

THE TECH

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BOSTON, MASS., JANUARY 15, 1910.

Although miners' work takes them underground, that they are not all dead ones is proven by the number of Course III men taking part in student activities. Among the seniors, the president of the class, one of the executive committee, two of the athletic association, the manager of the basketball team and others are prominent in outside work. Of the juniors, the clerk of 1911, and one man on the athletic association, the treasurer of Technique, the history editor of the year-book, as well as the business manager of the Tech, represent Course III. With the second year men, a miner is on the executive committee, and several are on the Tech. Besides these activities, Course III is always represented on class and varsity athletic teams, musical clubs, etc.

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COURSE IN GEOLOGY.

(Continued from page 23.)

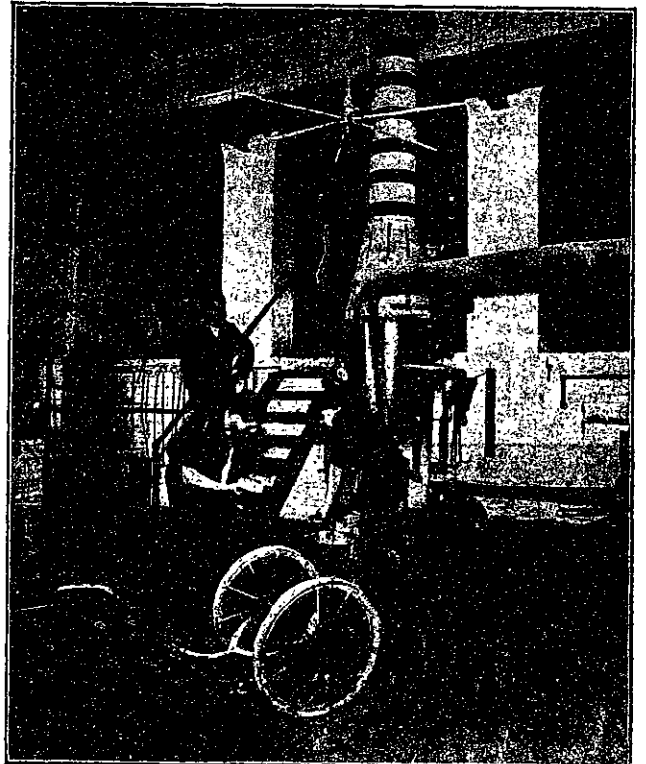
maps of the State. The United States Geological Survey stands ready to cooperate with the State in the expense of making these maps. The Institute of Technology ought to provide some of the topographers for this work if it is carried out. There is always opportunity on the geological survey for undergraduates or graduates of the Institute to get profitable training under the skilled Government topographers. Course XII is designed to develop systematic training along these lines.

The geologists who graduate from the course in Mining Geology at the Institute, may enter upon any one of several different professional careers. They may become Government or State geologists, do private expert work along economic lines, or become teachers in colleges. The usual procedure of our geological graduates is to go at once into a mining district, and begin work from the bottom up. Some men take the civil service examination for a position as assistant geologist on the United States Geological Survey, or become assistants on the Geological Survey of Canada. There is to be an examination held in many cases all over the country,



PROF. T. A. JAGGAR.

now announced for February 16th and 17th, to provide candidates for vacancies on the geological survey at salaries ranging from \$1000 to \$1600. The men chosen will have opportunity to gain valuable experience in remote and wonderful regions, such as Alaska, the Rocky Mountains, and the deserts of Nevada. Such experience is a training school in itself, and the Government offices provide every facility for excellent work at great expense. Men who have worked on the survey for a few years frequently go into private practice as consulting geologists, or become consulting experts of great mining companies at salaries ranging from \$5000 to \$10,000, according to their ability. The geologist is becoming more important in the commercial world as his science gains definition and accuracy; and nowadays there are many uses for his work apart from mining. In connection with water supply, sewage disposal, railroad engineering, harbors, agricultural and soil surveys, irrigation, forestry, and landscape architecture, and many branches of engineering construction, as well as in matters of litigation concerning the earth and its products, the services of the geologists are constantly required.



BLAST FURNACE.

