

(No Model.)

W. H. R. TOYE.

REGISTERING ATTACHMENT FOR PRINTING PLATES FOR PRINTING
MACHINES.

No. 522,129.

Patented June 26, 1894.

Fig. 1.

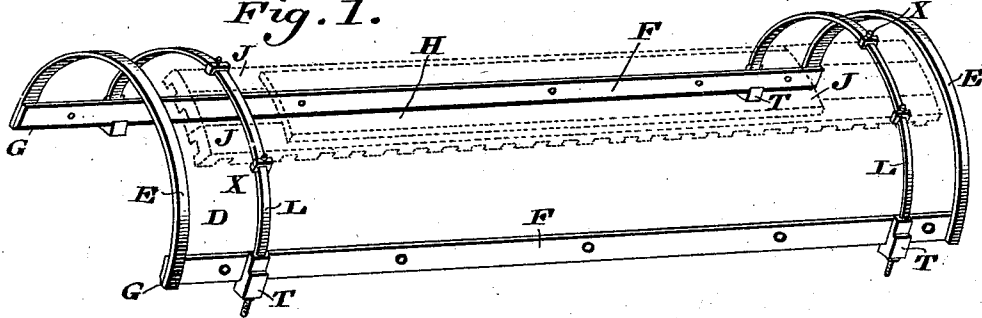


Fig. 2.

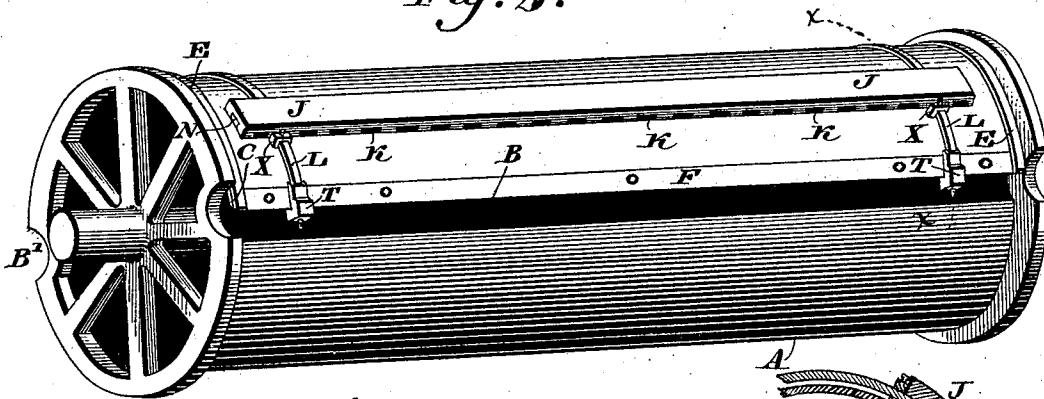


Fig. 3.

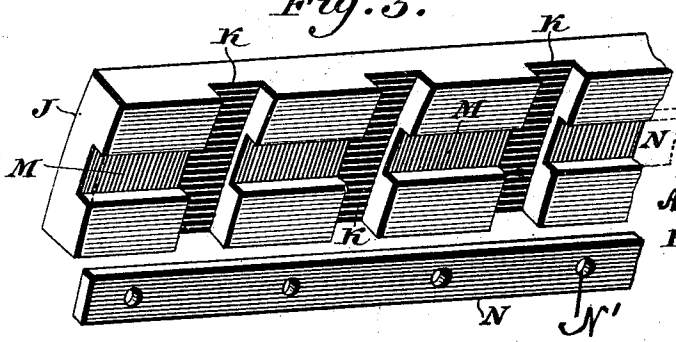


Fig. 7.

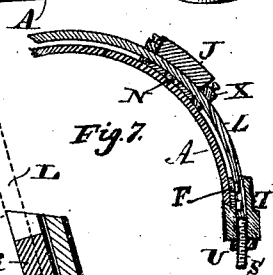


Fig. 5.

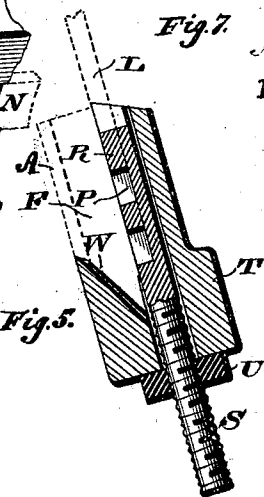


Fig. 4.

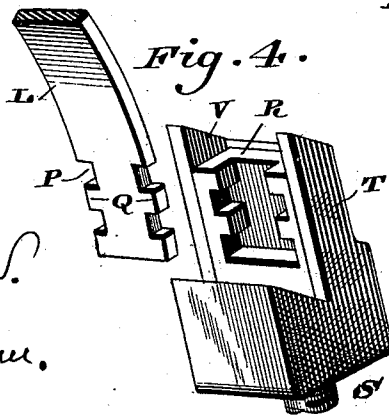
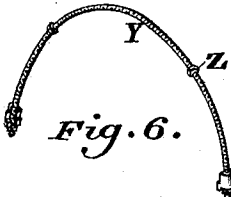


Fig. 6.



