

No. 662,880.

Patented Nov. 27, 1900.

J. H. SCHUSSLER.

INKING ROLL TRUCK FOR PRINTING PRESSES.

(Application filed Apr. 12, 1900.)

(No Model.)

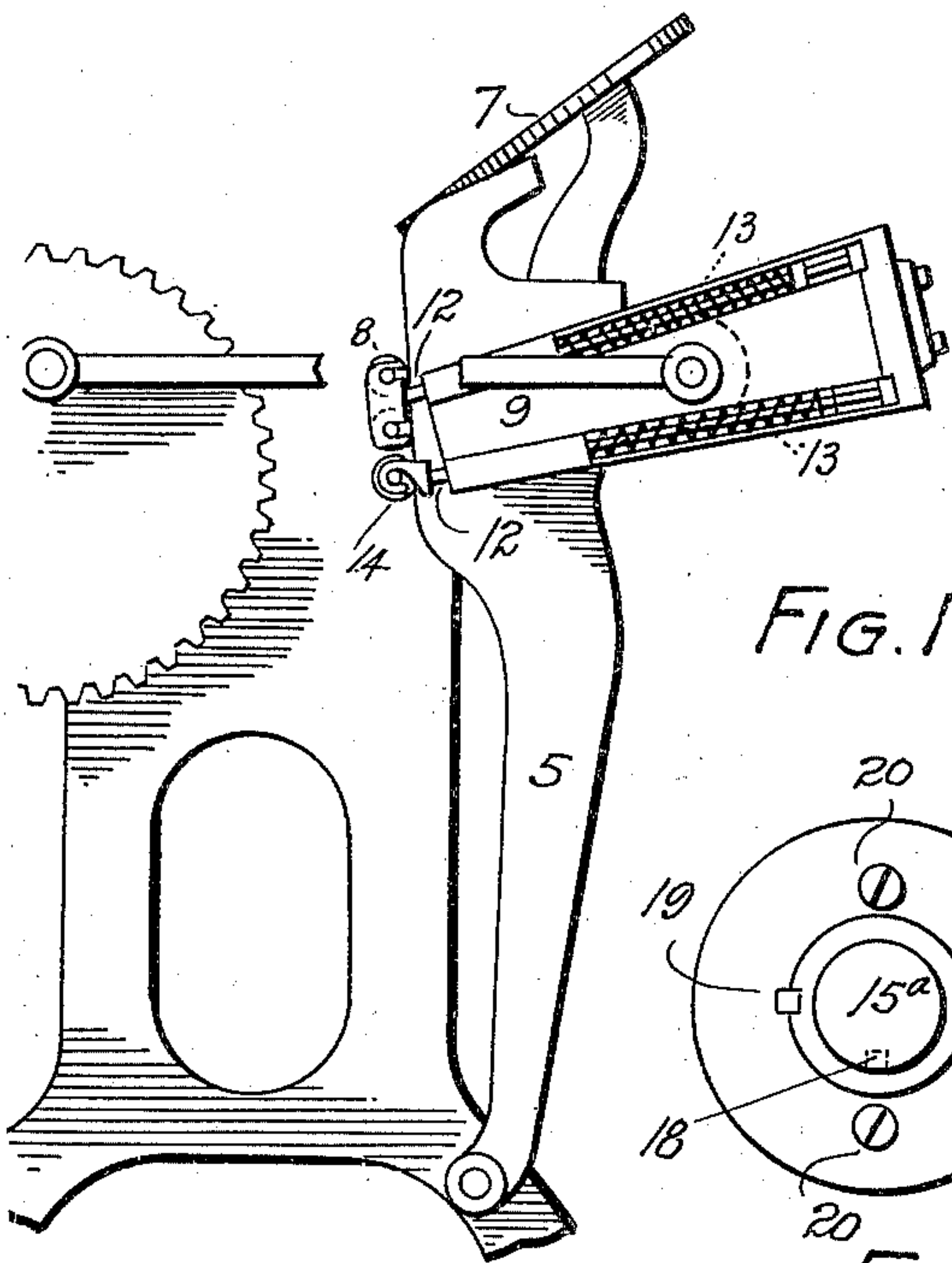


FIG. 1

