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G. McFADDEN.

Improvement in Tuck-marker for Sewing Machines.

No. 122,626.

Patented Jan. 9, 1872.

Fig. 1.

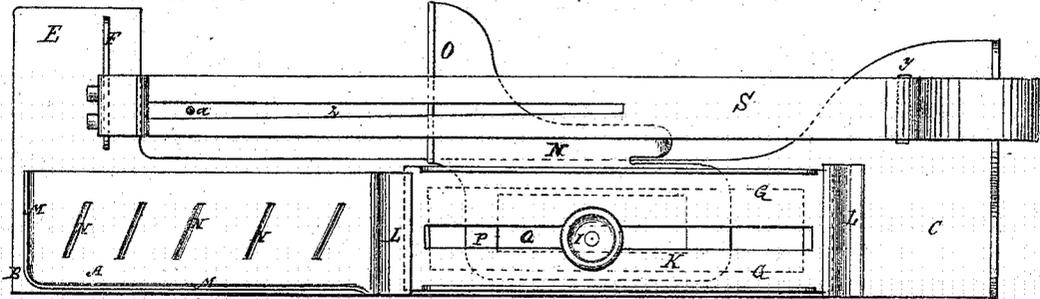


Fig. 2.

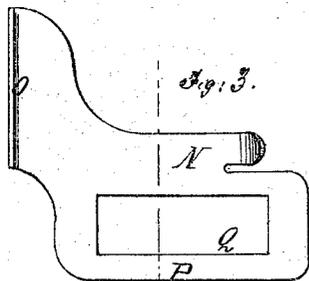
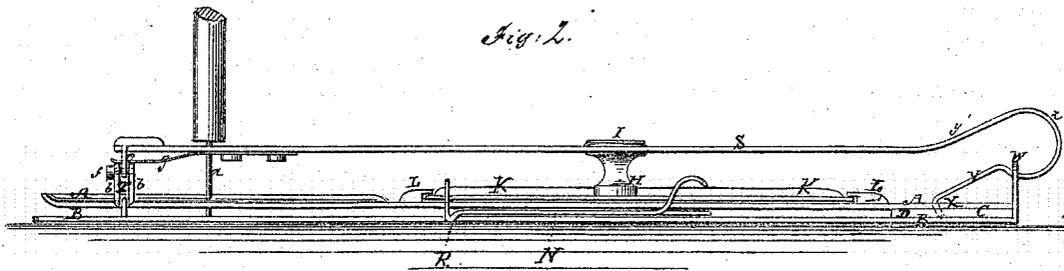


Fig. 3.



Fig. 4.

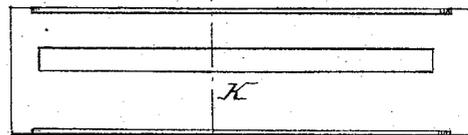


Fig. 5.

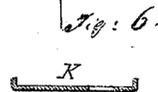
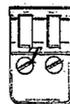


Fig. 6.

Fig. 7.



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UNITED STATES PATENT OFFICE.

GEORGE MCFADDEN, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN TUCK-MARKERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 122,626, dated January 9, 1872.

To all whom it may concern:

Be it known that I, GEORGE MCFADDEN, of Worcester, in the county of Worcester and State of Massachusetts, have invented a new and Improved Tuck; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

My invention relates to improvements in tuck-markers for sewing-machines; and it consists in the hereinafter-described construction and arrangement of such instrument.

Figure 1 is a plan view of the improved tuck-marker. Fig. 2 is a front elevation. Fig. 3 is a plan of the cloth-gauge plate. Fig. 4 is a section of the gauge. Fig. 5 is a plan of sliding top-plate. Fig. 6 is a cross-section of the same. Fig. 7 is a plan view of the vibrating part of the tuck-marker.

Similar letters of reference indicate corresponding parts.

