

OLD EDUCATION



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

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

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

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

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

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

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

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

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

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

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

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



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

to name the building after him, but no official action was ever taken. Much needed room in Science Hall was opened up after engineering left in 1900. A new standard for speed and efficiency of construction was set, and possibly never exceeded. But the rise of engineering as a university pursuit was too swift even for the new building. By 1910 the building was too small. For some unknown reason, possibly the replacement of Jennings by Arthur Peabody as architect, the first addition was built on the west side rather than the east side⁸, with its already begun basement level. While this five-level addition alleviated crowding for a while, it was decided that in the future engineering would be given a large group of buildings on the western end of the campus. In 1933 the first of those buildings (Mechanical Engineering) was completed and the engineers began to move out of the Bascom Hill site. Almost immediately interior modifications were made to suit the needs of the incoming Education department. In 1951 the last of the engineers left the building and in the next three years substantial remodelling was done to accommodate the Education department.⁹ This included the construction of some small one-level workshops in the back of the building, used as workshops for some craft classes of Art Education. It is an interesting detail that Art Education was following the engineering department a second time, having inherited the old machine shop buildings from engineering when the Bascom Hill site opened in 1900.

1) Laws of Wisconsin 1899 chapter 239

2) The list included Ferry and Clas (Milwaukee), Henry Koch (Milwaukee), A. D. Conover (Madison), Charles Frost (Chicago), Van Brundt & Howe (Kansas City), and many others. Executive Committee papers May 20, 1899, *Regents Report*, 1900 p. 22.

3) *Daily Cardinal*, February 1, 1900 p. 1.

4) *Wisconsin Alumni Magazine*, December 1900 p. 110-111

5) *Regent's Report*, 1900 p. 8;

6) *The Wisconsin Engineer* J. B. Johnson, June 1900 pp. 119-131; *Wisconsin Alumni Magazine*, March 1900.

7) They are: Bessemer, Reynolds and Gramme on the east; Ericson, Kelvin, Rankine and Siemens on the south; Henry Corliss and Telford on the west. Only Reynolds, a Wisconsin man at the Allis works in Milwaukee was a living engineer at the time.

8) *Wisconsin Alumni Magazine*, October 1909; *The Wisconsin Engineer*, 1909-1910 vol. 14, p. 43..

9) *Regent's Minutes*, February 9, 1952. p. 12.