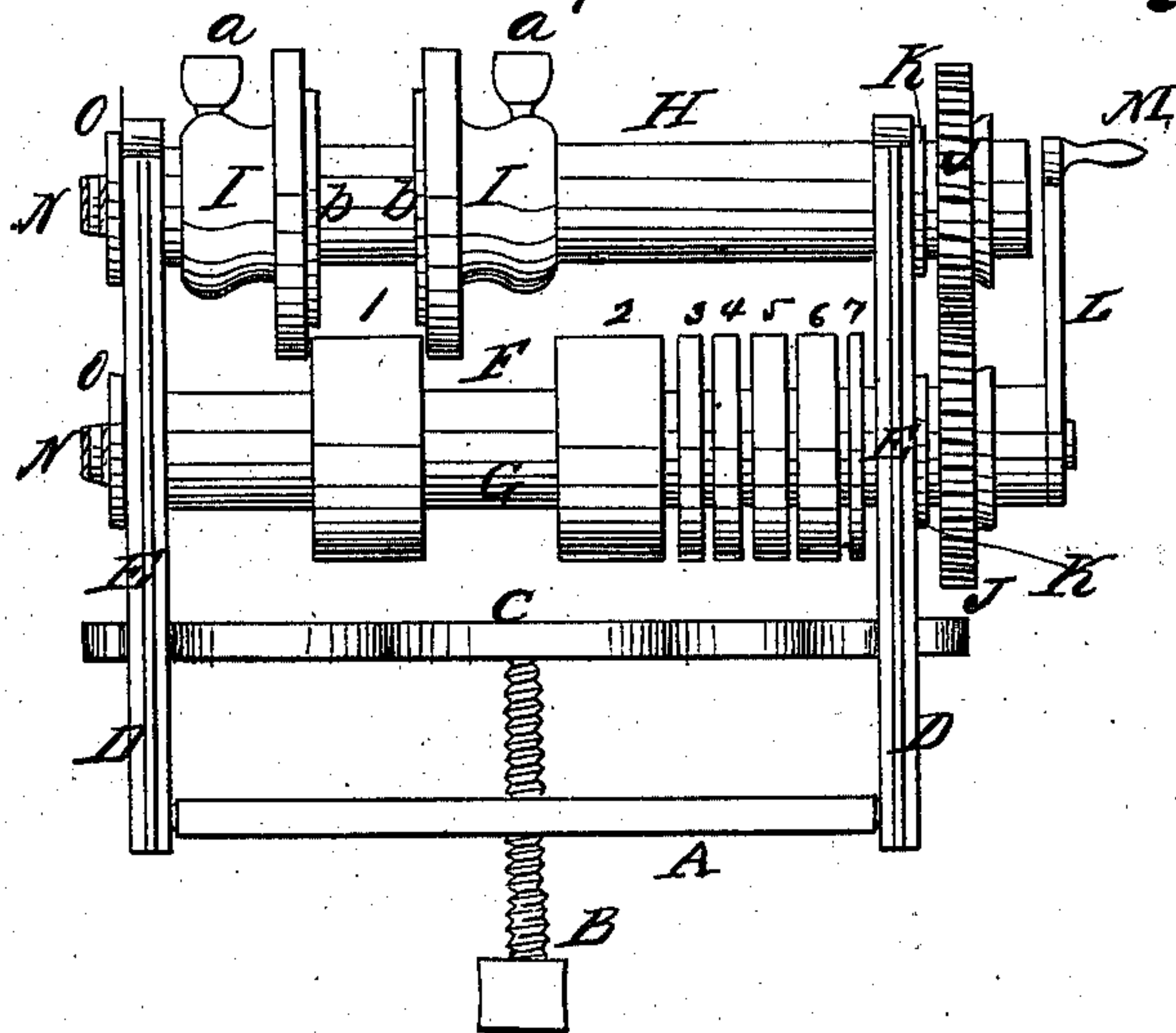


*W. McK. Thornton,*

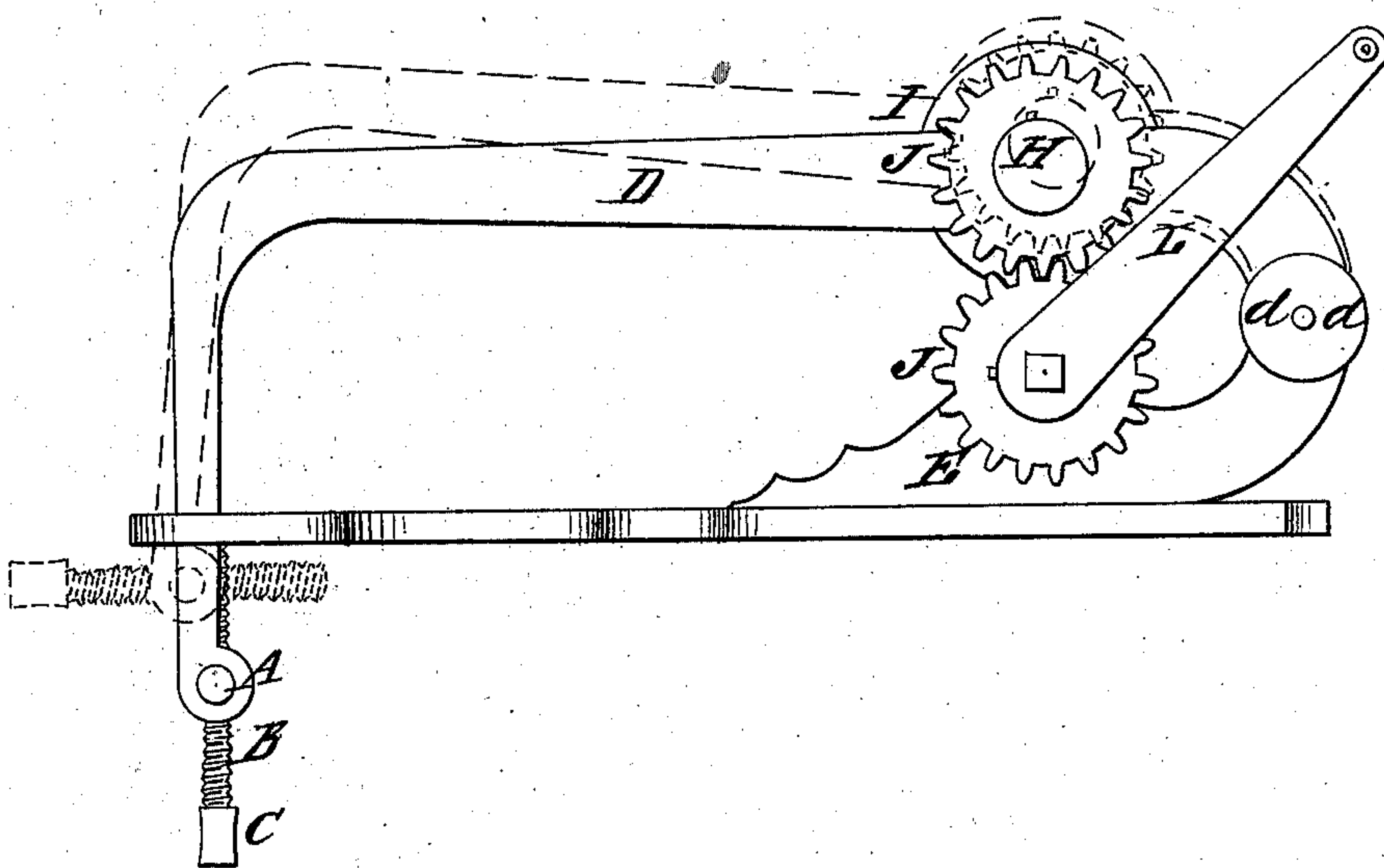
*Harness Machine.*

*N<sup>o</sup> 12,878.*

*Fig. 1. Patented May 15, 1855.*



*Fig. 2.*





# UNITED STATES PATENT OFFICE.

WM. McK. THORNTON, OF POTTSVILLE, PENNSYLVANIA.

## MACHINE FOR CREASING THE EDGES OF LEATHER STRAPS.

Specification of Letters Patent No. 12,878, dated May 15, 1855.

*To all whom it may concern:*

Be it known that I, WM. McK. THORNTON, of Pottsville, in the county of Schuylkill, in the State of Pennsylvania, have invented a new and Improved Mode of Creasing Leather; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, like letters referring to like parts of the machine.

