

No. 651,992.

Patented June 19, 1900.

L. T. HALLOCK.
HAT PACKING RING MACHINE.

(Application filed July 30, 1898.)

(No Model.)

2 Sheets—Sheet 2.

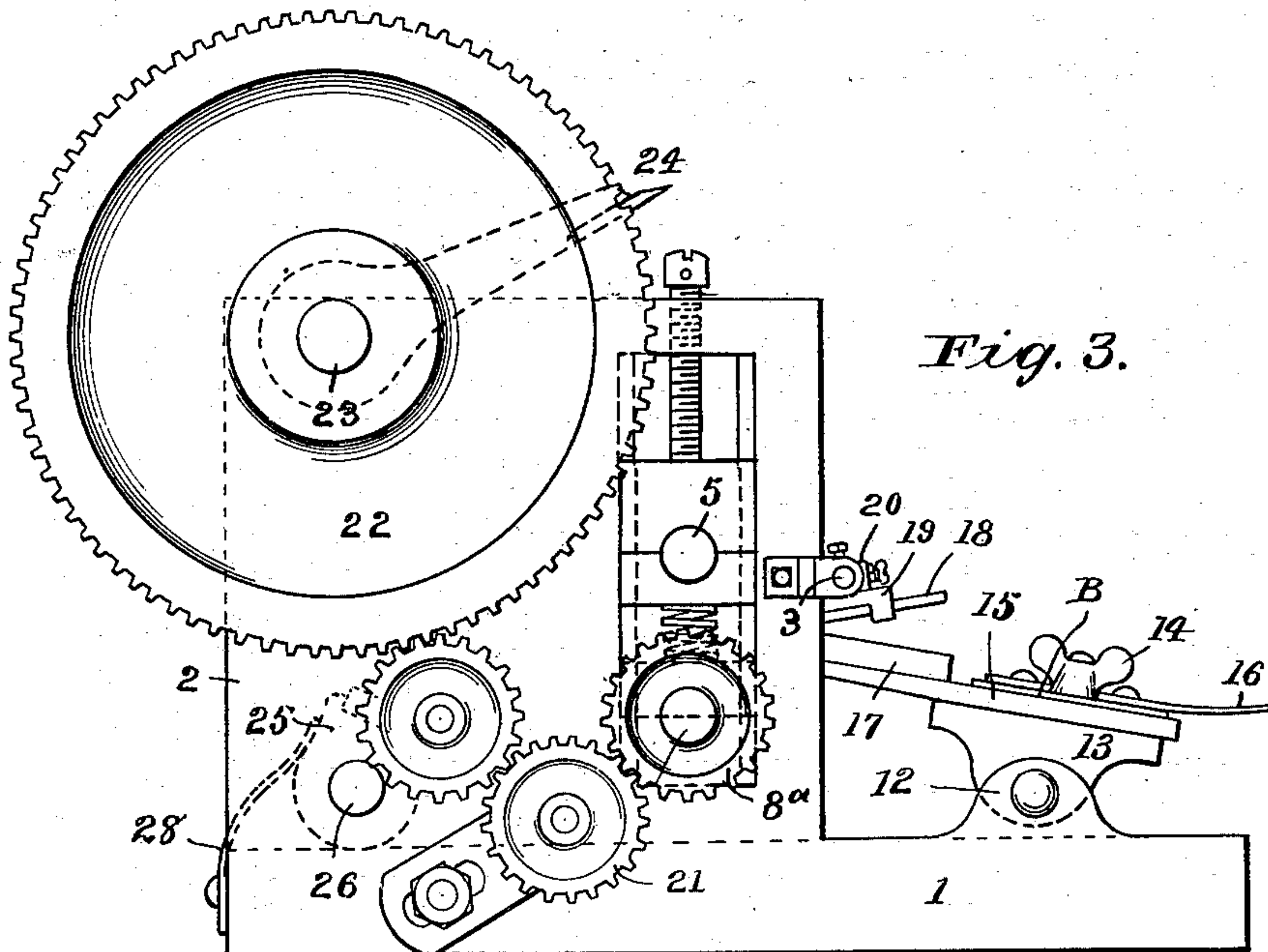


Fig. 3.

Fig. 4.