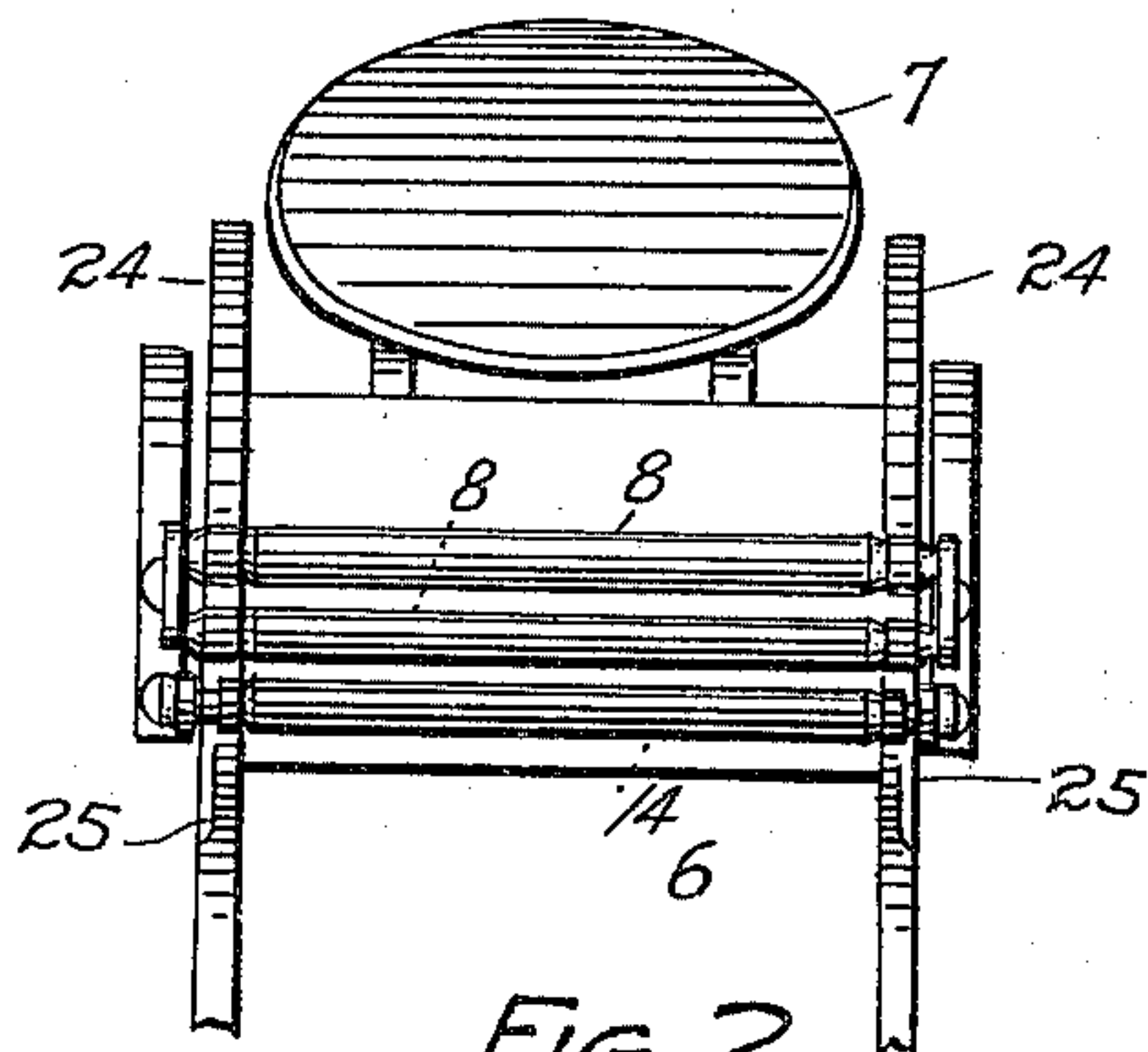


FIG. 2

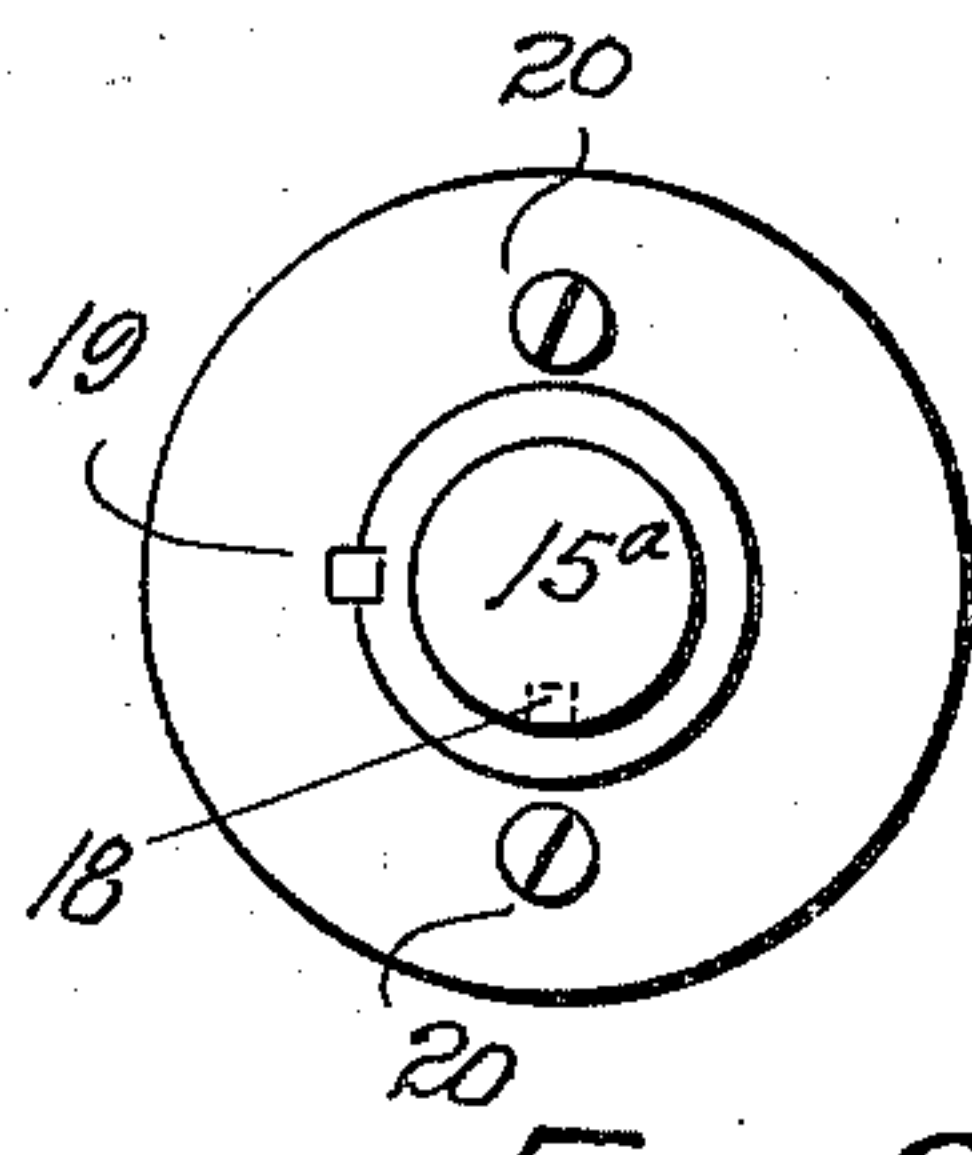


FIG. 8.