A and B represent the long slotted plates, connected together, as shown at C, with a plate, D, between them, of about the same thickness of said plates. These plates are equal in length, but B has an extension, E, rearward from the left-hand end, to support the knife-edge F, on which the creasing is to be done. Both of the said plates have a long and broad slot, shown dotted in Fig. 1 by the lines G, for the binding-screw to secure them to the machine, said slots being much wider than the binding-screw to admit of applying the instrument to machines of different kinds, in which the holes for the said binding-screw differ somewhat in their relative arrangement with the needle, and in order to avoid having the collar H of the binding-screw I as large as it would require to be on account of these wide slots and the shifting they are intended to provide for, I arrange a short slotted plate, K, on the top of plate A in guides L, arranged transversely thereon, to receive the pressure of the screw and transmit it to the plates A and B. This plate slides forward and backward on plate A, or allows the latter to move under it, and thus provides for the adjustment of the instrument in these directions, and it moves along the screw from right to left, and vice versa, with the plates A and B. The plate A is bent upward at the

front edge where the cloth passes under it; also at the end, as indicated by M, so as not to catch the cloth and obstruct it; and it has grooves or depressions N ranging obliquely toward the gauge in the part under which the cloth passes, by which the under side is ribbed or ridged in such manner as to have a tendency to draw the cloth toward the gauge as it passes along to the needle. I provide the plate N of the cloth-gauge O with a wide extension, P, at the side fronting the operator, to enter between the plates A B for being held by the same binding-screw that holds them, and make a slot, Q, in said plate to admit of the necessary adjustments. This makes it necessary to have a rib, R, on the under side of the plate N about as thick as the plate B for resting on the plate of the machine to support the end of the gauge-plate. S is a long spring-plate for carrying the vibrating part T of the tuck-marker. It is connected to the plates A B by the extension V of the C-shaped spring part of V, the right-hand end of which passes through the vertical flange W rising from said plates, and the hooked ends X enter the slot *y* in plates A B at a short distance to the left of the flange. The C-spring curves upward and over the flange W toward the needle to the point *y'*, from which to the end carrying the marker T, the plate is of uniform thickness and width, and sufficiently rigid to not spring materially, it being designed to spring mainly in the part V. This plate has a long slot, Z, which the needle *a* passes through to allow the lower end of the needle-bar to act upon the top for pushing it down. The slot admits of adjusting the plate along the needle for wide or narrow tucks. The outer end of this plate carries a pair of marking-jaws, *b*, held on a vertical flange, *e*, by screws or rivets F and two springs, *g*. The screws pass through slots in said flange, which allow the flange and plate S to continue their downward movement after the jaws have been stopped by the cloth and plate B, and to rise again before said jaws. The springs are connected to the under side of plate S a short distance from the end by screws or rivets, as preferred. By this arrangement of the jaws with the plate S the instrument is adapted for different machines, varying as to the distance the needle-point is from the table at the lowermost part of the movement or lowest position of the

post, and it gives better results in respect of the working of the machine, for the marker attached directly to the arm S will be arrested a little higher on thick cloth than on thin, and being adjusted to go low enough for thin cloth will cause a pounding action on the needle-post when working on thick cloth, as the plate S must spring downward between the needle and the said jaws on the one side, and between the needle and the C-spring on the other.

The mode of attaching the spring-plate S to the plates A B is better than bolting or riveting, because the connection is stronger, the plate not being weakened by screw or rivet holes, and the hooked end which holds it to said plate is much stronger than rivets. Besides, it admits of more readily detaching said plates. The said plate S being detached the gauge O and plates A B may be very successfully employed in the manner of using the ordinary cloth-guides. The manner of adjust-

ing the tuck-marker and the guide will be readily understood.

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

1. The combination of the plates A B, extension E, knife-edge F, spring-plate S, and the marking-jaws *b b*, and springs *g*, all constructed and arranged substantially as specified.

2. The arrangement with the plate S of the jaws *b* and springs *g g*, substantially as specified.

3. Spring-bar S, attached to the plates A B by the hooked extension of the C-shaped spring, the slotted flange W, and the slot for the hook X, all arranged substantially as specified.

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