

printed 144 pages at each revolution, in sections of twenty-fours. At the time of my visit the firm were publishing an edition of thirty-two volumes of "English Classics," at 18 dollars, printed on rotary presses, bound (gilt top) and turned out at the rate of 10,000 to 12,000 books per day, their plant enabling them, they claimed, to do 15,000 per day, if required. They were packed in boxes on the same floor, and transferred to trucks ten blocks away, upon a railway running for a clear 3,000 miles as far as San Francisco.

An interesting visit was the one paid to the offices of the American Planograph Company, established to introduce a new machine to produce printed matter without the aid of type, similar to the one I had seen in an experimental state in Cleveland. In this instance, however, the machine was in full working order. The inventor was most enthusiastic in his estimate of its capabilities and possibilities, claiming that it would help and raise the art of lithography, but would entirely "knock" that of typography. The machine, which weighed only 50lb, occupied a space of 3ft. by 2ft., had 40 keys on the keyboard, with five characters or impressions in each, which governed five wheels having 195 characters. The characters were printed on transfer paper, the print being transferred to a metal plate, which was placed upon the cylinder, the printed impression being taken from this smooth surface. The inventor claimed that from surface printing a sharper face and greater uniformity of tone could be obtained; that by the new process no metal or gas was required, the machine being manipulated by means of compressed air; that by the zinc process the matter could be transferred in 1½ minutes, and on the machine, ready for printing, within three minutes; that 50,000 ems of self-spaced matter could be produced in a day of six hours; and that, under the most favourable conditions of linotype or monotype work, there would by comparison be a saving of 50 per cent. Allowing for enthusiasm on the part of the inventor of the new machine, who in the course of his explanation described printers as door-mats for publishers to wipe their feet upon, the fact of its being shown to be possible to print without the aid of type and from an absolutely smooth surface necessarily arrested attention, and, in addition, it was none the less surprising to find that an equally good impression could be obtained from three thicknesses of paper fed into the machine, one after the other, the first being a sheet of ordinary news paper, the second a sheet of soda-fibre paper, and the third a sheet of tissue-paper. Blocks were also printed in the same manner—from a smooth surface—the impression being exceedingly good. The practicability of such a system of doing work, remarkable as the initial results undoubtedly were, appears to be extremely improbable; but the fact nevertheless remains that matter has been printed in the production of which type bodies were neither set nor cast, the composing machine printing the character on transfer paper, the justification of the lines being entirely automatic and without calculation on the part of the operator; and that the print was transferred to a smooth metal plate, and printed on a cylinder or rotary press absolutely without make-ready.

In the various cities which I visited, I made close inquiry into the speed at which the various grades of printing machines were being run, it having been frequently stated in this country that the output from precisely the same class of machine was not so great here as in America. The result of the inquiries was to establish—to my satisfaction, at any rate—that the difference in question was more imaginary than real. Whether the machine was producing colour work, high-class block work, or the customary letterpress printing of an ordinary jobbing or newspaper office, I failed to discover that anything like the difference claimed by English employers as prevailing between the two countries had any real existence; in fact, the output appeared to be as nearly as possible the same. In the case of the printing machines—which, as already stated, in nearly every instance were absolutely and completely up to date—as in that of the different composing rooms, it was evident that the strictest attention was given to the cleanly condition