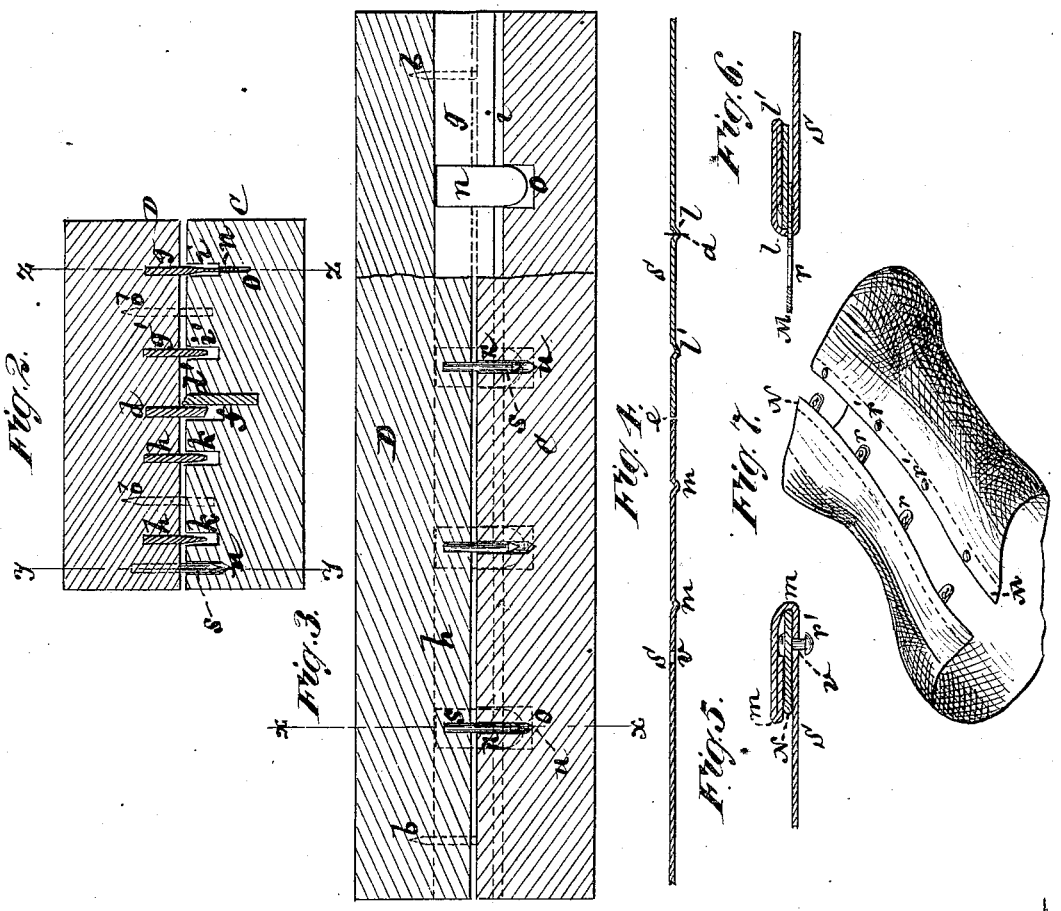
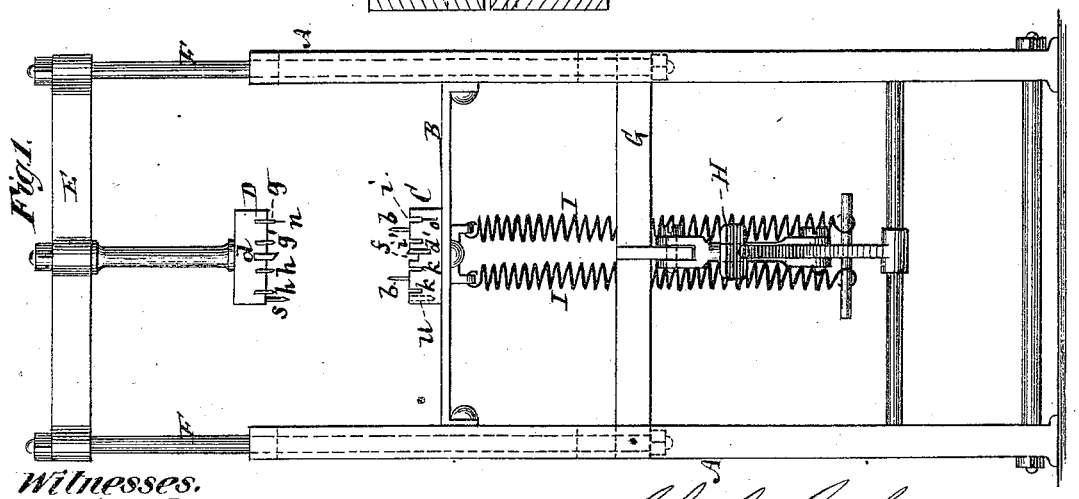
C. GAHREN.

Manufacture of Corsets.

No. 162,050. Patented April 13, 1875.





Witnesses.

John Becker.

Fred. Haynes

Charles Gahren

by his Attorneys

Brown & Allen

THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

UNITED STATES PATENT OFFICE.

CHARLES GAHREN, OF NEW YORK, N. Y.

IMPROVEMENT IN THE MANUFACTURE OF CORSETS.

Specification forming part of Letters Patent No. **162,050**, dated April 13, 1875; application filed December 1, 1874.

