

T. S. HUNTINGTON.

Gathering Attachments for Sewing-Machines.

No. 137,002.

Patented March 18, 1873.

Fig. 1.

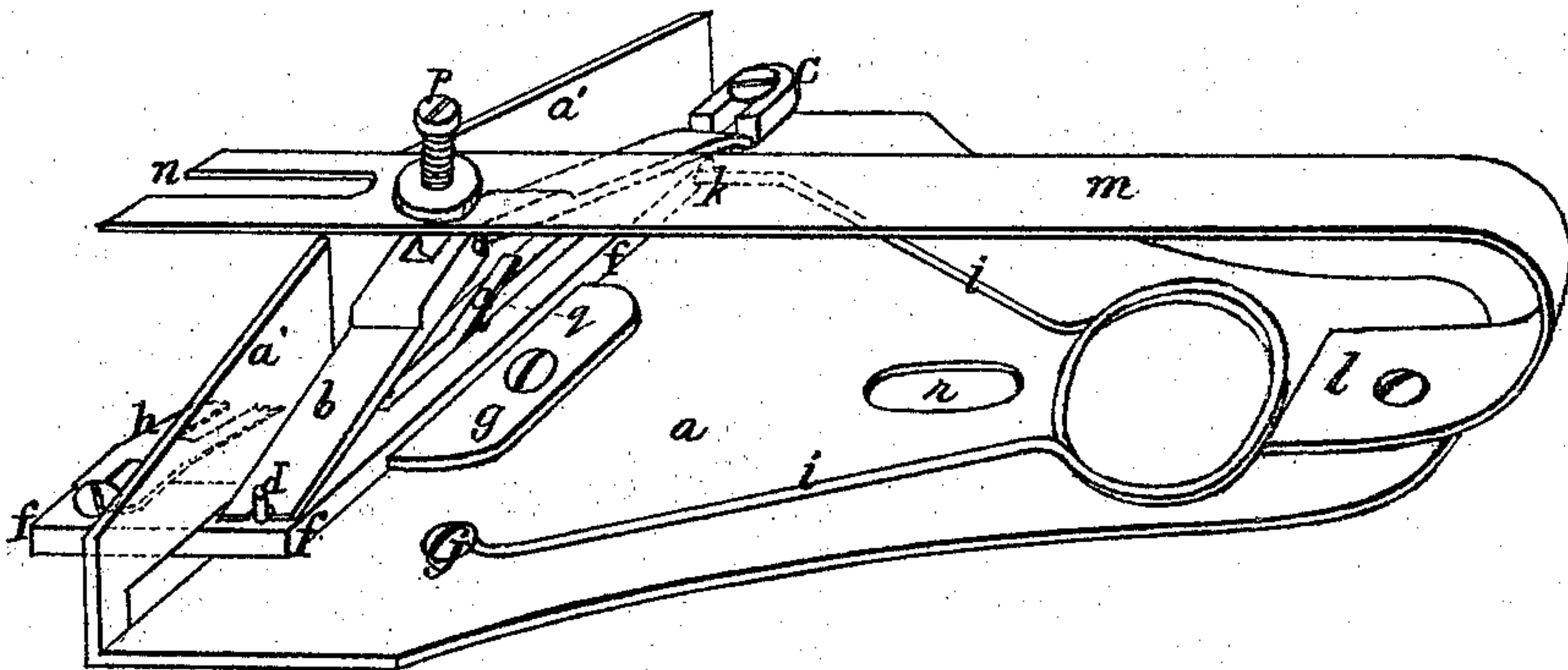


Fig. 2.

