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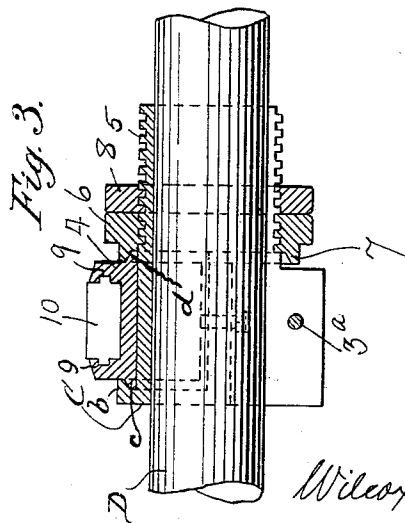
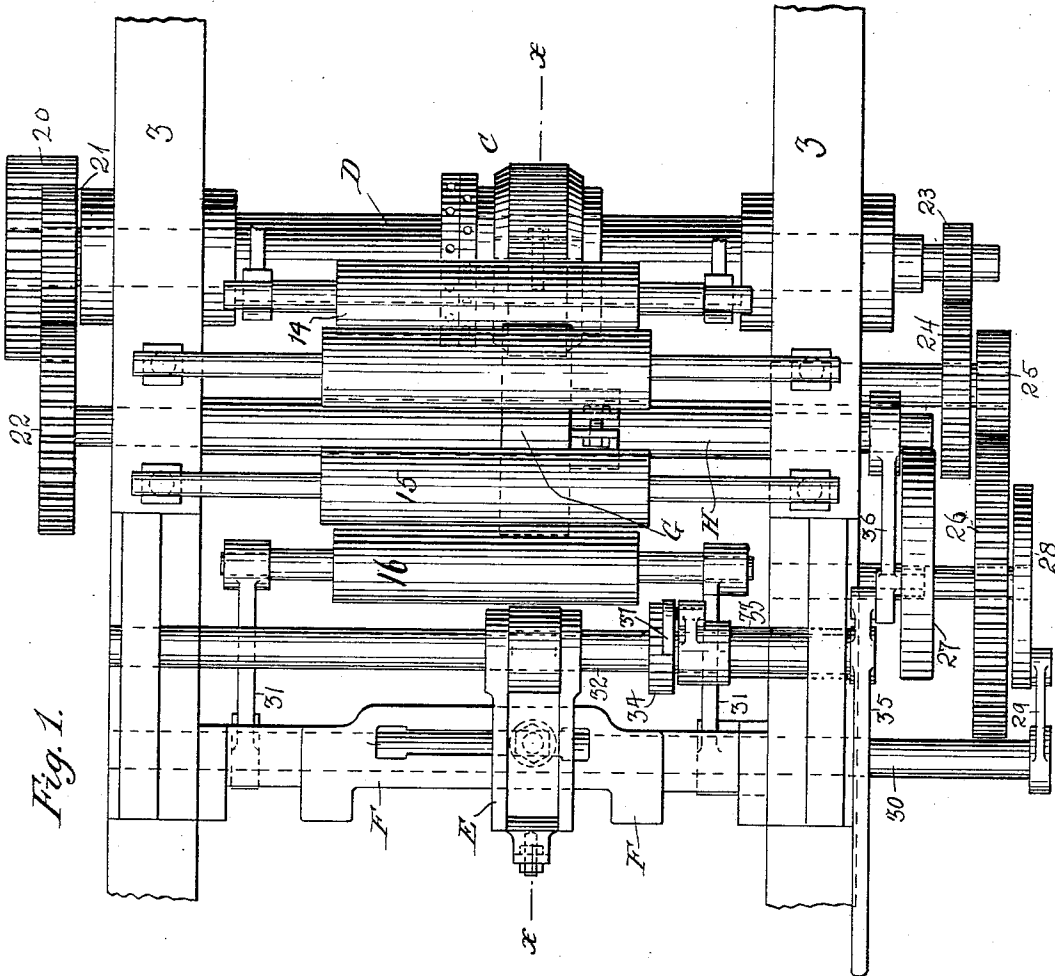
Patented Aug. 7, 1900.

