

(No Model.)

J. B. MORAN.
EYELET HOLE FINISHING DEVICE.

No. 604,589.

Patented May 24, 1898.

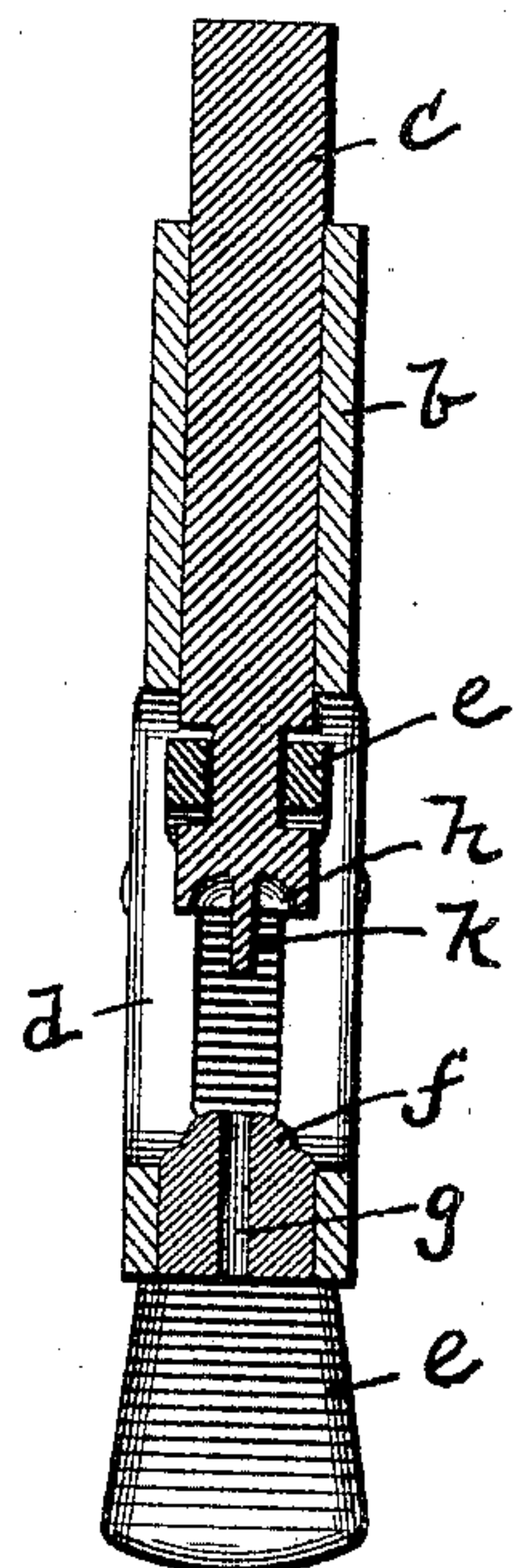
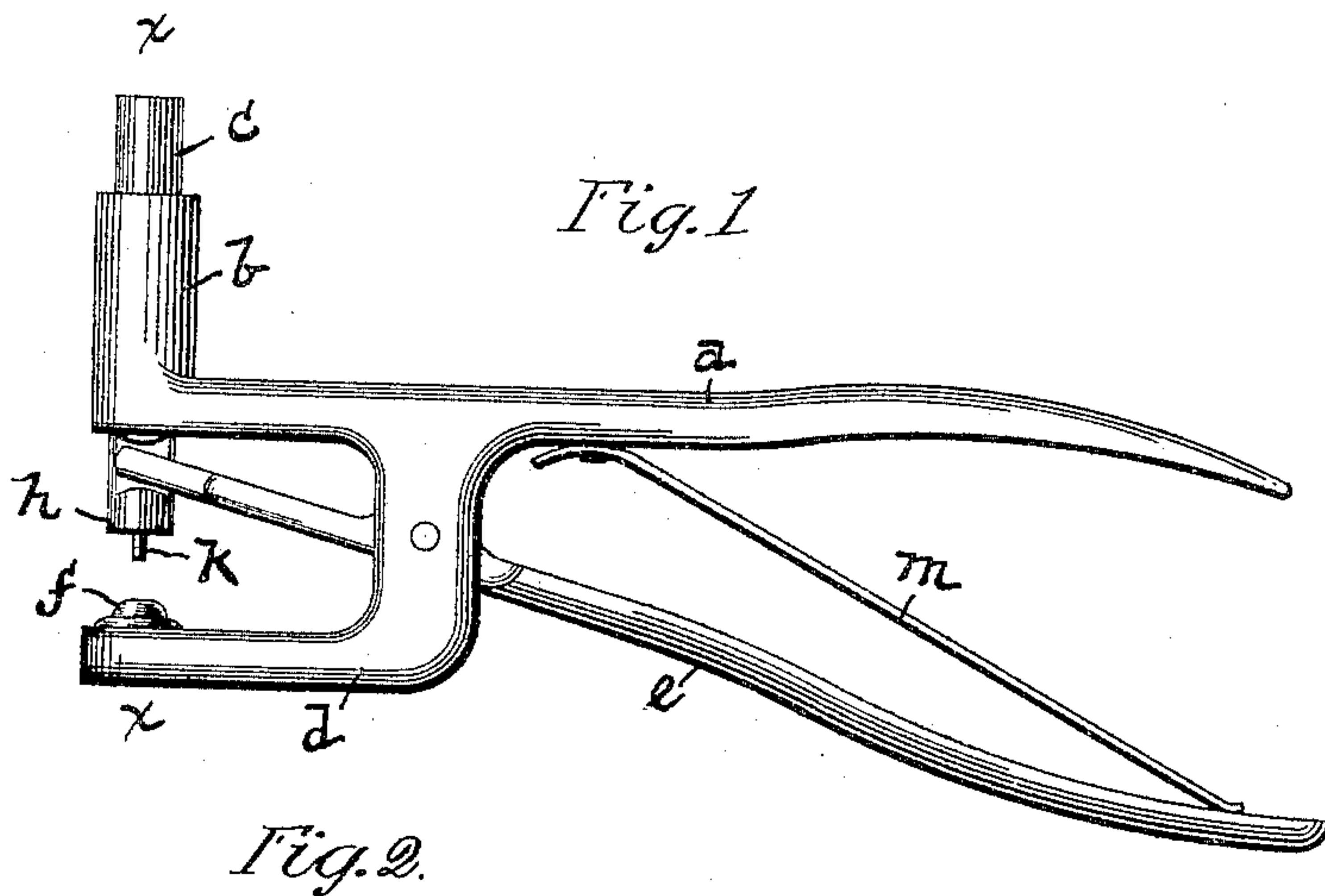
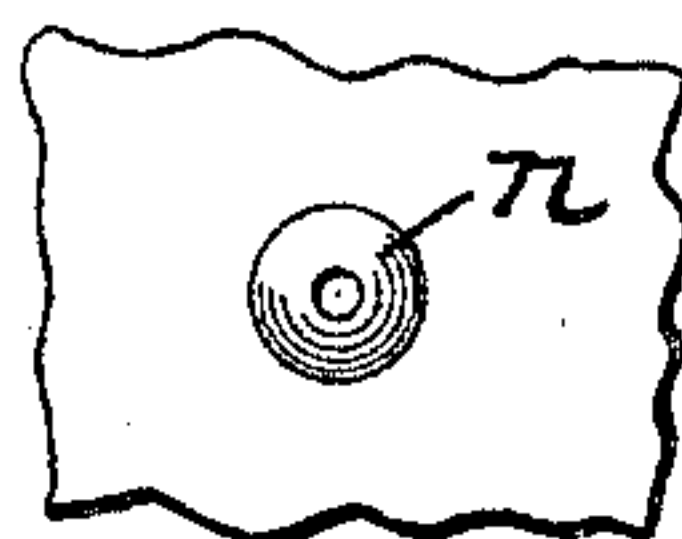


