

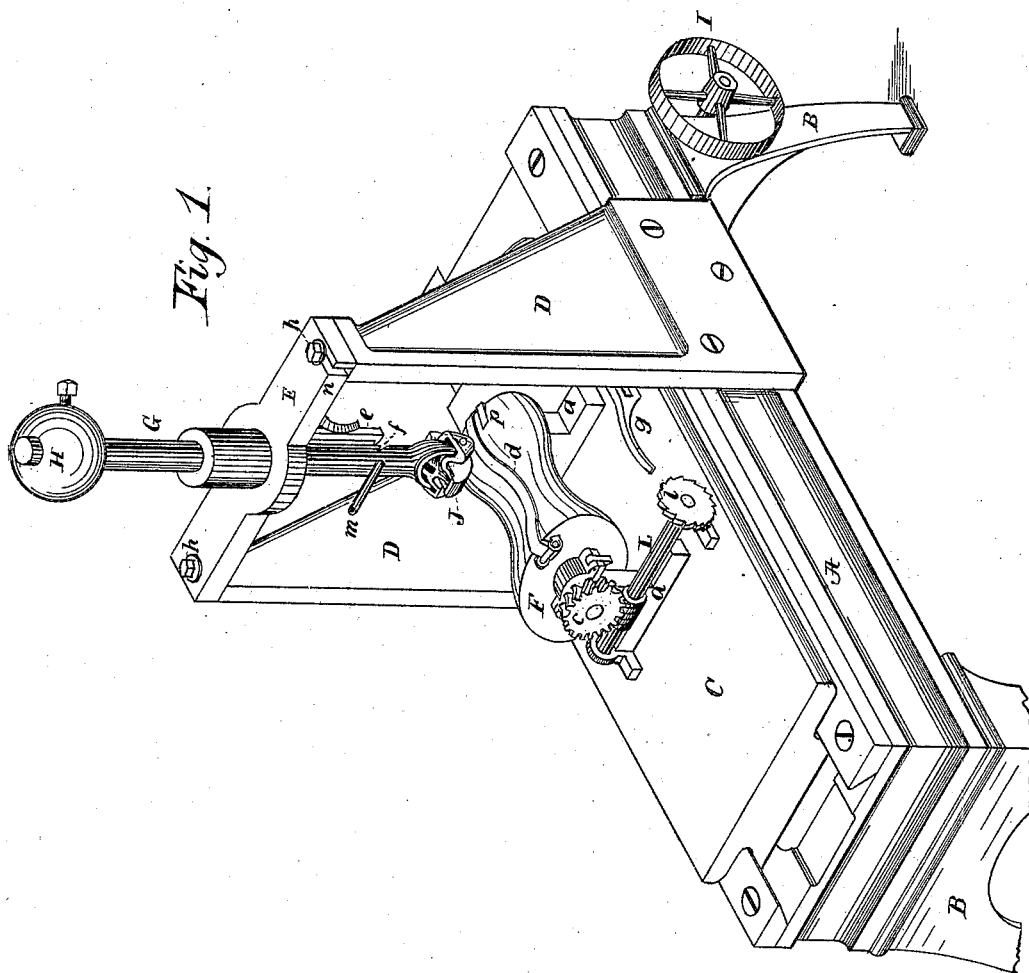
(No Model.)

2 Sheets—Sheet 1.

D. GROTTA.  
CORSET IRONING MACHINE.

No. 344,778.

Patented June 29, 1886.



Witnesses:  
George R. Cooley  
William E. Higgins

Inventor  
David Grotta  
By L. S. Day  
att'y

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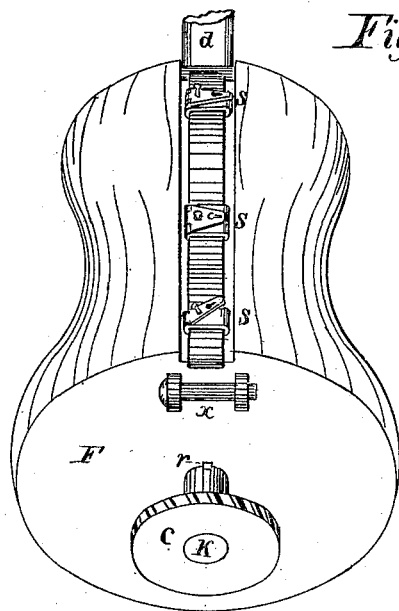


Fig. 2. Fig. 3.

