## H. C. GOODRICH.

THUR-CREASERS FOR SEWING-MACHINES.

No. 177,501.

Patented May 16, 1876.

Fig. Z.

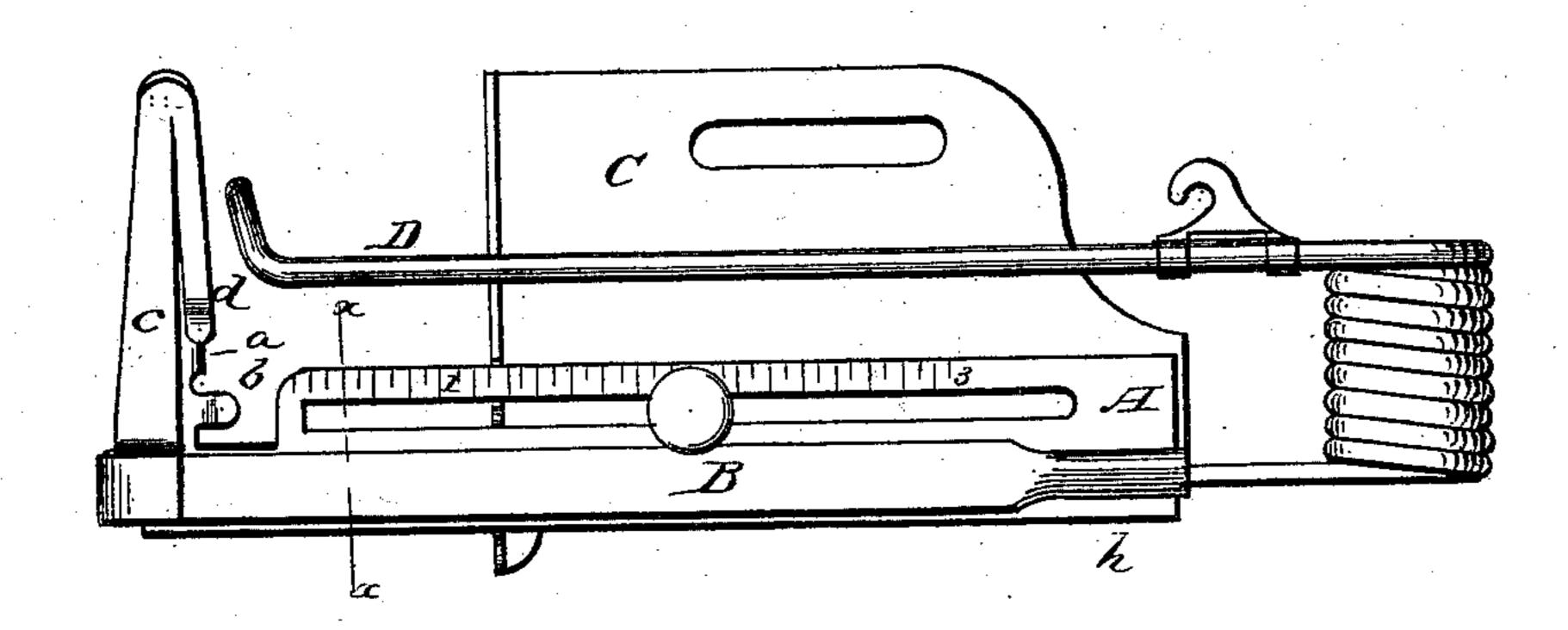
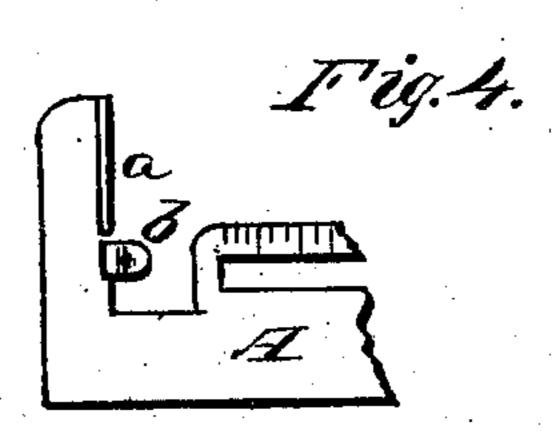


Fig. 2.

