

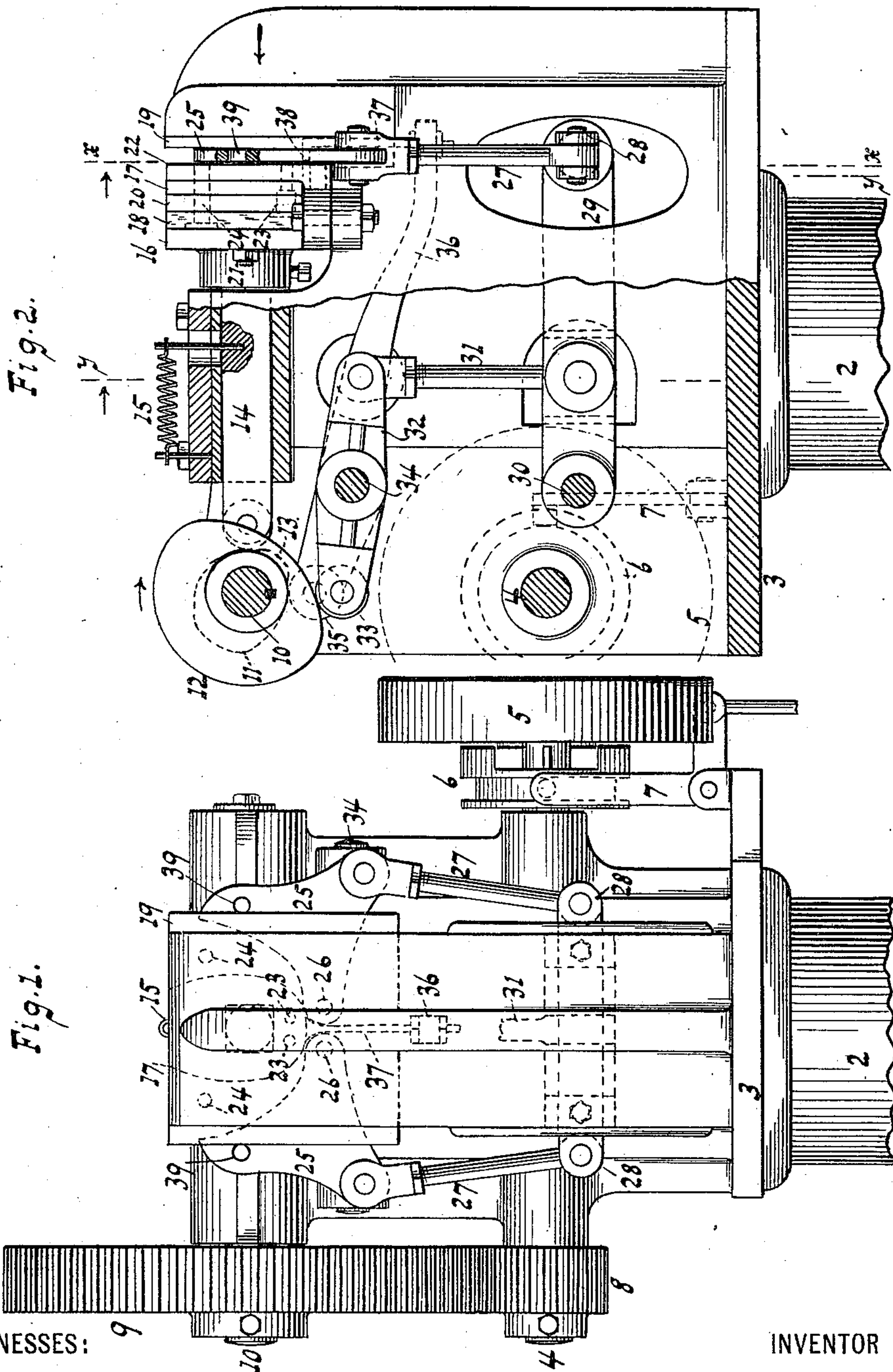
(No Model.)

2 Sheets—Sheet 1.

J. R. SCOTT.  
SHAPING MACHINE.

No. 575,619.

Patented Jan. 19, 1897.



WITNESSES:

