

plates for illustration. These plates are inked with yellow, the first color for ground work, and are for the first and last pages of the paper. The sheet passes directly over the off-set cylinder to the top impression cylinder for picture plates. This has red ink and furnishes the second color. The sheet having received its impress passes directly to the cylinder below, where the ink is blue.

In the current issue, there being six pages of type-printed matter, the cylinder was divided, half its plates being stereotype, or type for black ink matter, and half electrotype plates for color illustration; the last color in blue being laid on at this stage. If two inside pages had been colored illustrations this cylinder would have been entirely belted with electrotype plates. In other words, this press is capable of printing four pages of reading-matter and four pages of colored plates, or six pages of reading-matter and two pages of colored plates. One even more remarkable fact about the press is that the number of colors can be doubled. All of the ink fountains are divided into two compartments; the paper roll being half width it can be conducted twice about the off-set cylinder, receiving double-color impressions. This reduces the number of impressions to 7,500 per hour. There are seven ink rollers to each cylinder, with extra form and polish rollers, which give the appearance of complexity to the body of the press. A very ingenious device for giving clear impressions and cleaning the off-set roller is directly beneath the press in the tank. This is an oil fountain associated with a steel polish roller. It presses against a plush roller, which in turn presses the off-set cylinder, and does the rest when the strip of paper leaves the last impression cylinder it gets into the domain of the feeder and takes its first degree in a line of promotion as a paper and is pasted. It is then cut lengthwise between two cylinders, and passes with a flash to collecting cylinders, where it is gathered into sheets of four pages and then formed into an eight page paper. Two small cylinders give it a first fold; it whirls up like a spark from a fire, is folded a second time and behold there are two perfect eight-page papers; a pair of frisky cylinders divorce these Siamese twins, and drops them into packing boxes on either side of the folder. Every revolution throws two perfect eight-page papers with four pages of colored illustrations, in four or eight colors, as desired; every fifteen sheets are automatically counted, and 15,000 papers are thus printed in an hour.

The stereotyped plates of the press are similar to those used on all perfecting presses. The electrotype plate is engraved, the first being the model of the entire series; each color requiring its own individual plate. These plates are cast flat, and are

only a quarter of an inch in thickness, the ordinary stereotyped plates being half an inch. In order to fit the cylinders, they must be curved, and a simple but ingenious machine bends the plates without injury to the value of the finest lines. The plates are routed (the parts unnecessary for the colors being cut out), after the plates are bent. The bed of the routing-machine is semi-circular fitting. The curve of the plate and the drill of the router will work, too, as fine a line as flat-bed machines. The saw and trimmer for scraping up plates also have circular beds, and are equally accurate in preserving fine alignment. The fact that color work can be done on a perfecting-press shows its unique value in the illustration of current events; the proceedings of yesterday becoming the pictures of to-day. This paper is a pioneer in the Western world, but it proposes to advance the standard of this class of work as rapidly as energy and well-directed enterprise will admit.

TYPE FOUNDERS' COMBINE

AFTER several failures, the type founders have formed a combine. The new trust is known as the Type Founders' company. It is incorporated under the laws of New Jersey, with a capital stock of \$9,000,000, consisting of 40,000 shares of 8 per cent. preferred, and 50,000 shares of common stock. The New York Guarantee and Indemnity Company was prominent in the formation of the company, and will name two directors. The officers are:—Robert Allison, Cincinnati, president; W. B. Mackellar, Philadelphia, vice-president; A. T. H. Brewer, New York, secretary; John Marder, Chicago, western manager; G. H. Jerman, New York, eastern manager. The type founders think the profits can be increased to \$1,000,000 a year. A. D. Farmer & Son, and George Bruce, Son & Co., New York, refuse to join the trust. These are very old and very strong firms; they say they prefer to be independent and take their chances. Barnhart Bros. & Spindler, of Chicago, decline to join the combination, but it is said they are willing to sell out to it. The same statement is made concerning the Keystone type foundry, of Philadelphia.

THE London Eng., correspondent of the *Orillia Packet* says a kind word for *PRINTER AND PUBLISHER*. "It is an excellent work. I was very much pleased with it. 'The Curious Epitaph upon a Printer' and 'Tom Typo' are worthy of emanating from Welburn's pen, whose 'Night Comp.' and other similar poems, you have recently published."

Le Petit Journal of Paris has a daily circulation of nearly a million. It has the largest circulation in the world; the next largest is that of the *Daily News* of London.