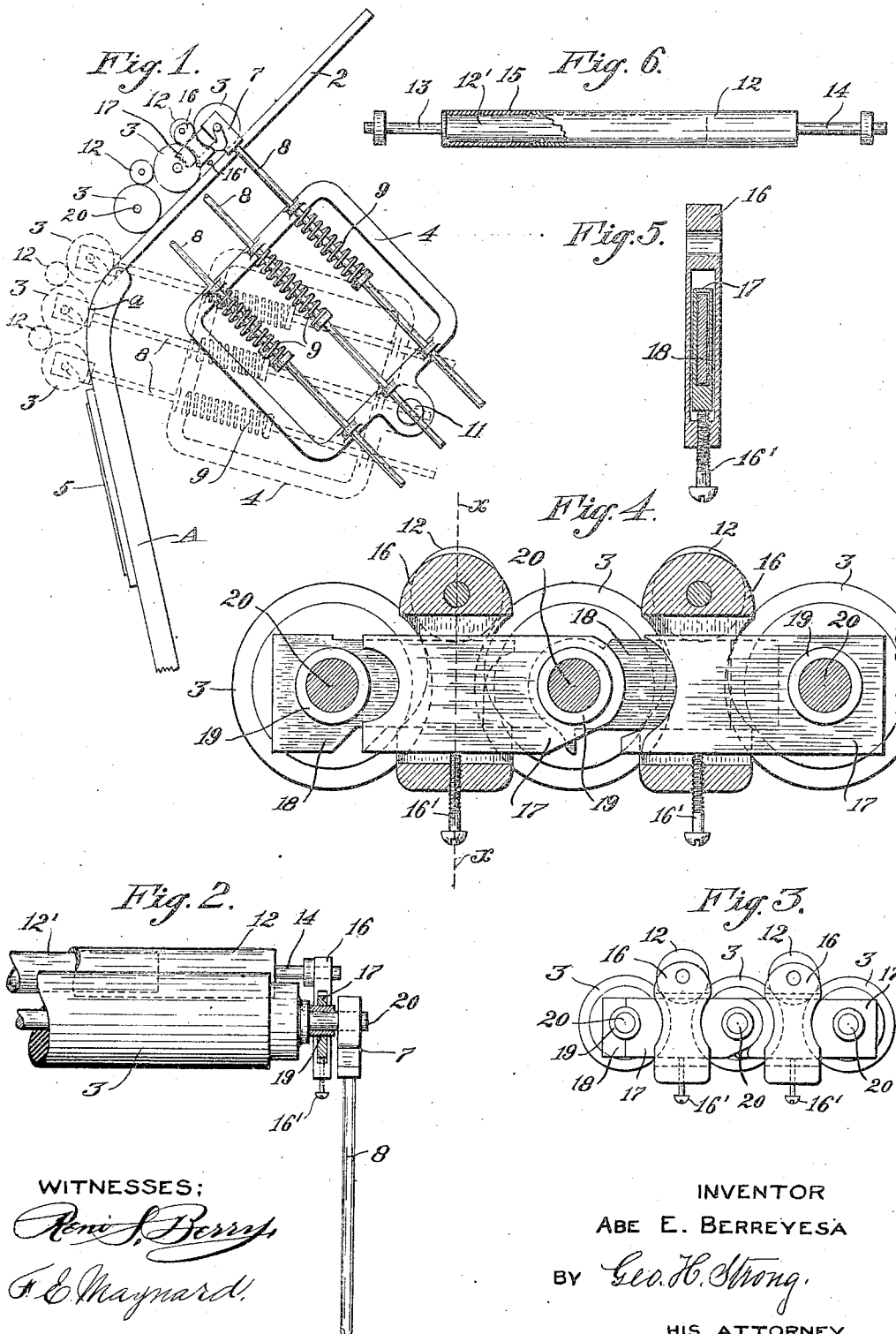


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 INK DISTRIBUTER FOR PLATEN PRESSES.
 APPLICATION FILED JAN. 13, 1909.

942,705.

Patented Dec. 7, 1909.



WITNESSES:

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ABE E. BERREYESA, OF OAKLAND, CALIFORNIA.

INK-DISTRIBUTER FOR PLATEN-PRESSES.

942,705.

Specification of Letters Patent.

Patented Dec. 7, 1909.

Application filed January 13, 1909. Serial No. 472,000.

To all whom it may concern:

Be it known that I, ABE E. BERREYESA, citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented new and useful Improvements in Ink-Distributers for Platen-Presses, of which the following is a specification.

My invention relates to inking devices, and pertains especially to distributers for platen presses.

I have designed an inking attachment for printing-presses, the purpose of which is to effect an even delivery of ink to a form in the press, and to provide an attachment that can readily be applied to the standard platen presses without any alterations in the press, and which is neither cumbersome nor power-consuming; and a further purpose is to devise a distributer which may be quickly and easily adjusted to presses of different widths and sizes.

The invention consists of the parts and the construction and combination of parts as hereinafter more fully described and claimed, having reference to the accompanying drawings, in which—

Figure 1 is a diagrammatic view showing the invention as applied. Fig. 2 is a view in elevation of the end portions of the rollers. Fig. 3 is an end view of the rollers of Fig. 2. Fig. 4 is a detailed view of the telescopic link. Fig. 5 is a section on line X—X, Fig. 4. Fig. 6 is a detailed view of the equalizing roller.

A represents the frame of an ordinary platen printing-press; 2 the inking disk, 3 the inking rollers on the oscillating carriers 4 (only one of which is shown); and 5 the printing form.

