

G. M. PETERS & A. STANDISH.
Machine for the Manufacture of Dashes.

No. 232,899.

Patented Oct. 5, 1880.

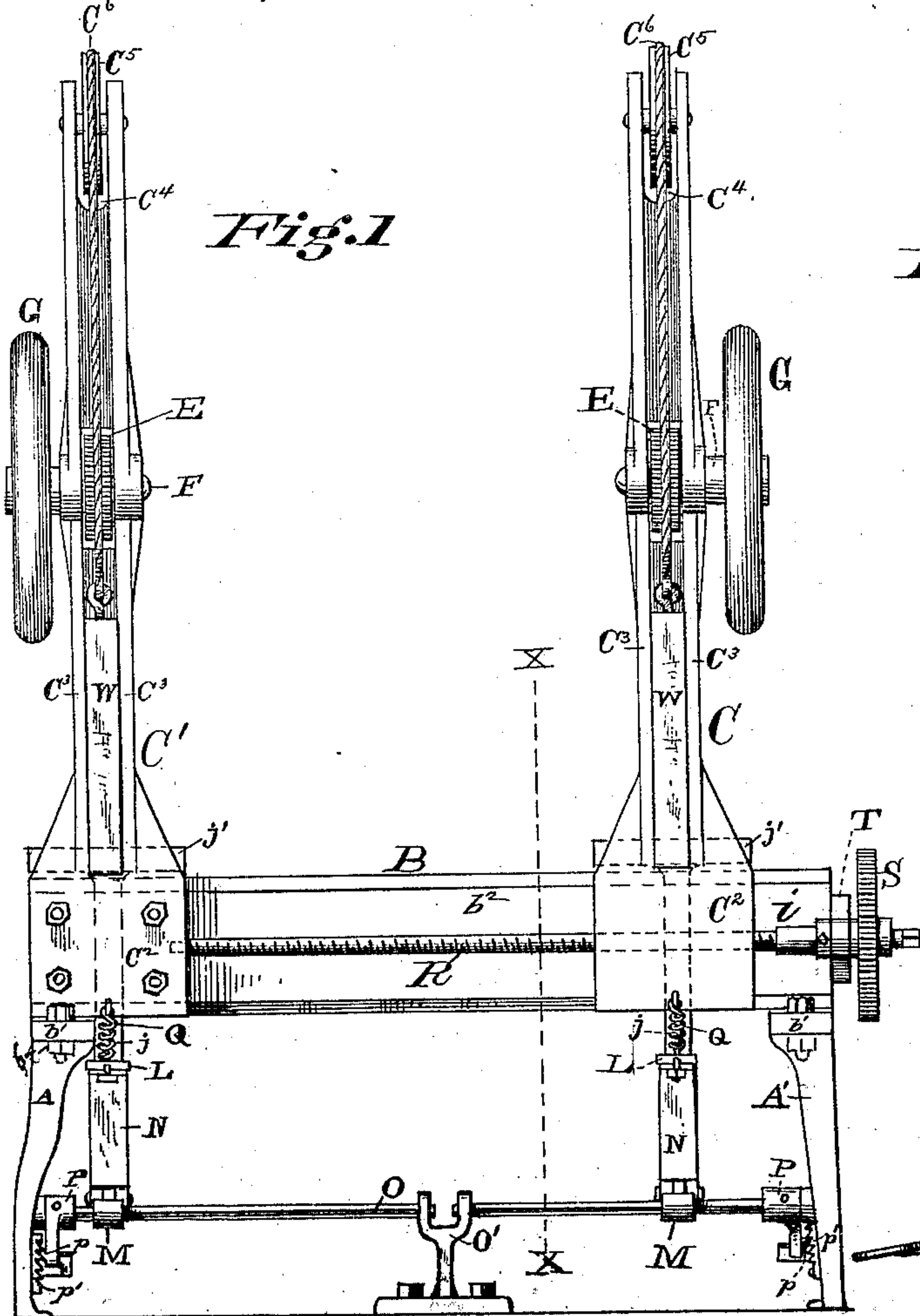


Fig. 1

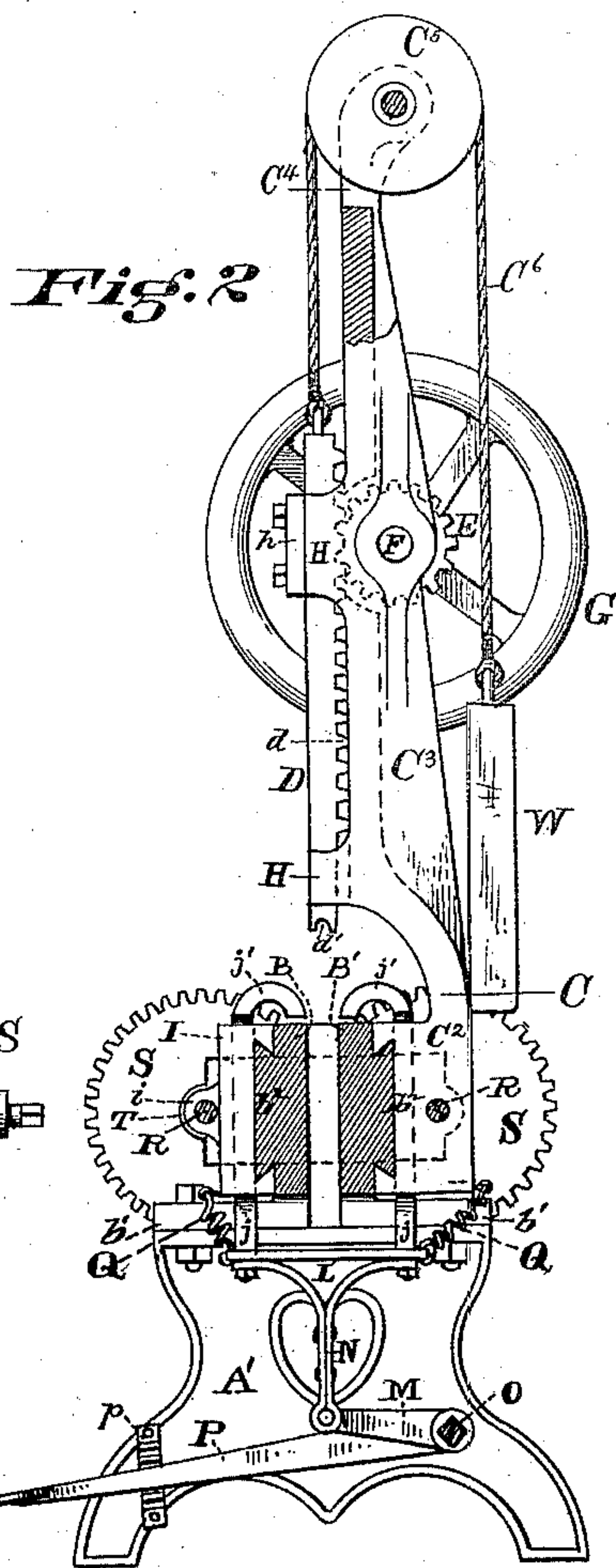


Fig. 2

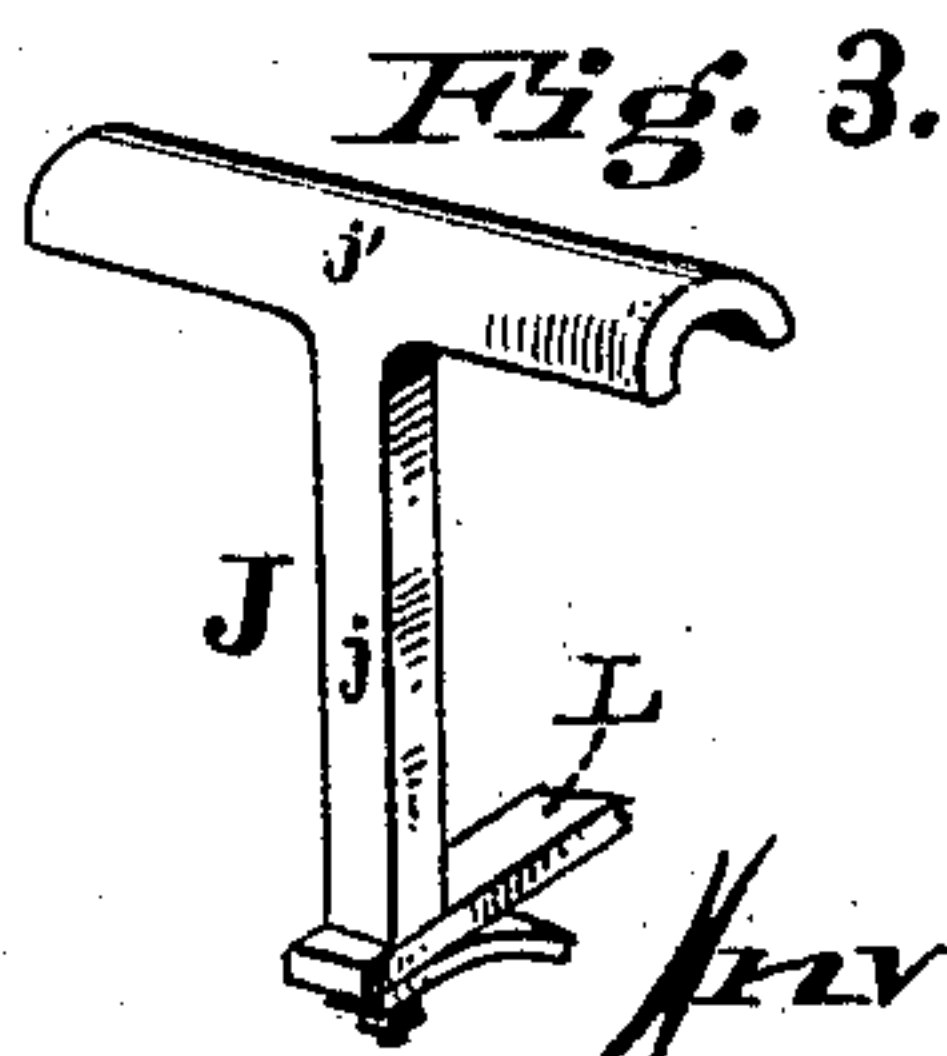


Fig. 3.

Attest

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UNITED STATES PATENT OFFICE.

GEORGE M. PETERS AND ALBERT STANDISH, OF COLUMBUS, OHIO; SAID
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MACHINE FOR THE MANUFACTURE OF DASHES.

SPECIFICATION forming part of Letters Patent No. 232,899, dated October 5, 1880.

Application filed December 15, 1879.

To all whom it may concern:

Be it known that we, GEORGE M. PETERS and ALBERT STANDISH, of the city of Columbus, county of Franklin, and State of Ohio, have invented certain new and useful Improvements in Machines for the Manufacture of Dashes and Fenders, of which the following is a specification.

Our improvements relate to the manufacture of that class of dashes which consist of a frame covered with leather or other suitable material.

When footless dashes or fenders, &c., are to be manufactured it is exceedingly advantageous to sew up the edges of the cover so that the latter forms a bag, three sides or edges of which are closed and the fourth is opened. It then becomes necessary to insert the frame into the bag.

Our invention enables the cover to be readily and accurately set in proper and convenient position for the insertion therein of the frame, and to be firmly sustained while the frame is being inserted, and also enables the frame to be thoroughly driven into the cover, although the depth of one side of the cover may be slightly greater than that of the other.

Our invention also enables the same machine to be conveniently and quickly adapted to covers of different widths, and thereby obviates the necessity for the employment of as many different machines for inserting the frame into the cover as there are covers of different widths.

