

A. B. CURTIS.  
Machine for Folding Corset Parts.

No. 224,885.

Patented Feb. 24, 1880.

Fig. 1

Fig. 2

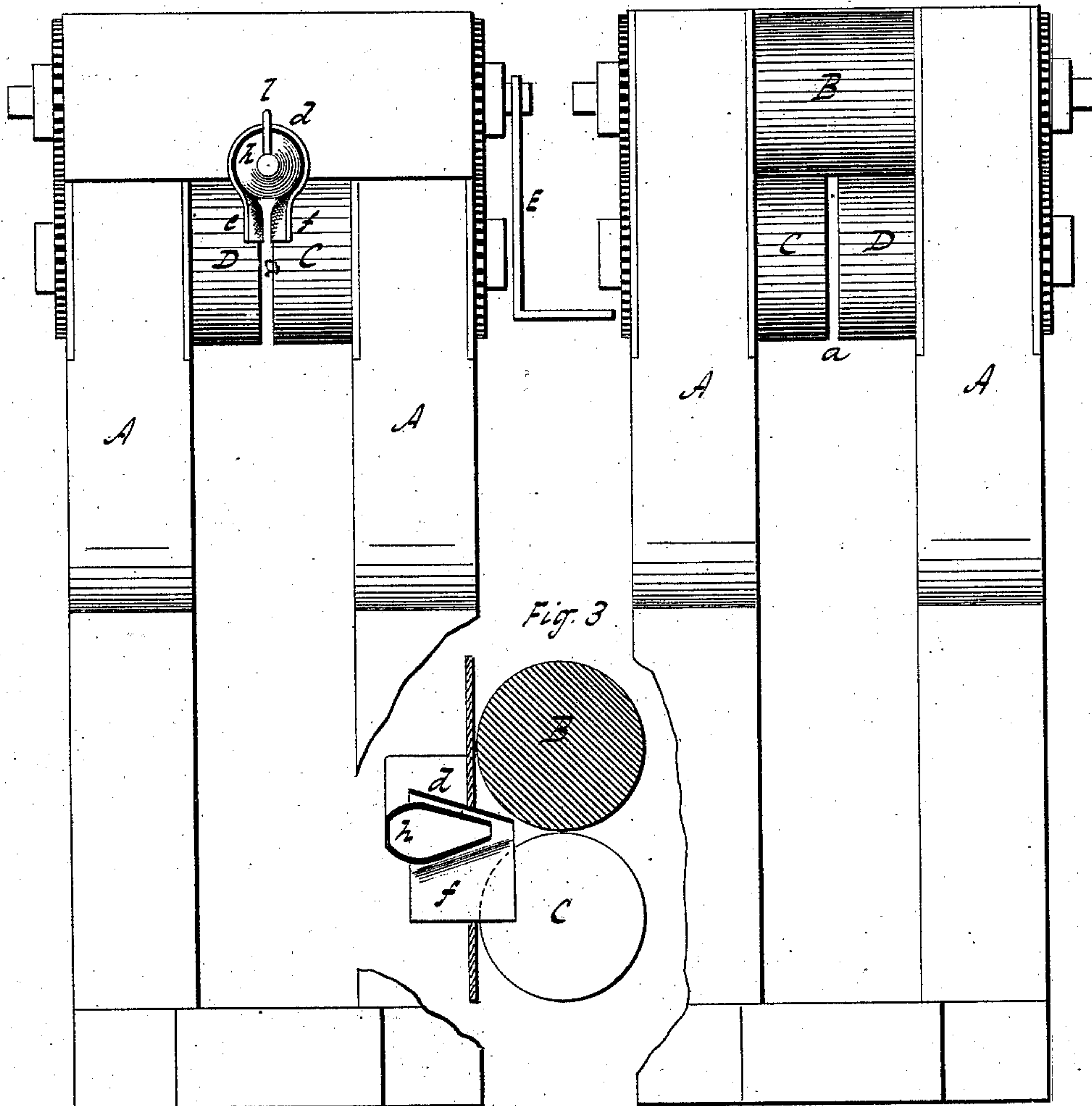


Fig. 3

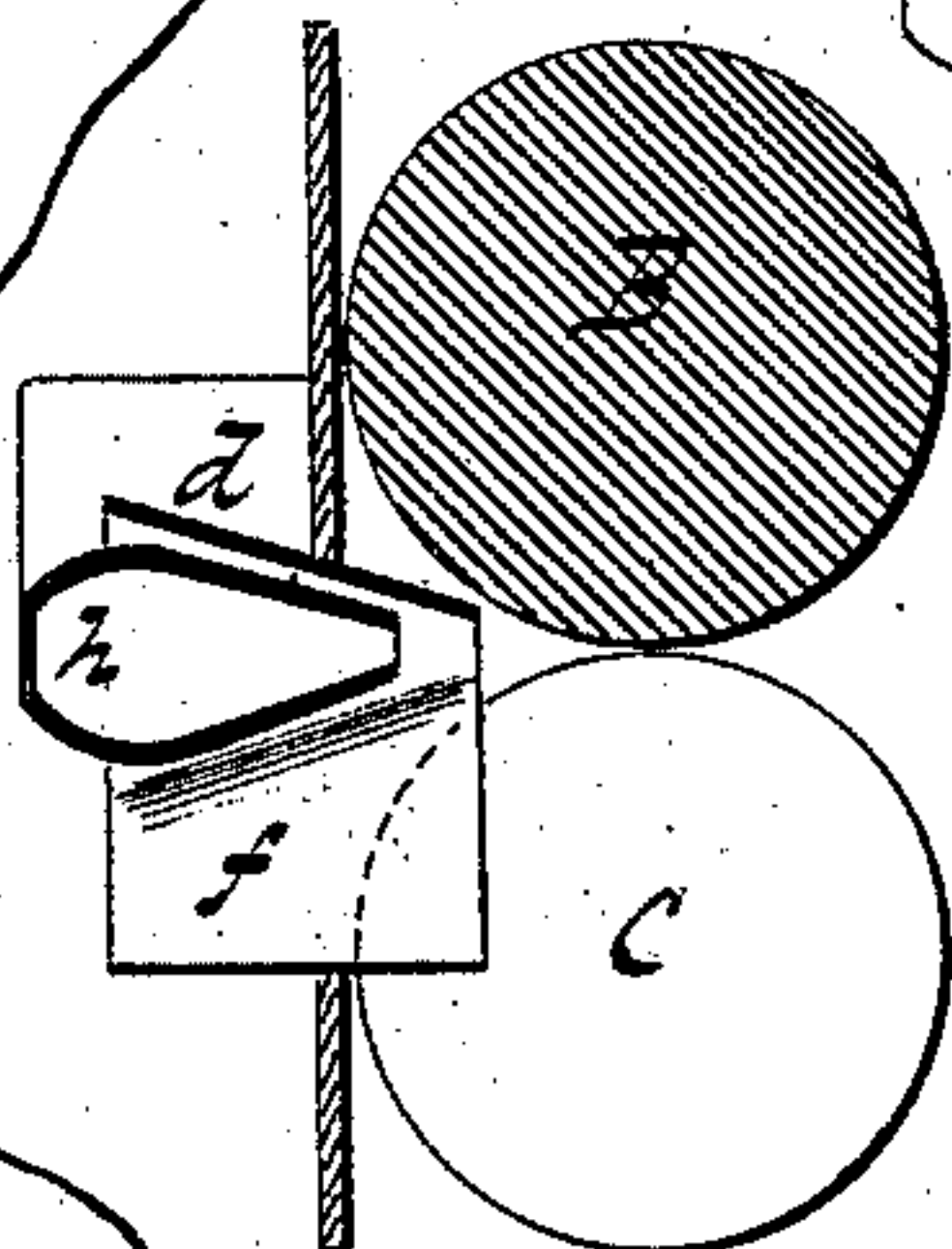


Fig. 4

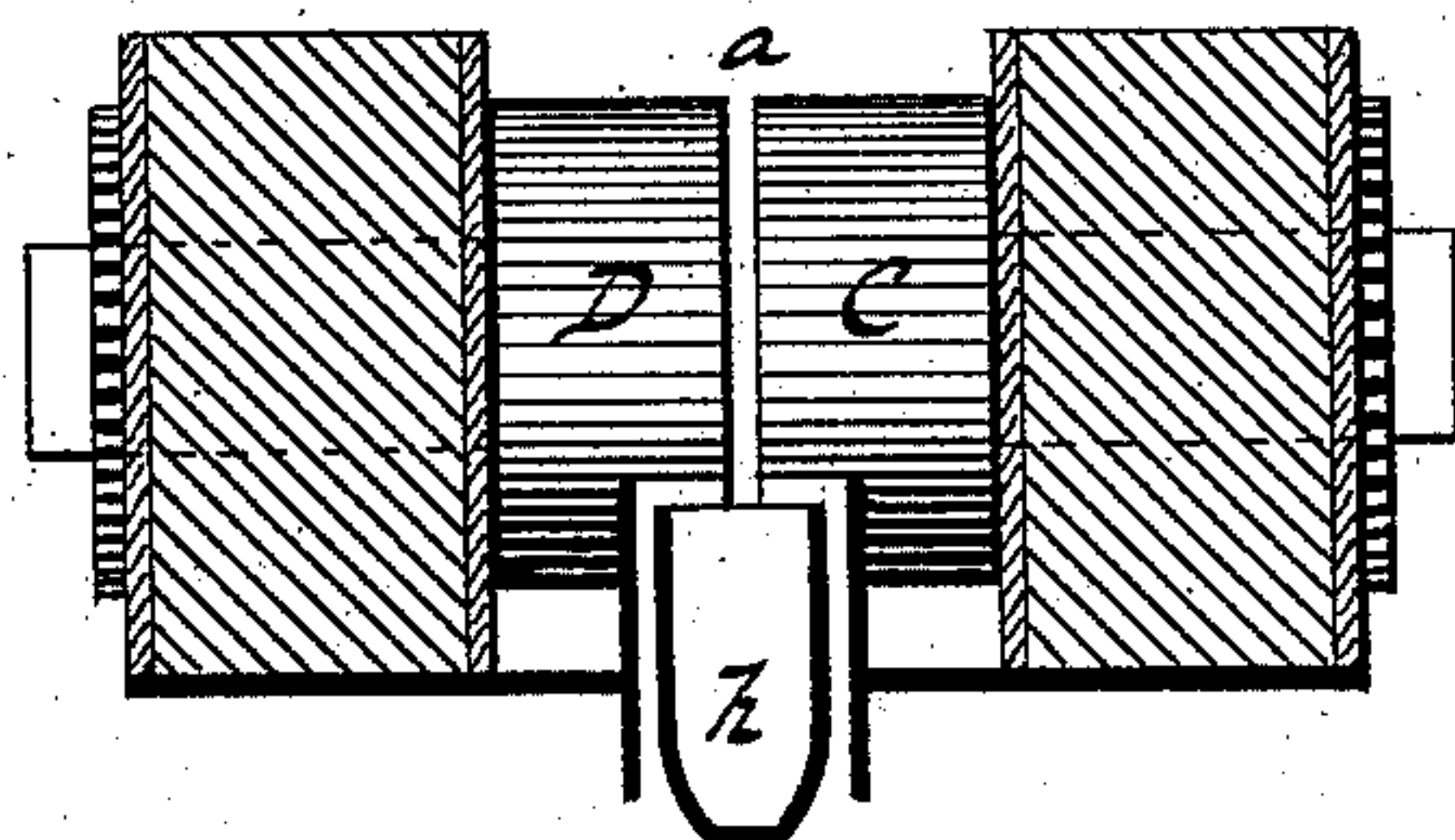


Fig. 5

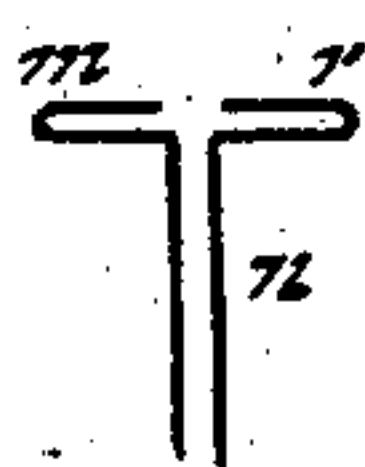
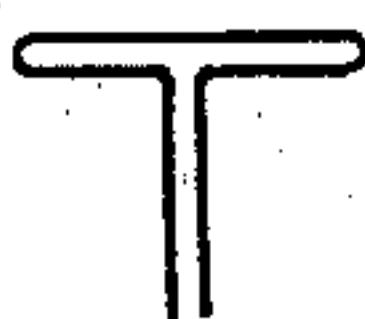


Fig. 6



Fig. 7



Witnesses:

J. H. Shumway  
J. C. Ball

Augustine B. Curtis.

By atty. Inventor

J. H. Shumway



# UNITED STATES PATENT OFFICE.

AUGUSTINE B. CURTIS, OF BIRMINGHAM, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO ABIJAH H. GILBERT, OF DERBY, CONNECTICUT; SAID CURTIS AND GILBERT ASSIGNORS OF ONE-THIRD OF THEIR RIGHT TO IRA DEVER WARNER, OF BRIDGEPORT, CONNECTICUT.

## MACHINE FOR FOLDING CORSET PARTS.

SPECIFICATION forming part of Letters Patent No. 224,885, dated February 24, 1880.

Application filed September 19, 1879.

To all whom it may concern:

Be it known that I, AUGUSTINE B. CURTIS, of Birmingham, in the county of New Haven and State of Connecticut, have invented a new Improvement in Machines for Folding Corset Parts; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, front view; Fig. 2, rear view; Fig. 3, vertical central section; Fig. 4, horizontal section between the rolls. Figs. 5 and 6 illustrate the operation; Fig. 7, delivery end of the folding-guide.

This invention relates to a device for turning in the raw edge of corset parts.

