Mr. Joseph M. Wade has taken the place of Mr. Thomas Pray, Jr., as editor of *Cotton, Wool, and Iron*, published in Boston, and Mr. M. N. Forney has retired from the *Railroad Gazette*.

The *Mechanical Engineer* refers to our paragraph regarding some trivial accidents in our shops as "a difficulty which attends students in technical colleges."

An Ohio firm manufactures luminous hardware in the shape of harness trimmings, doorplates, match-safes, and fishing bait. By the use of the latter it is claimed that the best game fish can be caught at night. All these articles are coated with phosphorescent paint, which emits light in the dark but by daylight has the appearance of ivory.

Mr. Angus Sinclair has an interesting account in the *American Machinist* of Jan. 5 of how the fastest train in America is run. We differ, however, with Mr. Sinclair as to the propriety of calling the Pennsylvania's Chicago Limited Express the fastest train in America, since, as we have before stated in *The Tech*, the New York Central's "Limited" runs a longer distance at a higher average speed, while between Jersey City and Philadelphia there are trains both on the Bound Brook and Pennsylvania routes which beat the latter's "Limited" on that portion of its run which lies between those two cities.

The textile department of the Lowell School of Design having been criticised in *Cotton, Wool, and Iron*, Mr. Scott replies to the criticism in the issue of Jan. 5.

A novel engine has recently been tested on the Eastern Railroad, in which water gas is used as a substitute for coal. The engine weighed about thirty-two tons, with 15-inch cylinder and 24-inch stroke. It was run for one week on a local train, and effected a saving of nearly thirteen dollars in fuel for that time as compared with the amount of coal burned in the same time by the engine which ordinarily drew that train. The engine was used to draw a light train of three or four cars, but was unable to keep exactly on time with them.

6,130 miles of railroad were built in the United States in 1883, as compared with 3,992 miles in 1882, 7,870 in 1881, and 6,139 in 1880.

We note the appearance of a new safety cage, with a safety hook which will detach, automatically, the cage from the cable, if drawn up into the sheave. The designer was Mr. Falkenan at the iron works in Leadville, Col., and the large number of mining men present pronounced the device excellent.

The annual meeting of the American Institute of Mining Engineers is to be held at Cincinnati, Ohio, beginning Tuesday, Feb. 19. The members will have an opportunity to enjoy the musical festival, which begins the 10th and continues for two weeks.

The use of natural gas at Pittsburg has not been much of an economical success, but according to latest reports it is one in Kittanning, where they have organized a company and pushed the fuel into general use. The well is about two and a quarter miles from the town; the flow is steady and strong, and the company supplies eight hundred fires at a cost of $8.00 per fire for eight months in the year,—a great reduction on the use of coal.

Several years ago the fourth year miners were re-examined in both mining and mineralogy. Year before last they were obliged to pass an examination in mineralogy. Last year both were omitted, but we understand that '84 is to have another whack at mining before they are cast upon the world. Personally, we favor the holding of an examination in mineralogy, at least, in order to insure the recognition of commercially valuable minerals; and unless one is especially interested in collecting them, he is apt to have forgotten some points learned two years before.

The *Chemical News* speaks in the highest terms of a recently published work entitled "Plant-Analysis: Qualitative and Quantitative," by G. Dragendorff, Ph. D., professor of pharmacy in the University of Dorpat; translated from the German by H. G. Greenish, F. T. C. London: Baillière, Tindall & Cox.