HISTORICAL OUTLINE

By PROF. R. H. RICHARDS.

Rogers laid out a program for a course in Practical Geology and Mining in his early pamphlet (Scope and Plan of a School of Industrial Science, May 30, 1864). It consisted of suitably balanced chemistry, physics, and mathematics, with geology, mechanical engineering, and civil engineering, together with language and literature; and to introduce the student to the practical side of the profession there should be a laboratory for concentrating and smelting, and also assaying by fire, and finally visits were to be made to mines, concentrating mills, and smelters. Rogers also gave the instruction in geology and physics during the first five years in addition to his duties as President.

Runkle in 1871 organized a summer school to visit mines, mills, and smelters in Missouri, Colorado, Wyoming, Utah, Nevada and California. Through his zeal and energy the Institute was presented many ore samples from the mines, and a complete gold mill for stamping, amalgamating and concentrating gold ores by the San Francisco manufacturers of machinery, the Union Iron Works, and Joshua Hendy Mfg. Co.

Ordway built the first metallurgical laboratory, including assay muffle and crucible furnaces, a roasting reverberatory furnace, a smelting reverberatory, and a little brick blast furnace for smelting.

Storer was the chief teacher of chemistry in the early years. Eliot followed by Allen and Ordway in Metallurgy, Henck in civil engineering, Watson in mechanical, Bocher and Kraus in languages, Runkle and Osborne in mathematics, and Atkinson in literature. Hague and afterwards Rockwell were the first two professors of mining engineering.

Richards in 1871 was placed in charge of the development and management of the mining and metallurgical laboratories. He also taught during different periods chemistry, mineralogy, mining engineering, and metallurgy.

The department has been very fortunate in its assistants, instructors, and professors throughout its history. The following men have risen through various positions in the instructing staff and have all contributed substantially to the development of the department: Stafford, Foster, Beal, Wood, Clark, Lodge, Hofman, Locke, Bugbee, Hayward and Reed.

The division of the subjects at present is: Richards and Locke have the mining and ore dressing, Hofman and Hayward have the metallurgy in all its branches, and Bugbee and Reed have the assaying and a portion of the metallurgical laboratory.

YELLOWLEGS.

(Saturday Evening Post.)

Yellowlegs is young and foolish when he wanders out from school,
Thinks a mine's a proposition to be run by line and rule.
He can tell the grizzled foreman just exactly where he's wrong,
And the "errors of the shift boss" are his never-ending song.
What he doesn't know of mining isn't worth the while to learn,
He would teach the old hands better, give 'em hints at every turn;
He's the pinnacle of progress, he's the prophet and the seer,
For he's learned it all at college, has the mining engineer!

Yellowlegs is young,
Yellowlegs is new,
Give him time to find himself,
Time to change his view;
He'll come down a peg
When he's worked a year.
He's a bully boy at heart,
Is the engineer.

Yellowlegs gets slightly wiser when he's worked around a while,
When he sees a little merit in the other people's style,
Finds a thing or two in mining he admits he didn't know,
Laughs at "absolute opinions" that he held a while ago.
Then he buckles down to business—there is plenty of his own—
Lets the foreman and the shift boss fight their worries out alone;
For it slowly dawns upon him, and it dawns upon him clear,
It will keep him mighty busy just to be an engineer!

Yellowlegs is young,
Yellowlegs gets wise,
Finds he hasn't any time
Left to criticize;
All his uppish ways
Quickly disappear.
He's a bully boy at heart,
Is the engineer.

Yellowlegs has all the workings on a blue print paper plat,
He knows where this drift is going, where the latest stope is at.
It is Yellowlegs who figures when to raise, and how and where
To connect the different levels and to give the miners air;
How to cross-cut through the "country," how to raise a thousand feet,
So the shaft that he is raising and the one above shall meet.
And although we chuckle at him when he comes among us here,
He's a pretty wise gazabo, is the mining engineer!

Yellowlegs is keen,
Yellowlegs is cool,
After he is toned a bit
He's nobody's fool.
Mine would be a joke
'Cept with him to plan.
He's a bully boy at heart,
And a bully man!

—Berton Braley.