties as they arose. A few illustrations will make this clear. No assayers were at hand. If samples were sent to the State University there was a charge of four dollars for each assay. The company found it necessary to create an assay office of their own and take a drug clerk and train him to be an assayer. They wished a mine surveyor and they must draft a land surveyor over seventy-five years of age, who was not accustomed to more elaborate apparatus than the old fashioned compass. Did they want drills sharpened they must persuade an old blacksmith to give up his shop and become their employee. Problems of pumping water boiler capacity, drilling, kind and quality of explosives to use, methods of handling and treating ores, and numerous kindred problems arose.

It was to men in the midst of problems such as these to whom the opportunity of a vacant educational plant suggested the idea that the state use the building for a mining school. The first to propose this was Hon. James W. Murphy, who represented this district in Congress from 1906 to 1908. He had been the president of the Platteville Lead and Zinc Co. from its organization in 1899. His father before him had been a lead miner and as a boy and a young man he knew by actual contact how the old surface mining had been carried on. Though by formal education and training a lawyer, the necessities of his business connections had compelled him to inform himself on a variety of problems connected with large scale deep mining. With him the

problem of securing trained help had been acute. He realized the great value it would be to the mining industry of this region to have at hand a school where men could be trained and where information of value to the mining industry could be assembled.

Once the idea was suggested, its evident merit gave it ready acceptance, won for it support and approval in the mining region of the state and the cooperation and support of those throughout the state who could appreciate the service that a mining school might render to Wisconsin. In the campaign of popularizing the idea of a mining school all of the local papers gave freely of their space and the local commercial club was active in its behalf.

When the time came to urge upon the state legislature the passage of a bill creating a state mining school and providing for its maintenance, an enthusiastic delegation from the mining region went to Madison to present their case before the proper committees. On fire with a conviction of the real importance to the state of the development of the mining region and believing that for this end the presence of a mining school at Platteville would be of great value, they presented their arguments with the zeal and determination of crusaders.

During the hearings violent and persistent opposition to the proposed school became evident. This opposition headed up under Van Hise who was at that time president of Wisconsin University. As Mr. Van Hise was himself a geologist of standing, the opposition backed by his official position promised to be most formidable. It would seem from this distance of time that the opposition may have overreached itself. The debate was at times bitter and acrimonious. It seems from the statements in local papers of the period, whose files are still extant, that the violent opposition of the University to the proposed school created the impression, whether rightly or wrongly, that the University had become a selfish, autocratic bureaucracy that sought to dictate to the state in all the details of its educational enactments and policies. This statement is made not with the purpose of reviving any unhappy controversies of the past whose asperities time has softened; but only that it may be evident what was the opposition that the sponsors of the mining school idea overcame when they secured the creation of the Wisconsin Mining School.

The showing that the champions of the mining school idea made appears to owe much to Mr. R. I. Dugdale, editor of the Grant County News. Mr. Dugdale had been carrying on independent experiments looking to the exploitation of some of the unused resources of the mining region such as the clays and even the oil rock. He exhibited a lamp which was burning oil that had been refined from oil gotten from local oil rock. One detail of the refining consisted in filtering the oil through a local clay. This demonstration by Mr. Dugdale together with exhibits made from local clays undoubtedly had great weight with the committees. Senator Stout, founder of Stout

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Institute, who was a member of the educational committee examined a pressed brick submitted and pronounced it the best he had ever seen made from Wisconsin clays.

Mr. Duncan McGregor was assemblyman from Grant County and Mr. E. E. Burns was state senator from this district. Each in his own house introduced a bill looking to the establishment of a mining school. It was the bill introduced by Senator Burns, chairman of the Senate finance committee, that finally passed. At that time this was known as the committee on claims. It is conceded that the work of these two men was vital to the successful passage of the measure creating Wisconsin Mining School. Each of them argued before the legislature in its behalf.

The local newspapers of the period state that several others from Platteville and elsewhere in the state spoke in behalf of the bill at committee hearings. They mention the following:

Mr. Henry F. Cochems of Milwaukee reviewed the development of the mining district and stated what were the possibilities of the future providing the mining industry could have trained and educated leadership.

