

(Model.)

H. C. GOODRICH.

TUCK MARKER FOR SEWING MACHINES.

No. 250,657.

Patented Dec. 13, 1881.

Fig. 1.

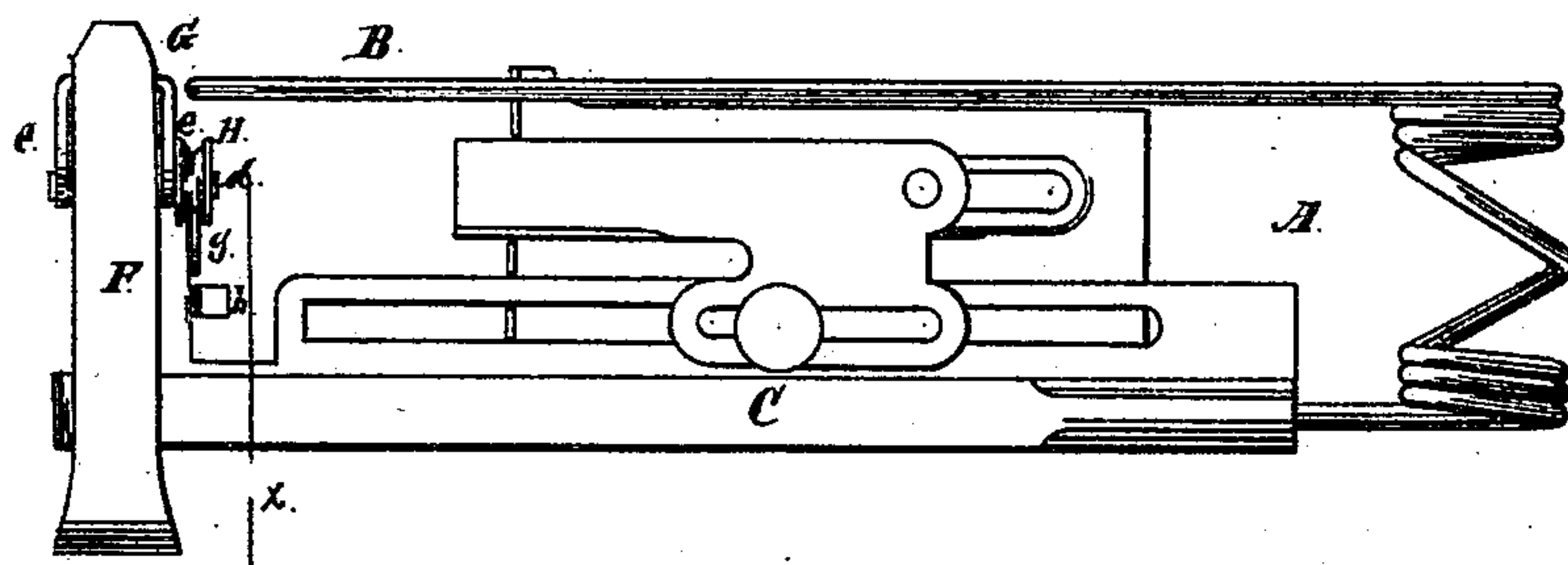


Fig. 2.