In the manufacture of corsets, the edges of the parts are generally in irregular or curved lines. These parts are cut from the fabric broader than they are to be in the corset, and the edges are turned over, so as to present a finished edge and to avoid what would be otherwise a raw edge. Hitherto these edges have been turned by hand.

The object of this invention is the construction of a machine to do the work more rapidly as well as more perfectly; and the invention consists in the construction hereinafter described, and more particularly recited in the claims.

A A are two posts or uprights, carrying in suitable bearings a single roll, B.

C D are two rolls of equal diameter, arranged parallel to the axis of the roll B, one supported in a bearing in one of the uprights and the other in a bearing in the opposite upright, in axial line with each other, but so as to leave a space, *a*, between the two, the two rolls C D geared to the roll B, so that the surface velocity of all the rolls is the same.

Power may be applied to impart revolution to the rolls in any convenient manner—here represented as by a crank, E. These rolls are used for laying or pressing the folded edge.

The folder consists of a funnel-shaped guide, *d*, arranged in a central line between the rolls, and on the side corresponding to the two rolls C D the edges *e f* are turned downward and enter between the two rolls C D, as seen in Fig. 3. This funnel-shaped piece terminates near where the surface of the rolls meet in a T-shaped opening, as seen in Fig. 7.

Centrally within the funnel-shaped piece or guide *d* is a piece, *h*, corresponding in outline to the interior of the funnel-shaped guide, but so as to leave a space around the said piece *h*, as seen in Figs. 1, 3, and 4. At the mouth of the guide is a partition, *l*, dividing it in the center at the top.

The guide *d* runs gradually from the shape of the mouth, as seen in Fig. 1, to the shape of its delivery end, as seen in Fig. 7, and so that if the two thicknesses of a corset part be presented into the guide *d*, one edge of one part at the right and the other at the left, and forced forward toward the rolls, the two parts will assume the shape seen in Fig. 5 at the delivery end of the guide, the edges of the two parts turned inward, and the body *n* of the part will pass into the space *a* between the rolls C D, and the turned-over edges *m r* will run one onto the roll C, the other onto the roll D and beneath the roll B, and will, by the revolution of the said rolls, be drawn forward until the edges of the part have completely passed through the folder or guide, and the material is delivered from the rolls with its edges completely turned and pressed. The folded edges then assume the position relatively to each other as seen in Fig. 6, which is the condition for being attached to adjacent parts.

It is immaterial what is the shape of the edge of the part, as, however irregular it may be, it readily follows the guide.

As thus far described, the invention is represented as folding the edges of two thicknesses at once, one at the right and the other at the left; but the thicknesses may be folded separately and afterward stitched together. More uniform and better work is produced by



first stitching the thicknesses together and then simultaneously folding corresponding edges of the two.

While designed with special reference to folding the edge of corset parts, the machine is equally adapted to folding or turning the edge of other work.

Instead of a single machine to fold the right and left parts, it may be divided, the roll C, with a corresponding roll, B, and one-half the folding-guide, constituting one machine, and the roll D, in a similar arrangement, constituting the other machine, the one for a right and the other for a left hand fold; but in either case the central portion of the guide must be complete in both machines—that is, so as to form a guide to conduct the body of the work in a plane at right angles to the space between the rolls and turn the edge over onto the body and deliver the folded edge between the two rolls and in a plane parallel with the axis of the said two rolls; and, in cases where the edge is straight and it is immaterial whether the edge be turned to the right or left, one of the machines last described would answer the purpose without the other, the essential feature of the invention being that the folding-guide shall conduct the body of the work in a plane at right angles to the axis of one roll and turn the fold into a plane between the rolls parallel with the axis of the said roll.

I do not broadly claim a folding-guide arranged to turn the edge of the fabric onto itself and deliver the folded edge between a pair of rolls, as such, I am aware, is not new.

I claim—

1. The combination of two rolls the axes of which are parallel to each other with a folding-guide arranged so as to conduct the body of the work in a plane at right angles to the axes of the rolls and turn the edge over onto the body and deliver the folded edges between the two rolls and in a plane parallel with the axis of the said two rolls, or at right angles to the body of the work, substantially as described.

2. The combination of two rolls arranged in axial line with each other, but so as to leave a space between them at right angles to their axes, with a third roll arranged with its axis parallel to the axes of the two rolls, and a folding-guide arranged to turn the two corresponding edges of the work over onto the body and deliver the said folded edges respectively between the said two rolls and the third roll in a plane parallel with the axes of the said rolls, while the body of the work passes through the space between said two rolls in a plane at right angles to the axes of the rolls, substantially as described.

3. The combination of the roll B, the rolls C D, arranged to leave a vertical space between them, and also a horizontal space between the rolls C D and the roll B, and a guide for directing the material between the rolls, substantially as described.

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Witnesses:

CLARK N. ROGERS,  
JOHN G. TOWNSEND.