Figure 1, is an end elevation. Fig. 2, is a side view.

To enable others skilled in the art to make, and use my invention, I will proceed to describe its construction and operation.

In Fig. 1, A, is the revolving lever. B, the adjustable screw. C the bottom. D, D, the adjustable sides of the frame or curved levers, for elevating or lowering the machine. E, E, boxes through which the shaft passes. F, the shaft with projection or rib G, let into it and extending entirely across it (between the boxes); 1, 2, 3, 4, 5, 6, 7, are collars of different sizes from  $\frac{1}{8}$  of an inch to one inch, and may be made of any required size, accommodating the machine to the width of the strap to be creased, they having on their inner surface a groove which fits on to the projection or rib, G, for the purpose of making them revolve with the shaft F. H the upper shaft. I, I, the sliding metallic rollers or creasers with adjustable screws *a, a*, for fastening them at any position required. On the inside of the creasers or rollers I, I, are shoulders with grooves *b, b*, for compressing and creasing the leather on its edges. J, J, the cogwheels for driving the shafts F and H with the rollers or collars, and creasers or condensers. K, K, washers on the inside of cogwheels. L, the crank. M, the handle. N, N, adjustable screws for fastening the shafts in their proper positions. O, O, the washers.

Fig. 2, is a side elevation. A, the revolving roller let through the lower end of the curved lever or side frame in which it revolves. A hook instead of a hole may be used, and when it is not in use the lever and screw may be taken out, and let the bottom rest on the bench. *c* is the head or end of the screw B. D, D, are the side arms or curved levers through which the shaft H passes. E, E, boxes through which the shaft F passes. *d d—d d* are projections at

the ends of the pieces forming the boxes E, E, and into which the ends of levers D, D, are fitted forming an oscillating joint, J, J, the cogwheels thrown out of gear. I, I the creasers or rollers. *d*, one of the adjustable set screws for fastening it, in its required position, and keeping it firm making it revolve on the shaft. L the crank.

The operation of my machine is as follows: the end is fastened to a bench or stand by screws or their equivalents, then the collars 1, 2, 3, 4, 5, 6, 7, are adjusted singly, or two three or more of them according to the width of the strap to be creased are brought together (by this arrangement a strap can be creased from an eighth of an inch wide to any desired width). In adjusting the collars on shaft F to get the required width the metallic creasers are raised by means of the side arms or curved levers D, D, by which means they are raised above the collars and allow them to slide freely on the shaft F. Then when the collars are adjusted to the size required the metallic creasers are adjusted to the size of the collars and fastened in their proper places by turning the set screws *a, a*, the machine is then put in gear by turning the revolving lever A, so as to bring the screw B in a vertical position bearing against bottom C thus allowing the flanges of the rollers or creasers to fall below the periphery of the collars until the shoulders with grooves *b, b*, are brought to bear on the collar or collars; the strap to be creased is then placed on the collar or collars thus arranged, and by turning the crank by the handle M the shafts revolve, and the strap is carried through between the rollers and collars, and is perfectly creased. The flanges of the creasers act as guides to the strap in passing through the machine.

In the construction of my machine I do not use boxes of an ordinary kind as I dispense with caps screwed on the top of my shafts or creases. By means of the screws N, N, I undo the fastening of the shafts by taking the screws out and removing the washers *o, o*, and unscrewing the set screws *a, a* I draw my shaft through the boxes E, E, and D D and take them out, or put them in at pleasure. The adjustability of my machine by throwing it out of gear for the purpose of sliding the collars, and rollers, is represented by the red lines as seen in Fig. 2 (see red lines) here the



levers D, D, are raised, and the machine thrown out of gear.

Having thus fully described the construction and operation of my machine, what I  
5 claim as my invention and desire to secure by Letters Patent is—

I claim the movable collars 1, 2, 3, &c., of different sizes on shaft F in combination with the movable metallic creasers I, I, on

shaft H, having flanges extending below the periphery of the collars, and shoulders with grooves *b*, *b*, operating in the manner, and for the purposes, herein set forth.

WM. McK. THORNTON.

Attest:

JNO. M. CARR,  
T. G. CLAYTON.