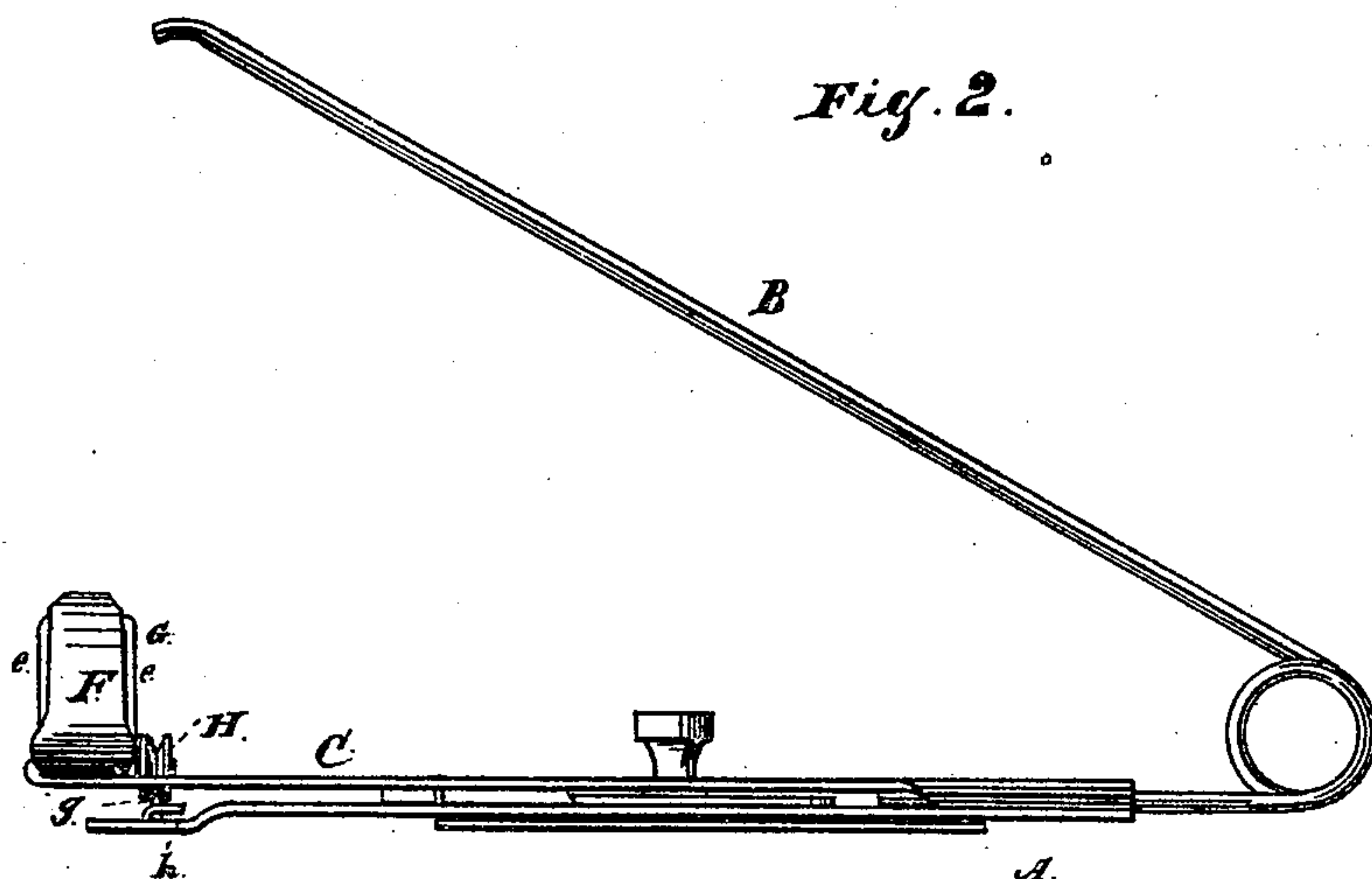


Fig. 3.

