

E. BOSTOCK.
Tuck Creaser for Sewing Machines.

No. 80,269.

Patented July 28, 1868.

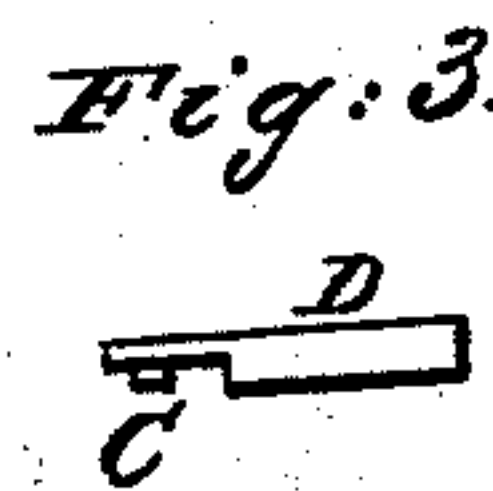
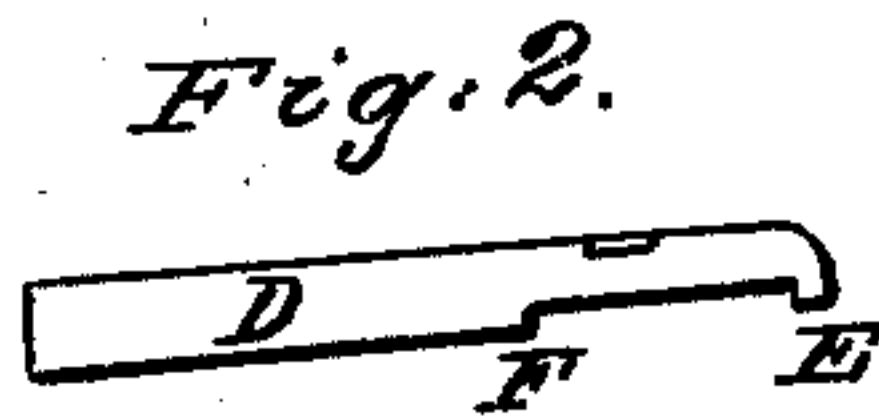
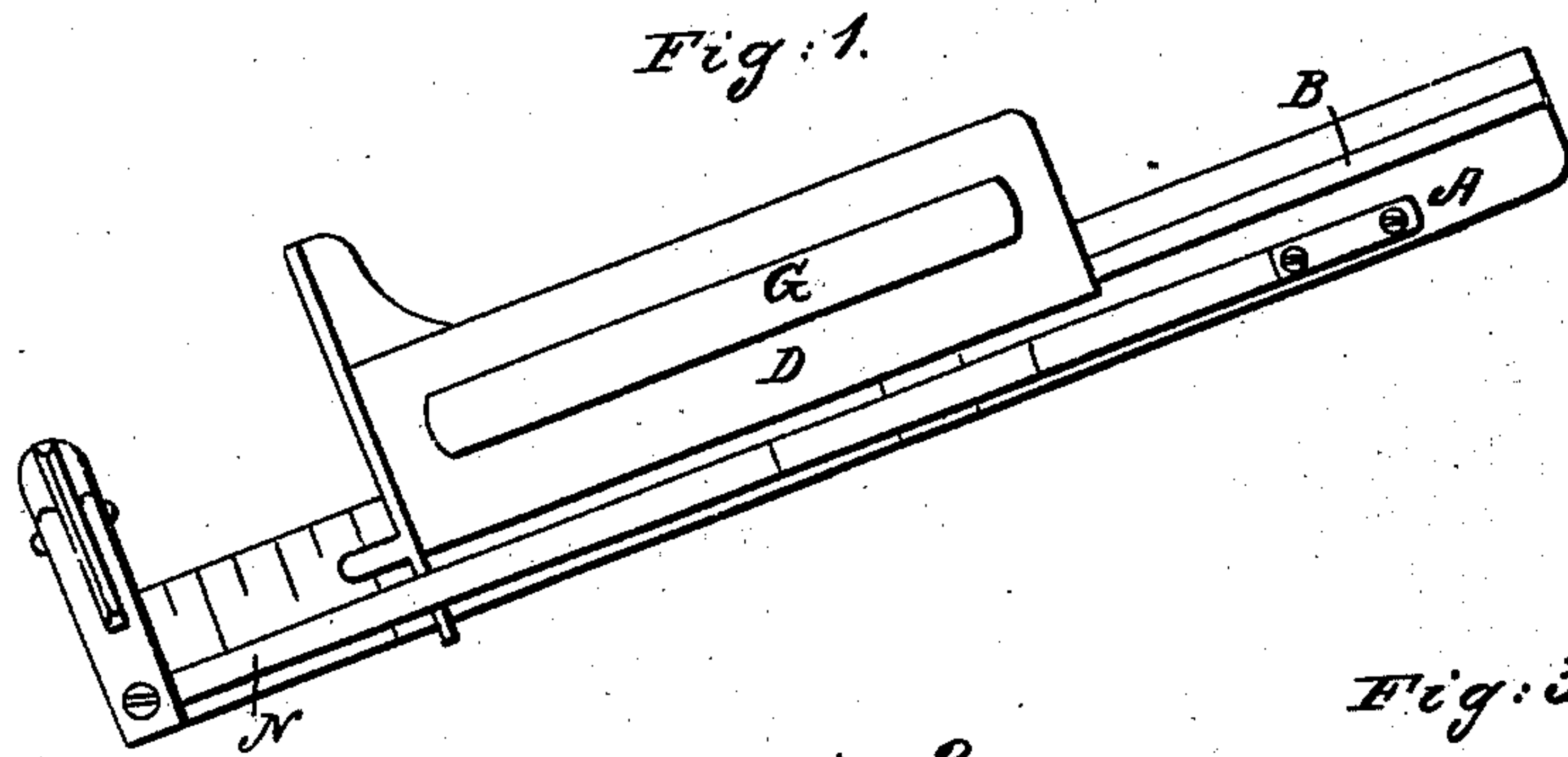