Box of a

Fig.3.

Baraca



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## UNITED STATES PATENT OFFICE.

HARRY C. GOODRICH, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN TUCK-CREASERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 177,501, dated May 16, 1876; application filed February 28, 1876.

To all whom it may concern:

Be it known that I, HARRY C. GOODRICH, of the city of Chicago, Cook county, State of Illinois, have invented new and useful Improvements in Tuck-Creasers for Sewing-Ma-, chines, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a plan; Fig. 2, a section at x of Fig. 1; Fig. 3, a section at the same place as Fig. 2, the position of the working parts being changed; Fig. 4, a detail; Fig. 5, a

modification.

The objects of my invention are to construct the upper marker of a tuck-creaser so that it will have a sliding, or backward and forward, movement over the cloth, thus producing a well-defined crease, with less pressure than when the upper marker is pressed | directly down upon the cloth, and also to so | construct such upper marker that it will not | device would be reasonably efficient if this be liable to break in use, when made of sheet metal; and I accomplish them by providing a double sheet metal spring carrying one of the markers, and so arranged and constructed that as it descends the marker is moved along over the cloth instead of being pressed down directly upon it. At the same time the spring of the metal is so distributed that it does not come at a single point, and hence the liability to break is decreased.

In the drawings, A represents the main plate, one end of which is extended forward and provided with a blade, a, and a lip, b. B is a cloth-smoother secured to A at h. C is a gage; D, a spring arm or bar operated by the needle-bar.

These parts are all constructed in the usual manner. c is a piece of sheet metal thick enough to have sufficient strength. It is placed at an angle, and its lower end is permanently secured to B, as shown in Figs. 1 | by Letters Patent, is as follows: and 2. d is a narrow piece of sheet metal secured at its upper end to the upper end of c, and at the other end, and on the under side, it is provided with a notch, e, arranged to engage with the blade a.

c d can most conveniently be made from a single piece; and, when ready for use, should be in about the position shown in Fig. 2.

By slightly changing the form of c, d might be located under c; but I think it better to make these parts substantially as shown.

In use the spring-arm D will be forced down |

by the descending needle-bar, and the bent end of this arm will come in contact with the spring c, forcing it down and bringing the notch e in contact with the cloth, which cloth passes over the blade as usual, the notch

engaging with the blade.

The parts are to be so arranged that after the notch comes in contact with the cloth, the upper ends of c and d will continue to descend, and at the same time the notch will be carried back, sliding over the cloth under some pressure, producing a better crease with less pressure than when the notch is only pressed down on the cloth, without moving over it. When at the lowest point the parts will be in or near the position shown in Fig. 3.

It is not necessary to bend the end of D, as

shown.

I have described c as a spring-arm. The arm were rigid; but it is better that it should have some spring.

The secondary arm d, as shown and described above, is secured to the upper or forward end of c, and the movement of the notch over the cloth is in a direction contrary to that

of the movement of the cloth.

Substantially the same result can be accomplished in substantially the same way by so arranging the secondary arm, or spring-bar, that its movement will be in the same direction as that of the cloth when producing the mark; and this can be done by securing a rigid short post to the lower end of c, or to B, and securing the secondary arm or springbar to this post at one end, the other end of the spring-bar being provided with the notch, and arranged so as to engage with the blade. This modification is represented in Fig. 5.

What I claim as new, and desire to secure

In a tuck-creaser, the arm c, in combination with a secondary spring-arm, d, provided with a notch, e, and the blade a, the said arm d being arranged with relation to the blade as described, whereby the notch is caused to slide or move over the cloth when in use, substantially as specified.

## HARRY C. GOODRICH.

Witnesses:

E. A. West, O. W. Bond.