Mr. A. W. Kopp called attention to the favorable opportunity presented by the fact that the former Normal building could be secured at a figure that was but a fraction of its real value as an educational plant.

Prof. Merton C. Leonard of the Platteville Normal School emphasized the fact that a large number of young men in the mining district who wished to obtain better technical knowledge were taking correspondence courses.

Apparently Congressman J. W. Murphy made one of the most telling speeches in behalf of the measure. His official prominence and his close contact with the mining industry gave his words weight as he recounted the difficulties and handicaps, because of lack of scientific knowledge, through which the mining industry of Southwestern Wisconsin had come. In connection with his speech, Mr. Dugdale gave the demonstration referred to above. Mr. Murphy emphasized the importance that would attach to the development of the by-products of the mining industry. This could come only by skilled direction and competent knowledge such as those who have taken adequate training possess.

Mr. J. H. Lewis of the Benton district explained to the committee the benefit that a mining school would be to the mining interests of the entire south west of Wisconsin.

The Grant County News gives a list of twenty one persons who were reported by name as making the trip to Madison on April 18, 1907 in the interests of the committee hearings on the "Mining School Bill." Their names were: Hon. P. Bartley of Bloomington, O. G. Rewey of Rewey, J. H. Lewis of Benton, Orville Eastman, F. M. Dyer, W. H. Ellis, R. I. Dugdale, Prof. M. C. Leonard, A. W. Kopp, J. H. Evans, C. A. Loveland Jr., Mayor James Dolan, J. H. Grindell, Arthur Grindell, C. E. Gilmore, Dr. T. M. Savage,

W. E. Lewis, H. J. Youmans, P. D. Hendershot Jr., Louis Patnaude, John Steinhoff.

The local papers of July 3, 1907 announced that the bill had passed the legislature during the previous week. Governor Davidson signed the bill July 10 or 11. The bill provided for three regents. The state superintendent of schools was one member. The other two were to be appointed by the governor from men living in the mining region of the state.

The first board was composed of Supt. of Schools, C. P. Cary; Mr. S. E. Smalley of Cuba City, a former assemblyman who had labored earnestly in behalf of securing the mining school; and Mr. R. I. Dugdale of Platteville. In appointing Mr. Dugdale as a regent, Governor Davidson sought to impress on him, so the latter reports, that if the proposed mining school was to be a success that it must be kept practical and within the possibilities of young men of moderate means. Mr. Dugdale recalls this striking sentence: "In formulating your course of study, don't make it hard for a boy to get into the school; but make it hard for him to get out."

On August 9, 1907, the newly constituted board held its first meeting in Platteville. A number of men interested in the success of the school, at the solicitation of the board, met with them and expressed their views of what would tend toward the success of the new school. Supt. Cary was ex-officio president of the board, and R. I. Dugdale was elected secretary. It was decided to open the school as soon as a competent person could be secured for the head of the school, and the necessary quarters and equipment provided. It was thought that this could be accomplished by not later than the following December.

Mr. R. B. Brinsmade of Salt Lake City, a graduate of Washington University, St. Louis and of Lehigh University, a man of varied experience along mining and allied lines was engaged as director during the fall of 1907. It was not, however, until Monday, January 27, 1908 that the actual work of enrollment and organization was begun by the admission of the first pupils. The first evening classes were held the following day. Delay in getting the deed to the former property of the Normal, which did not arrive until late in January, appears to have prevented the necessary preparations for an earlier opening. The school appears not to have had all initial equipment in place and running smoothly until some weeks later.

So began the institution that has now come to be accepted as a valued part of the state's educational equipment. The opposition to its original organization died hard. Even as late as the World War, because at one time the enrollment had dwindled to but seven pupils, this opposition sought to have the school discontinued. The proposal was idle, when the facts disclosed that its ertstwhile student body had gone "Over seas."

