

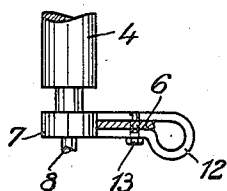
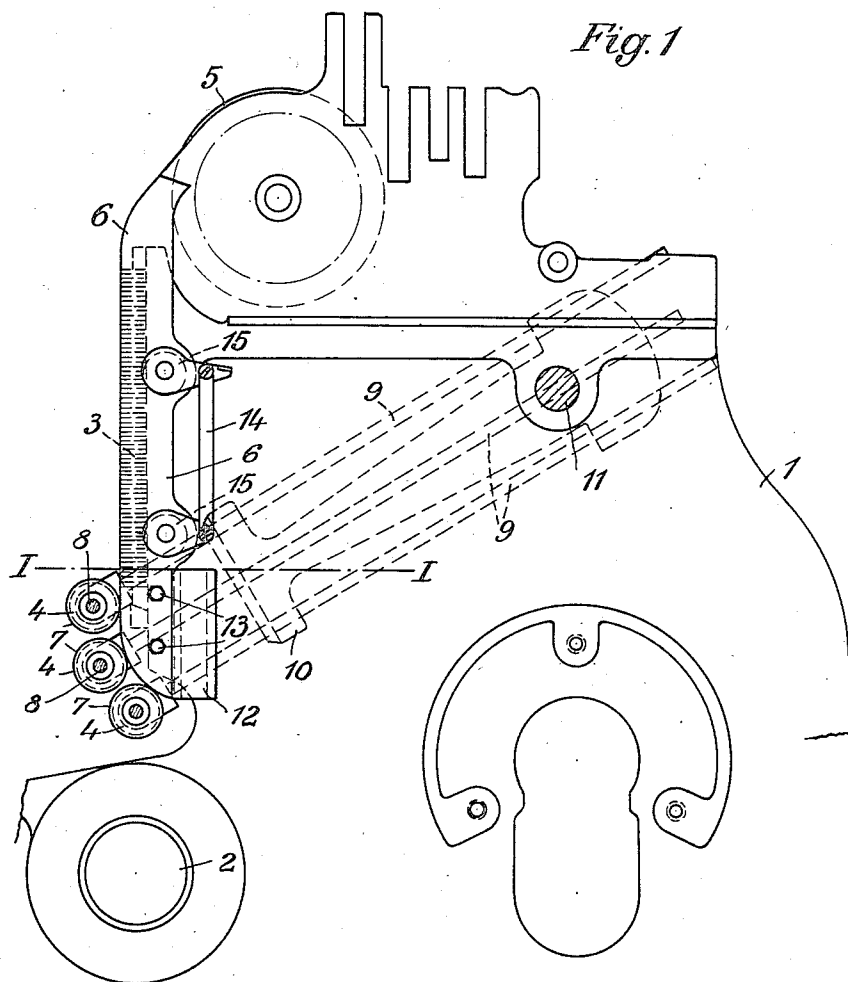
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INKING APPARATUS FOR PLATEN PRINTING PRESSES

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INKING APPARATUS FOR PLATEN
PRINTING PRESSES

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6 Claims. (Cl. 101—359)

This invention relates to an inking apparatus for platen printing presses, and more especially to a guiding device for the ink-distributing rollers of such printing presses. With presses of this type, the ink-distributing rollers of which are moved to and fro over the composition, these rollers are provided at their ends with guide rolls that run on rails. At the places of reversal of the carriage supporting said distributing rollers these latter have, especially in the case of a larger working speed of the press, a certain tendency to slip whereby the inking of the composition, especially of the lower portion thereof, is rendered deficient and rise to the formation of stripes is given.

It has already been endeavored to overcome these drawbacks by providing the axles of the ink distributing rollers with toothed wheels engaging racks and rolling along upon them, the intention of this arrangement and combination of the parts concerned being to obtain a positive motion of said rollers. When the ink distributing rollers commence to contact with the quickly rotating inking cylinder the said toothed wheels must get disengaged from the racks mentioned, and when the said rollers are about to leave the inking cylinder, said toothed wheels must reengage said racks. This manner of operation entails, however, an unquiet running of the ink-distributing rollers, and besides, special provisions must be made which render possible the accurate interengagement of the toothed wheels and the racks. Furthermore, the employment of guide racks entails the drawback that when the elastic roller mass has been consumed by and by, the difference in the diameters of the ink-distributing rollers and the appertaining toothed wheels is not equalized, in consequence whereof a reliable action of the ink-distributing rollers is no more possible.