To all whom it may concern:

Be it known that I, CHARLES GAHREN, of the city, county, and State of New York, have invented certain new and useful Improvements in the Manufacture of Corsets; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to the manufacture of woven corsets. Such corsets are usually woven in a single piece, and the latter as it comes from the loom divided into halves or sections. These sections are then folded, cut and basted for reception of the bones or clasp-strips, and said corset sections or halves afterward laundered. After this has been done the basting is picked apart and the clasp-strips inserted and sewed down. This is an expensive and laborious mode of proceeding, and does not admit of laundering before dividing the corset. To do away with the basting above referred to, corsets have been woven with a single pocket down their middle, and the corset afterward divided through the center of the pocket to receive the bones or clasp-strips. The corset-sections have then been laundered and the clasp-strips inserted, and the edges of each half-pocket turned in and sewed down over said strips. The same general objections, however, apply to this as to the herein previously described mode of making the corset, besides which there is the labor and expense of forming the pocket.

My invention consists in a novel process of making or preparing the corset by first weaving it entire or of a single piece, then laundering it, and subsequently dividing and creasing it for the clasp-strips. By way of carrying out said process the invention also consists in a combination of dies with attached dividing-knives and creasers. Furthermore, the invention consists in a combination of dies with attached creasers and cutters, for folding the edges of the divided and laundered corset over the clasp-strips, and for projecting the eyes and buttons of the clasp-strips through the corset-sections, after which the strips are sewed to their places. By these improvements I do away with all basting or the weaving of a pocket for the clasp-strips, and generally reduce labor and expense.

To facilitate description the several operations of dividing the woven corset, of creasing the corset-sections in lines of the folds, and of cutting them for the passage of the eyes and buttons of the clasp-strips, will here be referred to as being simultaneously produced by one and the same machine, or by a single pair of dies. This, however, is not absolutely necessary, as said operations may be separately performed after laundering.

Figure 1 represents a front elevation of such a machine. Fig. 2 is a transverse section upon a larger scale, on the line *x x* of Fig. 3, of the two dies of the machine when closed. Fig. 3, an irregular longitudinal section of the same, on the lines *y y* and *z z* of Fig. 2. Fig. 4 is a sectional view of the two sections or halves of the divided corset before folding in line of the creases, and Figs. 5 and 6 are similar views of the same after folding and with the clasp-strips inserted. Fig. 7 is a view in perspective of a finished corset.

A is the frame of the machine, and B its table, on which is arranged the lower die C. The other or upper die D, which is here represented as the moving one, is carried by a cross-head, E, having guide-rods F F. These guide-rods work through eyes in the frame, and are connected, by a lower cross-bar, G, to a treadle, H, which is controlled by springs I or their equivalents. The lower die C is provided with holding-pins *b*, on which the woven corset S, as it comes from the loom, is laid and punctured by the pins on opposite sides of its center, in direction of the subsequent creases and folds made in the meeting-edge portions of the front of the corset. The one die D is provided with a longitudinal knife or cutter, *d*, which, when said die is brought down by the treadle H, divides the woven corset S down or across its middle at *e*, the knife *d* operating in concert with a fixed knife, *d'*, in the lower die, and entering a recess, *f*, in the lower die C. Attached to the upper die D are also longitudinal creasing-blades *g g' h h*, and correspondingly arranged receiving-cavities *i i' k k* in the lower die C for making the parallel creases *l l'* and *m m* in the two

sections or halves of the divided corset, so that said sections may be folded at the meeting front edges of the finished corset, with the clasp-strips M N, within or beneath the folds as represented in Figs. 5 and 6, and the folds afterward stitched down over the inner edges of the clasp-strips. The creasing-blade *g*, in the upper die D, is interrupted at different points throughout its length with cutters *n* arranged to enter recesses *o*, in the lower die C, and serving to puncture the holes *a* in the crease *l*, for the eyes *r* of the clasp-strip M to project through. Furthermore, on the opposite side of the face of the upper die D are cutters *s*, working in connection with cavities *u* in the bottom die C, for cutting the holes *v* outside of the crease *m*, which is outermost before folding, for the buttons *r'* of the clasp-strip N to project through. The dividing-knives *d d'* should disposed to act a little in advance of the creasing-blades *g g' h h* to avoid tearing of the cloth and to insure its receiving a good creasing impression. Furthermore, although desirable, it is not necessary that the shears or knives which divide the woven corset in two, and the blades which afterward crease it, should be in the same machine, but the corset may be first separately divided by any suitable means and afterward creased. In all cases, however, the corset should be laundered as it comes from the loom or before dividing and creasing it.

By combining not only these last-named operations but also the cutting or piercing of the corset for the eye and buttons of the clasp-strips in the one machine, and so that a single action of the latter performs all these operations, the proper relation of all parts is secured and time and labor are economized.

I claim—

1. The described method of making woven corsets, or for preparing them for the reception of the clasp-strips, the same consisting in starching and pressing the corset as it comes in a single piece from the loom, and then dividing and creasing it, as herein set forth, for the object specified.

2. The combination, with a single pair of dies, of knives for cutting the woven corset in two, and of blades for creasing the corset sections or halves, substantially as specified.

3. The combination, with the dies, of attached creasers to form the folds and cutters for puncturing the holes for the eyes and buttons of the clasp strips, substantially as described.

CHARLES GAHREN.

Witnesses:
J. A. LEVISON,
EDW. W. WALLACE.