Emblematic of the mining industry is the pick and shovel, tools of humble but necessary toil. These symbols by common usage form part of

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the heraldry of every mining school. They stand for all devices by which man battles with and overcomes the hostile things of nature and binds them to yield him tribute of their wealth. The mission of Wisconsin Mining School is to train men to be leaders in the intelligent use of all of the powers which modern science and machinery have contributed as weapons in this ancient and ever renewed undertaking. The spectacular features of their occupation seem few to the men so engaged; but none may deny that those who so serve us all, are needful and useful men.

### Appendix III

WISCONSIN MINING TRADE SCHOOL	1908
WISCONSIN MINING SCHOOL	1915
WISCONSIN INSTITUTE OF TECHNOLOGY	1939

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THE PLATTEVILLE ACADEMY	1839
PLATTEVILLE NORMAL SCHOOL	1866
PLATTEVILLE STATE TEACHERS COLLEGE	1927
WISCONSIN STATE COLLEGE-PLATTEVILLE	1951
WISCONSIN STATE COLLEGE AND INSTITUTE OF TECHNOLOGY	1959
WISCONSIN STATE UNIVERSITY-PLATTEVILLE	1964
THE UNIVERSITY OF WISCONSIN-PLATTEVILLE	1971

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#### MINING SCHOOL DIRECTORS, PRESIDENTS, DEANS:

1908	ROBERT B. BRINSMADE	
1908-1910	HAROLD C. GEORGE	
1911-1920	RALPH E. DAVIS	
1920-1941	HOMER B. MORROW	
1941-1961	MILTON A. MELCHER	(ACTING PRESIDENT 1941-1942)
		PRESIDENT 1942-1959)
		DEAN 1959-1961)
1962-1963	EDWARD C. LAWSON	
1963-1966	C. W. OTTENSMA	
1966	DALE DIXON	(ACTING DEAN)
1966-1970	EDWARD O. BUSBY	
1970-1971	DALE DIXON	(ACTING DEAN)
1971-	EDWARD O. BUSBY	

# Appendix IV

## WISCONSIN MINING SCHOOL BOARD

C. P. CARY .....	Madison
R. I. DUGDALE .....	Platteville
S. E. SMALLEY .....	Cuba City

### Officers of The Board

C. P. CARY .....	President
A. H. DAHL .....	Treasurer
R. I. DUGDALE .....	Secretary

## WISCONSIN MINING TRADE SCHOOL

### Office of Secretary of the Board

Platteville, Wis, December 1, 1908.

HON. J. O. DAVIDSON, Governor,

Sir: — I have the honor to report to you the following receipts and expenditures of The Wisconsin Mining School Board; also the present condition of the school, the work being done, and the general prosperous and efficient status of the school at the present time.

Of the \$30,000 appropriated for use by the Board by the last Legislature, expenditures in procuring a Mining School Building, equipping the various laboratories and conducting the school a year have been as follows:

Building .....	\$15,000.00
Equipment for shops and laboratories .....	3,946.71
Permanent improvements .....	1,256.34
Furniture .....	429.10
Light .....	172.55
Printing .....	208.55
Reference books .....	451.18
Lumber, fuel and cement .....	846.92
Salaries .....	3,386.66
Insurance .....	294.58
Board's expense .....	242.00
Repairs .....	91.92
Miscellaneous .....	244.01
Total .....	\$26,570.52
Balance .....	3,429.48
	<u>\$30,000.00</u>

Orders issued, but not presented for payment, amounting to \$486.20, leaving in the treasury December 1, 1908 .....\$ 3,915.68

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With this balance we will be able to conduct the school to the close of the year in June, when our first graduation will take place—ten students from High Schools and Colleges having been given credit for former work, will have completed the course.

Notwithstanding the depressed condition of all mining interests, the school has made a creditable showing, having as large an attendance as the Michigan School of Mines had at the end of its second year.

There has been a total registration of 26 during the year and a regular attendance of 21 students, whose average age is 23 years. They are a group of earnest and ambitious young men who seem deeply interested in the work of the school and are freely complimented by Mining Men for their efficiency in practical mining work.