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UNITED STATES PATENT OFFICE.

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REGISTERING ATTACHMENT FOR PRINTING-PLATES FOR PRINTING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 522,129, dated June 26, 1894.

Application filed November 19, 1891. Renewed December 16, 1892. Again renewed December 12, 1893. Serial No. 493,494.
(No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. R. TOYE, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Registering Attachments for Printing-Plates for Printing-Machines, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to improvements in registering attachments for printing plates for printing machines, and has for its object, to provide means to readily and accurately adjust the printing plates of a cylinder press, and to hold them securely, while so adjusting them, and for this purpose it consists—first, of a chase or frame adapted to be secured to the printing cylinder and having adjustable binder bars on which are secured strips formed as described, and adjustable on said bars.

It further consists of the combination and arrangement of parts as herein set forth.

Figure 1 represents a perspective view of a registering attachment to a printing machine embodying my invention. Fig. 2 represents a perspective view of a printing cylinder having said registering attachment thereon. Fig. 3 represents a perspective view of one of the curved reglets on which the printing plates are secured. Fig. 4 represents a perspective view of detail portions of the device. Fig. 5 represents a vertical section of the parts shown in Fig. 4, in operative position. Fig. 6 represents a perspective view of another form of binding bar that may be employed. Fig. 7 represents a vertical section on line *x, x*, Fig. 2.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings: A designates the plate cylinder of a printing machine having the longitudinally extending slots or openings B and B' therein, the walls C of which are beveled for a purpose hereinafter explained.

D designates a chase, or frame conforming

to the shape of the cylinder, so as to be readily secured thereto, in any usual and well known manner and consisting of the segmental arms E, and the cross bars F, the latter being secured to the said segmental arms and having their outer edges G beveled. The printing plates H, which are of usual form and construction, are attached to the strips J, which are of wood or metal, and are preferably made type-high, but they may be made of any width or thickness to accommodate any kind of plate or surface printed from. The said strips are made of various widths like printers' reglets. The bottom of each of the strips J is provided with the grooves or recesses K, extending transversely of the same, so as to permit the insertion of the binder bars L, and the longitudinally extending groove M, of less depth than the grooves K for the insertion of the foot strips N, which are fastened to the strip J by pins or screws through openings N' thereof, and passing beneath the binder bars L secure the strips J to said binder bars. The said strips J are made either of wood, compressed paper or any other material that may be molded, brass, cast iron, type metal, or any other substance or combination thereof, which will give rigidity and strength to resist the impact of the impressing cylinder. The binder bars or strips L, which are of tough metal, as steel, brass or iron, and are curved, conforming to the plate cylinder, have their ends provided with the notches P, forming the projections Q, so as to readily fit in and be attached to the body part of a sliding piece R. Each of the said pieces R has a threaded stem S, which freely moves endwise in an opening in a block T, and has a nut U thereon. The said block T has a socket or recessed portion V, in which the body part of the piece R is guided, and a beveled shoulder W, so as to fit closely against the beveled wall C of the cylinder and the beveled edge G of the cross bar F of the chase.

On the binder bars or strips L, are the clamps X, consisting of a boss or collar movable on said bars and provided with a screw

working in an opening therein, and bearing against the bar. The said clamps secure the reglets in place on the bars. It will be seen, that if it be required to adjust the printing plate H toward the opening B, so as to properly register it, the nuts U on the ends of the pieces R at the opening B' are loosened; and the nuts U at the other ends of the bar or at the opening B, are rotated, bearing against the blocks T, so as to move the pieces R with their bars L, and the strips J, and the printing plate H, toward the said opening B. If it be desired to move the plate away from the opening B, the nuts U at that opening are loosened, and the nuts at the opening B', are tightened against their blocks T, so as to draw the bars L with the plate H, toward the said opening B', and away from the opening B. After the plate has been adjusted, the loose nuts are tightened against their blocks T, so that the bars L are held in place. The strips J may be employed with a screw-threaded binder bar Y of the form shown in Fig. 6, the same passing freely through the transverse openings or recesses in said strip, having the binding nuts Z thereon.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

30 1. A registering attachment for a printing

cylinder, consisting of a frame, binder bars adjustable thereon, and strips carried by said binders and to which a printing plate is adapted to be secured, said parts being combined substantially as described. 35

2. A registering attachment for a printing cylinder, consisting of blocks adapted to be attached to the walls of openings in said cylinder, bars adjustable in said blocks, and strips on said bars adapted to have the printing plates secured thereon, substantially as described. 40

3. A registering attachment for a printing cylinder, consisting of a chase, blocks fitting on said chase, curved bars with end pieces movable in said blocks, and having projecting screw-threaded stems, nuts on said stems, strips movable on said bars, and clamps for securing said strips in place, said parts being combined substantially as described. 45 50

4. A registering attachment for a printing cylinder, consisting of adjustable binder bars, a strip having transverse and longitudinal grooves on its bottom, and a bottom strip fitting in said longitudinal groove, said parts being combined substantially as described. 55

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