

(No Model.)

J. H. VINTON.
BUTTON SETTING MACHINE.

No. 388,232.

Patented Aug. 21, 1888.

FIG. 1.

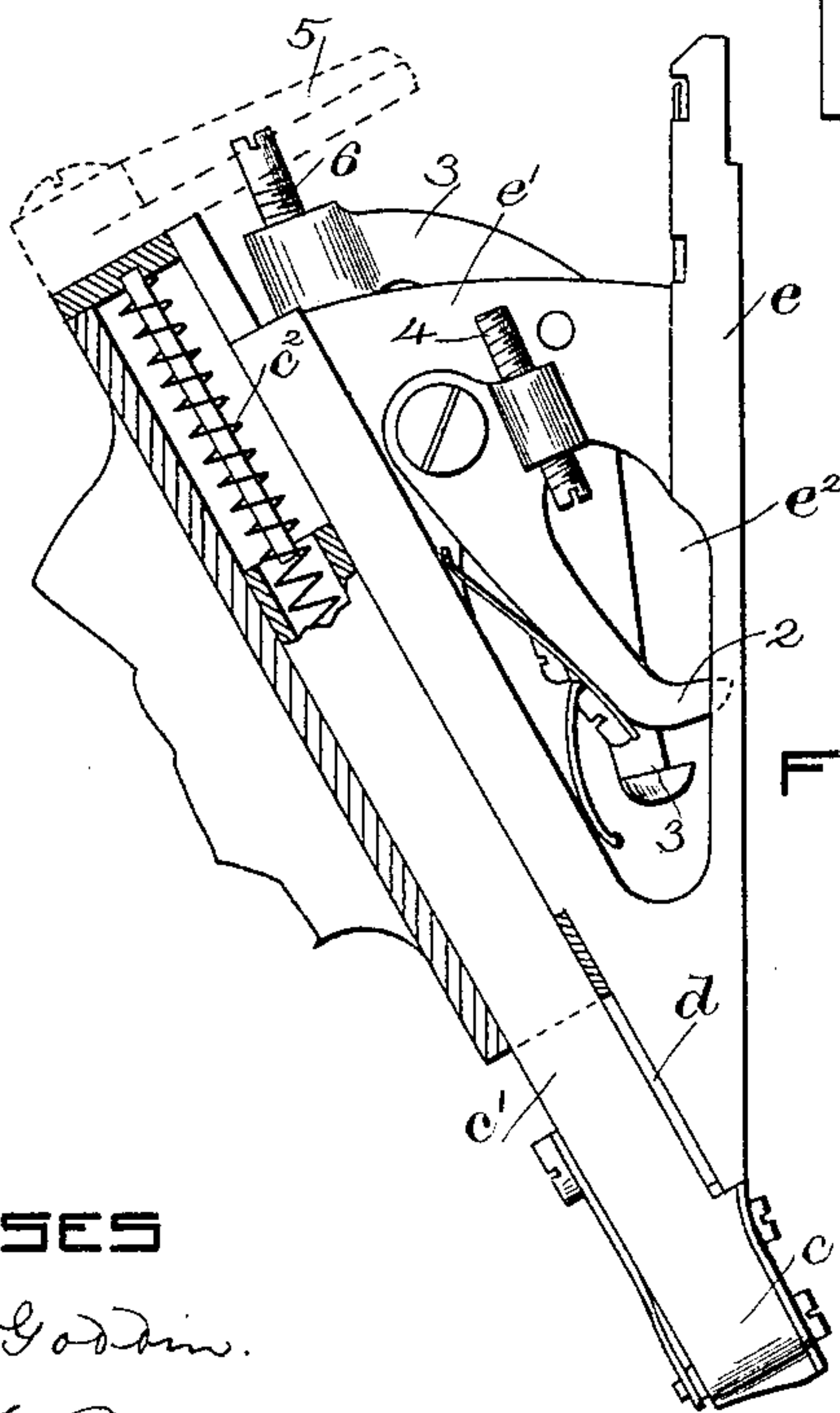
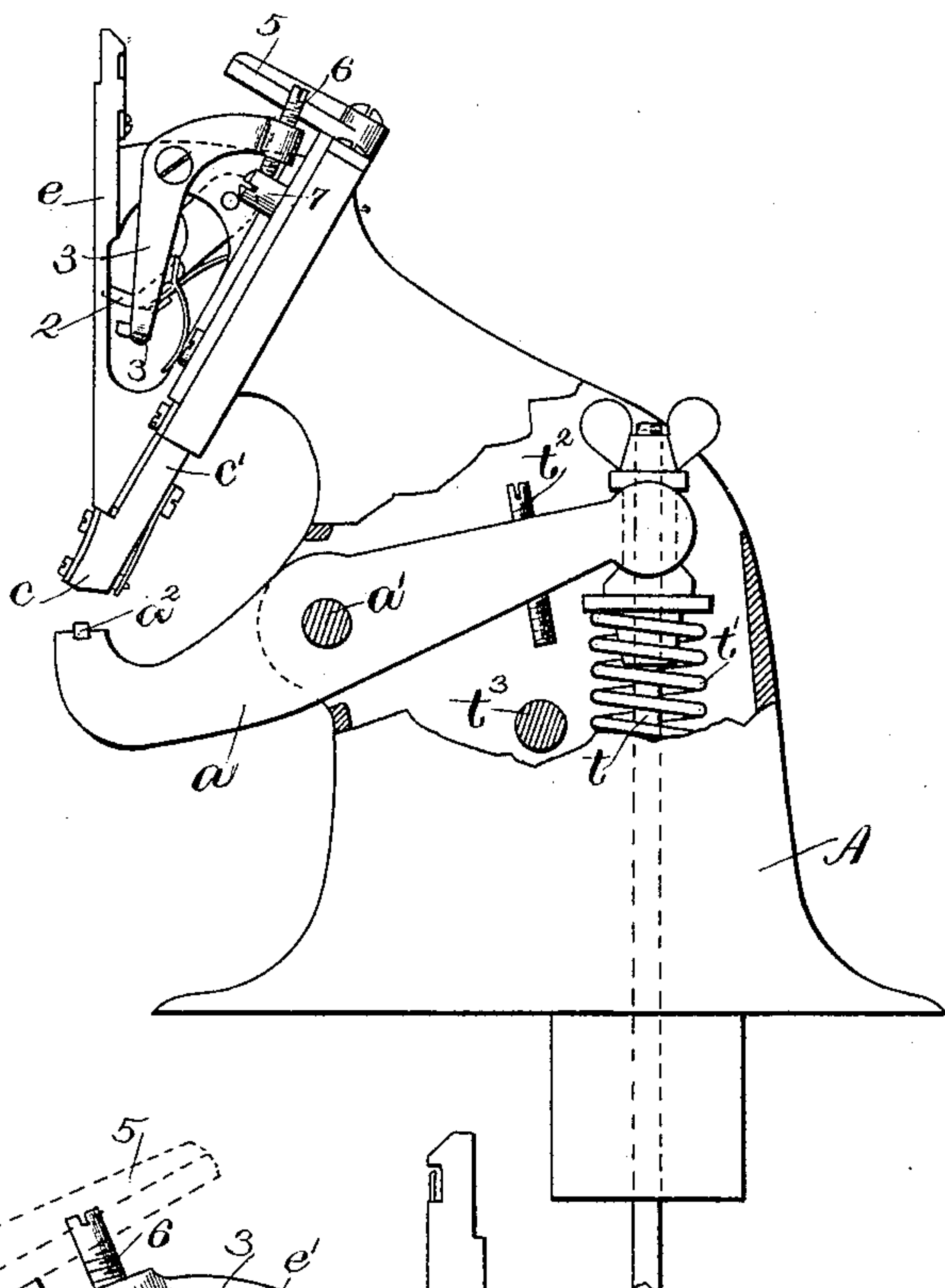