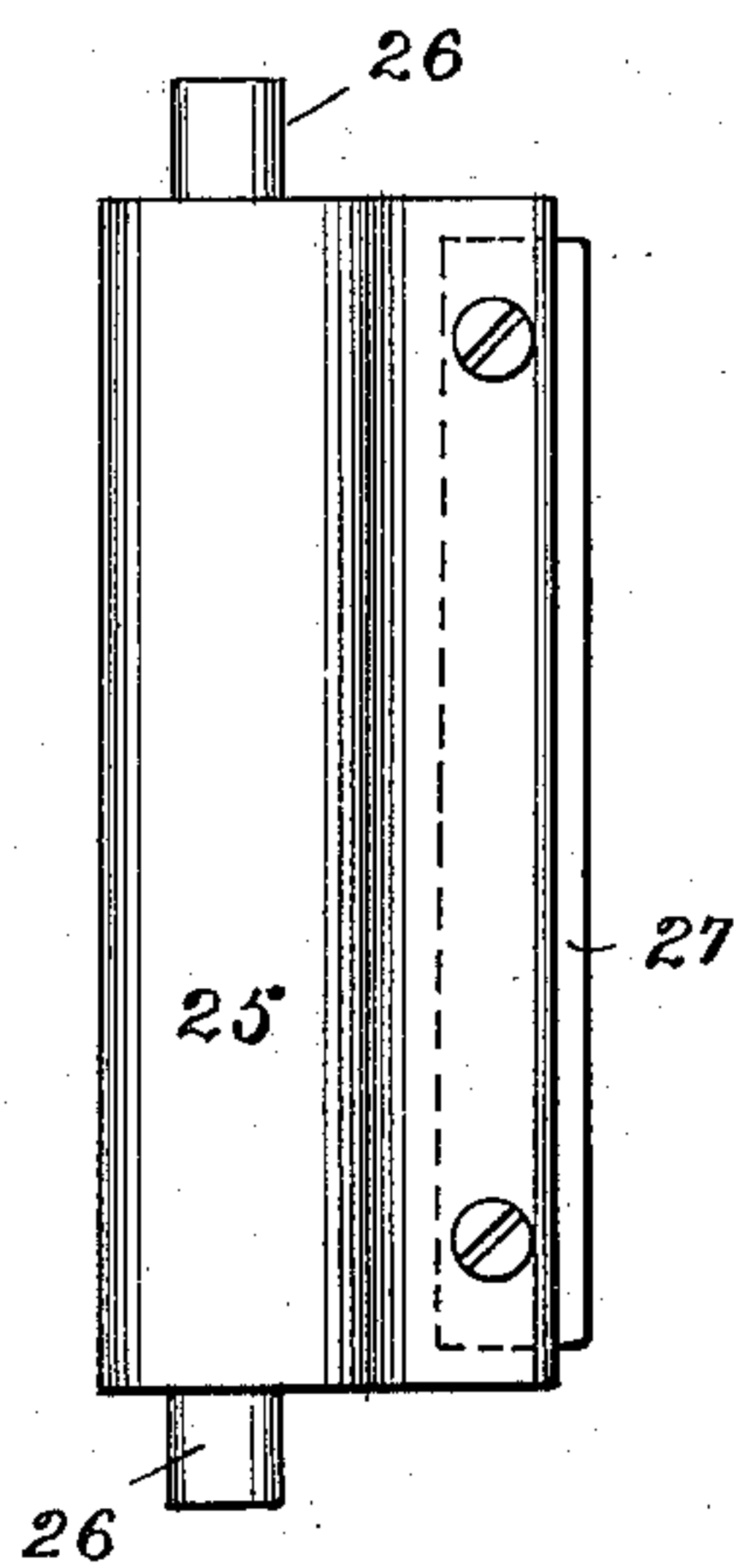


Fig. 5.