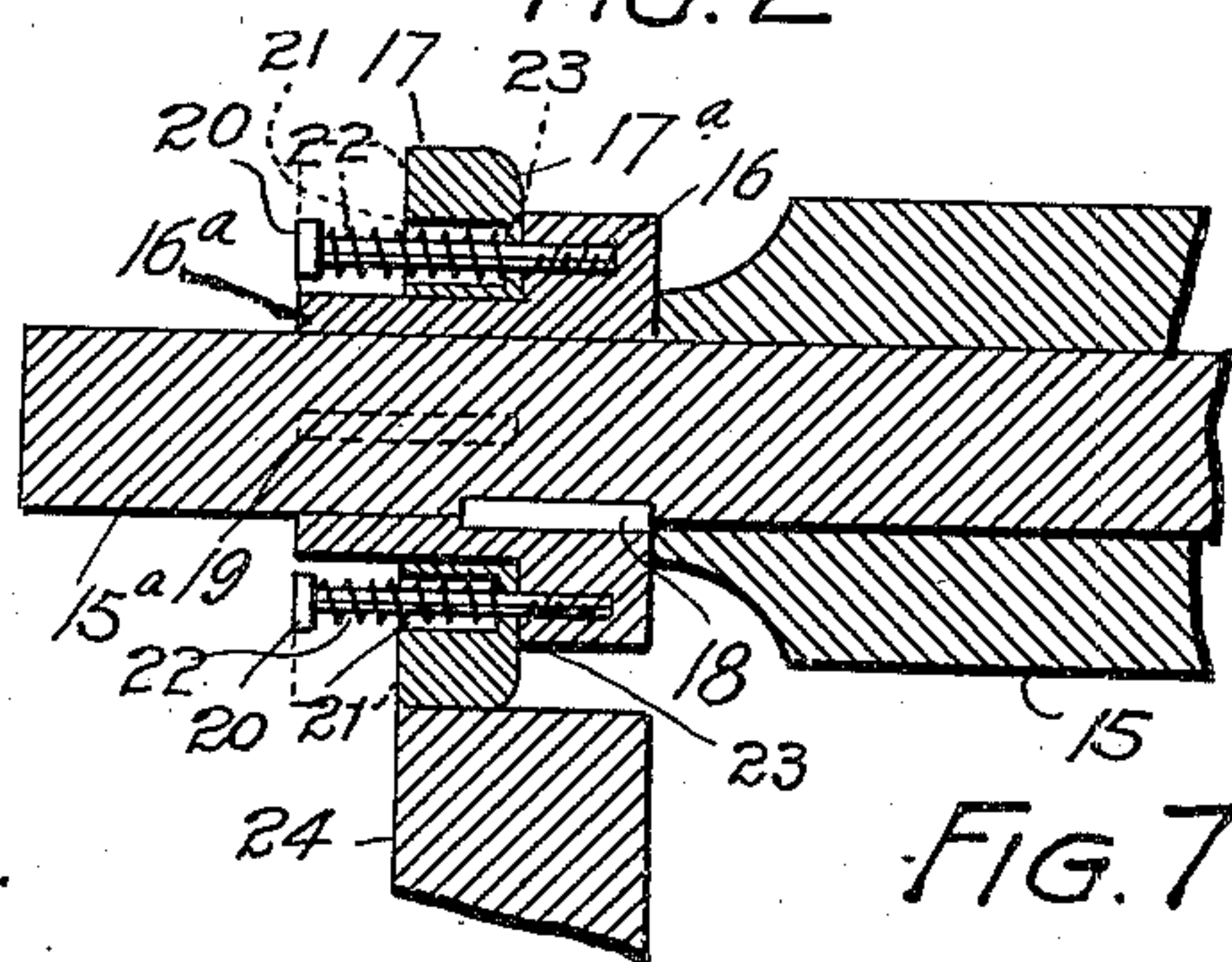


FIG. 7

