

The Sheffield Chemical Laboratory.

The Sheffield Chemical Laboratory was completed in 1895 by Smith, Sperry & Treat, whose work was not confined to the work of academic dormitories. This laboratory is generally regarded as one of the most substantially built and thoroughly equipped buildings of its kind in the country. The cost of construction was paid entirely from the finances of the Sheffield Scientific School.

The architects were Cady, Berg & See, of New York city, and the plans were made under the supervision of Professors Mixer, Wells and Penfield. The location is on Prospect street directly north of North Sheffield Hall, and separated from it by a space of forty-seven feet so as to afford plenty of light. The building is 60x125 feet in dimensions, three stories high with basement, and built on the slow-burning plan. The walls are of brick, trimmed with terra cotta and East Haven sandstone.

The roof is of three inches of spruce, one inch of felt and a covering of copper. The floors are of spruce and maple, and the walls are plastered and hard finished. The woodwork is of hard pine throughout. The building is heated from the plant in Winchester Hall.

The third floor comprises a general chemical laboratory, which is used by the Freshman class, a lecture room accommodating one hundred, a recitation room accommodating forty, and two preparation rooms, one containing the apparatus for the lecture room, and the other, that for the laboratory. The latter has ten desks, each twenty by four feet, and each accommodating eight men, and having four sinks.

The re-agent shelves are of soap-stone. The room has adequate locker space, each man having two drawers and one locker, supplying 320 men in four divisions. The gas holders for chemical work are located in the eastern end of the room on the wall, with a pneumatic trough below. The drainage is through the posts which support the flooring.

The second floor is devoted to a qualitative laboratory, furnished in a similar manner to the laboratory of general chemistry on the third floor, a supply

room for the laboratory, a private room for Prof. Mixer and a balance room.

The first floor contains a qualitative laboratory, which is somewhat smaller than the other two, a balance room, store rooms, and rooms for the work of the students in the graduate department. The basement is taken up by an assay laboratory, furnished with furnaces and complete apparatus, and a room for physical experiments.

Pierson Hall.

One of the most noteworthy pieces of work done for Yale by this firm was the building of Pierson Hall in 27 weeks. On March 11, 1896, the Corporation decided that another dormitory was a necessity. In two weeks the plans were ready, being made by Cady, Berg & See. The twenty-seventh week saw the completed dormitory accepted by the college authorities.

It was during the erection of this building, that the death occurred of Mr. Smith, the senior member of this building firm, which has since been known as Sperry & Treat.

Pierson Hall is on York street and is a handsome and valuable addition to the many buildings recently constructed by the University. It is named after Yale's first President. The building is 122 feet in length by 55 feet in breadth and five stories in height, not including a high-studded basement.

The main entrance is in the center of the facade through a wide doorway, leading to a vestibule and corridors. The material used from the foundation to the sill course of the second story is tool-faced red sandstone, laid in quoined courses. The corner trimmings are of sandstone, also laid in quoined courses. Above the stone courses the building is of fine red brick and terra cotta. To relieve the monotony of the wall there are four pilasters extending from the second to the beginning of the fifth story. The pilasters are of brick and are capped with terra cotta capitals of handsome design. The window arches and the ones over the doors to the main entrance are flat.

At the fifth story, extending across the entire facade, is a balcony. The cornice, extending from just above the fifth story windows and reaching to the

roof, is of terra cotta, executed in richly designed bas-relief. The roof is of the hip style of construction.

The main entrance is through heavy oak doors and the vestibule and corridors have floors laid with mosaic tiling. The building accommodates one hundred men and contains sixty single rooms and twenty double rooms. The former are arranged about the center of the building; the latter at the ends. The windows are larger than those of the other dormitories and the arrangements are such that all the apartments receive the sunlight for a long time each day.

The rooms are wainscoted in polished hard wood. In fact the entire cabinet work of the interior is of polished hard wood, mostly quartered oak. It is heated by steam, and especial care was taken in designing the ventilation and plumbing arrangements. The building is on the slow-burning or mill style of construction.

The contract price was approximately \$85,000.

The Whitman Gate.

A very artistic and generally most satisfactory addition to the Yale Campus is the Whitman Memorial Gate, between the Art School and the new Library. This was erected in the months of May and June, 1895, and its cost, the sum of \$3,500, was the gift of Mrs. Henry Farnam. It was named the Whitman Gate in memory of two ancestors of the donor, both of whom were members of the Corporation in its early days. With their terms of office added together it will be seen that a Whitman was a member for almost fifty years, or one-fourth of the whole history of the institution.

The gates swing between two large pillars of red sandstone which are joined overhead by a massive iron arch. The gates themselves are of iron, and are of the same design as the high iron fence that extend from each of the stone posts to the two buildings. On the left hand pillar is a tablet with the following inscription: "In Memory of Samuel Whitman, Fellow of Yale College, 1724 to 1746. Erected by Ann Whitman Farnam." On the right hand pillar is inscribed, "In Memory of Elnathan

Whitman, Fellow of Yale College, 1748 to 1774. Erected by Ann Whitman Farnam, 1895."

This structure was also the work of Smith, Sperry & Treat.

Heating Plant.

Perhaps not so ornamental but none the less useful and necessary is the new steam heating plant built by Smith, Sperry & Treat in 1893, situated just to the rear of Pierson Hall. The boiler-house is of brick, one story and a half high and fifty-three by seventy-one feet in dimensions. The chimney is one hundred feet high and six feet in diameter, inside measurement. The boiler-house contains nine large Bigelow boilers, six feet in diameter and seventeen feet long. From the boiler-house a series of brick conduits extends to the buildings which are heated. These conduits are five by four feet in dimensions and through them all the pipes lead. All the College buildings on and adjacent to the Campus are heated by this plant, while the old plant in the rear of Alumni Hall is reserved entirely for emergency work.

This is the largest steam heating plant in New England, and the system is a new one, devised by Mr. Arthur C. Walworth, '66, of Boston. By it the water is condensed and pumped into the boiler through a large receiver. Yale and Brown are the only colleges using this system of heating.

Turning the "Gym." into Commons.

The transformation of the old Gymnasium to adapt it to the requirements of a dining hall is a not unimportant change in the building history of Yale during the last few years. The very modest and simple structure which served as the developer of Yale muscle for so many years, is not of an early date, but is nevertheless full of reminiscent interest and of course was always pointed out to visitors at New Haven. It was originally erected in 1860. In 1892 the demand for a dining hall, under the direct control of the University, was answered by the establishment of Commons, and the remodeling of the Gymnasium to answer this purpose was another of the services in the way of building for Yale by the firm of Smith, Sperry & Treat. As now arranged, the hall accommodates 450 students, who are from the Scientific and Academic Departments. The management is under a steward.

ANOTHER GROUP OF SPERRY & TREAT (FORMERLY SMITH, SPERRY & TREAT) BUILDINGS.

