

F. SABOT.
ADJUSTMENT FOR INKING ROLLS.
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1,127,811.

Fig. 1.

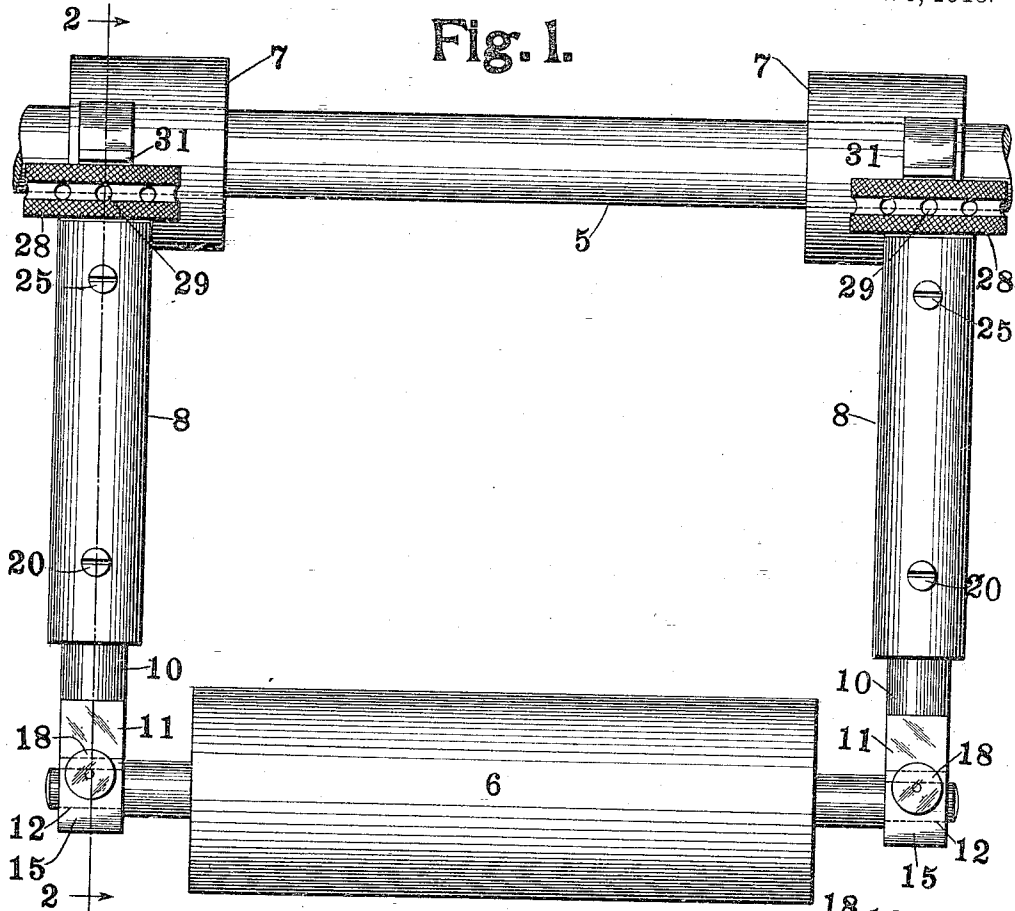
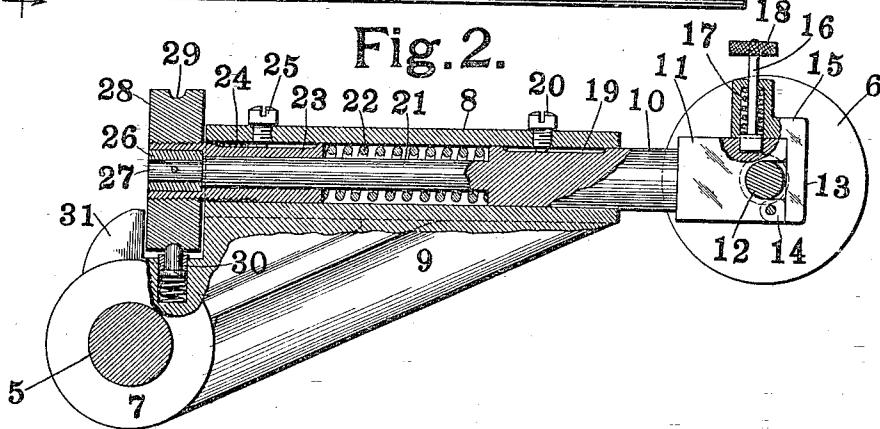