A President and two regular instructors, constitute the regular faculty. In addition to these, an expert wood worker and a drill sharpener instruct the classes in their respective lines at least once each week. A course of evening lectures by leading Mining men of the State on practical mining subjects has been arranged for the Coming Semester, and all students are required to attend these lectures.

The school was organized and is being conducted along the lines of practicability. Machinery, shops, and laboratories have been provided, while complete equipment for a survey corps is maintained.

Students are required to actually operate the air drills, run the engines, (steam and gasoline) fire the boilers, care for the dynamos, sharpen their own drill steel, repair the pumps, and in fact meet all practical problems and conditions that would confront them in taking charge of a mining plant. At the same time they are required to take sufficient theory as to definitely understand HOW AND WHY these problems are met.

In addition to the reference library maintained by the school, Benjamin Hodge, M. E. has loaned the school his technical library of more than 500 volumes, giving us the most complete mining library in the state.

### RECOMMENDATION

In view of the efficient and effective work being accomplished by the school, your Board respectively recommends that a modest annual appropriation be made to perpetuate The Wisconsin Mining Trade School that it may continue this work of preparing young men for a line of work that is now second only to that of agriculture in the United States.

Respectfully submitted

R. I. DUGDALE,  
Secretary of Mining School Board

## Appendix V

### Memoirs in the Life of Ernest Edward Clarke

*As Told to His Wife, Helen Tracy Clarke — April 12, 1958*

I was born September 7, 1882, in Grenville, Canada. My parents were born in Canada of Scottish descent. My father's name was Robert A. Clarke. My mother's name was Jane Ogilvie Clarke. I had two brothers — William and Robert, and two sisters — Jennie Clarke Sweeney and Mabel Clarke Lee. I came from Canada with my parents and sisters to Chippewa Falls in 1896. Both of my brothers had gone there several years before.

I attended country schools and worked as a farmhand and in the woods until 1903, when I went to Seattle, Washington and there worked in the harvest fields and cutting lumber, which was the only work I knew how to do. In the fall I returned to Chippewa Falls and that winter cut wood with my brother, Will, on the home farm at the Bluffs. In 1904, I again headed West, stopped at St. Regis, Montana, and worked in the harvest fields and laying ties for the railroad at \$1.40 per day. That was very good pay; back home I worked for 50 cents a day.

About this time I wrote to my cousin, Annie Clarke Kirk in Butte, Montana, and she answered at once inviting me to visit them. In 1904, I went to Butte. It must have been warm, for I remember I took a bath in the creek to prepare for the trip. Charles Kirk, Annie's husband, was superintendent of the East Butte mine and I went to work for him doing general mine labor. Andy Ray was one of the shift bosses and we remained friends for many years. Years later, Helen and I visited him in Butte and we had a good chat with Andy, talking over old times. I worked as a laborer in the mine for about three or four months and then joined the engineering staff as a helper; about this time I enrolled in Butte College and finished the courses in mathematics, going to school at night and working in the daytime.

My salary was about \$3.50 per day and we worked seven days a week. In June, 1906, Ralph Davis graduated as an honor student from the University of Wisconsin and came to work as an engineer in the East Butte mine. From that time on I had a good friend in Ralph. In September, 1907, a depression struck and the mine shut down. I had a bad accident and both my legs were badly shot. I nearly lost one leg, was in the hospital a long time and hobbled around on crutches for several months. In the fall of 1907, I returned to Chippewa Falls.

In January, 1908, I read in *The Milwaukee Journal* that there was to be a mining school in Platteville, Wisconsin. It was to be a two-year course for young men who had not had much previous education, so they would be able to manage mines which were doing very well in southwestern Wisconsin at the time. I came to Platteville and enrolled in the first class. There

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were about twelve students, and for years the school had about that number attending. I lived with Frank Russell's mother and father in a small red brick house near the college and paid \$3.50 per week for room and board. The director of the school was Mr. Brinsmade and he only stayed that one semester. Mr. H. C. George was one of the teachers and the next year he took over as director. My grades were good and I enjoyed going to school. I spent the following summer in Butte, Montana, working on a contracting crew in East Butte Mine and earned \$7.00 per day seven days a week.