In the accompanying drawings, Figure 1 represents a rear elevation of our machine. Fig. 2 represents a sectional elevation of the machine shown in Fig. 1, the section being taken at the line X X, Fig. 1. Fig. 3 is a perspective view of one of the grasping-links.

The frame-work of the machine consists of two end supports, A A', having secured to them the two guide frames or bars B B' by means of bolt *b*, passing through feet *b'* of the guide-frames and the upper flanges of the end supports, A A'. The guide-frames B B' have dovetailed projections *b²*. On the rear guide-frame, B', are two standards, C C', one of which is movable and the other, preferably, immovable. Each of these standards has a dove-

tailed groove, which fits over the dovetailed projection *b²* of guide-frame B'. The standards have a broad basilar portion, C², in which is placed the groove which fits over the projection *b²*. The part of each standard above the portion C², when contracted in width, as shown in Fig. 1, is, preferably, provided with strengthening-braces C³. In the top of each standard is a slot, C⁴, in which is placed a sheave, C⁵. Over this sheave C⁵ passes a cord, C⁶, to the rear end of which is attached a weight, W, and to the front end a rack, D, whose teeth *d* engage with the teeth of pinion E. Rack D is provided with a notch, *d'*, in its lower end. Weight W and rack D counterbalance each other. Pinion E is keyed to shaft F, and is operated by suitable mechanism, as hand-wheel G, keyed to the same shaft. Each rack D is directed by guides H, one or both of which are provided with a cap, *h*, for the purpose of keeping the rack close to the face of standard C. On the front guide-frame, B, are two blocks or jaw-holders, I, each provided with a dovetailed groove fitting over the front dovetailed projection, *b²*, of the frame. One of these blocks I is placed directly opposite each of the standards C C', and moves or is stationary, according as the standard to which it is opposite moves or is stationary. As standard C' is shown in the drawings as stationary and fixed, so the block opposite the standard C' is fixed to the standard C, and its blocks are each bolted in like manner. The block opposite standard C is arranged to slide upon the front projection, *b²*, of the frame as its opposite standard does upon the rear projection, *b²*, thereof, the block and its standard being preferably so connected that both must slide together along the frame.

One of the clamping-jaws is shown in Fig. 3. It consists of a shank, *j*, whose upper portion is provided with a curved lip, *j'*. The shank *j* fits into a recess in that side of the jaw-holder which is next to the guide-frame. A similar recess is cut in the lowest part of each standard, and a similar jaw inserted in each. Each jaw is connected to its opposing fellow on the opposite side of the frame by means of a cross-head, L, which latter is attached to the crank-arm M by any appropriate

means, as connecting-rod N. Each of the crank-arms M centers on a rock-shaft, O, preferably polygonal in cross-section, one end of each rock-shaft being journaled in the end supports, A and A', and the other end of each of said rock-shafts being journaled in the center support, O'. Attached at one end of each shaft O is its operating foot-lever. This lever has a tooth, *p*, on its side, which engages with the teeth of rack-work *p'*, thereby securing the lever in position.

A spring, Q, is stretched between the cross-head L and its respective jaw-holder I on the one side, and a spring, Q, is stretched between each cross-head and its respective standard, C or C', on the other side of the frame.

On the outer side of each guide-frame is a screw-threaded shaft, R. This shaft is supported by a journal-bearing, T, near one end, and the other extremity may be free, having no bearing, or be supported by its being rounded smooth and fitting in a bearing similar to the first, or in a socket, as shown in Fig. 1. One shaft R passes through the portion C² of standard C and engages a female screw in said standard, and the shaft R on the other side of the machine passes through the projection *i* of the block I on the rear side of the frame and engages a female screw in the said projection *i*. One of the shafts R has a right-hand screw-thread, while the other has a left-hand screw-thread. Each shaft R, near its outer end, has centered on it a cog-wheel, S. These two cog-wheels S are preferably of the same diameter, and the same number of teeth gear together. One or both of the shafts R are produced beyond the wheels S, and are fitted to and receive a suitable device, as a crank-handle, &c., for operating the said shafts.

