

(No Model.)

W. A. LORENZ & W. H. HONISS.

PAPER BAG MACHINE.

No. 377,314.

Patented Jan. 31, 1888.

Fig. 1

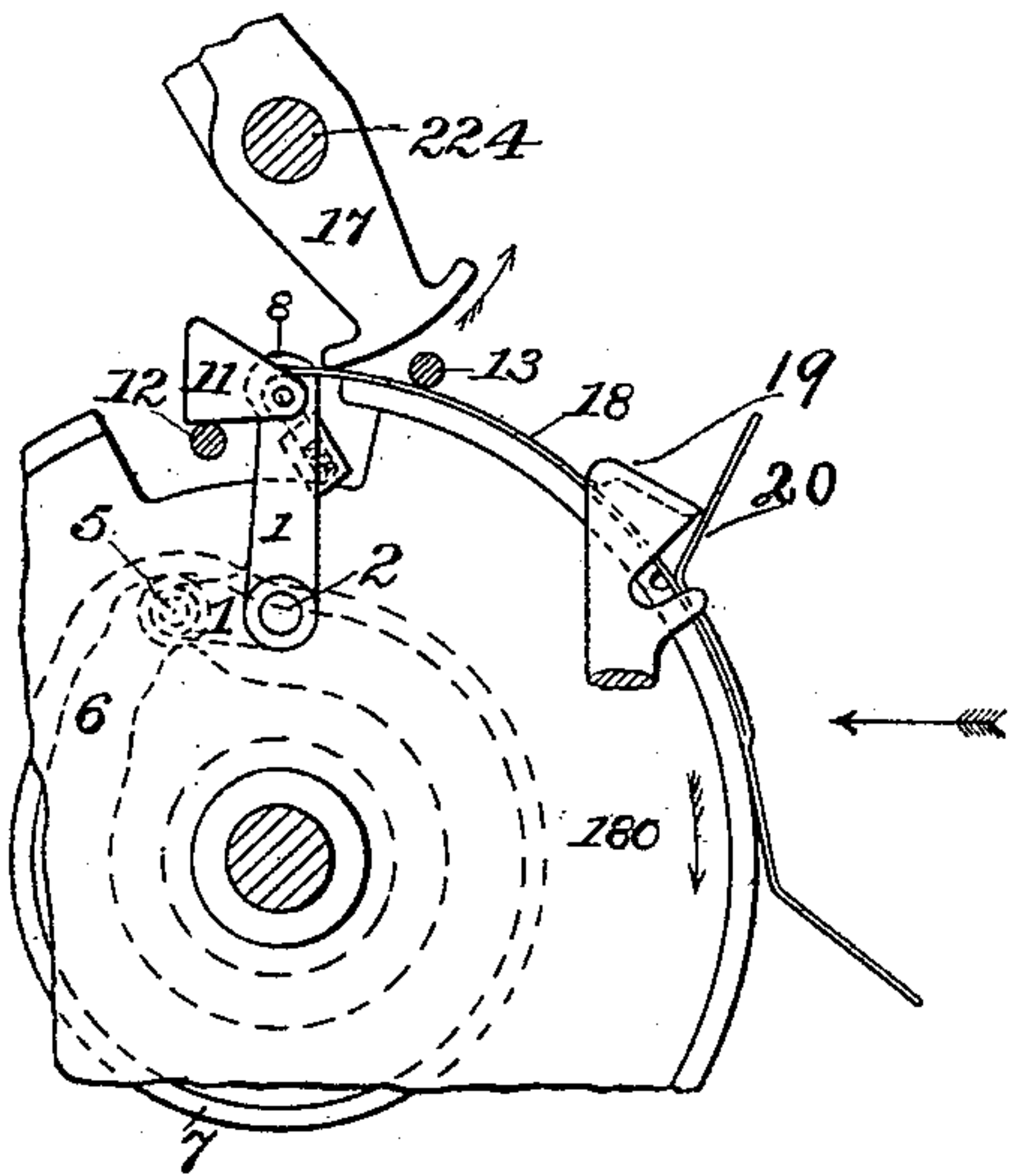