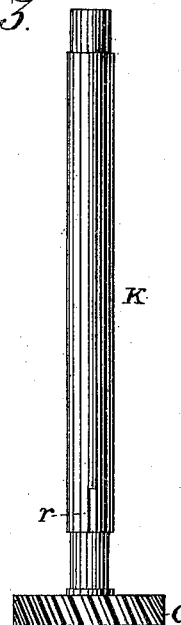


Fig. 4.

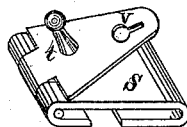


Fig. 5.

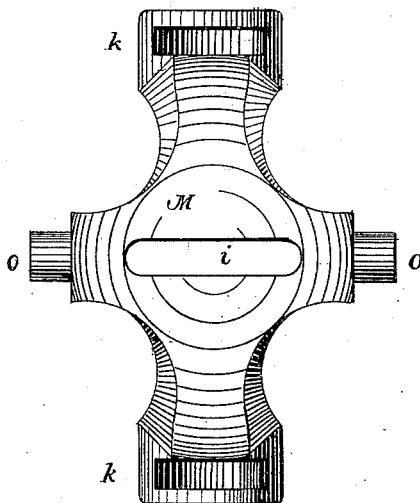
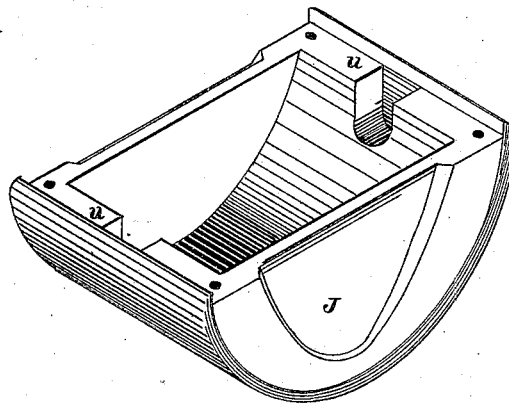


Fig. 6.



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# UNITED STATES PATENT OFFICE.

DAVID GROTTA, OF NEW HAVEN, CONNECTICUT.

## CORSET-IRONING MACHINE.

SPECIFICATION forming part of Letters Patent No. 344,778, dated June 29, 1886.

Application filed July 30, 1885. Serial No. 173,014. (No model)

*To all whom it may concern:*

Be it known that I, DAVID GROTTA, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Corset-Ironing Machines, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 represents a perspective view of my improved ironing-machine complete. Fig. 2 is a perspective view of the corset-form. The bar *d* is herein represented as broken off, to facilitate showing other parts. Figs. 3, 4, 5, and 6 are views of detailed parts, which are fully described hereinafter.

My invention relates to improvements in machines for ironing corsets; and the invention consists, first, in a machine for ironing corsets, in the combination, with a reciprocating rotary form for supporting the corset, of a yielding ironing-tool adapted to subject the corset to an ironing process; second, in the combination, with the reciprocating rotary form for supporting the corset, of a yielding ironing tool and the means of reciprocating and rotating the said corset-form; third, in the combination, with the reciprocating rotary form for supporting the corset, of a yielding ironing-tool and the means for automatically removing the ironing-tool from the corset upon the completion of a full revolution of the form; finally, in the construction, arrangement, and combination of the several parts hereinafter described, and specified in the claims afterward.

In the accompanying drawings, A represents the bed or frame of the machine, which is supported upon legs B B. Upon the bed A is fitted a movable table or platform, C, adapted to receive a reciprocal motion by means of a crank-and-pitman connection with the driving shaft and pulley I, or by any other of the many means now in vogue for imparting a reciprocal motion.

The platform C has two pillow-blocks, *a a*, erected thereon, which serve as bearings for the shaft K. The shaft K is provided with a worm-gear, *c*, securely fixed upon one end of the shaft; also with a small key, *r*, adapted to

enter the recess in the form F, which, when so entered, causes the form to rotate with the shaft K. The shaft L, being journaled at a right angle with the shaft K, is connected therewith by means of the worm and gear. The said shaft L receives an intermittent rotary motion by the passage of the ratchet *l* underneath the stationary arm *g*. The arm *g* is secured to the upright D, and may be adjusted so as to regulate the rotation of the form F. The form F, which is provided with a longitudinal bore adapted to receive the shaft K, is covered with any suitable covering.