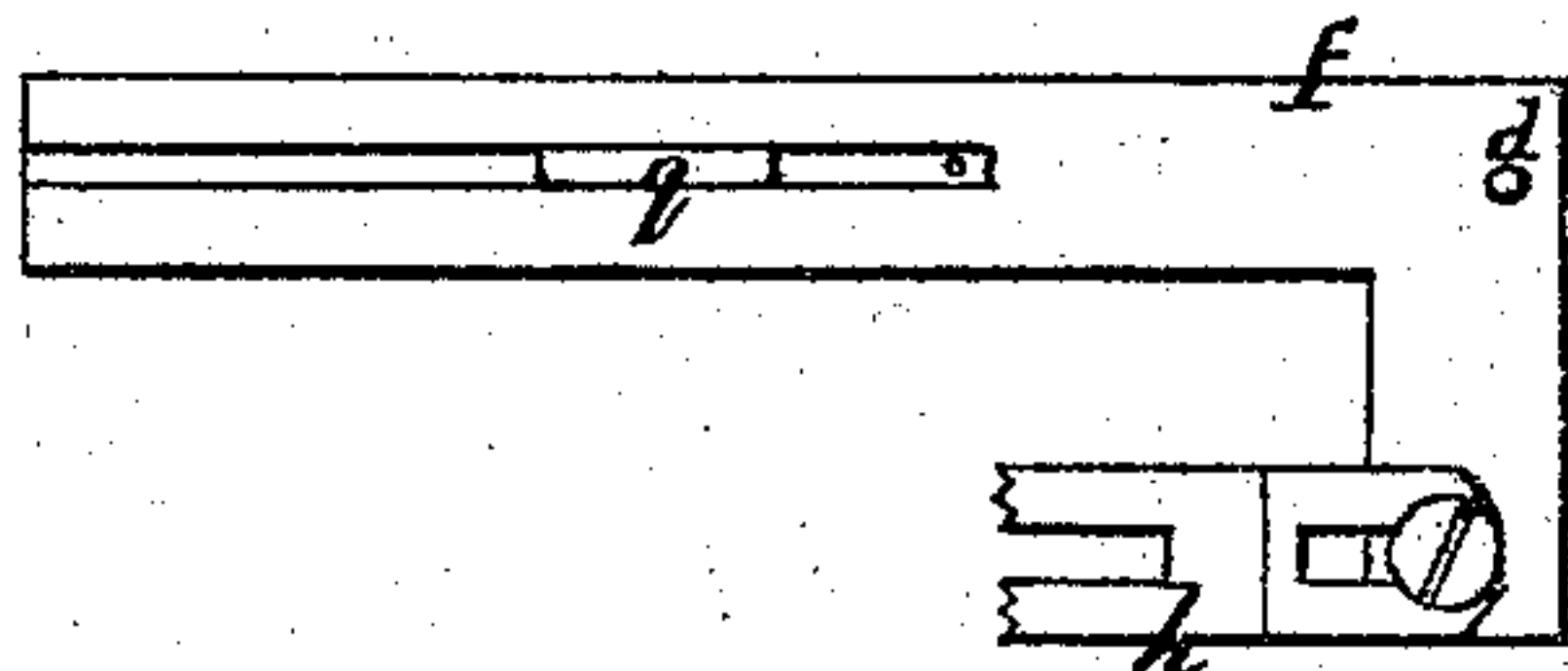
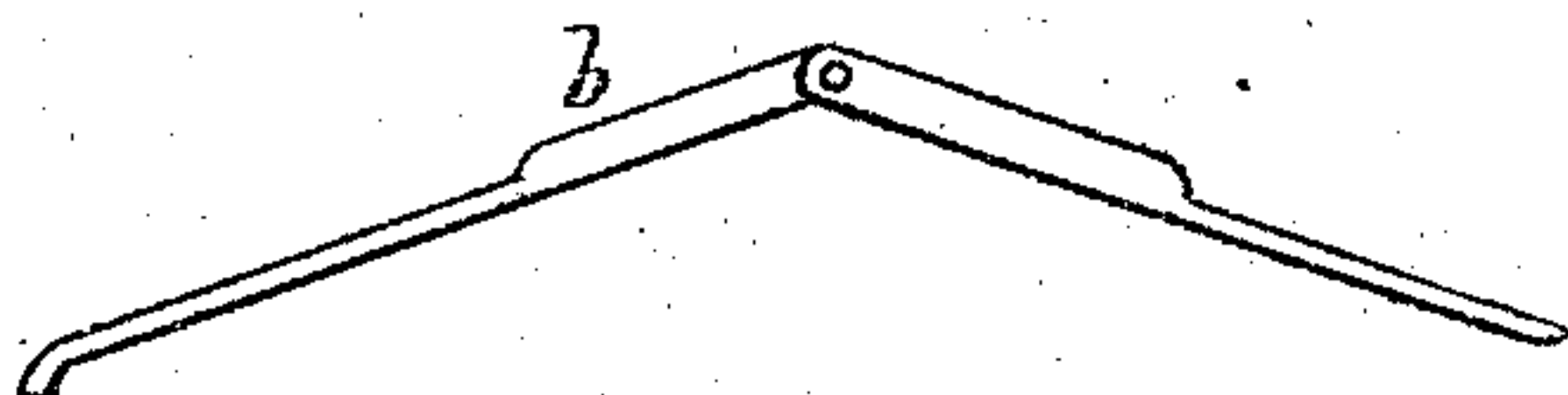


Fig. 3.