Fig. 2

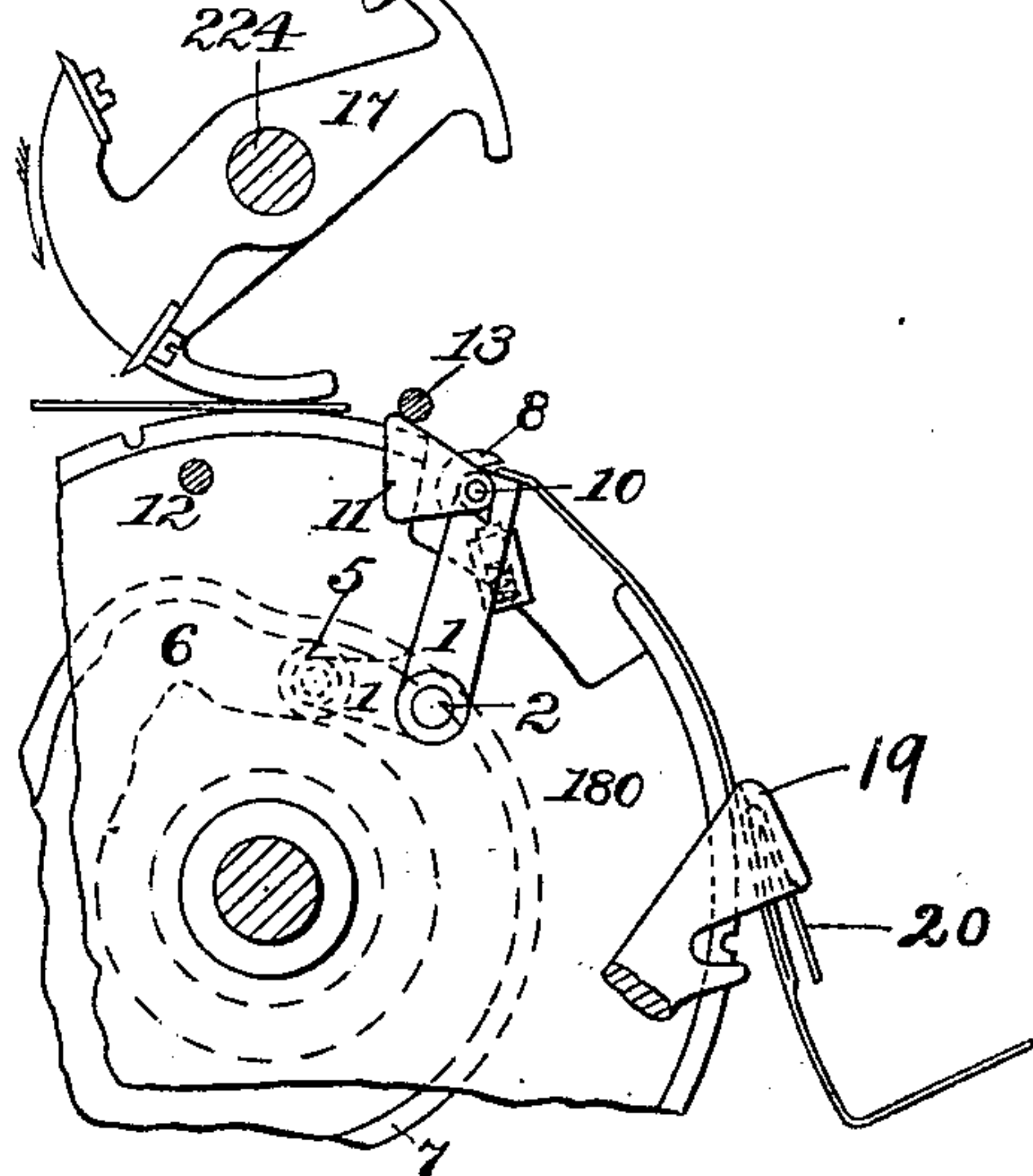


Fig. 3