Fig. 4.

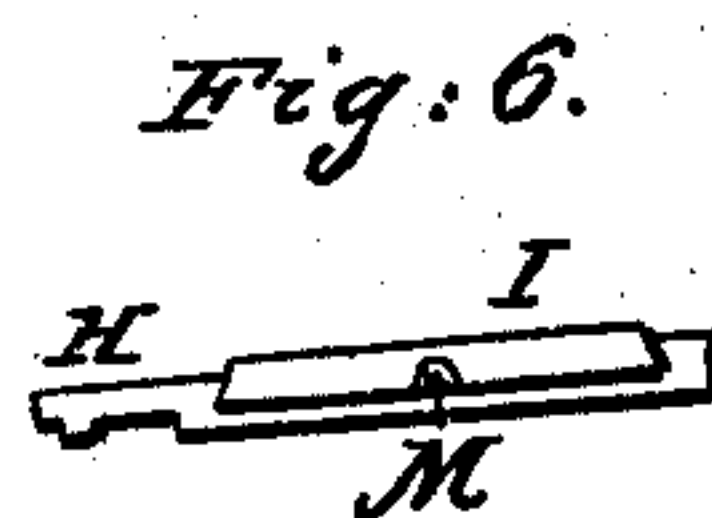
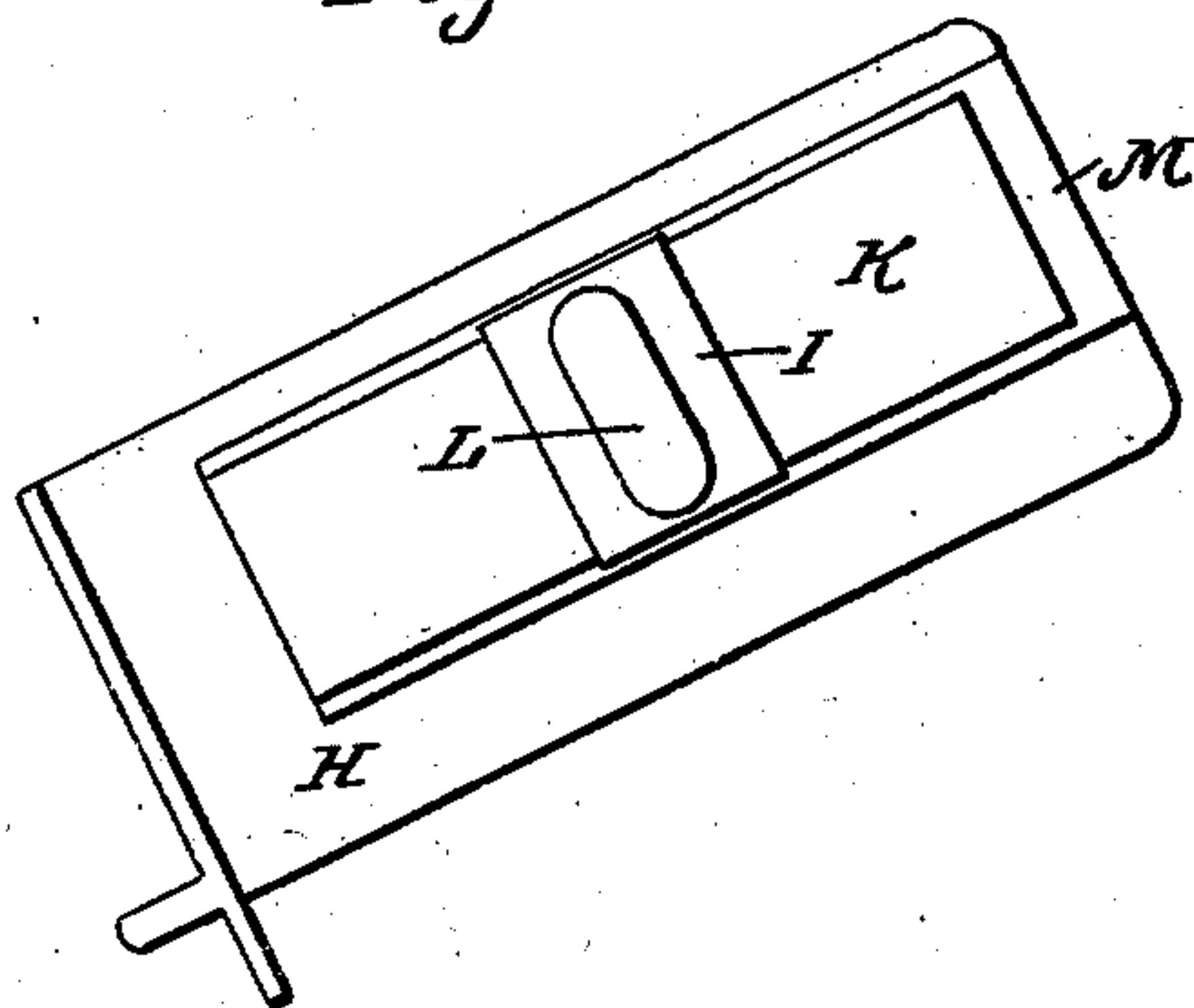
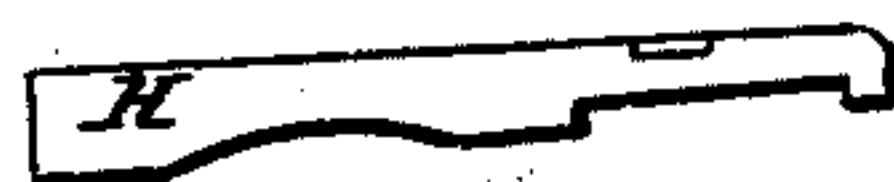