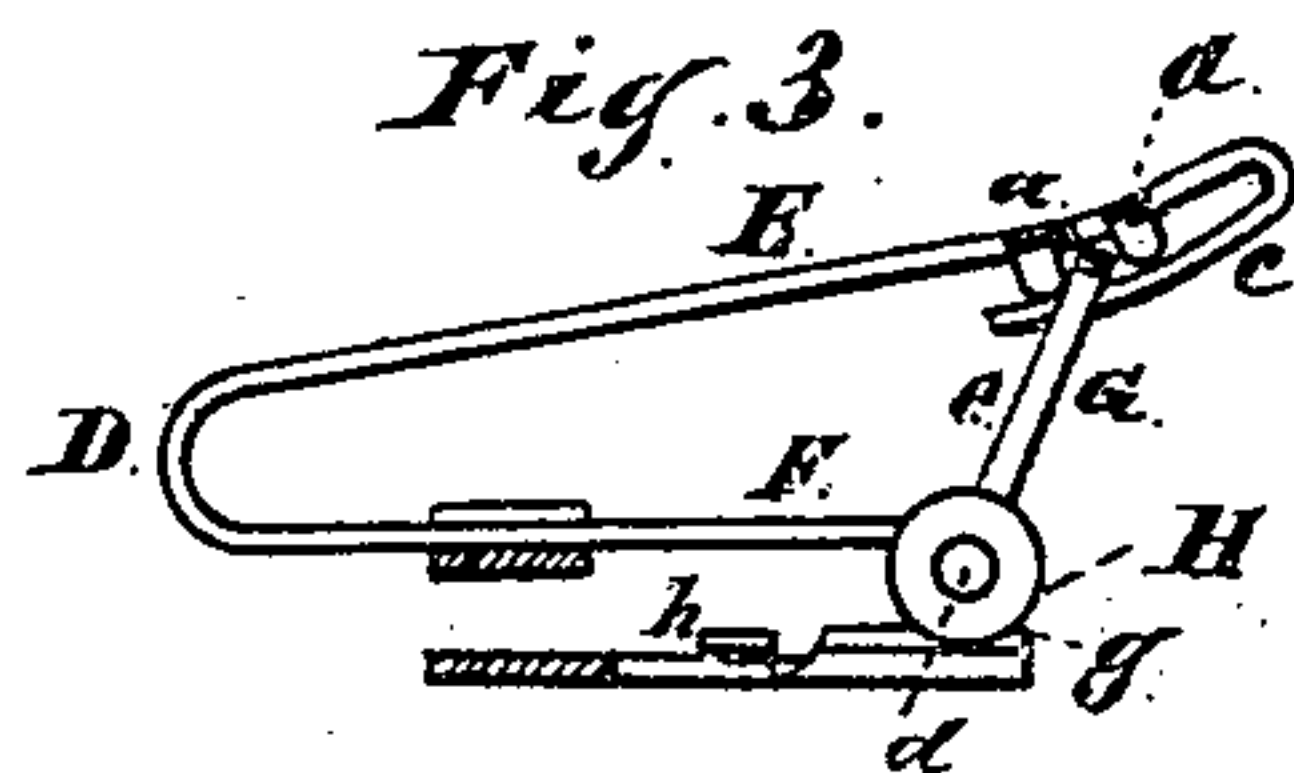


Fig. 4.

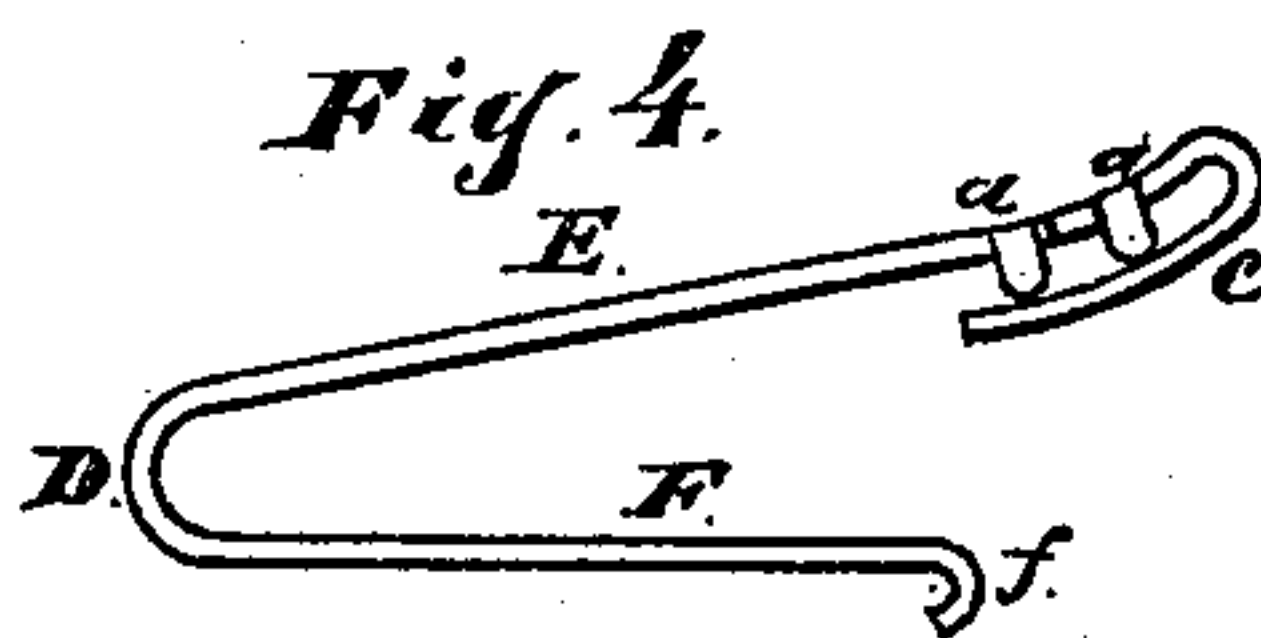


Fig. 5.