In the fall I returned to the Mining School, lived at Will Rose's parents' home on Mineral Street and boarded at Camps across the street. I worked for the Wisconsin Zinc Company, doing surveying for Mr. H. C. George who had always been connected with that company while running the school.

The end of the school year, 1909, I went to the Black Hills and worked for awhile at the Mead Hotel at Lead, South Dakota, for the chef in the kitchen.

In about six weeks when I had saved a little money I went to Butte, Montana, and worked for Ralph Davis for a few months. In the fall of 1909, we both left and I went to work as a laborer in the Speculator Mine at \$3.50 per day, seven days a week. I stayed there until the summer of 1910 and then went to Seattle. The first person I met on the street was the chef I had worked for back in Lead, South Dakota, and he took me to the Washington Hotel where I worked for a short time helping him. Then I went to work for the Pike Street New Market Construction Company. I helped the boss measure and cut pipe, etc. In December, 1910, the job was finished and I was laid off. Another fellow and I boarded the steamer, "President" and went to San Francisco. This was shortly after the big earthquake and much of the city had not been rebuilt. We stayed there about six weeks, and then boarded the steamer and went up the river to Sacramento. From there we went to Placerville but could not get work so I took the stage line to Jackson. I worked there in the mines for six months. They were very deep gold mines and decidedly unsafe for the workmen. In June, 1911, I went back to Seattle and worked laying trestles for the railroad. It was about this time I almost lost my life — taking a shortcut across a tide flat and had to crawl on my hands and knees to avoid being sucked in by the mud.

In September, 1911, I boarded a boat from Seattle to British Columbia and worked for the Howe Sound Mining Company at Britannia Beach, the same company my son, Kenneth worked for years later. I did general mining for a month of Sundays and then surveying and map making.

In June or July, 1912, I heard from Ralph Davis who was then director of the Mining School. He suggested that I come back to the school and finish and also teach surveying because I had finished that course when I had been a student there. So I returned to Platteville. This time I roomed at Hendys, relatives of the W. N. Smiths and I boarded with Mrs. Fuller, the mother

of Mrs. Raymond St. Germaine (Isabelle.) Besides teaching and going to school I did surveying for the Wisconsin Zinc Company. I graduated in June, 1913; that was a big night for I took a girl to the prom on a blind date. Her name was Helen L. Tracy and she was visiting with Mrs. Ralph Davis (Euretta Kimball.) A year later, June 25, 1914, we were married in Janesville, Wisconsin. After graduating I worked for some time at the Beloit Elmo Mine for Ralph Davis, the Federal Mine at Hazel Green in 1914, was engineer for the Vinegar Hill Company, and later became a full teacher at the Mining School. I was retired in 1953, but continue to do land surveying as a registered engineer in the State of Wisconsin. (Excerpt from the *Geode*, April 14, 1958:

"In 1953, after 37 years of service to Tech, Prof. E. E. Clarke retired. Mr. Clarke graduated from the Wisconsin Mining School in 1913, and in 1916, joined the teaching staff as a part time instructor. In 1921 he began teaching surveying as a full time instructor. In addition to teaching, Mr. Clarke was employed as the City Engineer of Platteville for 20 years. He also introduced to this area the transit to replace magnetic compasses used previously in surveying. In spite of his many years, he is still a young man and is very active.") E. E. Clarke died in 1974.

## Appendix VI

### The Co-ed and Engineering

The enrollment of two women as students in the W.M.S. started considerable talk as to the opportunities awaiting them upon graduation. Surely they could not expect to work underground as bosses or miners. Just what then could such technically trained women do?

Mining executives, when approached and asked about their help whether they would be more efficient had they been technically trained replied, "that beyond a doubt they would have been more valuable to the company." Not only would such persons be of greater aid to their employers but they also would better themselves. The person with a greater knowledge and understanding of his work or of his company will surely assume the more responsible and important job.

