2 Sheets--Sheet 1.

H. C. GOODRICH.

Tuck-Marker.

No. 162,225. Patented April 20, 1875.

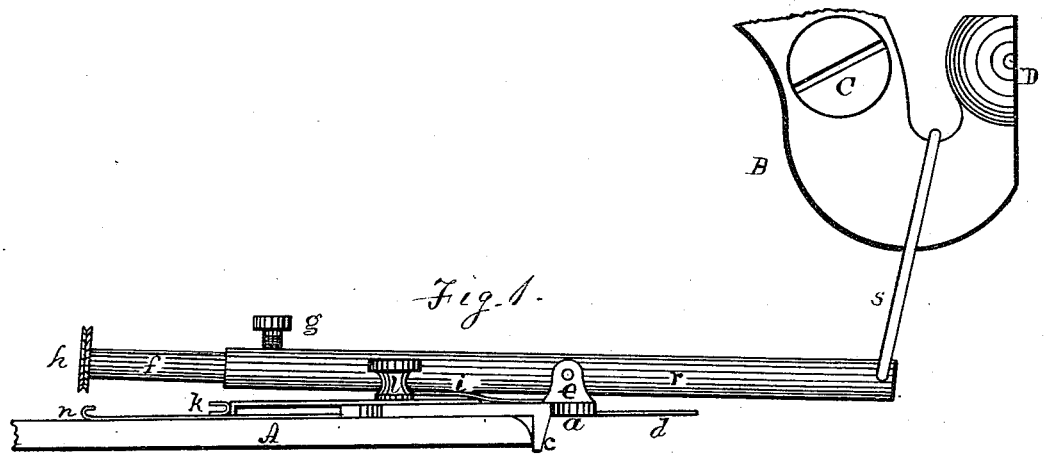


Fig. 1.

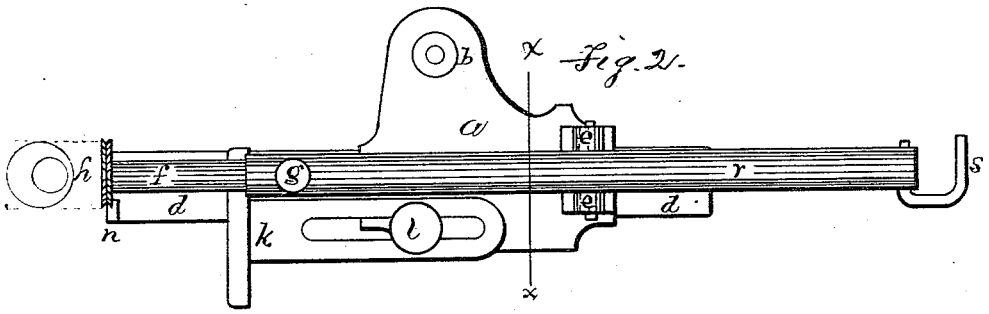


Fig. 2.

Fig. 3.

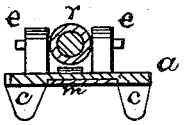
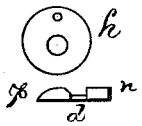


Fig. 4.



Witnesses
C. A. West
C. W. Bond

Harry C. Goodrich
Inventor

THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

2 Sheets--Sheet 2.

H. C. GOODRICH.

Tuck-Marker.

No. 162,225. Patented April 20, 1875.