Fig. 5.



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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN TUCK-CREASERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 80,269, dated July 28, 1868.

To all whom it may concern:

Be it known that I, EDWARD BOSTOCK, of the city of Albany and State of New York, have invented certain Improvements in Tuck Creasers and Guides; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

The object of my invention is to simplify and render more efficient and useful than hitherto the class of implements known as "tuck creasers or markers," and which are usually, though not necessarily, used in connection with a sewing-machine; and my improvements relate more particularly to that variety of implement in which the creasing or marking apparatus is arranged for adjustment relatively to the needle, and also to a gage-plate which is made attachable to the bed-plate of a sewing-machine.

I will proceed to describe my improvements and to state the advantages resulting therefrom.

Figure 1 represents my improved tuck-creaser; Fig. 2, a cross-section of the forward end of the gage-plate; Fig. 3, a cross-section of the rear end of the same; Fig. 4, a modified form of construction of a gage-plate, to enable the same tuck-creaser to be applied to the beds of different styles of sewing-machines; Fig. 5, a cross-section of the forward end of such last-named gage; and Fig. 6, a cross-section of the rear end of the same, with its dovetailed slide in place therein.

It is of the utmost importance in operating with creasing attachments, especially when applied to a sewing-machine, that all the parts should be securely fixed in position relatively to each other, so that when the machine is in operation a true parallelism of the gage-plate, straight-edge, and the creasing devices shall be preserved with perfect certainty, and not be subject, as most, if not all, such devices have hitherto been constructed, to a deflection of one out of true parallelism with the other whenever the screw which holds them may not be made to hold them very tightly, or whenever any undue strain or movement of one shall force it from its proper position. To secure such desirable end, and to avoid the difficulty stated

and the consequences resulting therefrom, I make in the main plate A (which, as in my patent of May 7, 1867, supports an arm and creasing-wheel) a longitudinal slot or groove, B, to form a track or bed for a projection, C, on the under side of the rear end of the gage-plate D, this projection and groove positively preventing any lateral movement of the gage relatively to the bed-plate at that point; and at the forward end of the gage-plate I place a similar downward projection, E, upon the extreme outer part of the straight-edge, and which is designed to come outside of and bear against the outer edge of the bed-plate A. That portion of the gage-plate which projects beyond the side of A, I make of sufficient thickness to rest upon the table of the machine and be nearly or quite flush with the under surface of plate A; and through this part (but not, as has heretofore been the practice, through plate A) I make a longitudinal slot to receive the thumb-screw which is employed to secure the implement to the table and to allow of its adjustment.