Mining like any other profession has in part a language of its own. Words and phrases though heard in common speech have a different meaning to miners and engineers. An outsider listening to technical men talking gathers little information from their conversation. They use words or phrases he has never heard before. Books, several hundred pages in length, are published containing only the words and meanings used by technical men. Symbols are utilized in technical papers each of which bears a definite relationship to the completed project. Even such drawings as house plans use conventional signs to depict or to show the position of an object in the completed structure. Topographic and Geologic maps carry little meaning to one un-

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familiar with such work yet to one technically trained they are an unfailing source of information portraying facts which might fill volumes if written in non-technical language. The notes of the engineers are of necessity brief. They do in a sense require translation when put in the form of a report. Such notes, if given to the ordinary non-technical secretary, would be meaningless. She could not perform the desired work unaided. Thus one can easily see the value of technical training for women seeking employment in engineering fields. The idea of specially training oneself for a certain type of work is not a new one. Many young women of today are in training to prepare themselves to act as secretaries for lawyers. The same method should be carried out by anyone desiring a clerical position in engineering fields.

One must not be under the impression that the only positions open to women in such lines of work are secretarial or clerical. The examination of those publications which classify people acting as executives of mining companies list several women holding such positions at the present time.

A large part of the world's wealth is in the hands of women. Many of them are interested and actually engage themselves in looking after their investments. This naturally requires special training or the employment of technical persons.

The various Mining Societies have women members in their ranks. These societies receive only those persons technically trained and recommended by members in good standing.

The technically trained woman does not have to stay within the mining field. She can easily apply her training in printing firms where technical books are printed or in business establishments dealing in minerals. All the clerical work in such lines of work could be handled by specially trained women. Geologists, mineralogists, paleontologists, and many others use women trained in their lines. A large part of their time is spent in writing notes and reports to engineers or mining executives. This part of their work could be handled by women.

Those women especially trained for engineering work, will in the future, have little trouble in finding employment. They will become a part of one of the greatest fields of human endeavor.

# *Bibliography*

Mining School, Normal School, College, and University Materials

*Administrative Subject Files, 1907-1959.*

Series 98/1. 6 boxes. Karrmann Library Archives, The University of Wisconsin-Platteville.

Alumni Directories (all published locally):

*Wisconsin Mining School, 1917.*

*Wisconsin Mining School, 1922.*

*Wisconsin Mining School, 1939.*

*Wisconsin Institute of Technology Alumni Directory, 1959.*

*The University of Wisconsin-Platteville Alumni Directory, 1978.*

*The University of Wisconsin-Platteville Alumni Directory, 1982.*

Bulletins (all published locally):

*First Catalogue of the Wisconsin State Mining Trade School of Platteville, Wis., 1908-'10, 1908.*

Wisconsin State Mining Trade School Bulletins, 1908-1915.

Wisconsin Mining School Bulletins, 1915-1939.

Wisconsin Institute of Technology Bulletins, 1939-1958.

Wisconsin State College and Institute of Technology Bulletins, 1960-1964.

Wisconsin State University Bulletins, 1964-1971.

The University of Wisconsin-Platteville Bulletins, 1971-1983.

*Engineering Club Records, 1914-1921.* Karrmann Library Archives, The University of Wisconsin-Platteville.

*The Exponent, 1908-1983.*

*The Geode, 1925-1983.*

*The Miner.* Platteville: *The Grant County News*, 1915-1918, 1920-1926.

*The Pioneer, 1910-1982.*

Platteville A.I.M.E. Chapter Minutes, 1951-1983.

## JUBILEE!

*Silver-Tips*, 1909.  
*The Tiger's Lair*, 1908.

### Government Documents

Regents' Biennial Report, 1907-1908.  
*The State of Wisconsin Blue Book*, 1952, 1956.  
*Wisconsin Statutes*, 1907, 1915, 1917, 1937, 1939, 1955, 1959, 1969, 1971.