W. SCOTT.
PRINTING MACHINE.

(Application filed Oct. 21, 1896.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:
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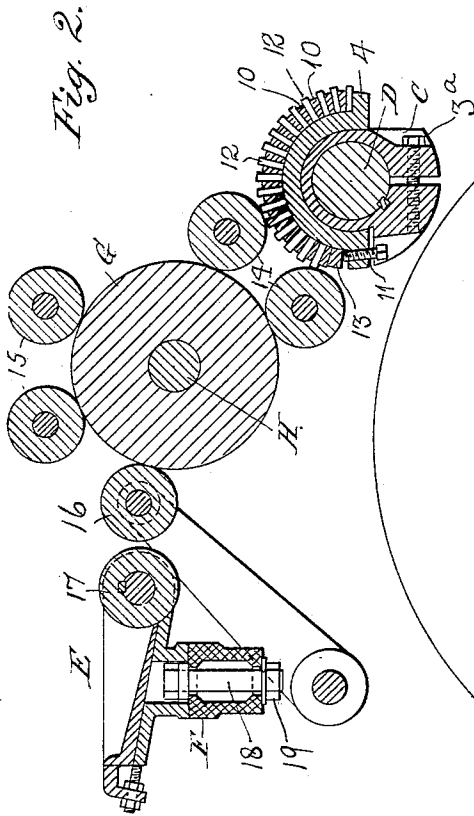
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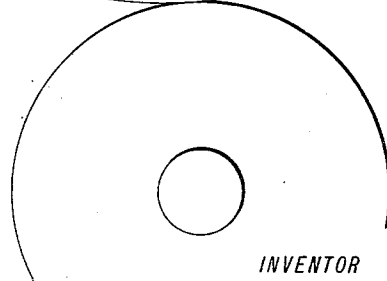
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(No Model.)

2 Sheets—Sheet 2.



2



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UNITED STATES PATENT OFFICE.

WALTER SCOTT, OF PLAINFIELD, NEW JERSEY.

PRINTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 655,356, dated August 7, 1900.

Application filed October 21, 1896. Serial No. 609,547. (No model.)

To all whom it may concern:

Be it known that I, WALTER SCOTT, a citizen of the United States, and a resident of Plainfield, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Printing-Machines, of which the following is a specification.

This invention relates to web-perfecting printing-presses, having for its object the insertion of matter upon the web in desired positions, such inserted matter preferably being in a color different from that of the remainder of the matter upon that side of the web.

The invention consists of the combination, with plate and impression cylinders for perfecting a web, of an auxiliary type-cylinder adjustable along one of said impression-cylinders and adapted to coact therewith, and inking apparatus for said auxiliary cylinder provided with a fountain, fountain-roller, and distributing-cylinder, also adjustable longitudinally of said impression-cylinder, and with non-adjustable distributing-rolls longer than said auxiliary cylinder and said distributing-cylinder.

The preferred form of the invention is illustrated in the accompanying drawings, forming part hereof, in which—

Figure 1 is a plan view showing portions of a framework, the auxiliary form-carrier and its inking apparatus and driving mechanism for the same. Fig. 2 is a sectional view taken upon the plan indicated by the line *xx* in Fig. 1. Fig. 3 illustrates a detail of construction.

The reference 2 indicates an impression-cylinder of a rotary printing-machine, which coacts with a plate-cylinder *p* to take impressions upon one side of a web or upon sheets of paper. Above cylinder 2 I journal a shaft D in a framework 3. Upon this shaft D and movable longitudinally thereof I place the type-cylinder C, this cylinder C being shown as being longitudinally split on one side thereof. A screw-bolt 3^a passes freely through one of the jaws of the longitudinally-split portion of the cylinder C and engages with a screw-threaded hole in the other of said jaws. By tightening and loosening the said bolt 3^a the cylinder C is clamped to and unclamped from the shaft D and may thus be moved along the same and clamped thereto

at any desired point. The shaft D being round, the cylinder C may be rotated thereabout, if so desired, or the cylinder C and the shaft D may be connected by a feather or spline, and the cylinder C thus be prevented from turning about the shaft D, while being movable longitudinally of the same. The cylinder C is formed with a circumferentially-extending overhanging lip *b* at one end (see Fig. 3) and is provided with a circumferentially-extending smooth surface concentric with the shaft D for the purpose of receiving the curved type-holder 4. The type-holder 4 fits upon the surface of the type-cylinder C and is provided with circumferential flanges *c d* at its base, one of which flanges, as *c*, fits under the overhanging lip *b* of the cylinder C. The type-cylinder C is screw-threaded, as at 5, and upon these screw-threads 5 a nut 6 runs. The nut 6, on that side thereof next the type-cylinder, is recessed circumferentially, as at 7, to fit over the second of the base-flanges, as at *d*, of the type-holder. A jam-nut 8 also runs upon the threads 5. By loosening the nuts 6 and 8 the type-holder 4 may be removed, and by tightening them the said holder is firmly held in position upon the type-cylinder C. The type-holder is provided with a rectangular circumferentially-extending groove, which may be closed at both ends. The sides of this rectangular groove are themselves provided with the recesses 9, which are concentric with the bottom of the circumferential groove above named. At one end of the type-holder a screw-bolt 11 passes through a screw-threaded perforation in the end thereof. At one end of the type-holder the grooves or recesses 9 may open out to the outer surface of the holder. The holder is provided with the wedge-shaped bars 10, which have projections or lugs upon their ends for engagement with recesses 9. The wedges 10 are placed with their thicker portion outermost and their thinner edge innermost, as will be understood. The type or linotypes 12 are inserted in the type-holder between the wedges 10, and the whole are firmly held in position by means of the screw-bolt 11 above named, which acts upon the follower 13, also in said rectangular groove of the type-holder 4. The type or linotypes are thus held in position by compression.

