No. 705,471. Patented July 22, 1902.

H. P. STEWARD.

TUCK CREASER FOR SEWING MACHINES.

(Application filed Dec. 3, 1901.)

(No Model.)

Fig. 1.

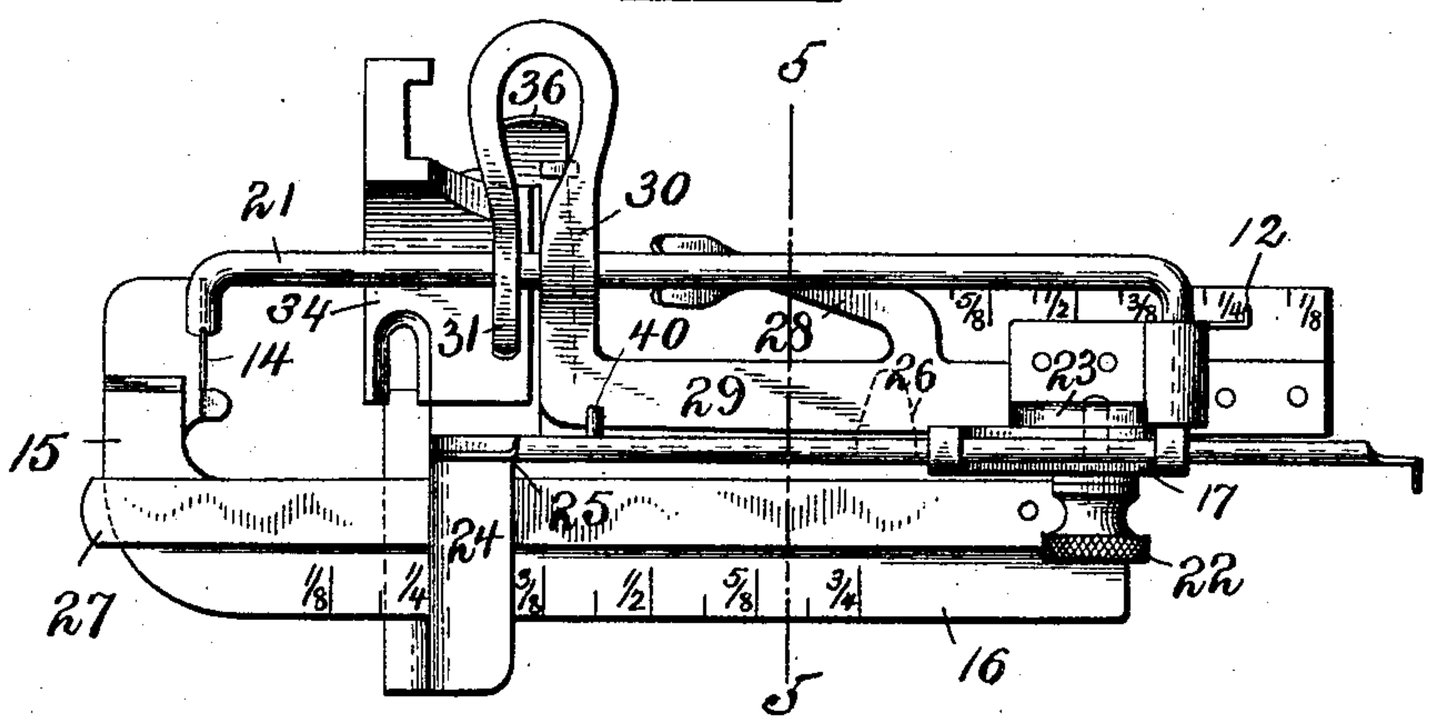


Fig. 2.