Upon the form F is secured a thin strip of metal. A series of movable slides, *s*, are arranged thereon, and by a reference to Fig. 4 it will be seen that the said slides *s* are constructed in two pieces and adapted to be adjusted upon the strip on the form F to suit the variations of different-sized corsets. These two pieces which form the slide *s* are joined together by a hinge-joint, and one of the pieces is provided with a stud, *t*, and an eyelet, *v*. Said studs *t* and eyelets *v* are adapted to receive corresponding studs and eyelets, which are in the edges of the corset, forming a device for securing the corset upon the form F. The edges of the corset on the opposite side of the form F are drawn together with any of the devices commonly used for the purpose, where by the corset is securely bound upon the form F. A curvilinear piece of metal, *d*, is pivoted at one end to the form F, and arranged to cover the slides *s*, protecting the studs *t*, also the slides *s*, from injury by the ironing-tool as it passes over them. In Fig. 1 the bar *d* is shown as secured in the position of covering the slides *s*.

Two upright supports, D D, are attached to the bed A, upon which is secured a cross-bar, E, by the bolts *h h*. One end of the cross-bar E is slotted, as at *n*, to permit the cross-bar E being swung around to the right, and carry the appurtenant ironing-tool J away from the form F, that the form F may be readily removed from the bearings in the pillow-blocks *a a*.

The ironing-tool J consists of a hollow semi-circular piece of metal, the convex surface of the same being adapted to be used for ironing

purposes. Upon the inner side, at each end, are recesses *u u*, adapted to receive the trunnions *o o* of the bridge-piece or yoke M, and secured therein with suitable caps.

5 The yoke M is provided with two arms extending at right angles with the axis of the trunnions *o o*, said arms having journals or bearings for the forked end of the shaft G, as shown at *kk* in Fig. 5. By this form of connection for the iron J a perfect universal oscillation of the iron J is provided, permitting the ironing-surface of the iron J to conform to all of the irregular angles of the form F, insuring a uniform ironing of the corset. The iron 15 J is heated with a "Bunsen" burner, which projects through the slot *i*, and is supplied with the necessary gas and air through the pipe *m*, inserted in the shaft G.

The shaft G is supported in a vertical position by the cross-bar E, through which it passes, being free to move in a vertical plane, and is actuated by the gravity of the weight H, which causes the iron J to follow the undulated surface of the form F. The form F is also provided with an incline or cam, *p*, which is adapted to raise the iron J higher than any point of the form F, when the spring-catch *e* will enter the notch *f* in the shaft G and hold the iron J suspended from the corset.

30 The operation of the invention is as follows, viz: The corset being lashed to the form F, as hereinbefore described, the spring-catch *e* is withdrawn from the notch *f* in the shaft G, letting the iron J rest upon the form F, when power is applied to the pulley I and the form 35 is carried to and fro beneath the iron J, at the same time receiving an intermittent rotary motion by the means already described, whereby the iron J is passed over the entire surface of the corset upon the form F. Owing to the universal-jointed connection between the iron J and the shaft G, every part of the corset is ironed alike, after which the corset is removed and the operation repeated.

45 The form of iron and universal-jointed con-

nection of the same is the same as that shown and described in an application for Letters Patent filed by me on March 6, 1885, Serial No. 157,867.

Parts of the apparatus herein shown and described are also shown in my application 50 Serial No. 184,882, and I do not wish to be understood as claiming in this application any of the said parts other than as hereinafter particularly recited.

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

1. In a machine for ironing corsets, the combination, with a rotary form for supporting 60 the corset, of a yielding ironing tool or device and the mechanism for reciprocating the said form F, substantially as described and set forth.

2. In a machine for ironing corsets, the combination, with a rotary form for supporting 65 the corset, of the yielding ironing-tool, the spring-catch *e*, the cam *p*, and the cross-bar E, all being arranged to operate substantially as described.

3. In a machine for ironing corsets, the combination, with a form for supporting the corset, of the removable shaft K, the auxiliary shaft L, and the means for imparting an intermittent rotary motion to the said form F, 75 substantially as set forth and described.

4. The combination, with the form and the corset, of the slides *s*, provided with the studs and eyelets for engaging the edges of the corset, substantially as described. 80

5. The combination, with the form and the corset, of the slides *s* and the hinged bar *d*, said bar *d* operating as a protecting media for the studs in the edge of the corset, as set forth.

In testimony whereof I affix my signature in 85 presence of two witnesses.

DAVID GROTTA.

Witnesses:

GEORGE R. COOLEY,

WILLIAM E. HIGGINS.