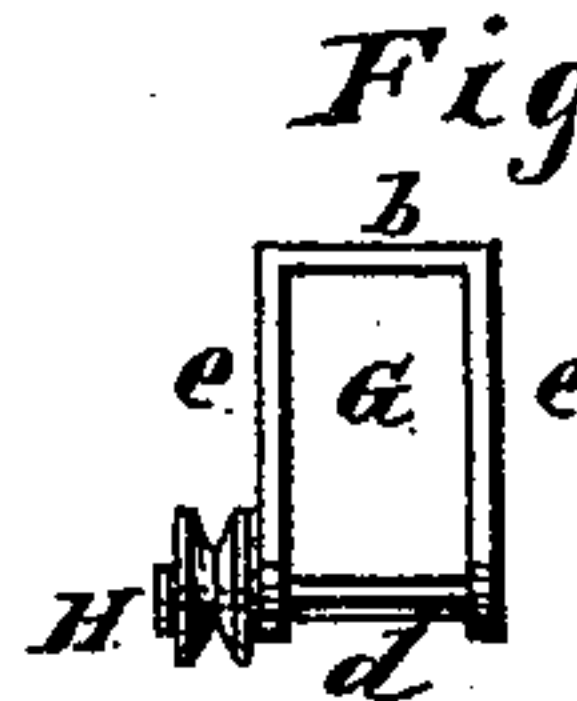
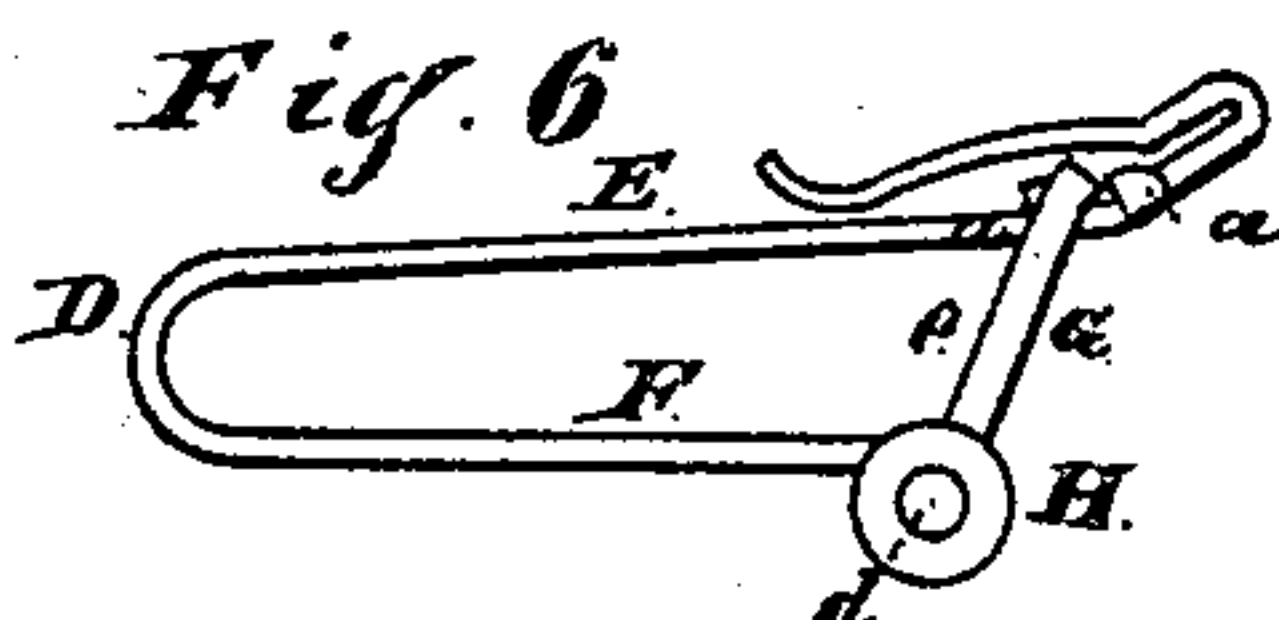


Fig. 6.



Witnesses:

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TUCK-MARKER FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 250,657, dated December 13, 1881.

Application filed August 16, 1880. (Model.)

To all whom it may concern:

Be it known that I, HARRY C. GOODRICH, residing at Worcester, in the county of Worcester and State of Massachusetts, and a citizen of the United States, have invented new and useful Improvements in Tuck-Markers for Sewing-Machines, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view. Fig. 2 is a side elevation. Fig. 3 is a section at line *x* of Fig. 1. Figs. 4 and 5 are details. Fig. 6 shows a slight modification in construction.