Witnesses

Wm. J. Burns
Wm. R. Wright

Inventor:

Thomas S. Huntington
by his attorney
Geo. H. Rugg

UNITED STATES PATENT OFFICE.

THOMAS S. HUNTINGTON, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN GATHERING ATTACHMENTS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 137,002, dated March 18, 1873.

To all whom it may concern:

Be it known that I, THOMAS S. HUNTINGTON, formerly of the city of Philadelphia, in the State of Pennsylvania, but now of Baltimore, Maryland, have invented a new and useful device, consisting of a Sewing-Machine Attachment for Fulling, Plaiting, Ruffling, and Gathering, of which the following is a specification:

This device may be used in connection with any of the sewing-machines in the market.

In the drawing, Figure 1 represents a perspective view of the device. The other figures represent details—Fig. 2 being a plan of the feed-bar *f*, and Fig. 3 a side elevation of the toggle-jointed lever *b* for moving back the feed-bar.

a is a metallic plate, to which the several parts of the device are attached. *b* is a jointed lever, one end of which abuts against the adjustable stud *c*, which is attached directly to the plate *a*. The other end of lever *b* is in contact with the stud *d* projecting up from the feed-bar *f*, the longer leg of which bar slides between the guide *g* and the upright part *a'* of the plate *a*, the shorter leg projecting through a slot in the same part of plate *a*, as shown. This slot confines the feed-bar *f*, and thus holds the inclined spring-feeder *h* down on the goods without the aid of springs. The jointed lever *b* is curved at one end, as shown, with the view of preventing the two legs of this lever from remaining locked when they have been pressed down into or below a horizontal line by the slotted lever *m*. *h* is the feeder. It is attached to the feed-bar *f* by a screw through a slot in the feeder, as shown, so as to be adjustable. The feeder, being made of steel, is of itself a spring, and, having a bend or an inclination downward, as shown, is caused to exert a constant pressure on the goods to be fed up; thus, as it moves back it smooths the goods, and as it moves forward it advances them against the needle or gathers them to an extent which is regulated by the adjustment of the jointed

lever *b*. *i* is a spring, one end of which is attached to the plate *a* at *j*, and the other end to the feed-bar *f* at *k*. *m* is a spring-lever rigidly attached at *l* to the plate *a*. It is slotted at *n* for the passage of the needle of the sewing-machine to which the device is attached. *p* is an adjustable screw for regulating the stroke of the feed-bar *f*. *q* is a spring attached to the feed-bar *f* in a groove formed therein for the purpose.

The described device is intended to be attached to the bed-plate of a sewing-machine by a screw through the slot *r*, or in any other manner preferred, the slot *n* of the spring-lever *m* being arranged directly under the needle-bar of the sewing-machine in line with the needle, so that when said needle-bar comes down on the lever *m* the jointed lever *b* is depressed more or less, according to the adjustment of screw *h* or stud *c*. This movement pushes back the feed-bar *f* and feeder *h* against the force of the spring *i*, which draws the feed-bar *f* and feeder *h* forward again as the lever *m* is being relieved from the pressure of the needle-bar, thereby advancing the goods against the needle and forming a plait of the desired size ready to be acted on by the needle in forming its next stitch. As soon as the spring-lever *m* relieves the jointed lever *b* from pressure, the spring *q* starts this lever upward. The spring *q*, being only auxiliary to the spring *i*, can be omitted at pleasure, as the curved or rounded form given to one end of the lever *b* prevents the locking of the two legs of said lever, as above described, and secures the return action of lever *b*.

I claim—

The adjustable spring-lever *m*, the jointed lever *b*, stop *c*, feed-bar *f*, feeder *h*, spring *i*, and plate *a*, constructed substantially as shown, for the purpose set forth.

THOS. S. HUNTINGTON.

Witnesses:

G. E. SANGSTON,
O. G. DEEVER.