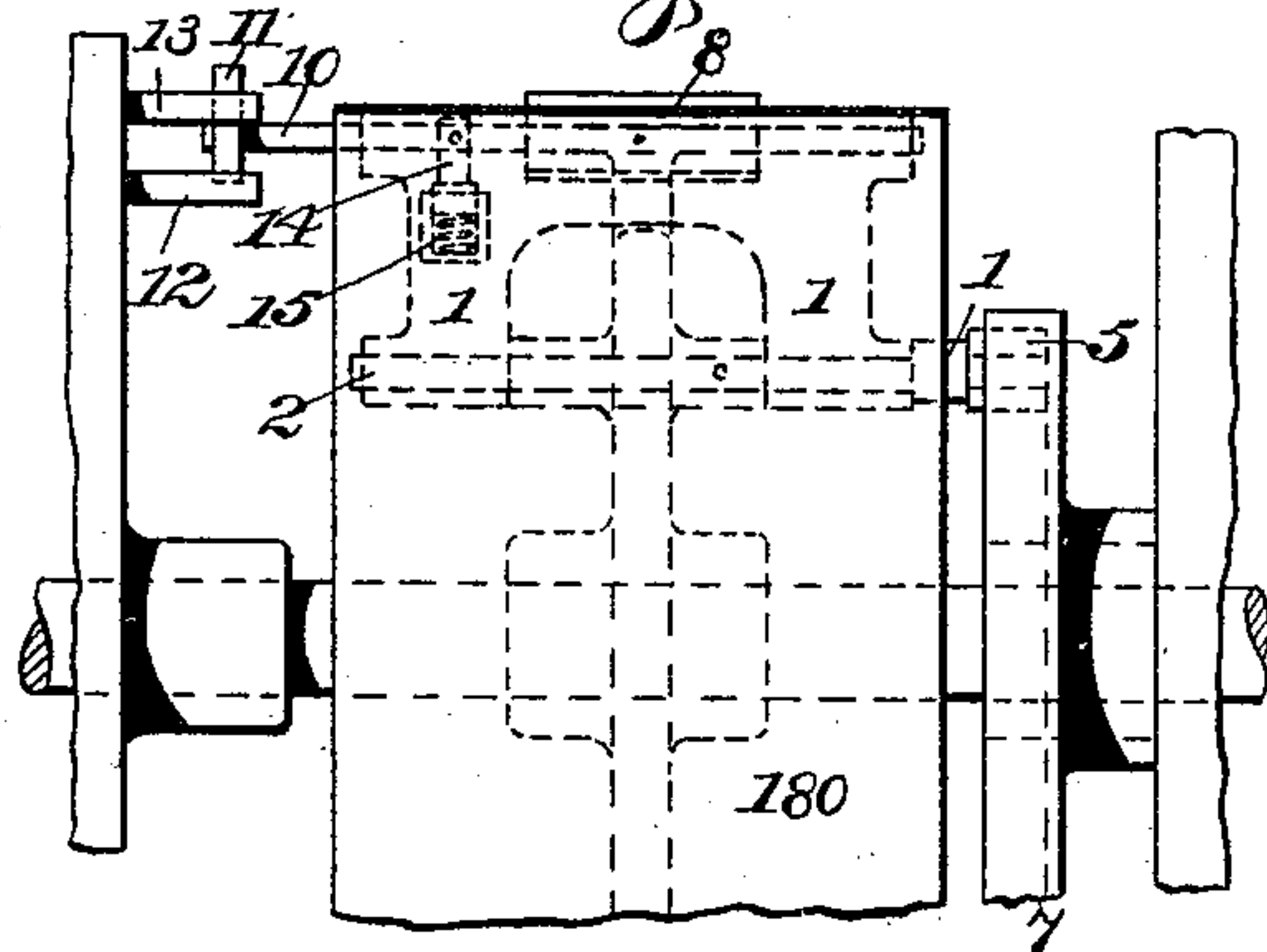
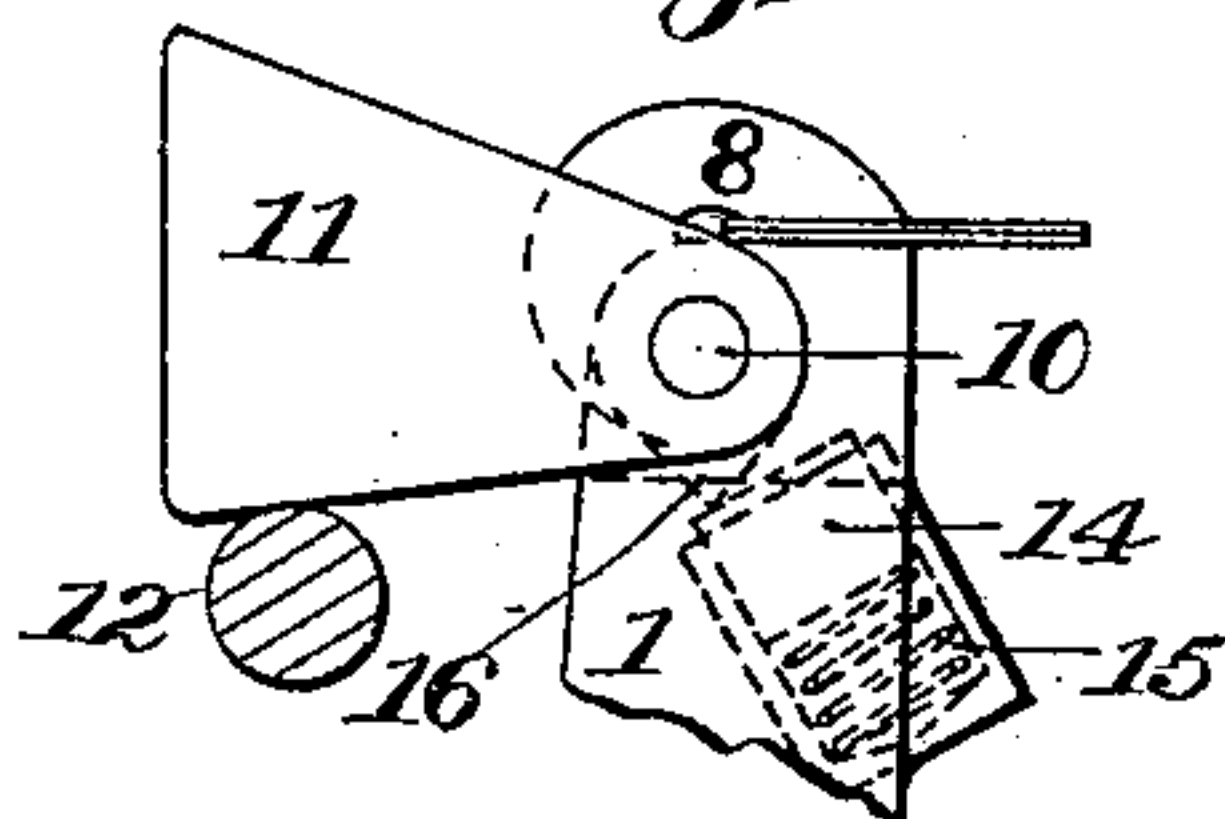