FIG. 2.

WITNESSES

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JOHN H. VINTON, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE PENINSULAR NOVELTY COMPANY, OF GRAND RAPIDS, MICHIGAN.

BUTTON-SETTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 388,232, dated August 21, 1888.

Application filed January 12, 1888. Serial No. 260,529. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. VINTON, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Button-Setting Machines, of which the following description in connection with the accompanying drawings is a specification, like letters on the drawings representing like parts.

In an application filed by Edward O. Ely February 21, 1887, Serial No. 228,309, a button-setting instrument was shown embodying a movable anvil, a driver to co-operate therewith, a yielding carrier constructed and arranged to receive a fastening and attached button which is forced therefrom by the driver, and a slotted raceway movable simultaneously with the said carrier and adapted to receive a series of fastenings having buttons attached thereto, said raceway being open at its lower end to deliver the said fastenings and buttons to the said carrier. Suitable retaining devices were also provided for the fastenings and buttons, which were controlled by springs and were moved aside to permit the passage of a fastening and its button by a direct pressure either upon the fastening or upon the button—as, for instance, by the fingers—to remove the fastening and its button from the raceway to the carrier, and by the driver to remove the fastening and its button from the carrier.

This invention has for its object to construct a foot-power machine employing substantially the same button-setting devices shown and described in the above-named application in connection with automatic feeding devices.

The invention therefore consists in the combination, with a driver, a movable anvil, a yielding carrier located beneath the driver and adapted to receive a fastening and attached button, and a raceway simultaneously movable therewith, said raceway being slotted to receive several fastenings and attached buttons, and being open at its lower end to deliver said fastenings and buttons to the carrier, of two automatically-operated feed-dogs, the engaging ends of which act upon the fastenings to permit them, together with the buttons, to pass from the raceway to the carrier one at a time.

The carrier is arranged at an inclination, so that the raceway may extend vertically to in-

sure the descent of the buttons and fasteners by gravity.

Figure 1 shows in side elevation a button-setting machine embodying this invention, the main frame-work being broken away to expose the treadle and movable jaw carrying the anvil; and Fig. 2 a detail showing the carrier, raceway, and feeding devices on a larger scale, viewing the machine from the opposite side shown in Fig. 1.

The main frame-work A is of suitable shape to support the operating parts.

The jaw *a*, carrying the anvil-block *a*², is pivoted at *a*¹ to the main frame-work, one end being connected with the treadle-rod *t*, which is normally held in elevation by the spring *t*¹.

To limit the ascent of the anvil, and thereby prevent injury to the button-setting devices, an adjusting-screw, *t*², passes through the jaw *a*, which strikes a stud, *t*³, as the treadle-rod is depressed. The carrier *c*, formed at the lower end of a bar, *c*¹, moving in suitable guides in the main frame, is suitably slotted and recessed to receive a fastening, to which is attached a button. A raceway, *e*, suitably slotted and recessed to receive several fastenings and attached buttons, is secured to the bar *c*¹ by a web, *e*¹; or it may be cast integral with it, so that the raceway and bar move as one piece. The bar *c*¹ is recessed to receive a spiral spring, *c*², the normal tendency of which is to retain the said bar in its lowermost position. The carrier *c* and its bar *c*¹ and the raceway *e*, attached to the bar, are substantially as shown in the application before referred to. The web *e*¹ is open as at *e*², and the rear side of the raceway is also cut away to permit the engaging ends of two feed-dogs, 2 3, pivoted to the web to act upon and hold the fastenings. The feed-dog 2 has an adjusting-screw, 4, which, when the raceway is in its most elevated position, strikes a projection, 5, fixed to the main frame-work, and thereby moves the said feed-dog to disengage the fastening. The feed-dog 3 has an adjusting-screw, 6, which strikes a stud or projection, 7, fixed to the main frame, (see Fig. 1,) when the raceway is in its lowermost position, thereby moving the said feed-dog to disengage the fastenings. The engaging ends of the feed-dogs lie one above the other, and by acting alternately by the move-

ments of the raceway, permit the fastenings and attached buttons to fall by gravity one at a time, the perpendicular arrangement of the raceway best insuring this result. The driver 5 *d* is secured to the main frame parallel with the slide-bar *c'* and in a direct line with the passage through the carrier, so as to enter said passage and force therefrom the fastening and its attached button when the said carrier is raised.

10 I claim—

1. In a button-setting machine, the stationary driver, movable anvil, yielding carrier, and raceway movable simultaneously with the carrier, combined with two feed-dogs, 2 3, 15 adapted to act alternately upon the fastenings in the raceway at the rear side thereof, the ad-

justing-screws 4 and 6 for the feed-dogs, and the studs or projections 5 7, substantially as described.

2. In a button-setting machine, the stationary driver, yielding carrier, and raceway, and alternately movable feed-dogs 2 3, combined with the movable jaw carrying the anvil, the treadle-rod *t*, the adjusting-screw *t*², and the stud *t*³, substantially as described. 20 25

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN H. VINTON.

Witnesses:

BERNICE J. NOYES,
F. L. EMERY.