Fig. 2.



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ADJUSTMENT FOR INKING-ROLLS.

1,127,811.

Specification of Letters Patent.

Patented Feb. 9, 1915.

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To all whom it may concern:

Be it known that I, FRANK SABOT, a citizen of the United States of America, residing at Philadelphia, Philadelphia county, Pennsylvania, have invented a certain new and useful Adjustment for Inking-Rolls, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to an adjustment for inking rolls and is more particularly adapted for inking rolls of presses of the type known as "plate presses."

In the accompanying drawings, which illustrate an adjusting device made in accordance with my invention, Figure 1 is a side elevation, and Fig. 2 is a section taken on the line 2—2 of Fig. 1.

Like marks of reference refer to the same parts in both views of the drawings.

5 represents a rock shaft of a plate printing press, said rock shaft being adapted, by its movement, to carry an inking roll 6 alternately into contact with an ink distributing surface and the plate to be inked. Surrounding the rock shaft 5 are a pair of collars 7 which may be secured to the rock shaft in any suitable manner carried by each of the collars 7 and preferably formed integrally therewith is a hollow arm 8. The opening which extends longitudinally through this arm does not extend radially from the shaft 5 but is tangential thereto, as best shown in Fig. 2 of the drawings. In order to impart rigidity to the arm 8, I preferably form integral with said arm and the collar 7 a radial rib 9. Entering each of the hollow arms 8 is an extension arm 10 carrying on its outer end a squared portion 11 having formed in it a bearing to receive the trunnion 12 of the inking roll 6. In order to prevent the accidental removal of the inking roll from its bearings, I close the normally open side of said bearings by plates 13 pivoted at one side of the bearings, as shown at 14 in Fig. 2. Each of these plates 13 is provided with an overturned portion 15 which bears against the side of the block 11. Carried by this portion 15 is a detent 16 surrounded by a coil spring 17 and adapted to enter a suitable recess in the

block 11 and thus lock the plate 13 against movement on its pivot 14. The outer end of each of the detents 16 is provided with a head 18, by means of which it may be retracted so as to allow the plate 13 to swing on its pinion and release the trunnions of the inking roll.

Each of the extension arms 10 is provided with a slot 19 which is engaged by the end of a screw 20 inserted in the hollow of the arm 8. This allows the said extension arm 10 to move longitudinally in the arm 8 but to be incapable of rotation therein. The inner end of each of the arms 10 is reduced as indicated at 21 and is surrounded by a coil spring 22. Bearing on the end of the coil spring 22 is a sleeve 23 which is provided with a slot 24 engaged by a screw 25 similar to the screw 20 hereinbefore referred to. The sleeve 23 is thus prevented from rotating in the arm 8. In order to hold the sleeve against the pressure of the spring 22, a collar 26 is pinned or otherwise secured around the outer end of the arm, preferably, on a still further reduced portion 27. The recess in the end of the sleeve 23 is, of course, enlarged, as shown in Fig. 2, to receive the collar 26. The exterior of the sleeve 23 is threaded to engage with corresponding threads on the interior of a wheel 28 which has formed in its periphery a number of recesses 29 adapted to be engaged by a spring detent 30 carried in the collar 7. The wheel 28 is prevented from movement in one direction by contact with the arm 8 and, in the other direction, by a stop 31 formed integrally with the collar 7.