### Newspapers

*Chicago Tribune Magazine*, 1982.  
*The Grant County News*, 1907, 1909, 1919, 1920.  
*Milwaukee Sentinel*, 1959.  
*The Platteville Journal*, 1919, 1920, 1945, 1953, 1958, 1959.  
*The Platteville Witness and Mining Times*, 1907, 1919.  
*Telegraph Herald* (Dubuque), 1983.  
*Wisconsin State Journal*, 1925, 1959.

### Secondary Sources

Bogue, Allen G. and Taylor, Robert, eds., *The University of Wisconsin-One Hundred and Twenty-Five Years*. Madison: The University of Wisconsin Press, 1975.  
Curti, Merle and Carstensen, Vernon, *The University of Wisconsin-A History 1848-1925*. 2 vols. Madison: The University of Wisconsin Press, 1949.  
*Dictionary of Wisconsin Biography*, Madison: The State Historical Society of Wisconsin, 1960.  
Fatzinger, Dale R., *Historical Geography of Lead and Zinc Mining in Southwest Wisconsin 1820-1920: A Century of Change*. Michigan State University: An unpublished Ph.D. dissertation, 1971.  
Gamble, Richard R., *From Academy to University 1866-1966*. Platteville: Wisconsin State University, 1966.  
Gregory, John G., ed., *Southwestern Wisconsin: A History of Old Crawford County*, 4 vols. Chicago: The S. J. Clarke Publishing Company, 1932.  
Holford, Costello N., *History of Grant County Wisconsin*. Lancaster: The Teller Print, 1900.  
Kaye, Ivan N. *Good Clean Violence*. New York: J. B. Lippincott Company, 1973.  
Longhorn, Milton, ed., *During Seventy-Five Years: A History of the State Teachers College, Platteville, Wisconsin, 1866-1941*. Platteville: Printed locally, 1941.  
Pickard, Dorothea Wilgus, *My Roses in December*. An unpublished manuscript, 1983.

