

paper on the type as in the old style, it was fastened to a cylinder which rolled over the form and made the impression. This press could then print 800 copies an hour. In 1846 Richard M. Hoe of New York built a press for the Philadelphia Public Ledger, on which the type was fastened to a cylinder which revolved and touched other cylinders on which the paper was fastened. With this press 8,000 copies could be made every hour. Soon an improvement was added by which 20,000 copies could be made. Up to this time no newspaper had a very large circulation, for sufficient copies could not be printed in a day, but from that time on many newspapers were sent abroad.

The Saturday Evening Post, which was brought into existence by Benjamin Franklin in 1728, printed from 200 to 240 eight-page papers in a day. Today the same publication prints approximately 150 million pages in a week, containing about ten times as much reading matter, and its circulation is easily 143 times as great.

To give you some idea of the speed at which a modern newspaper press runs, I will say that in Boston a press prints and folds 90,000 eight-page papers each hour. By reducing this number to find its rate per minute, 1,500 will be our answer. Divide 1,500 by 60 and we find that 25 papers are printed each second. At one end of this press is a large roll of paper which runs through the machine at a rate of 32 miles an hour and comes out at the other end printed and folded.

The size of the press has changed equally as much as has the speed. A modern Goss press stands about 28 feet high, is 14 feet wide, and a little more than 50 feet long.

For the setting of type machines have been made to do all but think, while the great devices that print the papers and books of the present day are among the most marvelous contrivances ever conceived by man.

Making colored pictures has become a most wonderful printers' triumph. The process has been so thoroughly mastered that to produce a picture with all the natural colors of life is a common achievement. Besides this, printing as a civilizing force and an educational factor is second to none. In the time of Columbus, when the art was first practiced, a new impulse was given to navigation and exploration. Knowledge gained by men has ever since been collected and compiled. Those wishing to pursue any branch of science have only to read and learn what has already been accomplished in this particular line and begin where former wise men left off. They, in turn, add wisdom gained by experiment and investigation, and thus the world progresses.

The certain and thorough method of giving information through printed matter is excelled by no other system of communication. The telegraph and the telephone are noted for the celerity with which they convey news, but printed matter finds its way into regions that are in-