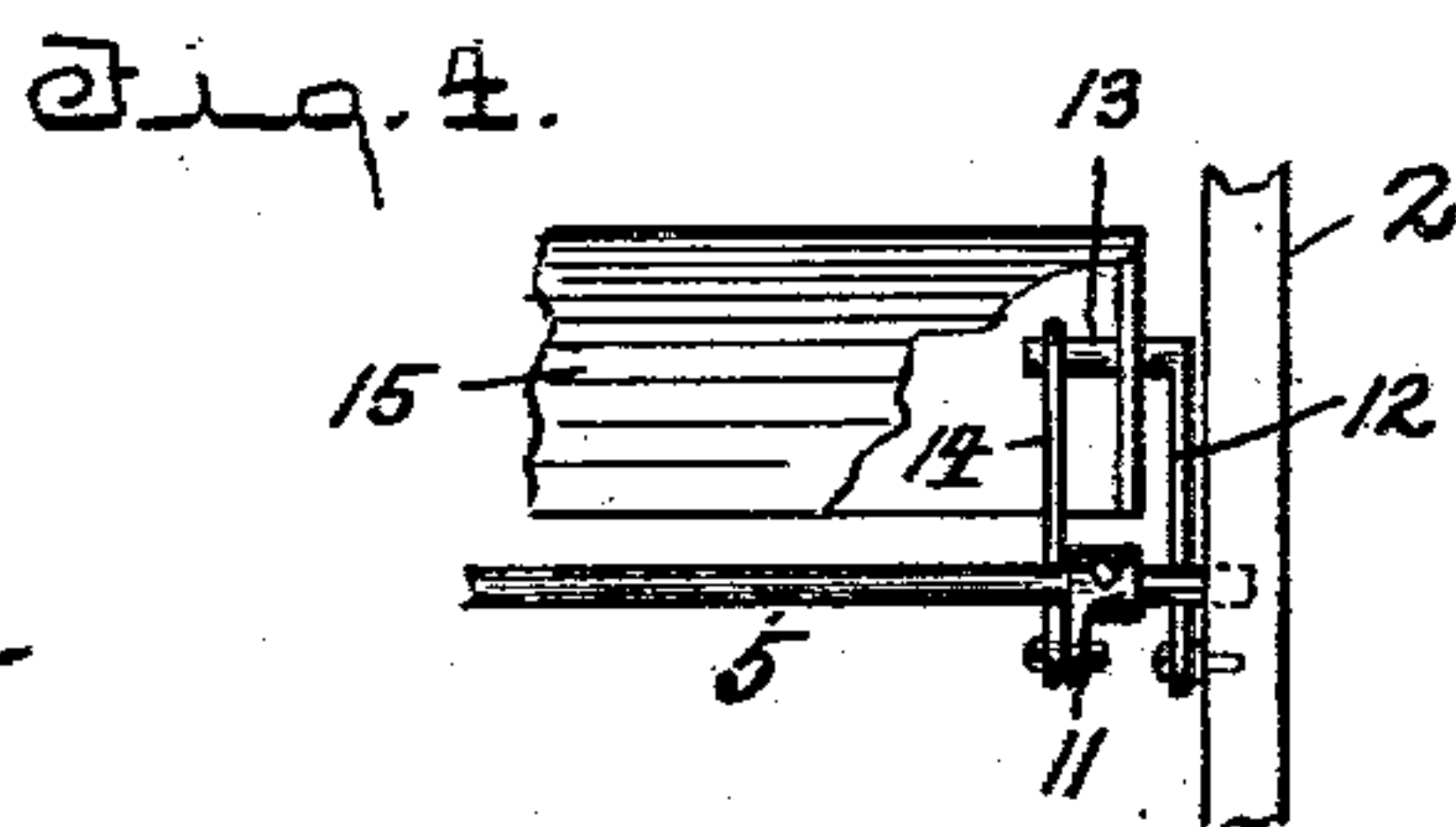