Instead of the groove being made in A and the projection formed on plate D, a groove or slot may be in D and the projection on A. The space between E and F, as shown in Fig. 2, is cut away of sufficient breadth to allow the gage at its forward end snugly to span the plate A, and so, with C and D, keep steady and prevent any lateral movement or play of the plates relatively to each other at the forward end of the gage. By this mode of construction I not only absolutely compel the two plates always to preserve, as above stated, their true relative positions, so that the line of creasing shall of necessity be in parallelism with the line of stitching and with the straight-edge, but I dispense with the making of any slot in the under plate, A, so that while the thumb-screw holds the gage-plate the latter holds the under plate, there being nothing above plate D, except the thumb-screw, to keep it down, and this allows, by merely loosening the screw, the removal of the under plate and its creaser from off the sewing-machine without the need of removing the gage-plate, which thus may remain for use as such, as in ordinary cases where no creaser is employed, and without the need of lifting said gage-plate any higher than sufficient to release E from groove B. This is of great importance,

and no creaser or tucker or similar attachment, so far as I am aware, has ever been thus constructed in which all parts thereof, except the straight-edge, could be applied or removed without also (and under former modes of construction of necessity) removing the straight-edge.

For the purpose of more conveniently adapting this form of construction to different styles of machines, I sometimes put two or more parallel slots—such as shown at G—in the gage-plate, the apparatus in such case requiring no other change. I have, however, devised a peculiar and most efficient mode of adapting one implement to many machines, whose holes in the bed-plate for the reception of the thumb-screw, as is well known, are variously located, and by means of which the same gage-plate of my apparatus may be placed in the desired position upon the machine by the same slotted piece and the same screw. This mode is illustrated in Fig. 4, in which H represents the gage-plate open throughout most of its length, and I a dovetailed slide fitted to ride in dovetailed or equivalent grooves therein, as shown in Fig. 6. K represents the opening in plate H, and L the slot in slide I for the reception of the thumb-screw. M is a small pin, lip, or stop to prevent the slide from becoming at any time detached from the plate. This form of gage-plate being applied to a creaser, instead of the form first above described, it is evident that wherever may be the location in any sewing-machine of the screw-hole to receive the thumb-screw this plate may be used, the only condition necessary being that the quadrangle described by the length of slot L (for the two short sides of the quadrangle) and by the distance it is permitted to slide (for the two longer sides of the quadrangle) shall be in the first instance made large enough to inclose within its area a space sufficient to take in all the screw-holes in the well-known machines in the market. It may therefore be considered as having a universal application, and at once gets rid of that great inconvenience and expense of having separate creasers for each style of machine. By shifting the slide the thumb-screw may be brought into proper position for any hole within the range of its movement, and by shifting the thumb-screw in slot L it may be

brought into position for any hole which may be brought under any part of such slot.

Inasmuch as the screw-hole for a gage is in some machines placed in a line with the needle, in others in front of the needle, and in others back of the needle, the importance of this improvement, which adapts the device to all of them, cannot be overestimated and does not require to be further set forth.

I do not confine myself to making my tucker with a right-angled projection, as some of my earliest drawings and tuckers have the wheel on the end of the spring-arm.

In place of the grooved wheel I sometimes have attached to the arm N a cylinder or tube having a notch or groove opposite the blade and a spiral groove cut into or a spiral piece of metal fixed on the outside of said cylinder or roller, which will rest upon the work, thus causing the roller to turn with the action of the feed and the spiral groove or projection to keep the work up to the gage.

By constructing for all the machines used in the market one kind of gage-plate only I may, by putting a slot of any desired width at any desired position, fit any particular machine with the same creaser.

I claim—

1. A tuck-creasing device constructed substantially as described, in combination with the plate A and gage-plate D, both constructed and arranged substantially as described, and the plate D, serving to confine A to the bed-plate, as set forth.

2. A gage-plate or guide for a sewing-machine, when provided with an adjustable piece, I, having a slot, as and for the purpose set forth.

3. The gage-plate H, slide I, and creasing device, combined to admit of adjusting the apparatus in any desired position relatively to the needle and feeding device of different machines by means of a single screw.

4. The tuck-creaser and gage plate for use with or without a sewing-machine, when the whole is constructed as described.

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Witnesses:

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