Fig 5

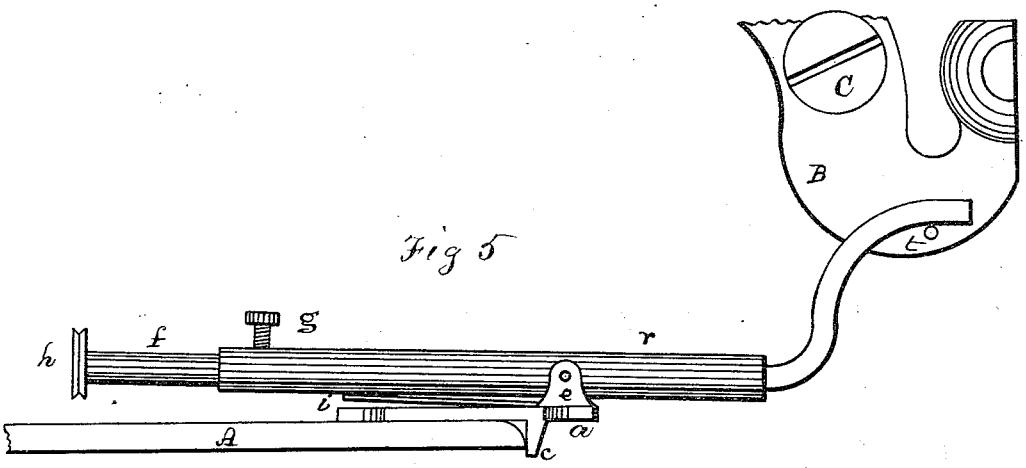
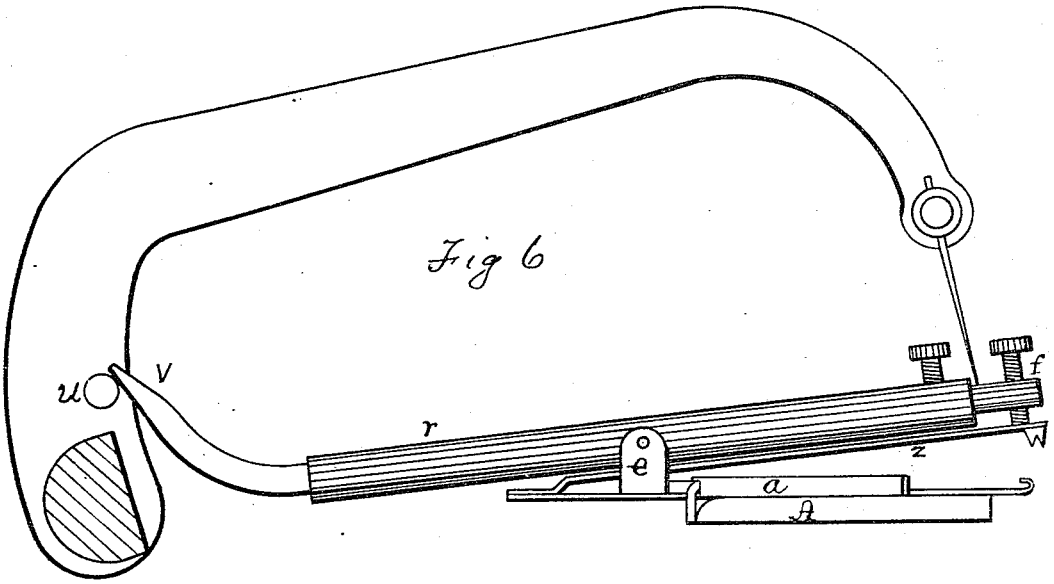


Fig 6



Witnesses
E. A. West
C. V. Bond

Harry C. Goodrich
Inventor.

UNITED STATES PATENT OFFICE.

HARRY C. GOODRICH, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN TUCK-MARKERS.

Specification forming part of Letters Patent No. **162,225**, dated April 20, 1875; application filed December 8, 1874.

CASE A.

To all whom it may concern:

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

Figure 1 is a side elevation, showing my device attached to a Willcox and Gibbs sewing-machine, such parts only of the machine being represented as are necessary. Fig. 2 is a top view of the device detached from the machine; Fig. 3, a section on line *x* of Fig. 2; Fig. 4, an end view of the parts shown. The drawings are full size. Figs. 5 and 6, sheet 2, represent variations in form.