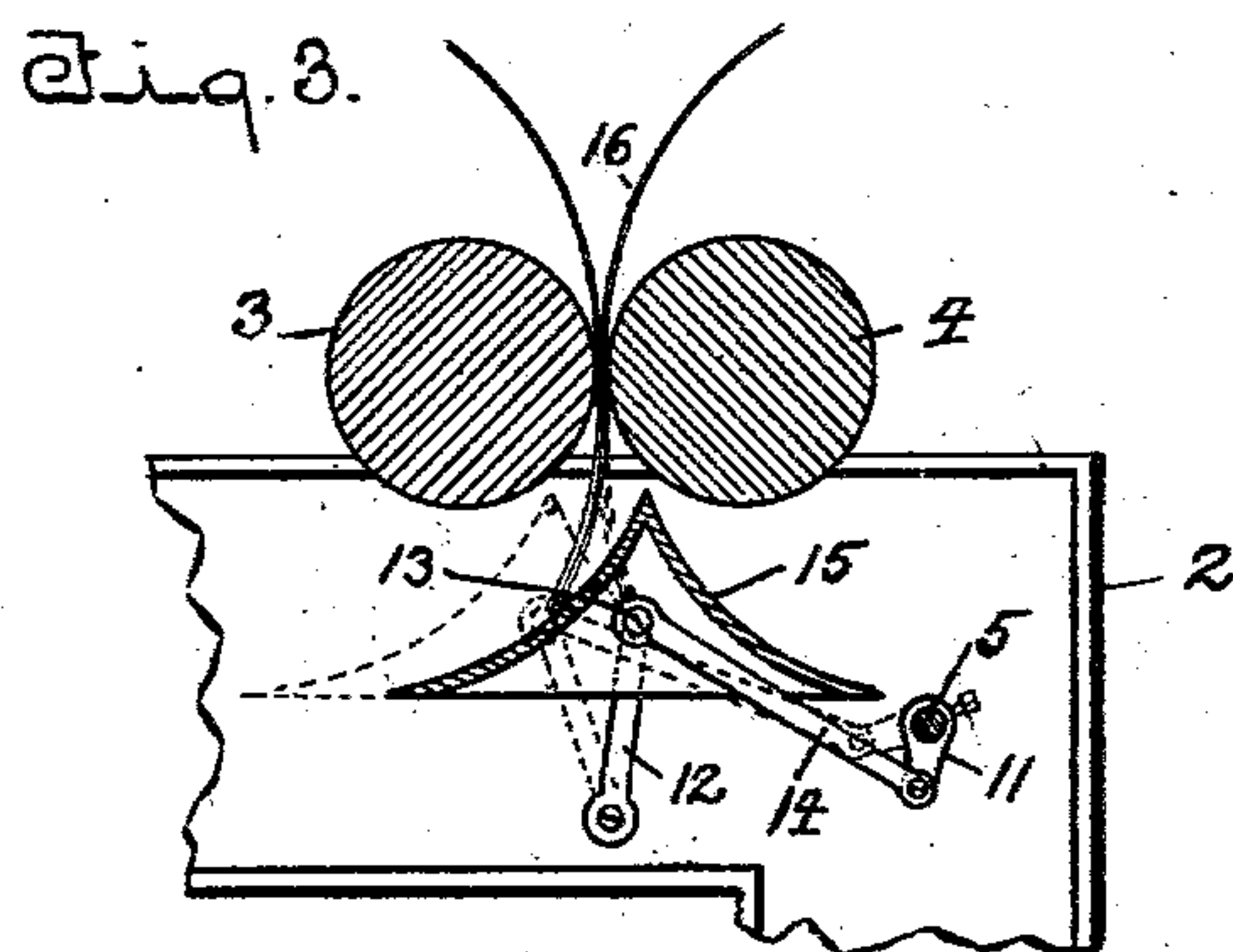
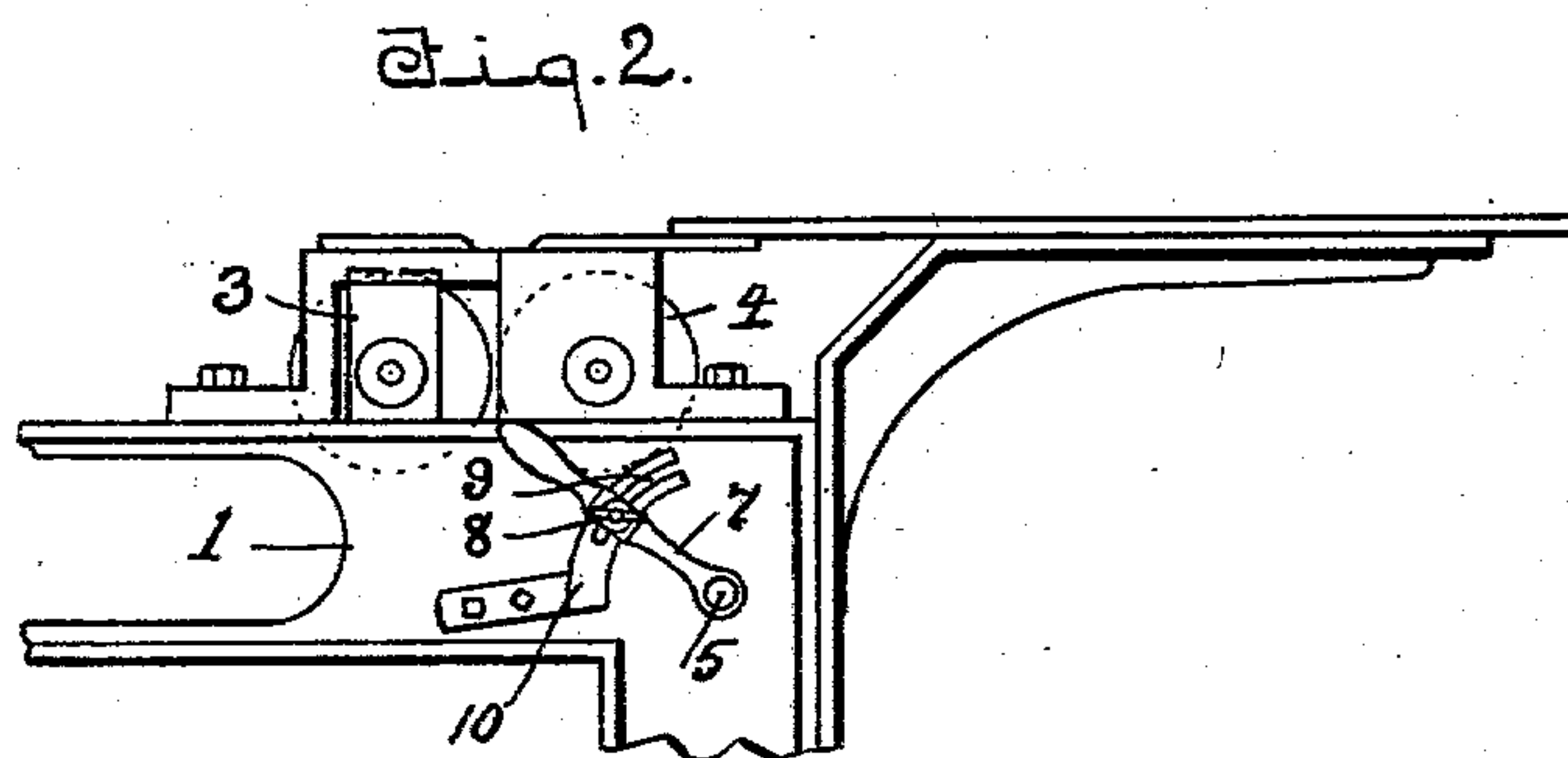