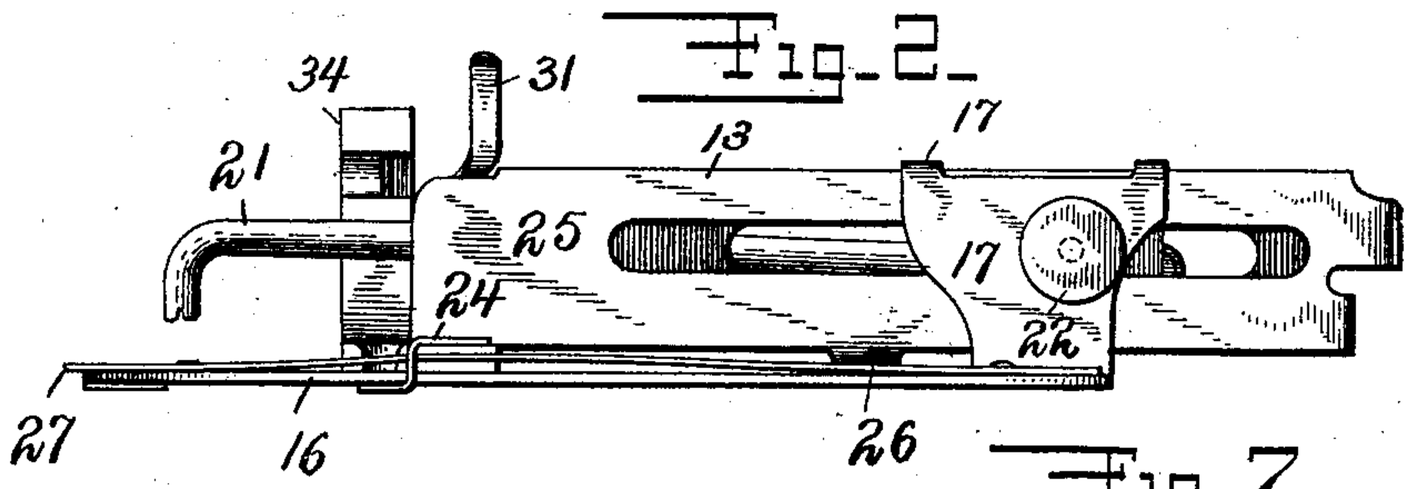


Fig. 7.

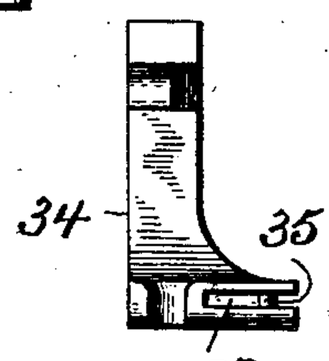


Fig. 3.

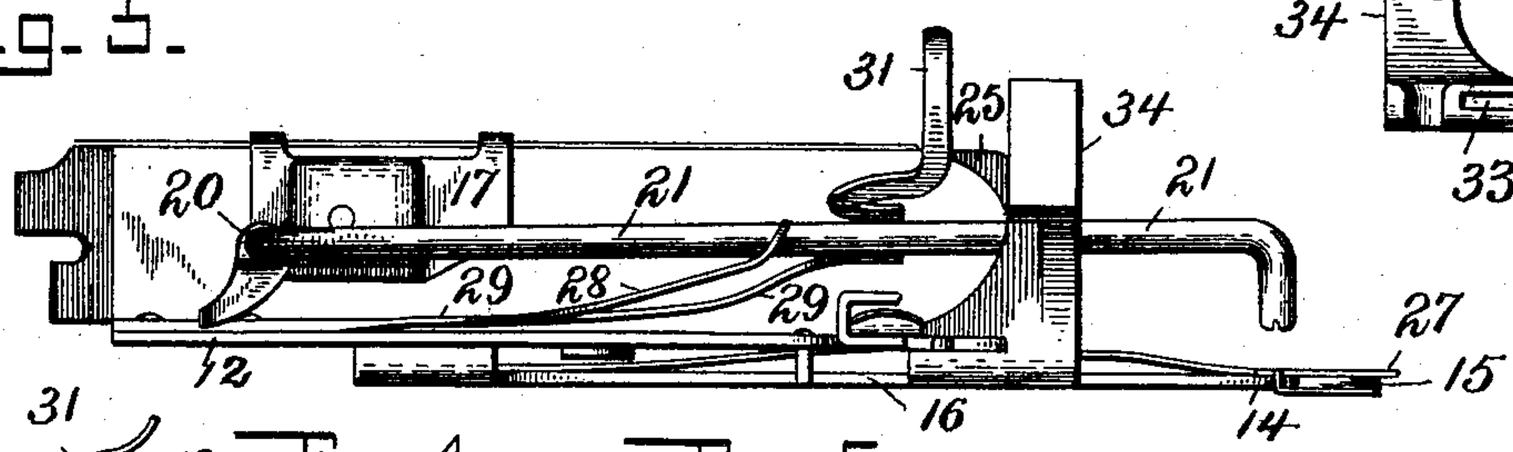


Fig. 4.