The object of the present invention is to obviate also the just-mentioned drawback, in fact, all drawbacks hitherto experienced, and I attain the object in view, especially a slip-free running of the ink-distributing rollers, or of the guide rolls respectively, without the employment of mechanical means specially provided for said object. In essence, the invention resides therein that the guide rolls of the ink-distributing rollers which run upon the guide rails are subjected to magnetic action which holds the guide rolls in continual contact with the guide rails whereby a slip-free rolling of said rolls on said rails is rendered possible.

It is suited to the purpose in view to design the

arrangement and combination of the parts concerned in this way that at those places where the guide rolls run with a slip the guide rails are directly connected with a magnet, over the pole surfaces of which the guide rolls run along. The magnets may form a part of the guide rails so that when these rails are re-adjusted the magnets are re-adjusted together with them.

It is a matter of course that the guide rails themselves may be magnetic along their entire length.

Owing to the positive movement of the guide rolls always the same place or portion of the ink-distributing rollers transmits the ink to the composition when these rollers are moved rearwardly, whereby also difficulties such as smearing of the composition or the like, as well as the so-called "doubling", are completely obviated.

The invention is illustrated diagrammatically and by way of example on the accompanying drawing, on which Fig. 1 is a side-view of a constructional form of the parts concerned of a platen printing press, and Fig. 2 is a horizontal section on line I—I of Fig. 1, seen in the direction from above to below.

On the drawing, 1 denotes the frame of the press and 2 is the axle on which the platen (not shown) oscillates. 3 denotes the composition over which the ink-distributing rollers 4 are moved up and down. When these rollers are in their uppermost position they come into contact with the ink-cylinder 5 by which they are supplied with ink.

At both vertical sides of the composition 3 adjustable rails 6 are provided at the frame 1, and on these rails run in known manner rolls 7 which are attached to the axles 8 of the ink-distributing rollers 4. These rollers are in known manner supported in the ends of spring-actuated rods 9 guided in arms 10 located at both sides of the frame and being turnable on an axle 11. Owing to the action of the springs (not shown) the guide rolls 7 are pressed against the guide rails 6.

To the lower end of each of these rails is a horse-shoe magnet 12 affixed by means of screws 13; the pole surfaces of these magnets constitute elongations of the respective running path for the guide rolls 7. By reason of the action of the magnets the rolls 7 run without slip when their movement is reversed so that always the same place or portion of the ink-distributing rollers 4 comes into contact with the same place or portion of the composition. As soon as the ink-distributing rollers get upon the composition, the

action of the magnets upon the rollers ceases and these can roll along over the composition according to their diameter.

If, in the case of the diameter of the ink-distributing rollers having become unduly small, it becomes necessary to re-adjust the guide rails 6 by turning the eccentrics 15 which are connected with one another by a link 14, the magnets are, at least in the constructional form shown by

10 way of example, like-wise re-adjusted.

If requisite, the magnets may be also arranged at the upper end of the guide rails 6, that is to say, at a portion shortly in front of the place where the ink-distributing rollers 4 pass onto

15 the ink cylinder 5.

I claim:

1. A guiding device for the ink distributing rollers of platen printing presses, comprising, in combination, with said rollers guide rolls connected to said rollers, and guide rails for said rolls, said guide rails forming magnets so as to be able to hold the said rolls in continual contact with the guide surface so as to obtain a slip-free rolling of the said guide rolls on said rails.

25 2. A guiding device for the ink distributing rollers of platen printing presses, comprising, in combination, with said rollers guide rolls connected to said rollers, and guide rails for said rolls, magnets so arranged as to be able to hold the said rolls in continual contact with said

30 rails so as to obtain a slip-free rolling of the said guide rolls on said rails.

3. A guiding device for the ink distributing rollers of platen printing presses, comprising, in combination with said rollers, guide rolls connected to said rollers, and guide rails for said rolls, magnets directly connected with said rails at those places where the said rolls run with a slip and so arranged with respect to the said rolls that these latter can run over their pole surfaces.

4. A guiding device for the ink distributing rollers of platen printing presses, comprising, in combination with said rollers, guide rolls connected to said rollers, and guide rails for said rolls, and magnets forming portions of said rails, substantially as set forth.

5. A guiding device for the ink distributing rollers of platen printing presses, comprising, in combination with said rollers, guide rolls connected to said rollers, and guide rails for said rolls, magnets forming portions of said rails and being arranged at those places where the said rolls run with a slip, substantially and for the purpose set forth.

6. A guiding device for the ink-distributing rollers of platen printing presses, comprising, in combination with said rollers, guide rolls connected to said rollers, and guide rails for said rolls, magnets forming portions of said rails and being directly connected with the other rail portions at those places where the said rolls run with a slip.

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