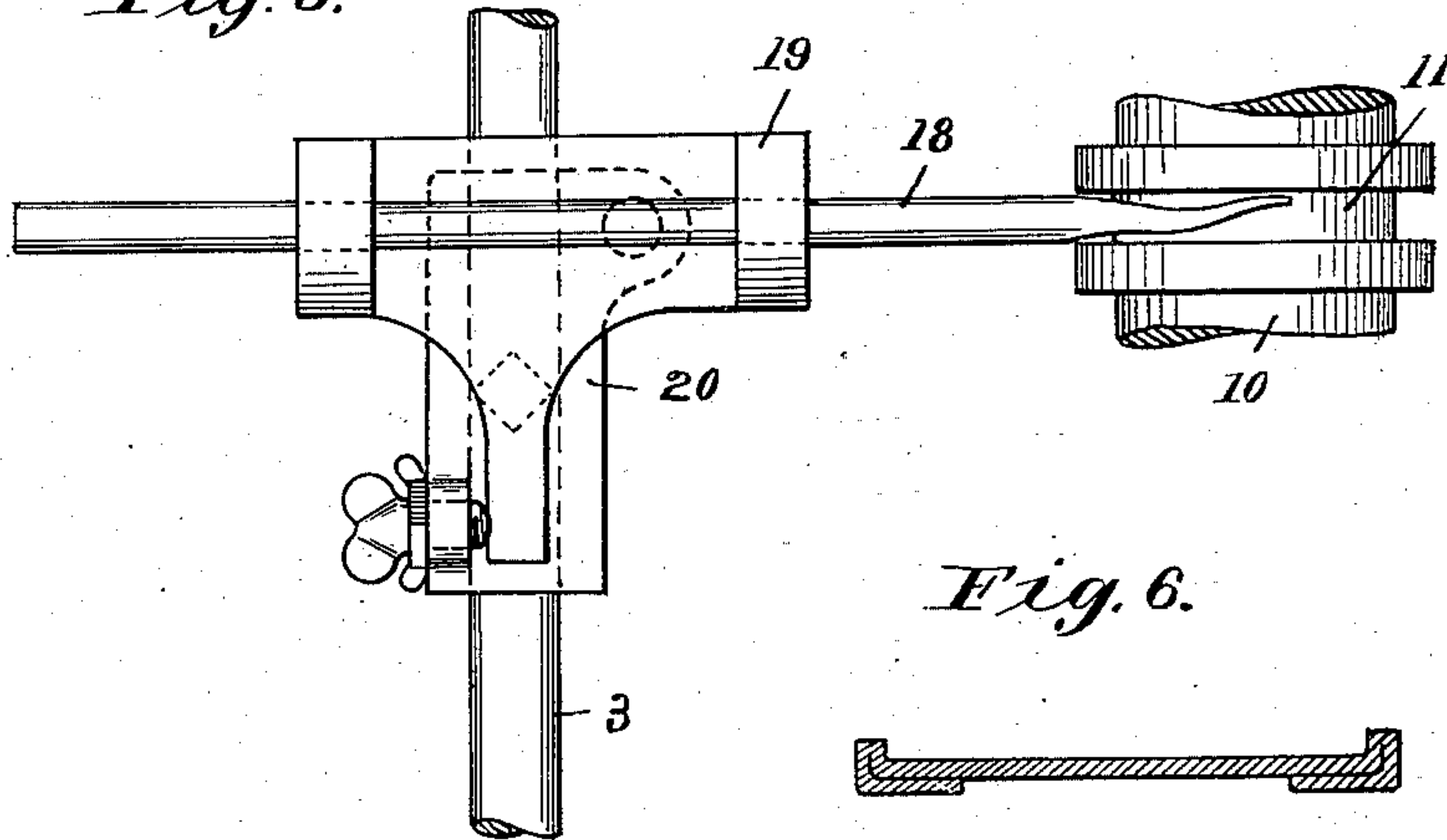


Fig. 6.



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LEE T. HALLOCK, OF ORANGE VALLEY, NEW JERSEY, ASSIGNOR TO ADDIE B. HALLOCK, OF READING, PENNSYLVANIA.

HAT-PACKING-RING MACHINE.

SPECIFICATION forming part of Letters Patent No. 651,992, dated June 19, 1900.

Application filed July 30, 1898. Serial No. 687,330. (No model.)

To all whom it may concern:

Be it known that I, LEE T. HALLOCK, a citizen of the United States, and a resident of Orange Valley, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Hat-Packing-Ring Machines, of which the following is a specification.

This invention relates to new and useful improvements in machines for making paste-board hat-packing rings, such as shown in my former patent, No. 603,445, dated May 3, 1898, and also as shown in cross-section in Figure 6 of the drawings of this application.

The objects of my invention are to improve upon ring-machines of the above class, to simplify and cheapen their construction, and particularly to provide a machine especially adapted to produce rings in accordance with my said patent.

With the above objects in view I have devised the simple and novel construction shown in the accompanying drawings, forming a part of this specification, and upon which similar characters of reference denote like or corresponding parts throughout the several figures, and of which—

Fig. 1 shows a plan view of my improved machine complete. Fig. 2 is a cross-section on line 2 2 of Fig. 1. Fig. 3 shows a side elevation as seen from the bottom of Fig. 1. Fig. 4 is a detail view of the pivoted toggle which works in conjunction with the cutting-blade. Fig. 5 is an inverted detail plan view of the shield and means for supporting the same. Fig. 6 is a cross-sectional view of a ring the edges of which have been operated upon by my machine.

Referring to the characters of reference marked upon the drawings, 1 indicates the base of the framework; 2 2, uprights secured thereto; 3, a rod extending from one upright to the other, forming a brace and support for the shields.

4 represents a driving-pulley upon the main shaft 5, which latter is journaled in boxes fitted in the framework. Said driving-shaft 5 is provided with a pinion 6, which meshes with a similar pinion 7 upon a corresponding shaft 8, mounted in boxes of the upright and immediately above the driving-shaft afore-

said. Upon the shafts 5 and 8 are mounted feed-rolls 9 and 10, which are provided with a series of corrugations 11, encircling their periphery. As will be seen, the several corrugations of these two rolls register with each other in a manner to receive the flat-pointed shield 18 of the guides A and B, which are shiftable from one groove to the other to accommodate varying widths of rings.