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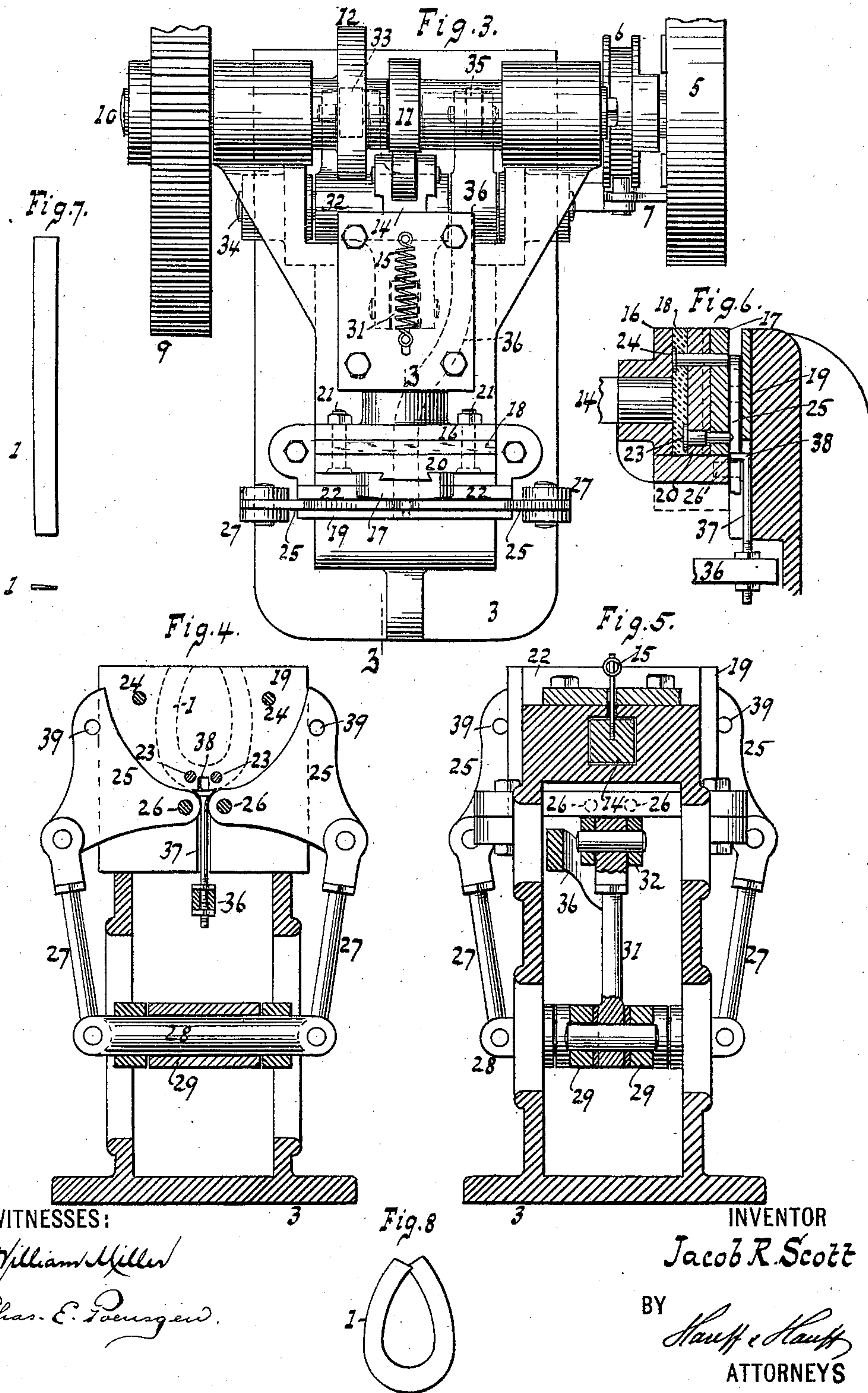
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# UNITED STATES PATENT OFFICE.

JACOB R. SCOTT, OF NEW YORK, N. Y.

## SHAPING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 575,619, dated January 19, 1897.

Application filed February 27, 1896. Serial No. 580,934. (No model.)

*To all whom it may concern:*

Be it known that I, JACOB R. SCOTT, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Shaping-Machines, of which the following is a specification.

The object of this invention is to provide a machine suitable for such work as crimping and molding rands and articles of leather; and the invention resides in novel features of construction set forth in the following specification and claims, and illustrated in the annexed drawings, in which—

Figure 1 is a front elevation of the machine. Fig. 2 is a sectional side elevation of Fig. 1. Fig. 3 is a plan view of Fig. 1. Fig. 4 is a section along *xx*, Fig. 2. Fig. 5 is a section along *yy*, Fig. 2. Fig. 6 is a section along *zz*, Fig. 3. Fig. 7 shows a blank in plan view and end view. Fig. 8 shows a rand or completed article.

A blank or rand strip 1, suitably beveled or wedge-shaped, as seen in the end view of Fig. 7, being suitably bent or shaped into horseshoe form, as indicated in dotted lines in Fig. 4, forms a rand suitable for placing in the heel of a shoe. The machine is shown supported on a column 2, carrying a plate 3, suitably supporting a shaft 4, with which the pulley or driver 5 is engaged at suitable intervals by a clutch mechanism 6 7. The driving-shaft 4 conveys motion by gears or connections 8 9 to shaft 10, carrying cams 11 12 and a nose 13, Fig. 2. A slide or actuator 14 is held or moved by spring 15 toward the cam 11.

The actuator 14 carries a plate or face 16, between which and the jaw 17 is interposed a spring or cushion 18, such as a rubber or elastic pad. At suitable times the cam 11 moves the jaw 17 toward jaw 19. The jaw 19 might also be made movable toward and from jaw 17, but by having the jaw 19 fixed, as shown, the construction is simplified.