In the drawings, A represents the cloth-plate of a sewing-machine; B the rocking-arm which operates the needle-bar, and which is pivoted at C, and operated or driven at D. *a* is the main plate of my device. It is secured to the cloth-plate by a set-screw, *b*. It may have lugs or projections *c* at the outer end, to come in contact with the edge of the plate A, to aid in keeping it, *a*, in place. *m* is a longitudinal recess in the under side of *a* to receive the sliding plate *d*, but it is not as deep as the thickness of *d*, so that when A is secured to A *d* will be held fast, but it can be adjusted by first loosening the screw *b*. The end of this plate *d* near the needle is provided with a lip, *n*, under which the last completed tuck passes, and a blade, *p*, which serves as one of the markers. *r* is a rod or lever, the outer end of which is connected to the end of the needle-arm by means of a rod or hook, *s*. This lever *r* is pivoted to the ears or bearings *e* upon the main plate so as to have an oscillating movement. The inner end of *r* is hollow, and receives the adjustable rod *f*, which is held in position by the set-screws *g*. *h* is a grooved disk, permanently secured eccentrically to the rod *f*. This disk is the upper marker, and by turning the rod *f* the pressure upon the cloth can be adjusted. Instead of the disk a many-sided block may be used, the edge of each side being grooved, or a marker vertically adjustable may be secured to the end of *f* by means of a set-screw. *i* is a spring under *r*. Its office is to carry the upper marker *h* away from the cloth at the proper time. This could be done by the positive action of *s*, if secured to B in a suitable manner to do that work. *k* is a gage secured to *a* by a screw, *l*.

In use, the plate *d*, which carries the under marker, is to be located with reference to the desired width of tuck, and secured in position by means of the main plate and set-screw *b*. The upper marker is then brought to the proper position to engage with the under marker, and is secured in place by means of the set-screw *g*. Then, when the needle descends, the outer end of the rod *r* will be raised by means of the outer end of the needle-arm B, and connecting-hook *s*, which will force the marker *h* down upon the cloth, and when the needle rises the marker *h* will also rise, permitting the cloth to pass freely.

It is obvious that the spring *i* might be extended and provided with a notch to engage with the blade *p*, and so arranged as to be operated by the disk *h*, in which case the disk need not be grooved on its edge, and in which case it will be desirable to connect the outer end of *i* permanently to the outer end of *d*, so that the upper and lower markers will be adjustable together.

If the arm B were extended down at its outer end, so as to come on a line with the rod or bar *r*, such rod *r* could be connected directly with the arm B, instead of through the link or rod *s*. Such connection can also be directly made with the arm constructed as shown in Fig. 1, by turning up the end of *r* and engaging it directly with the arm, which can be done by inserting a pin, *t*, on the arm B, over which to pass the end of *r*, as shown in Fig. 5, sheet 2. By slotting the end of the rod, and so arranging the parts that the pin will be in the slot, the inner end of *r* will be thrown up by the action of B, instead of by the spring *i*. The end *v* of the rod *r* can, in some machines, be made to engage with the needle-arm, forward of its pivotal point, instead of back of such point. This will be de-

sirable in machines of the Wheeler and Wilson class. The manner of doing this is represented in Fig. 6, in which *u* is a pin in the needle-arm, and the up-turned end *v* of *r* engages with this pin in such manner that as the needle descends *v* will be forced up and the opposite end will be carried down. In this figure the upper marker is carried by the spring *z*, and the pressure on the cloth can be adjusted by the screw in the end of the movable part *f*. There are machines in which the outer end of the needle-arm extends below the line of the cloth-plate, and the rod *r* can, in such machines, be connected with the lower end of the needle-arm extended as stated.

In this device, and in all the variations described, the rod or bar *r* is pivoted as near its center as convenient, to the main plate, and the markers are adjustable without regard to the main plate and rod *r*, the position of which remains unchanged.

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

1. The pivoted bar *r*, in combination with the plate *a*, and the rear link or rod connected directly with the bar and forming an extension thereof, substantially as and for the purpose specified.

2. The combination, in a sewing-machine tuck-marker, operated by a non-flexible bar, if the separately-adjustable grooved disk or plate *h*, and the blade *p* for adjusting the length of the stroke between the two, substantially as described.

HARRY C. GOODRICH.

Witnesses:
E. A. WEST,
O. W. BOND.