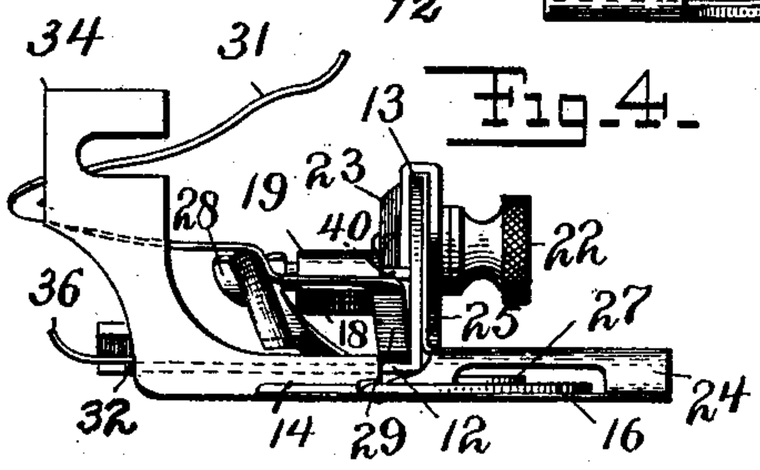


Fig. 5.

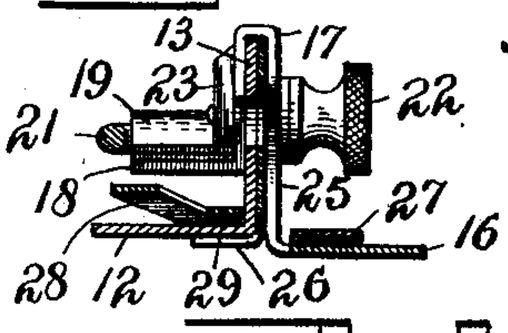
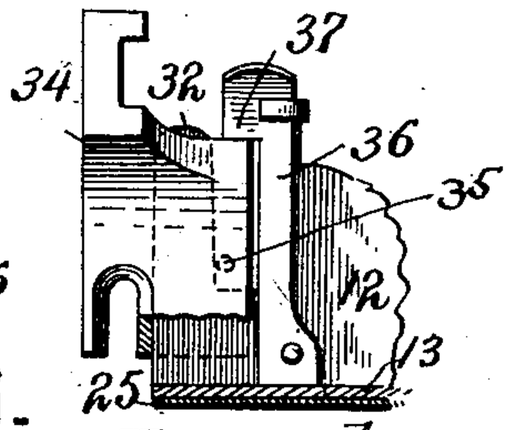


Fig. 6.



Witnesses:
J. B. McGirr.
L. M. Sweeney.

Inventor:
Hiram P. Steward,
by Munn & Co.
Attys.

UNITED STATES PATENT OFFICE.

HIRAM P. STEWARD, OF ELIZABETH, NEW JERSEY, ASSIGNOR TO THE SINGER MANUFACTURING COMPANY, A CORPORATION OF NEW JERSEY.

TUCK-CREASER FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 705,471, dated July 22, 1902.

Application filed December 3, 1901. Serial No. 84,563. (No model.)

To all whom it may concern:

Be it known that I, HIRAM P. STEWARD, a citizen of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Tuck-Creasers for Sewing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to tuck-creasing attachments for sewing-machines, and has for its object to provide a tuck creaser or marker of compact and simple construction, so that it may be cheaply manufactured, but which will be rigid and strong as well as efficient in operation.

In the accompanying drawings, Figure 1 is a plan view of the improved tuck-creaser. Figs. 2 and 3 are front and rear side views, respectively, thereof. Fig. 4 is a front end view of the same looking from the left of Fig. 2. Fig. 5 is a cross-section on line 5 5, Fig. 1. Fig. 6 is a detail plan view to show the detachable fastening of the creaser with the presser-foot, and Fig. 7 is a detail front view of the presser-foot.

Referring to the drawings, 12 denotes the base-plate of the attachment, having an upturned portion or flange 13, these two integral parts constituting the attachment-frame, which is of right-angular or L-shaped formation in cross-section, so that a very rigid frame is produced from comparatively thin sheet metal; also, by turning up the part 13 of the attachment-frame lateral compactness is secured, and the said part or flange 13 serves as a support and means of attachment for the adjustable creasing devices and adjustable guide for the edge of the work.

