

TRIPS TAKEN BY JUNIOR AND SENIOR ENGINEERS.

DURING SUMMER, 1905, AND YEARS 1905-1906.

Since the advancement of engineering at Iowa and the placing of this department under a separate college, a number of changes have been inaugurated. Among these are short trips to various manufacturing plants, steel works, mines, etc., for the purpose of seeing the actual methods in operation. In the past these trips were chiefly for the mining students and the class in metallurgy, under the direction of Mr. C. L. Bryden. It is planned, however, to extend this method of study to other classes and departments of the college in the future.

SUMMER TRIP, 1905.

The Junior and Sophomore mining engineers left Iowa City, Tuesday, June 13, 1905, for Centerville, Iowa. Here we visited three types of coal mines in operation, No. 9, Relay, and Mystic. No. 9 and Relay were room and pillar mines, while Mystic was worked by the long wall system. The entrance to the Mystic mine was also by a drift, while the other mines were operated by shafts. Both hand and machine mining was studied, and two types of haulage, the tail rope and mule haulage, were in use.

From Centerville we went direct to Joplin, Missouri, where we visited districts in and around Joplin, Webb City, etc. Besides studying several zinc and lead mines in operation, we visited several concentrating mills, the "Pitcher & Pitcher lead works," and the "Gordon zinc white works." The mines visited were the Conqueror and one of the "Boston Get There" mines. While here we met Dr. F. H. Bain, of the United States Geological Survey, now state geologist of Illinois.

Our next stop was Pittsburg, Kan., where we visited an old coal fired Belgian zinc furnace. We then went to Iola, Kan., where we visited the Iola Cement Co. and two gas-fired Belgian zinc furnaces of the Langon Zinc Co. and zinc rolling mills. From here we proceeded to Omaha, where we visited the new electric power plant and the American Smelting and Refining Company.

CHRISTMAS TRIP OF MINING ENGINEERS.

The work of the summer trip was not fully carried out, on account of the lack of several instruments. Therefore the mining students went back to Centerville during the Christmas intermission to make a survey in one of the collieries.

We all arrived here Dec. 27, '05, in a fierce snow storm, ready for work. The survey was made in the N. E. of No. 9 colliery of the Centerville Block Coal Company. The work progressed very rapidly, with the assistance of several Freshmen engineers who lived here, so that we were able to return to Iowa City by Jan. 1, '06, ready to take up our work in school again.

SPRING TRIP—ALL ENGINEERS TAKING METALLURGY.

On April 9th we started for Chicago, where the following plants were visited—Illinois Steel Co., Illinois Steel and Cement Works, Ship Building Co., and International Harvester Co. One day was spent in Aurora, Ill., visiting the C. B. & Q. shops, while another was spent in Milwaukee, where we visited the Allis-Chalmers West Allis works, and the Pabst Brewing Co.'s plant. The trip to Milwaukee was by boat, and passed away pleasantly. Easter Sunday was spent in Chicago, but Monday we started back, stopping off at La Salle to visit several plants of interest. Among those visited were the Mattheisen and Hezeler Zinc Co., employing the old Belgian coal fired furnaces; the Illinois Zinc Co., at Peru, using Producer gas-fired furnaces; the German-American Portland Cement Works; and the Peru Clock Works. The party then returned to Iowa City, to take up the work of the fourth quarter Tuesday morning, April 17, 1906.