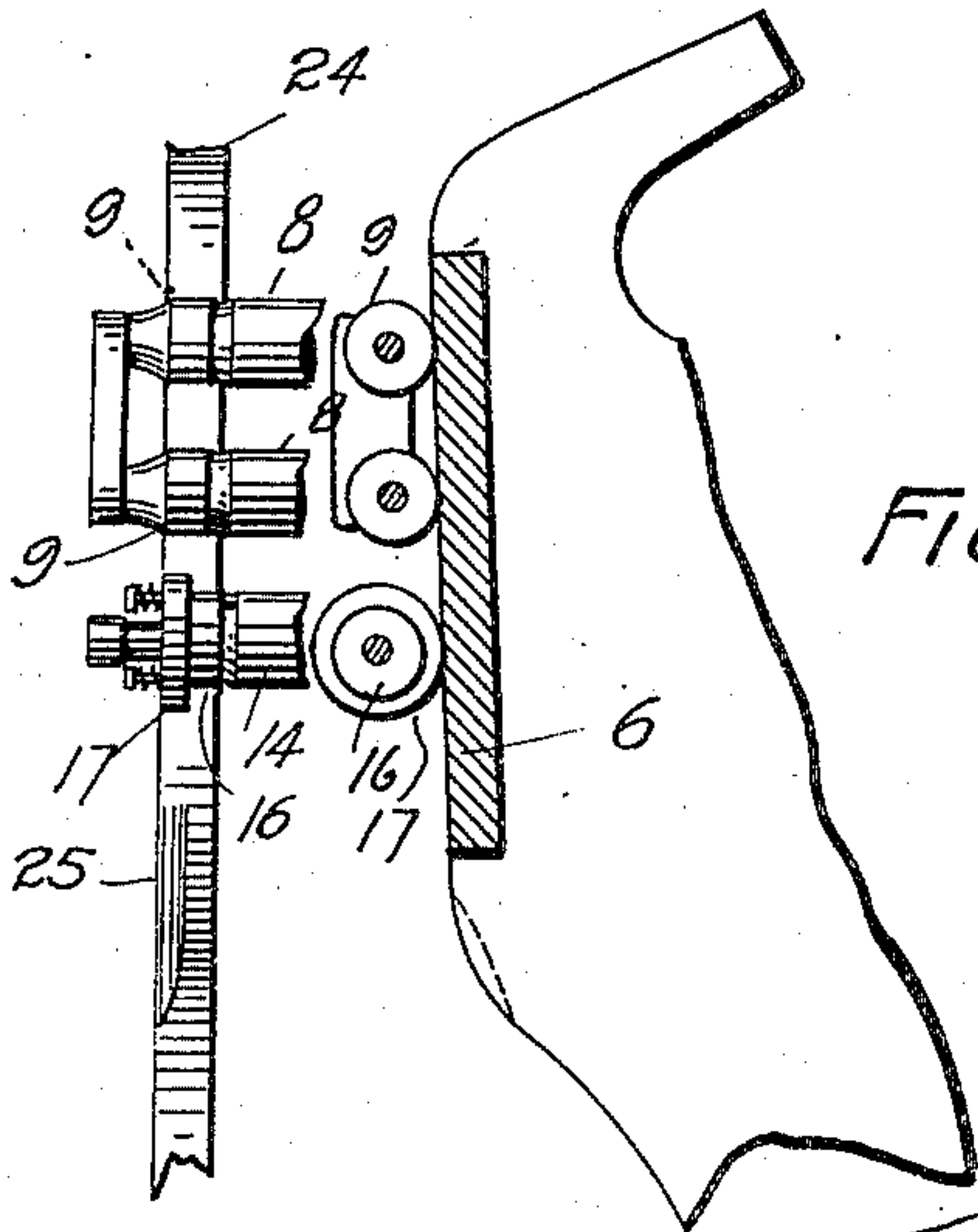


FIG. 3

FIG. 4.