The plate or face 16 is shown as having the spring 18 and a plate 20, secured thereto by bolts or fastenings 21, Fig. 3, passing through the spring 18 and plate 20, but lying flush with or not projecting beyond the front face of plate 20. The jaw or die 17 is dovetailed or slid onto plate 20 and is prevented from sliding down too low by a suitable stop, such

as a rest or plates 22, Figs. 2 and 3, fixedly supported and forming a seat on which the jaw 17 can move back and forth.

The blank or material for the article 1 to be shaped or pressed is slipped or passed between the jaws 17 and 19. A holder keeps the material or blank in place while being shaped or pressed by suitable wipers, and a stop or lock is made to engage the wipers at the end of their shaping or operating stroke.

The holder is practically formed by a pin or pins 23, seated against spring 18. The stop or lock is shown formed by pins 24, seated against the face 16 or against actuator 14, of which face 16 forms a part or to which said face is rigidly secured.

The wipers 25 play between the jaws 17 and 19, and said wipers are fulcrumed or supported at 26, Fig. 4. Links 27 are jointed to said wipers and to a cross head or piece 28, carried by lever 29, Fig. 2, fulcrumed at 30. A link 31 is jointed to lever 29 and to an arm 32 of lever 32 33, fulcrumed at 34 and actuated or oscillated by cam 12. The oscillations of levers 33, 32, and 29 with links 27 cause the wipers 25 to alternately approach or swing toward one another and to separate.

The toe or cam 13, Fig. 2, oscillates or actuates lever 35 36. The lever-arm 36 carries an ejector 37, having its ejecting part or face 38 located between jaws 17 19.

The action of the machine is as follows: The jaws 17 and 19 being sufficiently separated and the holder 23 being sufficiently far or separated from jaw 19, a blank for the article 1 is placed or slipped between the jaws and rests on ejector 38. The cam 11 then moves actuator 14 against the action of returning-spring 15 sufficiently to cause the holder or pins 23 to grip or confine the blank at a suitable part, the jaws 17 19, however, not being so far brought together nor the stop or lock 24 so far advanced as to prevent the play of the wipers 25 between the jaws or to prevent the wipers from properly approaching one another. The wipers then making their approaching movement or swing cause the strip or blank to be brought to the desired shape, after which the jaws 17 19 are caused to approach one another sufficiently to flatten or squeeze the article shaped, as also to cause the pins or lock 24 to enter



or engage recesses or eye or engaging parts 39 in wipers 25. On the jaws 17 19 receding or separating sufficiently to withdraw or free the lock 24 and holder 23 the ejector 38 moves 5 the article out from between the jaws or displaces the article for ready removal.

The edges of the wipers facing one another by having the shape or contour required for the article to be produced will secure the finish or shape required. By placing the blank, 10 Fig. 7, into the machine so that its thinner or sharp edge lies at the inside or concavity of the curve into which the blank is thrown the finished article, Fig. 8, will come out 15 neatly finished or in suitable condition for use. Of course the machine is not limited to operating on rands, as it can be otherwise employed, as, for example, in pressing or squeezing heels or lifts.

20 By causing the wipers to shape the article while free from pressure by the jaws the desired shape or contour is readily given to such article, and by then locking the wipers and causing the jaws to forcibly compress the 25 article confined by or between said locked wipers the article is suitably shaped or molded and also firmly compressed, so as to leave the machine thoroughly hardened or in condition for use.

30 What I claim as new, and desire to secure by Letters Patent, is—

1. A shaper comprising jaws, an ejector and wipers made to play between said jaws, and actuating mechanism substantially as 35 described for said jaws, ejector and wipers.

2. A shaper comprising jaws, wipers made to play between the jaws, a holder for the material operated on, and a stop or lock for the wipers substantially as described.

40 3. The combination with jaws and an actuator for one of the jaws, of a spring or

cushion between the actuator and its jaw, a holder comprising a pin (one or more) seated against the cushion, wipers made to play between the jaws, and a wiper-stop comprising 45 pins seated against the jaw-actuator and made to pass by or through the cushion substantially as described.

4. The combination with jaws and an actuator for one of the jaws, of a spring or 50 cushion between the actuator and its jaw, a holder or holding-pins seated against the cushion, wipers made to play between the jaws, and wiper stop-pins seated against the jaw-actuator, said wipers having eyes or en- 55 gaging parts for the stop-pins substantially as described.

5. A shaping-machine comprising jaws and wipers, one of said jaws being movable from and toward the other jaw, an actuator for 60 said movable jaw provided with a dovetailed or channeled plate or face onto which said jaw is slipped or to which the jaw is engaged, and a jaw-seat on which the movable jaw is made to rest during its movements by 65 the actuator substantially as described.

6. A machine for shaping or molding articles of leather, comprising jaws and wipers, and a lock for the wipers, combined with actuating mechanism substantially as described 70 for causing the wipers to shape the blank or article and to be locked, and then causing the jaws to press or mold the article confined by said locked wipers substantially as described. 75

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

JACOB R. SCOTT.

Witnesses:

W. C. HAUFF,  
E. F. KASTENHUBER.