Experience has shown that with the ordinary distributer or inking rollers, as used in platen presses, the ink is deposited on the form very irregularly, and by the time the bottom inking roller has reached the lower portion of the form, the ink is so reduced in quantity that there is an appreciable difference in imprint on the surface of the paper being printed. This is particularly noticeable in running large forms, cuts, or bold type, which require large quantities of ink to be delivered from the disk 2 to the form 5 by the rollers 3.

The usual rollers 3 are journaled in blocks

7 secured to the outer ends of the sliding rods 8 actuated by springs 9 and mounted in the carriers 4 which are rocked by shaft 11.

There are usually three distributing rollers 3, and they are adapted to be carried over disk 2 where they are coated with ink and then carried down across the form 5; each roller being independent of the others, and each delivering its coating of ink separately and successively to the form, and there being no equalization of the amount of ink on the several rollers. This results in a heavy deposit of ink upon the upper portion of the form, and a light or streaky deposit at the lower end, and also leads to other detrimental results. To obviate this, and equalize the coating over all the rollers 3, I introduce intermediate, sectional, adjustable equalizer rollers 12 each comprising a tube closed at one end by a plug 12'. The plug has a pintle 13, and the opposite end of the tube also has a pintle 14 on which the roller turns. By pulling out the plug and inserting a tubular section 15, Fig. 6, a roller may be lengthened to suit presses of any width. As seen in Figs. 1-3, these equalizer rollers are located in the spaces between the rollers 3 and above their centers, so that each equalizer roller 12 bears lengthwise upon the surface of each adjacent pair of rollers 3, and the equalizer rollers and inking rollers are in constant peripheral contact with each other, so that the ink is continuously transmitted from roller to roller and the ink is evenly distributed from the rollers to the form.

As the rollers 3 are carried from the ink disk down toward the form, the rods 8 are reciprocated in the carriage to permit the rollers 3 to turn the corner *a* of the press above the form; and it is necessary to provide means that will permit the equalizer rollers to be successfully carried around in conjunction with the rollers 3. For this purpose the pintles 13-14 of the rollers 12 are journaled in blocks 16 adjustably carried by means of the screws 16' upon telescoping links 17-18 which are pivoted to the spindles 20 of the rollers 3. The telescoping links 17-18 are disposed adjacent the ends of the several spindles 20 of the rollers 3 outside of the plane of the ends of the equalizing rollers 12, the pintles 13-14 of which are carried in the adjustable blocks

16. The ends of the links 17—18 are perforated and provided with interchangeable bushings 19 mounted loose upon the spindles 20 of the rollers 3. Thus as the rollers 3 and the spindles 20 are carried over the corner *a* of the press frame, and the distance between the centers of spindles 20 is varied, the link sections 17—18 correspondingly lengthen and shorten and adapt the several rollers to one another; and when they all come into the same plane again and travel over the form, the several rollers 3 and 12 will be in a contacting train, and every portion of the form will receive an equal coating of ink. As the carrier 4 ascends, the several inking rollers 3 are caused to traverse the ink disk 2; ink is then transferred from the first to the second by the equalizer 12, and so on, until by the time the carrier 4 ascends and carries the rollers 3 off the disk 2 the ink is distributed in an approximately even layer over all the rollers 3, and in consequence, as the rollers 3 are carried over the form 5 by the carriers 4, said form will be given a substantially equal coating of ink. The presence of the equalizing rollers 12 insures a rapid, even distribution of ink at all times between the rollers 3 as they traverse the form. Furthermore, by use of the equalizing rollers 12 all liability for offset from a cut on the form to the rollers and thence again to some other part of the cut or form is obviated; it being understood that the equalizing rollers are never in contact with the form.

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

1. The combination in a printing press, of an ink disk, a plurality of distributing rollers, means whereby said rollers may independently reciprocate, equalizing rollers intermediate of the distributing rollers and arranged above the centers thereof, each equalizing roller adapted to bear lengthwise upon the surface of an adjacent pair of distributing rollers, and link connections between the equalizing rollers and the spindles of the distributing rollers.

2. The combination in a printing press, of a printing form, inking rollers adapted to traverse said form, means for supporting the inking rollers, equalizing rollers intermediate of the inking rollers and above the centers thereof and each adapted to bear lengthwise upon the surface of each adjacent pair of inking rollers, and link connections

between the equalizing rollers and spindles of the inking rollers.

3. In a printing press, the combination of a form and an inking plate arranged in a plane at an angle to the plane of the form, inking rollers traversing said plate and form, a rocking support for the rollers, means by which the rollers have a limited movement radially of said support, to permit of their angular travel between the plate and form, equalizing rollers located in the spaces between the inking rollers and above the centers thereof, each equalizing roller adapted to bear lengthwise upon the surface of each adjacent pair of inking rollers, and link connections outside of the plane of the ends of the equalizing rollers and between said rollers and the spindles of the inking rollers.

4. In a printing-press, the combination of a form and an inking plate arranged in a plane at an angle to the plane of the form, inking rollers traversing said plate and form, a rocking support for the rollers, means by which the rollers have a limited movement radially of said support to permit of their angular travel between the plate and form, equalizing rollers contacting with the inking rollers and carried by the inking rollers support, and means including link connections between the equalizing rollers and the spindles of the inking rollers by which said equalizing rollers are adjusted to the angular travel of the inking rollers.

5. In a printing-press, the combination of a form and an inking plate arranged in a plane at an angle to the plane of the form, inking rollers traversing said plate and form, a rocking support for the rollers, means by which the rollers have a limited movement radially of said support to permit of their angular travel between the plate and form, equalizing rollers contacting with the inking rollers and carried by the inking rollers support, and means by which said equalizing rollers are adjusted to the angular travel of the inking rollers, said last-named means comprising extendible link connections between the equalizing rollers and the spindles of the inking rollers.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ABE E. BERREYESA.

Witnesses:

CHARLES A. PENFIELD,
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