

J. J. HILL.
 Tucker for Sewing-Machines.
 No. 220,024. Patented Sept. 30, 1879.

Fig. 1.

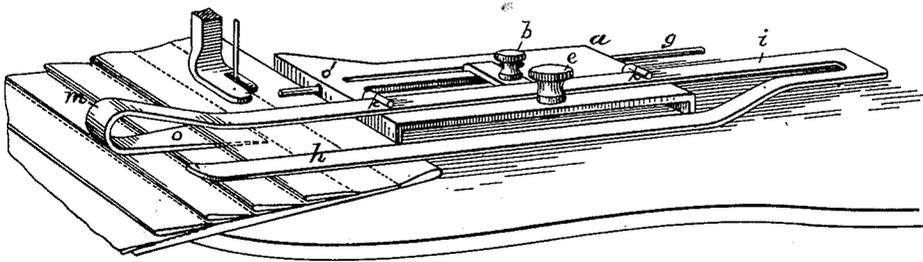


Fig. 2.

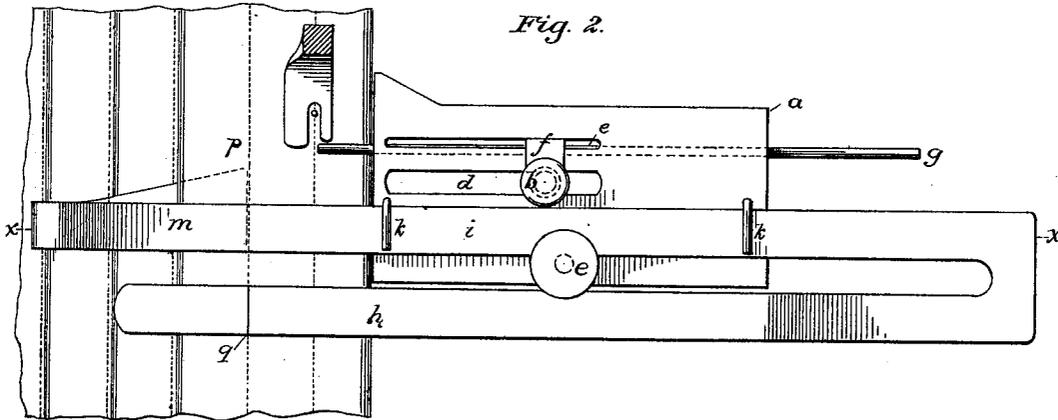
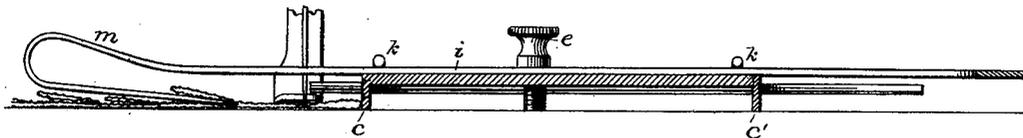


Fig. 3.



Attest:
L. W. Sears
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JOHN J. HILL, OF ASHEVILLE, NORTH CAROLINA.

IMPROVEMENT IN TUCKERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 220,024, dated September 30, 1879; application filed May 15, 1879.

To all whom it may concern:

Be it known that I, JOHN J. HILL, of Asheville, in the county of Buncombe and State of North Carolina, have invented an Improvement in Tuckers for Sewing-Machines, of which the following is a specification.

My invention relates to what are known as "tuckers" for sewing-machines, having for its object the simplification of the parts for cheapness of manufacture and greater certainty and convenience in operation.

It consists of certain details of construction hereinafter fully set forth, and particularly pointed out in the claim.

In the drawings hereunto attached, Figure 1 is a perspective view of my improved tucker, Fig. 2 a plan view, and Fig. 3 a vertical section on line *x x* of Fig. 2.

The plate by which the attachment is secured to the cloth-plate of the machine is indicated at *a*. It is formed, preferably, of sheet metal, of sufficient thickness to allow the set-screw to hold it securely in place without springing materially under the pressure. At the ends it is bent down to form flanges *c c'*, which rest upon the cloth-plate of the machine. It is slotted at *d*, to allow it to slide longitudinally on the set-screw, and a second and narrower slot is represented at *e*, parallel and coterminous with the first, for the ear *f*. This ear *f* is fixed upon a slender rod, *g*, which passes through holes in the flanges, that hole, *o'*, which is next the cloth being slightly elongated vertically, to allow the end of the rod to spring upward and adapt itself to the thickness of the cloth.

It will be observed that the rod *g* is held by means of the thumb-screw *b* upon the plate of the machine, and that when the thumb-screw is loosened the plate *a* may be slipped forward or backward bringing the flange *c*, which acts as a guide to the folded edge of the cloth, nearer to or farther from the needle.

The rod *g*, extending close to the presser-foot of the machine, a little in front of the needle, acts as a smoothing-rod, and serves to prevent the cloth from fulling up after it has passed the fold-gage, hereinafter described, and before it reaches the needle.

The cloth-holder is represented at *h*, Figs. 1

and 2, and the fold-gage at *i* in the same figures. These may be made in one piece of sheet metal, as represented in Fig. 2, the cloth-holder being carried by the fold-gage. The former is elastic and bent down, so as to bear upon the cloth and press it gently upon the cloth-plate of the machine. Its elasticity allows it to adapt itself to any thickness of the goods.

The cloth-gage *i* is held to the plate *a* by open guides *k k* and by the screw *e*. By loosening the latter the gage may be adjusted at pleasure toward or from the guiding-edge of the plate *a*. This gage is turned back at the end into the form of a loop, *m*, and the end *o* is made thin and adapted to fit, in the formation of one tuck, under that previously made. It may be brought close to the seam of the tuck, and thus serves as an unerring guide to the cloth which is fed along, being held down by the cloth-holder, by the end *o* of the fold-gage, and by the smoothing-rod *g*, and between the end of the fold-gage and the guiding-edge of the plate *a*.

For greater security and precision of operation I widen the end *o*, as shown at *p*. This serves to prevent the spreading of the previous tucks, and guides the work as neat as possible to the needle.

A guide-mark, *q*, is made on the cloth-holder opposite the end of the part *o*, to aid the operator in keeping the cloth straight and to make the tucks parallel.

It will be observed that there are two adjustments—one of the plate *a* upon the set-screw *b*, and one of the fold-gage and cloth-holder upon the plate *a*. The adjustment of the plate *a* brings its cloth-guiding flange *c* nearer to or farther from the needle, and regulates the width of the tuck. The adjustment of the fold-gage and cloth-holder governs the distance between the tucks. The smoothing-rod *g* manifestly maintains its position in relation to the needle.

The lower front edge of the flange *c* may be made straight or with an offset to adapt it to the kind of machine upon which it is used.

The parts of my attachment are very few, and may be easily and cheaply made.

The plate *a* and the cloth-holder and fold-gage may be struck out of sheet metal in a manner well known to those skilled in the art.

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

The combination of the adjustable plate *a*, provided with the parallel slots *d e*, flanges *c c'*, guides *k k*, ear *f*, set-screws *b e*, and rod *g*, extending through holes in the flanges, with the fold-gage *i*, provided with a loop, *m*, hav-

ing a widened end, *o*, and cloth-holder *h*, substantially as described, and for the purpose set forth.

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

JOHN J. HILL.

Witnesses:

L. W. SEELY,

H. B. MOULTON.