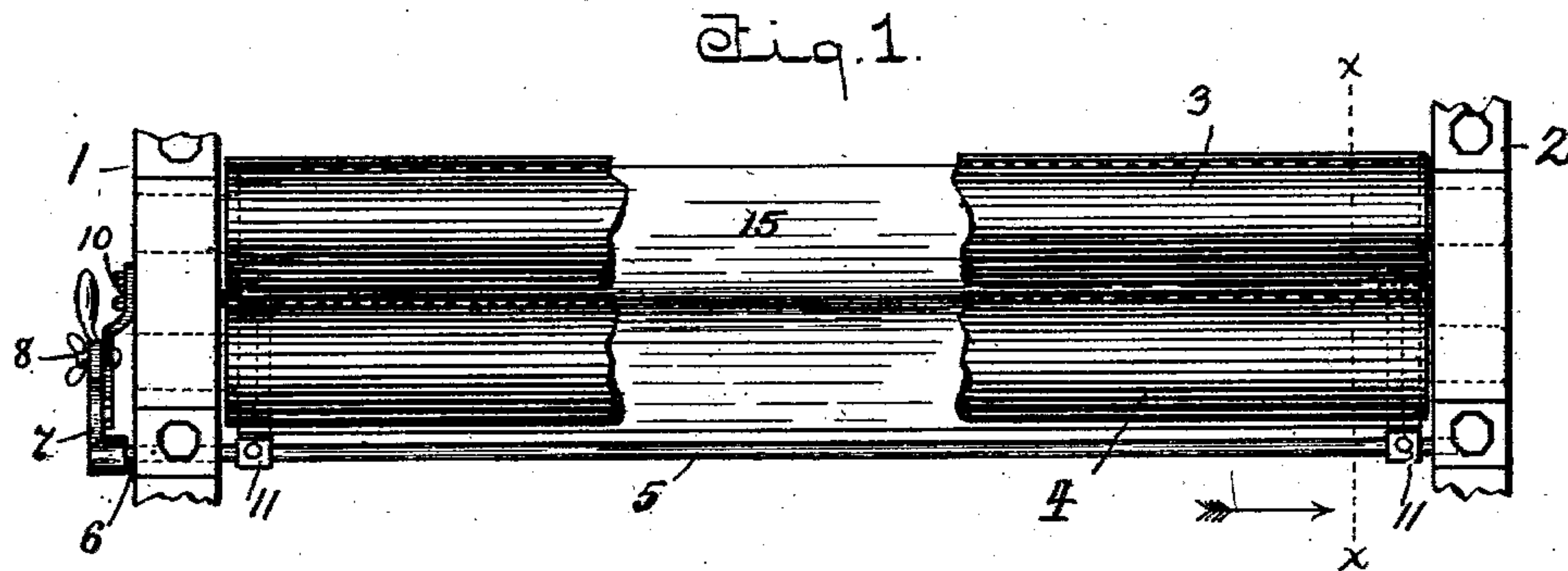


