No. 824,711.

PATENTED JULY 3, 1906.

A. S. DICKINSON.

TUCK MARKER FOR SEWING MACHINES.

APPLICATION FILED APR. 28, 1904.

Fig. 1.

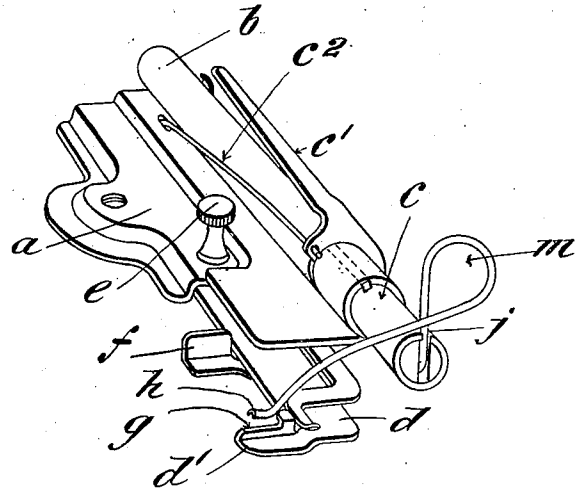
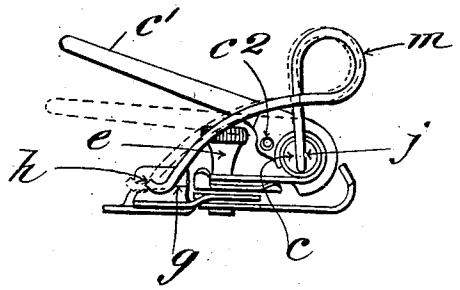


Fig. 2.



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UNITED STATES PATENT OFFICE.

ARTHUR S. DICKINSON, OF ATLANTA, GEORGIA.

TUCK-MARKER FOR SEWING-MACHINES.

No. 824,711. Specification of Letters Patent. Patented July 3, 1906.

Application filed April 28, 1904. Serial No. 205,350.

To all whom it may concern:

Be it known that I, ARTHUR S. DICKINSON, a citizen of the United States of America, residing at Atlanta, in the county of Fulton and State of Georgia, have invented new and useful Improvements in Tuck-Markers for Sewing-Machines, of which the following is a specification.

This invention relates to sewing-machines, and has especial reference to tuck-marking devices used in connection therewith, the object of the invention being to provide an improved tucker in which the point of the tucker-arm bearing on the goods shall have during the operation of the device a downward movement against the fabric and a sliding movement when pressed against the fabric to more distinctly and permanently impress the crease therein; and the invention consists in the particular construction whereby these ends are attained, which construction is fully described in the accompanying specification and clearly pointed out in the claims appended thereto and is fully illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the tuck-marking device to which this invention has been applied; and Fig. 2 is an end elevation of the same, showing the parts in two different positions.

In the construction illustrated in the accompanying drawings, *a* indicates a base-plate having formed along one side thereof the tubular portion *b*, adapted to receive the rock-shaft *c*, which is endwise adjustable therein and has connected therewith the tucker-plate *d*, said rock-shaft *c* and plate *d* being secured in a fixed position relative to the base-plate *a* by means of the set-screw *e*, mounted on the base-plate. The rock-shaft *c* has a spline-and-groove engagement with the arm *c'*, as is usual in this class of constructions, whereby the shaft is permitted to slide endwise relative to the arm *c'* and whereby the latter when reciprocally operated by engagement with the needle-bar of the sewing-machine will impart oscillatory movements to the shaft on its axis. Connected with this arm *c'* is a spring c^2, which serves to return the arm *c'* to the position it occupies in Fig. 1 after the depression of the arm to the position shown in dotted lines in Fig. 2. On the base-plate *a* is the usual guide-flange *f* for the work, the extremity *d'* of the tucker-plate *d* being parallel with the flange *f*, said extremity being provided with a vertically-disposed flange or rib *g*. The tuck is marked on the fabric by the compression of the fabric between the rib *g* and the upturned extremity *h* of the tucker-arm *j*, and the invention resides, essentially, in the peculiar construction and arrangement of this arm whereby it will bear during the operation of the machine yieldingly on the fabric, pressing it down over the edge of the rib *g* and sliding the same along that edge with a frictional movement, which will impress the tuck-mark in the fabric more permanently than has heretofore been possible within my knowledge.

The tucker-arm is fixedly secured in the end of the rock-shaft *c* substantially in the plane of the rib *g* and extends vertically above the rock-shaft, the arm being bent upon itself to constitute a spring-loop or bend *m*, the free end thereof from this loop being curved downward and out over the rib *g*. The extremity *h* of the tucker-arm being curved upwardly, as shown in the drawings, constitutes a sort of rounded foot in the under side of which is formed a groove parallel with the rib *g*, whereby the end of the tucker-arm is not only held in position on the rib, but whereby also a V-shaped crease is formed in the fabric after the latter has been pushed along the rib *g*, firmly held between the end of the tucker-arm and said rib. By extending the vertically-disposed portion of the tucker-arm above the rock-shaft *c* and by forming the spring-loop *m* therein, which practically constitutes a hinge in the arm, the foot of the latter has imparted thereto the longitudinally-sliding movement on the rib *g*, as well as a movement toward and from the surface of the fabric, the operation of the tucker interfering in no wise with the regularity of the feed movement of the fabric by the machine.

From the foregoing description it is evident that as the rock-shaft *c* is oscillated the operative end *h* of the tucker-arm *j* will be swung from the position thereof shown in Fig. 1 to the position thereof shown in full lines in Fig. 2, which is its position at the time of the initial contact between the end of the tucker-arm and the fabric, whereby the latter is pressed down over the edge of the rib *g*. From this point until the end of the arm *j* arrives at the position shown in dotted lines in Fig. 2 the crease in the fabric is ironed into it, as it were, by the sliding movement of the arm along the top of the

rib. During the return movement the extremity *h* of the tucker-arm will slide over the fabric under a constantly-decreasing pressure until as it nears the limit of its rearward movement it is lifted away from the fabric in position to repeat the above-described movements.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. The combination with a suitable tuck-marking mechanism comprising a rock-shaft, of a tucker-arm secured to the shaft and extending vertically therefrom, said arm having a spring-loop formed therein by bending the arm across itself, the free end thereof extending from said loop portion and in continuation across one side thereof downwardly and obliquely inclined relative to the vertically-disposed portion of the arm; together with a tucker-plate having a rib thereon, on which the free end of the arm bears, there being a groove in said arm end to fit the rib.

2. In a tuck-marking device, a tucker-plate, a tuck-marking member consisting of an arm made of wire and comprising a perpendicular portion having a loop formed on the upper end thereof by bending the wire upon itself, and a downwardly and obliquely inclined portion crossing the perpendicular portion of the wire, the extremity of which is provided with a groove running lengthwise of the arm, a transverse rib on the tucker-plate and against which the groove in the tuck-marking arm bears, as described, and whereby a simultaneously sliding and pressing effect is obtained.

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