The upturned creasing-lip 14 or lower creasing member is on the arm 15 of the plate 16, at the rear end of which is an upwardly-extending saddle-piece 17, straddling and adapted to slide upon the flange 13 of the attachment-frame and having a horizontal extension 18. Pivoted or otherwise suitably attached to the extension 18 is a plate 19, constructed to form an eye or socket 20 to receive the right-angular rear end portion of the creasing-lever 21, having a downturned and notched forward end to coöperate in the usual manner with the creasing-lip 14, the said eyepiece or socket serving as a bearing for the journal portion of said lever. It will thus be understood that the upper and lower creasing members are connected together through the saddle-piece 17, so as to be simultaneously adjustable from and toward the needle of the sewing-machine to vary the width of the tucks, the said saddle-piece being held in any desired position of adjustment on the flange 13 of the attachment-frame by a clamping-screw 22, passing through a slot in said flange and tapped in a small clamping plate or block 23.

The edge-guide 24, the position of adjustment of which regulates the distance apart of the tucks, is preferably formed integral with a plate 25, slotted for the passage of the clamping-screw 22, the loosening of which permits of any desired adjustment of said edge-guide as well as of the creasing devices, said plate 25 being preferably provided with a right-angular steadying lug or finger 26, extending beneath the base-plate 12. The presser-spring 27 is attached at its rear end to the lower creaser-plate 16.

The creasing-lever 21 is lifted by a forked spring-arm 28 of a plate-spring 29, formed at its forward part with an arm 30, overlying and resting upon said creasing-lever and having an upwardly-bent return extension or arm 31 to be engaged by a screw or projection on the needle-bar to depress the said creasing-lever in the creasing operations and which extension or arm 31 will yield after the downturned notched end of the creasing-lever is in contact with the work overlying the creasing-lip 14 to permit of a continued downward movement of the needle, so as to effect the creasing operation by a yielding pressure rather than by sudden blows or impacts, which would be liable to abrade and injure the cloth being creased. The upward movements of the plate-spring 29 are preferably limited by a stop-pin 40 on the flange 13 of the attachment-frame. It will thus be seen that the present construction enables the spring-operating arm to be engaged by the needle-bar projection, the arm overlying the creasing-

lever and the spring which lifts the creasing-lever to be all made in one integral piece of spring sheet metal, thus contributing to simplicity of construction as well as to convenience.

To afford a convenient means for attaching the creaser to a sewing-machine, the base-plate 12 is preferably provided with a tongue 32 to fit in a groove 33, with which the presser-foot 34 is provided, the said tongue being of a suitable width to fit closely between the inner wall of said groove and a pin 35 inserted in the presser-foot and crossing said groove. The attachment is locked to the presser-foot by a spring-catch 36, having a shoulder 37 which engages the heel of the presser-foot and which spring-catch may be lifted to disengage said shoulder from the presser-foot when the attachment is to be removed from the sewing-machine.

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

1. In a sewing-machine tuck-creaser, the combination with a creaser-frame consisting of a plate composed of two right-angular parts one of which forms an upturned flange and which parts afford a creaser-frame of L-shaped cross-section, of connected upper and lower creasing members and operating means supported by said frame.

2. In a sewing-machine tuck-creaser, the combination with a creaser-frame consisting of a plate composed of two right-angular parts one of which forms an upturned flange and which parts afford a creaser-frame of L-shaped cross-section, of a clamping saddle-piece adjustably mounted on said flange, upper and lower creasing devices both connected with said saddle-piece, and a yielding device through which the upper creasing member is to be operated.

3. In a sewing-machine tuck-creaser, the combination with a creaser-frame consisting of a plate composed of two right-angular parts one of which forms an upturned flange and which parts afford a creaser-frame of L-shaped cross-section, of a clamping saddle-piece adjustably mounted on said flange, upper and lower creasing devices both connected with said saddle-piece, a yielding device through which the upper creasing member is to be operated, and an adjustable edge-guide held in place by said saddle-piece when the latter is clamped to the said flange.

4. In a sewing-machine tuck-creaser, the combination with the creaser-frame, of creasing devices adjustably supported on said frame and comprising a vibratory creasing-lever, of a spring having a forked arm for lifting said lever and an arm overlying said lever having an upwardly-bent extension to be engaged by a projection or part on the needle-bar of a sewing-machine.

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

HIRAM P. STEWARD.

Witnesses:

HENRY J. MILLER,

HENRY A. KORNEMANN.