No. 740,592.

PATENTED OCT. 6, 1903.

G. W. SCHOCK.
PAPER FOLDING MACHINE.
APPLICATION FILED OCT. 13, 1902.

NO MODEL.



Witnesses:
George Oltsch
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UNITED STATES PATENT OFFICE.

GEORGE W. SCHOCK, OF SOUTH BEND, INDIANA.

PAPER-FOLDING MACHINE.

SPECIFICATION forming part of Letters Patent No. 740,592, dated October 6, 1903.

Application filed October 13, 1902. Serial No. 127,198. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. SCHOCK, a citizen of the United States, residing at South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Paper-Folding Machines; and I do hereby 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.

My invention has relation to improvements in paper-folding machines; and the object is to provide a simple and effective means for deflecting the folded sheet as it passes from between the folding-rollers in either direction.

The invention embodies a double-inclined deflecting device arranged under the folding-rollers and mechanism for shifting the deflector so as to deflect the sheet either toward the front or rear of the machine.

I have fully and clearly illustrated my improvements in the accompanying drawings, to be taken as a part of this specification, and wherein—

Figure 1 is a top plan view of a pair of folding-rollers, shown as broken away at the middle portion to disclose the paper-deflecting plate or device. Fig. 2 is a side view of the feed-end portion of a paper-folding machine, showing the lever and slotted arm for holding it in set position. Fig. 3 is a view showing a portion of the frame, the folding-rollers in cross-section, and section through the deflecting-plate with the shifting mechanism. Fig. 4 is a detail side view of a portion of the deflector-plate and the shifting mechanism connected therewith.

Referring to the drawings, wherein the same designations are used to point out similar parts or elements in the several figures, 1 2 designate the side rails of the frame of the machine, wherein are journaled a pair of folding-rollers 3 4 in the usual manner, and across the machine, preferably in advance of the rollers, is mounted a rock-shaft 5, one end of which, as 6, projects through the side rail or plate of the frame and has secured thereto a lever 7, whereby the shaft may be rocked in its bearings. The lever 7 is provided with a clamping-screw 8, the neck of

which is posited in a curved slot 9 in arm 10, secured to the face of the frame-rail. It will be seen that when the lever is moved to a desired position it can be set by tightening up the clamping-screw. Adjacent to each end of the rock-shaft 5 is a radial arm 11, by means of which the shifting mechanism is operated.

Supporting-rods 12 are pivotally secured at their lower ends to the inner faces of the frame and have their upper ends bent at right angles to their bodies, as at 13, to the inner ends of which are pivotally connected one end of the connecting bars or links 14, the other ends of which are connected to the radial arms 11.

15 designates the device or plate for deflecting the folded paper 16 in the desired direction as it passes through the rollers. This paper-deflector consists of a body having its working faces inclined in opposite directions, as shown, the faces of which are preferably concaved in vertical direction. The ends of the deflector are closed and are pivotally mounted on the parts 13, as clearly seen in Fig. 4 of the drawings.

It will now be seen that by rocking the shaft 5 the deflector may be moved with a substantially horizontal slidable movement to the position seen in full lines in Fig. 3, and the paper will be turned in the direction of the rear of the machine to be subjected to subsequent operations of the mechanism to produce additional folds; but if but a single fold is all that is desired then the deflector is shifted to the position indicated by the dotted lines in Fig. 3, and the paper will be deflected toward the front of the machine and on severance drop as desired.

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

1. The combination with the folding-rollers of a folding-machine, of a slidable deflecting member located below the rollers and having its front and rear faces converged upwardly to a common dividing edge, and means for slidably shifting the deflecting member back and forth in a substantially horizontal plane to alternately direct the work in opposite directions.

2. In a paper-folding machine, the combi-

5 nation with the first pair of folding-rollers, of a triangular deflecting-plate arranged under the rollers having concaved surfaces, a rock-shaft, pivotally-mounted bars to support the plate, a connection between the rock-shaft and the pivotal supports, and a lever to rock the shaft.

10 3. In a paper-folding machine, the combination with the first pair of folding-rollers, of a deflecting-plate having double-inclined sides concaved in vertical direction, pivotally-supporting arms having their upper ends

connected to the plate, a rock-shaft, arms radially extended from the shaft, connecting-rods having one end pivotally secured to said arms and their other ends secured to the supporting-arms, a lever to rock the shaft, and means to lock the lever in set position. 15

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

GEO. W. SCHOCK.

Witnesses:

GEORGE OLTSCH,
MAGGIE OLTSCH.