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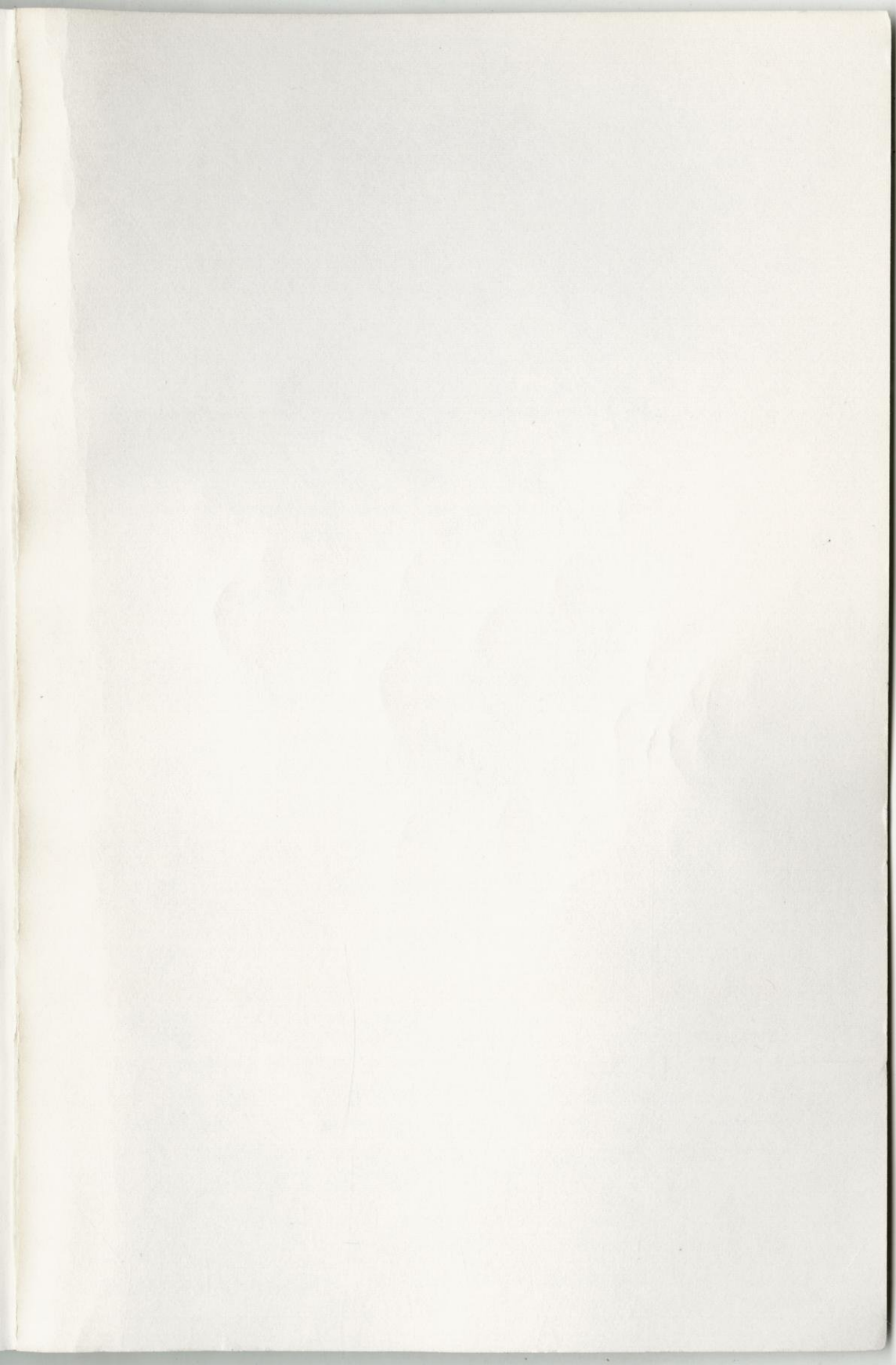
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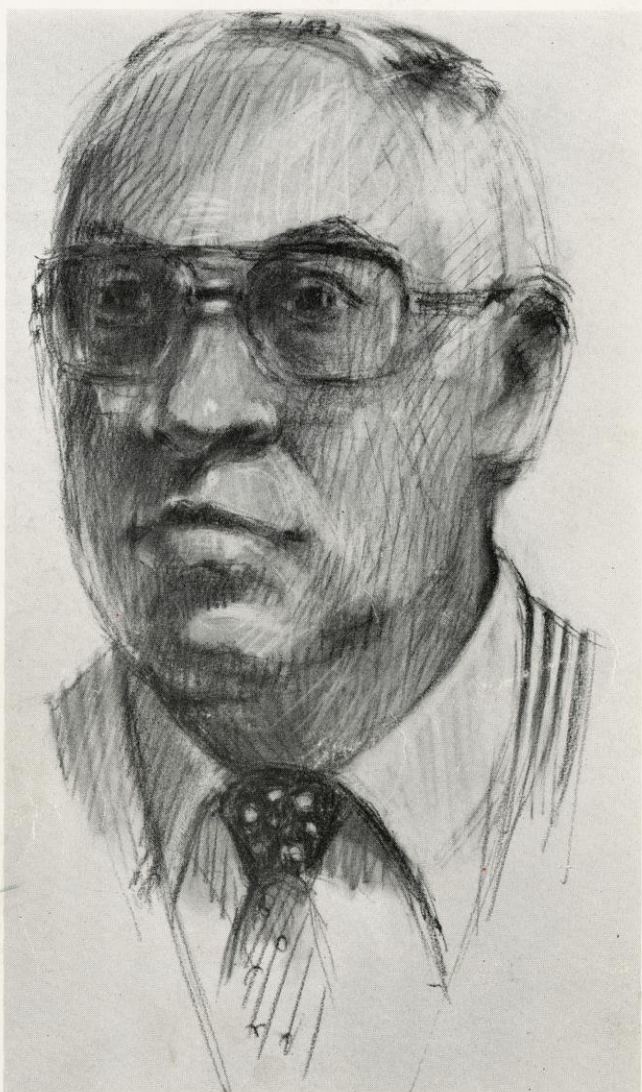
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Drawing by Bud Wall

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