The operation of my device is evident. By rotating the wheels 28 in one direction or the other, the sleeve 23 is moved into or out of the arm 8 carrying with it the arm 10 and, consequently, the inking roll 6. As in this movement, the parts 10 and 23 move together, there is no variation in the tension of the springs 22. When, however, the inking roll comes in contact with an object, such for instance as the plate to be inked, the arm 10 will be moved relative to the sleeve 23 so as to compress the spring 22. It will be evident that by the use of my device, the two ends of the inking roll can be independently adjusted so as to secure the proper distribution of ink to the plate. It will also be evident that the inking roll can be readily

placed in position or moved from the device by merely withdrawing catches 16 from engagement with the blocks 11.

Having fully described my invention, what I claim as new and desire to secure by Letters-Patent of the United States is:

1. The combination with a rock shaft, of a pair of arms carried by said shaft, a second pair of arms slidably mounted in said first named arms, an inking roll carried by said second pair of arms, a threaded sleeve slidably mounted on each of said roll carrying arms, a stop for limiting the movement of said sleeve in one direction, a spring opposing the movement of said sleeve in the other direction, and an adjusting nut engaging with said sleeve to regulate the distance between said rock shaft and inking roll.

2. The combination with a rock shaft, of a pair of arms carried by said shaft, a second pair of arms slidably mounted in said first named arms, an inking roll carried by said second pair of arms, a threaded sleeve slidably mounted on each of said roll carrying arms, a stop for limiting the movement of said sleeve in one direction, a spring surrounding the roll carrying arms and bearing at one end on said sleeve, and an adjusting nut engaging with said sleeve to regulate the distance between said rock shaft and the inking roll.

3. The combination with a rock shaft, of a pair of arms carried by said shaft, said arms being provided with longitudinal passages the axes of which are situated at one side of the rock shaft, a second pair of arms slidably mounted in the passages in said first named arms, an inking roll carried by said second pair of arms, a threaded sleeve slidably mounted on each of said roll carrying arms, a stop for limiting the movement of said sleeve in one direction, a spring opposing the movement of said sleeve in the other direction, and an adjusting nut engaging with said sleeve to regulate the distance between said rock shaft and the inking roll.

4. The combination with a rock shaft, of a pair of arms carried by said shaft, a second pair of arms slidably mounted in said

first named arms; said second pair of arms being provided with ways and said first named pair with projections engaging with said ways, an inking roll carried by said second pair of arms, a threaded sleeve slidably mounted on each of said roll carrying arms, a stop for limiting the movement of said sleeve in one direction, a spring opposing the movement of said sleeve in the other direction, and an adjusting nut for engaging with said sleeve to regulate the distance between the rock shaft and inking roll.

5. The combination with a rock shaft, of a pair of arms carried by said shaft, a second pair of arms sliding in said first named arms, an inking roll carried by said second pair of arms, a threaded sleeve mounted on each of said roll carrying arms, said sleeve being provided with a way and one of said arms with a projection engaging with said way, a stop for limiting the movement of said sleeve in one direction, a spring opposing the movement of said sleeve in the other direction, and an adjusting nut for engaging with said sleeve to regulate the distance between said rock shaft and inking roll.

6. The combination with a rock shaft, of a pair of arms carried by said shaft, a second pair of arms slidably mounted in said first named arms, an inking roll carried by said second pair of arms, a threaded sleeve slidably mounted on each of said roll carrying arms, a stop for limiting the movement of said sleeve in one direction, a spring opposing the movement of said sleeve in the other direction, an adjusting nut engaging with said sleeve to regulate the distance between said rock shaft and inking roll, said adjusting nut being provided with a series of recesses, and a spring detent for engaging with said recesses to hold the nut against accidental movement.

In testimony whereof, I have hereunto set my hand and affixed my seal in the presence of the two subscribing witnesses.

FRANK SABOT. [L. s.]

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."