The object of my invention is to provide a tuck-marker with improved devices for creasing cloth, which I accomplish by means of a link or other piece of suitable form, the lower end of which carries a grooved roller, while its upper end is pivoted to or otherwise loosely connected with the free end of an arm or spring, the roller being held in contact with the cloth, above a creasing-blade in operation, by another arm or spring. The link and other parts are so constructed that the roller, with the lower end of the link, has a horizontal movement when the spring or arm to which the link is connected is pressed down, as hereinafter fully set forth.

In the drawings, A represents the main plate; B, an operating spring-arm.

C is a spring secured at one end to the plate A.

D is a U-shaped spring, which is secured to the free end of the spring C. This spring D has two arms, E and F, each of which is in fact a separate spring.

G is a link, the upper end of which is loosely connected with the arm E. As shown, this is done by means of nibs *a*, of which there are two on each side of the arm E, between which the upper end or cross-bar, *b*, of the link is placed, while an extension, *c*, at the end of the spring-arm E, is bent under this part *b* of the link, holding the link in place between the nibs *a*.

H is a grooved roller secured upon one end of a shaft, *d*, which shaft is supported in bearings in the lower ends of the two arms *e* of the link. The free end of the arm or spring F rests upon the shaft *d*. There is a hook, *f*, upon the free end of the arm F, which prevents the lower end of the link from passing beyond such end

of this spring. The link is in an inclined position.

g is a creasing-blade upon an extension of the plate A.

h is a lip under which the last-made tuck passes.

The parts A, B, C, *g*, and *h* are constructed in the usual manner.

The operation is as follows: The cloth is inserted, as usual, between the spur or blade *g* and the roller H, the arm B being arranged to be operated by the needle-bar of a sewing-machine. The action of the arm B upon the spring-arm E will depress it, and the wheel H will be pressed down upon the cloth and will roll back over the cloth on the blade *g* as the arms E and F approach each other. This blade forms a guide-piece for the creasing device on the link supported by the vibratory plate E, and said blade or guide-piece is supported by a flexible extension of the plate A. As the arm E returns to its former position the wheel will also be returned back to the position shown in Fig. 3. Thus the wheel will have a rolling movement backward and forward over the cloth. The construction is such that the distance traveled by the wheel is equal to the length of several ordinary stitches, so that the wheel will roll over the cloth several times, making a very well defined crease.

The two arms E F must be so constructed that they will in use alternately approach and recede from each other in order to give the roller the desired movement over the cloth; and the most convenient way to do this is by the use of the U-shaped spring D, having the two arms E F. Instead of this U-shaped spring two separate arms might be used, both secured to the spring C; but this variation in construction is not desirable. In Fig. 6 the nibs *a* are turned up instead of down, and the extension *c* of the spring is correspondingly changed. Other suitable means could be used for connecting the link with the spring, but I know of none better than those shown.

It is not essential that the link G be constructed as shown. Indeed this piece need not be a link; any suitable piece hinged at one end to the spring E and carrying a grooved roller

at the other end and operating substantially as described will answer the purpose.

Instead of the roller H a fixed wheel or a curved notch might be used; but I prefer the rotating wheel.

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

1. The plate E, connected with the forward end of a plate, C, and adapted to be struck by the operating-arm in its descent, in combination with the link G, provided with a creasing device and loosely suspended from the plate E, the whole being arranged to operate substantially in the manner described.

2. The U-shaped spring D, connected at one end with the forward end of a plate, C, and provided at its other end with a depending laterally-swinging link, G, carrying a creasing device at its lower end, said spring D being adapted to be struck by the operating-arm in its descent, substantially as and for the purpose described.

3. In a tuck-creaser, the combination of the main plate A, spring C, U-spring D, link or

piece G, carrying a creasing device at its lower end, and a creasing-edge, substantially as and for the purpose described.

4. In a tuck-marking attachment for sewing-machines, the combination of a vibratory plate, a creasing device, a link connected with said arm at one end, and carrying at the other end the said creasing device, and a guide-piece for the latter, substantially as described.

5. The combination, with a creasing-edge, a vibratory plate, and a creasing device, of a link connecting said device with said plate, and inclined inward at the bottom, so that the creasing device works under said plate lengthwise of said creasing-edge, substantially as described.

6. The combination, with a vibratory plate, creasing device, and connecting-link, of a guide-piece and flexible support therefor, substantially as described.

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Witnesses:

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