Fig. 4



Witnesses

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PAPER-BAG MACHINE.

SPECIFICATION forming part of Letters Patent No. 377,314, dated January 31, 1888.

Application filed March 7, 1887. Serial No. 229,895. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM A. LORENZ and WILLIAM H. HONISS, of Hartford, Connecticut, have invented an Improvement in Paper-Bag Machines, of which the following description and claim constitute the specification, and which is illustrated by the accompanying sheet of drawings.

This invention is an apparatus for retracting a paper-bag blank along the surface on which it is lying in a machine wherein it is being made into a paper bag and folding over a certain flap appurtenant to that blank.

This apparatus, together with its proper environment in a paper-bag machine, is shown in Figures 44, 45, 46, and 47 of the drawings of Letters Patent of the United States No. 361,591, granted to us April 26, 1887, on a paper-bag machine, and the same matter is briefly described in the accompanying specification, but is not claimed therein.

Fig. 1 of the present drawings is a side view of our present invention and its proper environment, and Fig. 2 is a view of the same matter in another position, while Fig. 3 is an elevation looking in the direction of the arrow between Figs. 1 and 2, and Fig. 4 is an enlarged view of parts of Fig. 1.

The numeral 1 indicates a retracting-arm pivoted on a pin, 2, and provided with the roller 5, running in the cam-groove 6, cut in the stationary cam-disk 7.

The retracting-clip 8 is rocked on the shaft 10, and that shaft is pivoted to the upper ends of the arm 1 and is worked by the arm 11. That arm is forced in opposite directions alternately by colliding alternately with the stationary pins 12 and 13. The retracting-clip 8 is thus alternately opened and shut down upon the top of the arm 1, and is firmly held in the alternate positions shown in Figs. 1 and 2 by means of the bolt 14, worked by the spring 15, pressing alternately against the opposite sides of the cam 16 on the shaft 10. The presser 17, upon the shaft 224, terminates in a surface having the contour of an arc of a circle, and, revolving in the direction of the arrow, operates

to hold the rear end of the bag-blank 18 down upon the periphery of the cylinder 180, so that it can be seized by the clip 8. The cylinder 180 also carries at its sides a pair of side clips, 19, one member only of which is shown in the drawings. These clips are counterparts, and are placed at an angle to the sides of the cylinder, and oscillate upon studs secured to ears attached to the cylinder. The outer ends of the side clips, 19, are bent inward toward the cylinder, and each of them has two projections adapted to close over the periphery of the cylinder, and constructed and operating as particularly described in our said Letters Patent No. 361,951. A duplication of the parts 1, 2, 5, 8, 10, 11, 14, 15, and 16 is preferably placed on the diametrically-opposite side of cylinder 180. The other parts of the drawings are identical with the corresponding parts shown in our said Letters Patent.

The mode of operation is as follows: When the revolution of the cylinder carries the arm 11 into collision with the pin 12, the clip 8 clasps the rear end of the bag-blank down upon the upper end of the arm 1, and then the roller 5 runs out of the eccentric part of the cam-groove 6, and thus causes the arm 1 to rock backward and to retract the bag-blank along the periphery of the cylinder. That retraction occurs when the clips 19 have been rocked upon the cylinder and over the edges of the bag into the position shown in Fig. 1 of the present drawings, and particularly described in our said Letters Patent. As the retraction occurs, the flap 20 of the bag-blank is folded over from its position shown in Fig. 1 to that shown in Fig. 2 by means of the side clips, 19, operating to prevent that flap from being retracted with the body of the bag-blank. This folding over is the special function of this invention. Afterward, when the further revolution of the cylinder carries the arm 11 into collision with the pin 13, the shaft 10 is rocked thereby, and the bag-blank is thus released from the grasp of the clip 8.

A reciprocating blank-carrying carriage may be provided with this invention; but in

that case the arm 1 would be worked by a longitudinal cam-groove, and the arm 11 would be slightly modified in form.

We claim as our invention—

- 5 The combination of the arm 1, provided with the clip 8, the presser 17, having a working-surface corresponding to the opposite surface under the bag-blank, and the pair of clips 19, pivoted, constructed, and operating substantially
10 as pointed out, the whole being so arranged that

the body of the bag-blank is retracted and the flap 20 is folded over, substantially as described and shown.

Dated March 4, 1887.

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Witnesses:

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