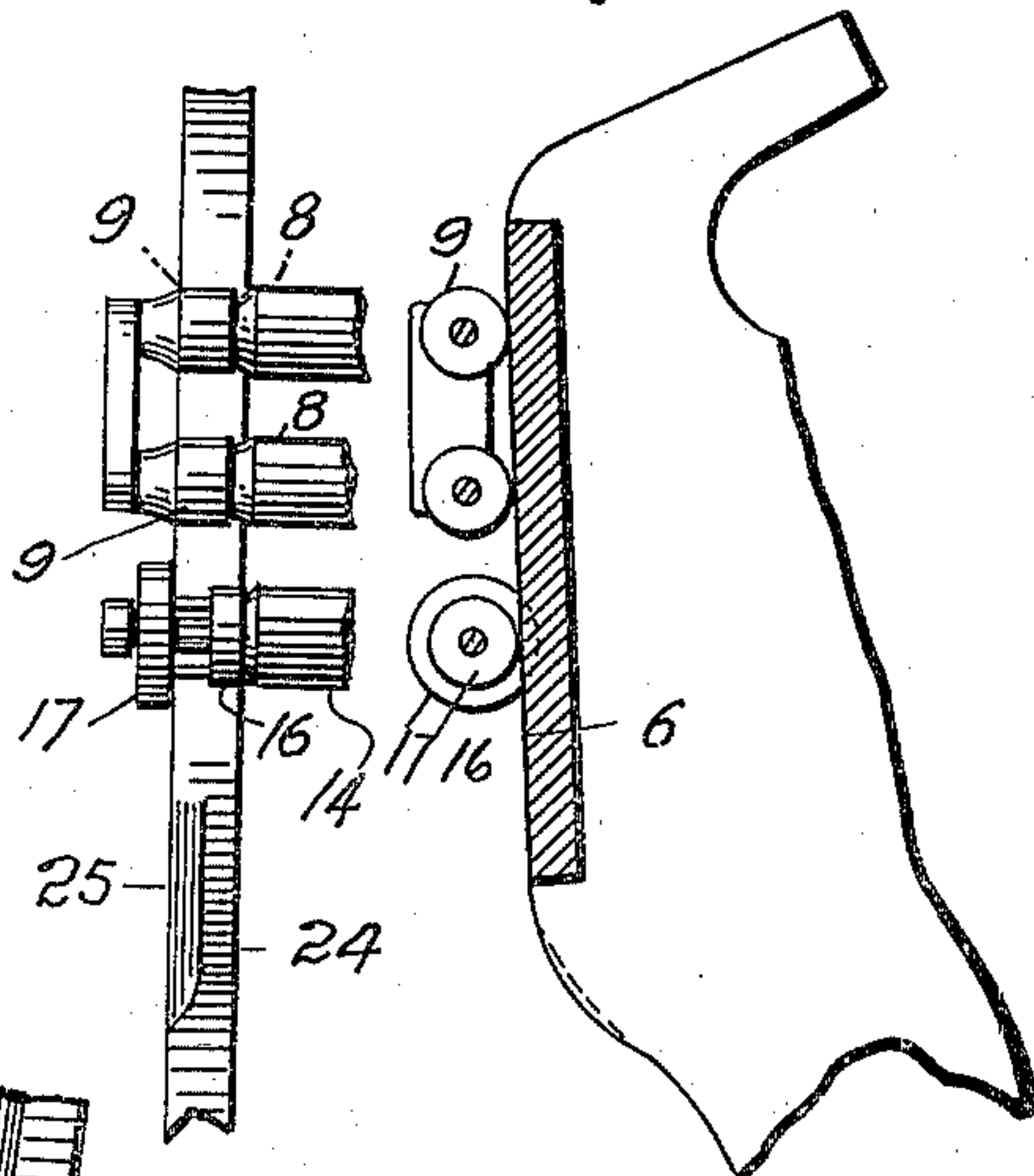


FIG. 5.

FIG. 6.

WITNESSES:
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FIG. 9

BY

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UNITED STATES PATENT OFFICE.

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INKING-ROLL TRUCK FOR PRINTING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 662,880, dated November 27, 1900.

Application filed April 12, 1900. Serial No. 12,586. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. SCHUSSLER, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Inking-Roll Trucks for Printing-Presses; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in inking-roll trucks for printing-presses.

My improved truck is of the class having two treads of different heights so arranged that the high tread engages the truck during the movement of a supplemental inking-roll in one direction, whereby the roll is raised above the surface of the type, while the low tread engages the track while the roll is moving in the opposite direction, bringing the supplemental or auxiliary roll in contact with the type.

The object of an invention of this character is the even inking of the type. Without the supplemental or auxiliary roll the inking of the type-surface is uneven by reason of the fact that during the first rotation of the rolls after leaving the ink-disk the greater portion of the ink is removed and during subsequent rotations less ink is deposited on the front or printing surface of the type. The supplemental roll mounted on my improved truck is kept raised from the type during the downward movement while the other rolls are engaging the printing-surface, but is brought in contact with the face of the type during the upward movement, whereby there is a substantially even distribution of ink thereon.

The invention will now be described in detail, reference being made to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a fragmentary side elevation of a printing-press equipped with my improvement. Fig. 2 is a fragmentary view of the apparatus. Fig. 3 is a fragmentary front view in detail, showing the

high tread of the supplemental or auxiliary roller-truck on the track, being in the proper position during the downward movement of the inking-rollers. Fig. 4 is a vertical section viewed at right angles to Fig. 3. Figs. 5 and 6 are similar views showing the low tread on the track, being the position during the upward or reverse movement of the inking-rollers. Fig. 7 is a sectional detail view of the auxiliary roller equipped with my improved truck, the parts being shown on a larger scale. Fig. 8 is an end elevation of the same. Fig. 9 is a perspective view in detail illustrating the beveled portion of the track, whereby the high-tread portion of the truck is made to run off the track. This view is shown on a greatly-enlarged scale.

The same reference characters designate the same parts in all the views.

Let the numeral 5 designate the frame; 6, the printing or type surface; 7, the ink-disk; 8, the rollers equipped with ordinary trucks, and 9 the arms for actuating the inking-rollers. These rollers are attached to the arms by rods 12 and held in contact with the bed or printing-surface and the ink-disk by springs 13.