The reference 14 indicates the form-rollers, which are suitably supported from the framework 3 and are shown as being non-adjustable.

- 5 The distributing-cylinder G is shown as of a width sufficient to equal the width of the column of type in the holder 4 and as being adjustable longitudinally of the shaft H. This shaft H is journaled in the framework 3. The devices for adjusting and securing the cylinder G at any point upon the shaft H may be similar to those hereinbefore described for securing the type-cylinder C in any desired position upon the shaft D and are so shown.

15 The reference 15 marks rollers which coact with the distributing-cylinder G, these rollers 15 being vibrated in any usual manner. (Not shown.)

- 20 The reference 16 marks a ductor-roller for transferring ink from the fountain-roller 17 to the cylinder G. The fountain E and its roller 17 are of size sufficient to supply ink to the cylinder G. The fountain E is shown as adjustably attached to the slotted bar F, which extends across or forms part of the framework 3, the fountain being secured in position by means of the bolt 18 and nut 19. The rolls 14, 15, and 16 are longer than the rolls or cylinders 17 and G and the cylinder C and are thus adapted to coact with the rolls 17 and G and the type-form on the cylinder C whatever may be the adjusted positions thereof, thus securing that the auxiliary type-form on cylinder C shall be inked without any adjustment of the rolls 14, 15, and 16.

- The shaft D is driven by means of the gear 20, fast at one end thereof. This gear 20, through the intermediate gear 21 and the gear 22 on shaft H, serves to drive the cylinder G. The shaft D is also provided with a gear 23, which, through the train of gearing 24, 25, and 26, drives the cams 27 and 28. The cam 28, through the arm 29 and shaft 30, operates the ductor-roller 16, this roller 16 being borne in arms 31, fast on the shaft 30. The shaft 32 passes through the fountain-roller 17 and is splined thereto, as indicated in Fig. 2. The shaft 32 is journaled in the framework 3 at one end, and at the other end it is journaled in the sleeve 33, which itself is journaled in such framework. The shaft 32 is provided with a ratchet-wheel 34, fast thereon, and the sleeve 33 is provided with an arm 35, fast thereto. An arm 36 is loosely journaled upon the extension of shaft H and is operated by means of the cam 27. Arm 36

is connected with the arm 35 above named and through the said arm 35 communicates an oscillatory motion to the sleeve 33. A pawl 37 is carried by the said sleeve 33 and coacts with the said ratchet-wheel 34 to turn the shaft 32.

While the described auxiliary printing mechanism may be carried by the main framework of the machine, it is obvious that it may be mounted in or carried by an additional frame, as 3, sitting upon and fastened to the main framework. It is also obvious that the form-rollers, the vibrating rollers, and the ductor-roller may, instead of being non-adjustable transversely of the machine, as shown, be adjustable across the machine with the fountain and cylinders C and G.

While I have shown an auxiliary type-cylinder of a size sufficient to print upon every other page of the copies passing beneath it, it is obvious that the cylinder C may be of a size sufficient to print on each page that passes beneath it. It is also obvious that the cylinder C may contain more than one column of matter, and that the matter printed by the said cylinder may be upon portions of the web upon which the form or forms upon the cylinder *p* make no impression, and that the matter imprinted by the cylinder C may be interspersed among impressions taken from the forms upon the cylinder *p*.

The invention is not limited to the precise form thereof shown in the drawings and above described, since the form may be varied in many ways without departing from the spirit of the invention.

Having thus fully described my invention, what I claim is—

In a printing-press, the combination with plate and impression cylinders for perfecting a web, of an auxiliary type-cylinder adjustable along one of said impression-cylinders and adapted to coact therewith, and inking apparatus for said auxiliary cylinder provided with a fountain, fountain-roller, and distributing-cylinder also adjustable longitudinally of said impression-cylinder and with non-adjustable distributing-rolls longer than said auxiliary cylinder and said distributing-cylinder, substantially as described.

Signed at New York city, in the county of New York and State of New York, this 20th day of October, A. D. 1896.

WALTER SCOTT.

Witnesses:

RICHARD W. BARKLEY,
CHAS. A. BRODEK.