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

JAMES B. MORAN, OF NEW HAVEN, CONNECTICUT.

EYELET-HOLE-FINISHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 604,589, dated May 24, 1898.

Application filed January 31, 1896. Serial No. 577,516. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. MORAN, a citizen of the United States, residing at New Haven, county of New Haven, and State of Connecticut, have invented a new and useful Improvement in Eyelet-Hole-Finishing Devices, of which the following is a specification, reference being had to the accompanying drawings, forming part thereof.

My invention relates to devices for finishing the eyelet-holes in shirt-bosoms after the same are laundered, for the twofold purpose of giving to the eyelet-hole a finished appearance and facilitating the introduction of the shank of a stud therein; and the invention has for its object to provide a simple and convenient tool for this purpose which can be rapidly and accurately operated with one hand and the use of which will obviate any danger of injury to the shirt-bosom or other article containing the eyelet-hole.

To this end my invention consists in the tool constructed and operating as hereinafter fully described, and particularly pointed out in the claim.

Referring to the drawings, in which like letters designate like parts in the several views, Figure 1 is a side view of a tool embodying my invention. Fig. 2 is a cross-section thereof, taken at line *xx* of Fig. 1. Fig. 3 is a representation of the eyelet-hole when finished by the tool.

The tool invented by me consists, primarily, of two handle members pivotally connected between their ends, one of which members carries at its front end the forming-dies and the punch-carrying stem, and the other of which is operatively connected to said stem, whereby movement of said members toward each other at their rear end will actuate said stem to cause its punch to enter the eyelet-hole and the dies to produce a concavo-convex formation of the fabric immediately surrounding said hole. The letter *a* designates one of said handle members, which member at its front end carries the tubular socket *b*, in which is loosely mounted the punch-carrying stem *c*, having its plane of movement at substantially a right angle to said member *a*. Said member *a* is also provided near its front end with the downwardly and forwardly projecting arm or bracket *d*,

upon which is pivotally hung the handle member *e*, carrying at its front end a fork which loosely embraces a reduced portion of the stem *c*, near the lower end of the latter, as clearly shown in Figs. 1 and 2. Upon the arm or bracket *d* is located the male die *f*, which is of convex form and is provided with a centrally-located hole *g* to receive the punch, said hole preferably extending to the outer side of the arm or bracket, as shown, to permit the escape of any threads or other matter forced therein by the punch. I prefer to locate said male die upon a pin of hardened steel which is set into the arm or bracket, as shown in Fig. 2, thereby greatly increasing its durability at a trifling additional cost. Said male die is so located as to exactly register with the lower end of the stem *c* when the latter is moved to its lowest position, and at its said lower end the stem carries the female die *h* of concave form, as shown, and the punch *k*, centrally located within said die and projecting slightly beyond the face of the same. A spring *m*, secured to the member *a* and bearing against the inner side of member *e*, serves to normally separate the rear ends of said members and to retain the stem *c* in its highest position, as shown in Figs. 1 and 2.

The handle members *a* and *e* have their outer surfaces at their rear end suitably curved longitudinally and transversely, as shown, to enable them to be conveniently grasped in the hand, and the tool is operated by so grasping said members, placing the male die *f* against the inner side of the eyelet-hole *n*, (see Fig. 3,) and compressing said handle members, thereby depressing the stem *c* and causing the punch *k* to enter and open said hole and the dies *f* and *h* to impart a concavo-convex formation to the fabric immediately surrounding the hole, as represented in said Fig. 3. Upon releasing the pressure upon the handle members spring *m* immediately expands their rear ends and releases the fabric, whereupon the tool is ready to be applied in the same manner to another eyelet-hole.

It will be observed that such operation of opening and forming eyelet-holes can be performed very rapidly and conveniently and by the use of but one hand.

Particular attention is directed to the fact

that by mounting the male die at the outer end of the downwardly and forwardly projecting arm or bracket *d*, as described, a considerable space is afforded within said arm or bracket at the rear of the dies to receive that portion of a shirt-bosom lying between the eyelet-hole and the edge of the bosom. Such construction forms an important feature of the tool devised by me, as it enables the dies to be engaged with the eyelet-holes of all "open-bosom" shirts, regardless of the varying distances between the same and the edge of the bosom.

I am aware that ticket-punches have been devised comprising two levers pivotally connected, one of which carries a stationary die and a movable punch and the other of which has a forked end to engage and impart movement to said punch; but the tool devised by me differs materially from that class of punches in that it has provision at the rear of the dies for receiving that portion of the bosom lying between the eyelet-hole and the edge of the bosom—a feature which is entirely foreign to a ticket-punch.

I am also aware that eyelet-embossing machines have been devised—such, for example, as that shown in Letters Patent No. 262,494, issued to Sternberger August 8, 1882—comprising a stationary frame supporting a male die, a plunger carrying the female die, and a lever system for operating said plunger; but the use of this machine in a laundry necessi-

tates that each operator carry each shirt ironed to the machine to emboss the eyelets at a very material loss of time, and it was to overcome this objection that my invention was made, inasmuch as my invention renders it possible for each operator to be provided with an embossing-tool ready for instant use at all times.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

In an eyelet-finishing device, the combination with the handle member *a*, carrying at its front end the tubular socket *b* that extends below the handle member *a* and provided with the downwardly and forwardly projecting bracket *d*, upon which is secured the convex and centrally-recessed die *f*, of the stem *c* loosely mounted in said tubular socket and carrying at its lower end the concave die *h* and punch *k*, the handle member *e* having a pivotal bearing upon said bracket and carrying at its front end a fork which engages a reduced portion of the stem *c*, below the socket *b*, and spring *m*, arranged and operating substantially as described, whereby sufficient space is provided between the fork and the female die, for the purpose set forth.

JAMES B. MORAN.

Witnesses:

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