The supplemental roller 14 is provided with one of my improved trucks at each extremity. As these trucks are alike a description of one only will be necessary. This truck consists of two important parts—namely, the low-tread part 16 and a high-tread part 17. Formed integral with the low-tread part is a sleeve 16^a, which engages the roller-shaft 15^a. The part 16 and its sleeve are attached to the roller-shaft by a suitable key 18, whereby the roller and truck parts are made to rotate together. Mounted on the sleeve 16^a is the high-tread part 17 of the truck, which is connected with the sleeve by a key 19. By this arrangement the two truck parts are made to rotate in unison, but the part 17 is allowed an independent movement in a direction parallel with the shaft of the roll. The two parts are further connected by two screws 20, passing through plain openings formed in the part 17 and entering threaded openings in the part 16. These screws are diametrically located. The openings in the part 17 are made larger than the screw-shanks, as shown at 21, the greater part of their length to make room

for coil-springs 22, which surround the screws. One extremity of each spring bears against the screw-head, and the other extremity engages a shoulder 23 at the bottom of the enlarged opening 21. The tendency of these springs is to hold the two tread parts 16 and 17 in contact with each other, as shown in Fig. 7. As shown in the drawings, the outer edges of the track 24 are outwardly beveled at their lower extremities, as shown at 25, to allow the spring-actuated rods acting on the roller to pull the high-tread parts of the truck from the track, whereby as the roller moves upwardly the high-tread truck parts travel outside of the track, allowing the roller to engage the printing-surface. To facilitate this action, the inner peripheral corner of the part 17 is slightly rounded or beveled, as shown at 17^a.

As the ink-rollers leave the disk 7 in their downward movement the trucks of the ordinary rollers 8 engage the tracks 24, bringing the rollers in contact with the printing-face 6 of the type. At the same time the high-tread part 17 of each auxiliary roller-truck engages the track, whereby the roller 14 is raised from the printing-surface during the downward movement of the rollers. After the inking-rollers leave the printing-surface and are about to begin the return movement the part 17 of each truck engages the grooved part 25 of the track and slips off, this action being facilitated by the rounded corner of the truck part and the action of the springs 13. As soon as this occurs the low-tread part 16 engages the top of the track, while the part 17 engages the side thereof, (see Figs. 5 and 6,) and as the rollers pass upwardly the auxiliary roller 14 is brought in contact with the printing-face of the type for the first time after leaving the ink-disk. Hence a sufficient quantity of ink is applied to the lower portion of the type by the auxiliary roller to compensate for the limited quantity applied by the rollers 8, and the printing-surface of the type is properly and evenly inked for all practical purposes.

During the outward movement of the part 17 of the truck as it slides from the track the springs 22 are compressed into the openings 21, the heads of the screws being then flush with the outer surface of the truck part. Hence as soon as the auxiliary roller leaves the upper extremity of the track and passes to the ink-disk the recoil of the springs returns the part 17 to its normal position ready for

the downward movement, when its action will be a repetition of that just described.

The key 19, which causes the two truck parts to rotate in unison, prevents undue pressure on the springs 22, which might interfere with their proper action if the key were not used and in case the screws were relied upon exclusively to connect the two truck parts.

Having thus described my invention, what I claim is—

1. The combination with an auxiliary inking-roller for printing-presses, and spring-actuated rods connected with said roller and having a tendency to hold the latter against the printing-surface, of a truck composed of two parts, namely, a low-tread part and a high-tread part, a connection between the two truck parts whereby they are normally held in contact but allowed to separate, and a track having a truck outwardly beveled at its lower portion in the path of the high-tread part of the truck whereby as the high-tread truck part reaches this bevel in its downward travel, the spring-actuated rods, acting on the roller, pull the high-tread part on each end of the roller, from the track whereby as the roller moves upwardly each high-tread truck part travels outside the track allowing the roller to engage the printing-surface.

2. The combination with an auxiliary inking-roller for printing-presses, and spring-actuated rods connected with said roller and having a tendency to hold the latter against the printing-surface, of a truck mounted on each extremity of the roller, each truck being composed of two parts, namely, a low-tread and a high-tread part, the latter having a rounded or beveled inner corner, a connection between the two parts of each truck whereby they are normally held in contact but allowed to separate, and a track for the truck outwardly beveled at its lower portion in the path of the high-tread part of the truck whereby as the high-tread part reaches this bevel in its downward movement, the spring-actuated rods acting on the roller pull the high-tread part from the truck bringing the roller in contact with the printing-surface ready for its upward movement.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN H. SCHUSSLER.

Witnesses:

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GRACE MYTINGER.