The method of operation of our machine is briefly as follows: The standard C and opposite jaw are first regulated in their position on the guides B' and B so that the jaws J will grasp the extremities of the dash-cover. Then the dash-cover, three of whose edges have been sewed, is lowered into the open space between the guide-frames B B, the open edge being uppermost. The lips of this open edge are now placed between the lips *j* and the guide-frame on their respective sides, and the foot-lever P depressed and secured in position by the tooth *p* engaging with the rack-work *p'*. When both of the foot-levers P have been depressed and secured, the four jaws J securely hold the lips of the cover in the position in which they were placed. The frame of the dash is now inserted by hand into the cover as far as it will go. The hand-wheels G are now turned in the proper direction, forcing the racks downward. The notches *d'* fit over the edge of the dash-frame, and the racks descending force the frame home in the cover. If one end of the cover happens to hang lower than the other end, the rack on that side may be forced farther down, thus enabling the operator to always put the frame in the proper position in the cover. The foot-levers are now

released, and the springs Q retract and elevate the clamping-jaws, so that the dash may be removed from the machine.

When very short dash-frames or frames for fenders are to be inserted into a cover, it will only be necessary to use one pair of the jaws J, and only one of the standards C and its mechanism need be used.

As the open edge of the cover was not sewed the frame may spring slightly from its position when the pressure is removed. To obviate such tendency to spring, whenever it exists, small hand-clamps may be used while this open edge is being sewed up, but little force being required to keep the frame home after the use of our invention.

As will be observed, our invention enables the cover to be held in a vertical position for insertion of the dash-frame. The tendency of one lip of the cover to fall upon the other and retard the handling of said lips and the insertion of the frame—a tendency ever present when the cover lies in a horizontal position—is entirely obviated by our invention. The latter enables the lips to be handled with ease and dispatch, and the frame to be easily, quickly, and correctly inserted into the cover.

What we claim as new, and desire to secure by Letters Patent, is—

1. The guide-frames B B', in combination with jaws J, united by cross-head L, and provided with depressing and elevating devices, substantially as specified.

2. The combination of guide-frame B B', jaw-holders I, jaws J, cross-head L, spring Q, connecting-rod N, crank-arm M, rock-shaft O, and foot-lever P, substantially as specified.

3. The combination of jaw J, jaw-holder I, and guide-frame B, and connecting and operating mechanism, substantially as specified.

4. The rack D, counterbalanced by weight W, in combination with hand-wheel G, and pinion E, and jaws J, and guide-frame B B', for grasping and holding open the lips of the cover, substantially as and for the purposes set forth.

5. The combination of rack D, jaws J, and guide-frames B B', and connecting and operating devices, substantially as and for the purposes specified.

6. The combination of standard C, provided with dovetail groove and guides and the rack D, devices for operating said rack, jaws J and surfaces opposing same, and connecting and operating mechanism, substantially as and for the purposes specified.

7. The combination of standard C, provided with dovetail grooves and guides, and the rack D, devices for operating said rack, jaws J, and guide-frames B B', cross-head L, springs Q, connecting-rod N, crank-arm M, rock-shaft O, and foot-lever P, substantially as and for the purposes specified.

8. The combination of the jaws J, jaw-holders I, guide-frame B B', screw-shafts R, and connecting and operating devices, substantially as and for the purposes specified.

9. The combination of jaws J, jaw-holders I, guide-frames B B', screw-shafts R, and standard C, and device for pressing the dash-frame into the cover, and connecting and operating mechanism, substantially as and for the purposes set forth.

10. The combination of jaws J, jaw-holders I, guide-frame B B', device for adjusting said jaws upon said frame longitudinally, standard C, and device for pressing the dash-frame into the cover, and connecting and operating mechanism, substantially as and for the purposes specified.

11. The combination of standard C, jaw-holder I, provided with projection i, right and left handed screw-shafts R, and gear-wheels S, substantially as and for the purposes specified.

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