Upon the base 1 are secured lugs 12, to which is hinged a guide-block 13 for the purpose of supporting movable guides A and B. The guide B is shown to be adjustable by means of a clamping-screw 14, while the other guide A is preferably fixed to the said block, and consequently its position is not changed, as is the case with guide B. Each of the guides consists of a base-piece 15, having a flat sheet-metal deflector 16 secured thereto in a manner to form a slot, through which the paste-board passes.

17 represents a concave piece which forms a part of the guide and serves to turn the pasteboard flat upon the main strip and guide its entrance into the feed-rolls.

In conjunction with the guides A and B, I use adjustable shields 18, which in practice serve to engage the doubled edge of the ring in a manner to flatten or spread the same. These two shields and their supporting parts are substantially alike in construction and differ only in that one is a right and the other is a left. The left shield, together with its connecting parts, is shown in detail in Fig. 5, and comprises a holder 19, pivoted and adjustably mounted on a plate 20, which latter is movably attached to the guide-rod 3. It will thus be apparent that these shields can be adjusted to register with the guides A and B as well as the grooves of the forming-rolls into which they extend, and by reason of the pivotal connection between the holder and plate a slight wobble play of the shields is permitted for the purpose of adapting themselves to any variation in the width or thickness of the pasteboard being operated upon.

21 represents an idler journaled upon a stud adjustably mounted on upright 2 and serves to communicate power from shaft 8 to gear 22 of shaft 23. Said stud is adjustable to permit the substitution of larger or smaller

gears for changing the speed of the knife 24 and the length of the ring cut thereby. The shaft 23 is suitably journaled in the uprights 2 2 and has secured thereto a revolving blade 24, which latter operates successively in conjunction with the spring-actuated toggle 25 to sever the strip into suitable lengths after the same has been operated upon, said toggle 25 being shown in detail in Fig. 4, and consists of a casting having trunnions 26 at each end, which latter operate in suitable bearings of the uprights. Said toggle is further provided with an engaging block 27, which is fitted into a suitable recess thereof, and also a spring 28, which serves to slightly tilt it to the front (see Fig. 2) against an adjustable stop 29, in which position it remains until engaged by the ring when the latter is operated upon by the blade.

The operation of my machine is as follows: The stock is fed to the machine from a strip or roll of a suitable width and is passed through the slots under deflectors 16 of the guides A and B and then into the concave pieces 17, which turns the raw edges down flat upon the main body. This doubled edge is next fed between the rolls and operated upon in a manner to press and bend said doubled edge over the outer top corner of said shield and force it between said shield and the walls of the grooves, from which it emerges substantially as shown in Fig. 6. From the feed-rolls just mentioned the strip is passed backward and successively operated upon by the blade and toggle in a manner to sever the strip into sections of predetermined lengths.

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

1. In a machine of the class described, the combination of a pair of feed-rolls having a series of square grooves upon their peripheries which register with each other, a pair of guides adjacent to said rolls, means for adjusting one of said guides, flat-pointed shields which enter a pair of said grooves, means for adjusting one of said guides to register

with the different grooves, to produce varying widths of rings.

2. In a machine of the class described, the combination of a pair of feed-rolls having a series of square grooves upon their peripheries and registering with each other, means for turning the edge of the pasteboard over upon the stock and feeding it between the rolls, a flat-pointed shield against which the stock is pressed and bent over and flattened, substantially as shown, a blade and toggle adjacent to the rolls and adapted to successively sever the stock into desirable lengths while it is in motion.

3. The combination in a ring-machine, of a pair of grooved feed-rolls, guides for directing the stock into the grooves of said rolls, flat-pointed shields adjacent to the guides and extended between the rolls, means for shifting said shields to register with any of said grooves, mechanism for affording an independent lateral movement to said shields and means for regulating the amount of said movement, a blade and toggle adapted to successively sever the stock into lengths as it comes from said rolls, substantially as shown and described.

4. In a ring-machine of the class described, the combination with suitable grooved forming-rolls, of means for vertically adjusting said rolls, guides for directing the stock between the rolls, adjustable flat-pointed shields extended between the grooves of said rolls, means for affording an independent lateral movement to said shields, a knife rotatably mounted adjacent to said rolls, a spring-actuated toggle mounted to operate in conjunction with said knife, means for limiting the movement of said toggle, substantially as shown and described.

Signed at Bridgeport, in the county of Fairfield, State of Connecticut, this 29th day of July, A. D. 1898.

LEE T. HALLOCK.

Witnesses:

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