

(No Model.)

2 Sheets—Sheet 1.

R. D. TUCKER.

WELT GUIDE FOR SEWING MACHINES.

No. 387,963.

Patented Aug. 14, 1888.

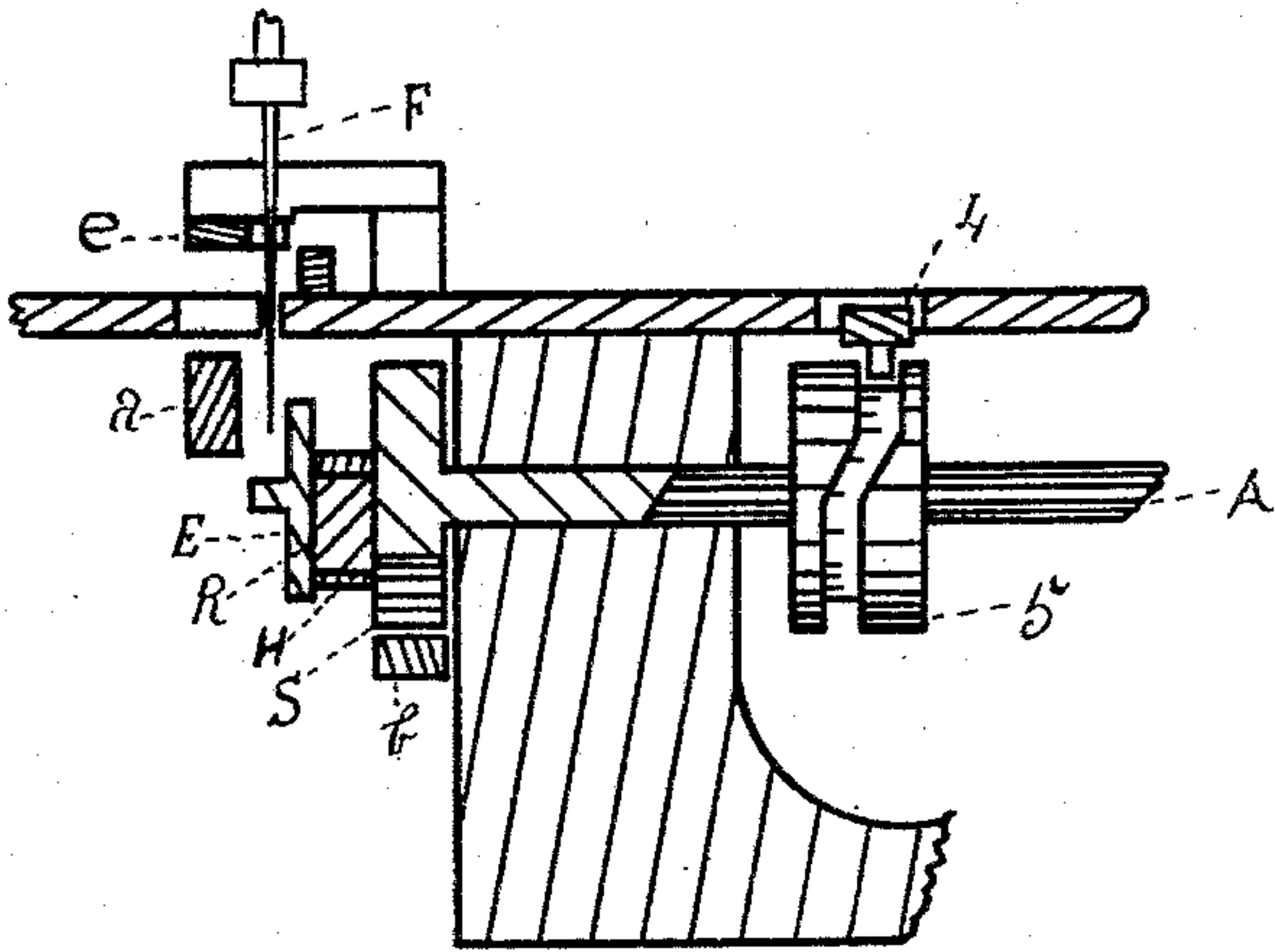


Fig: 2.

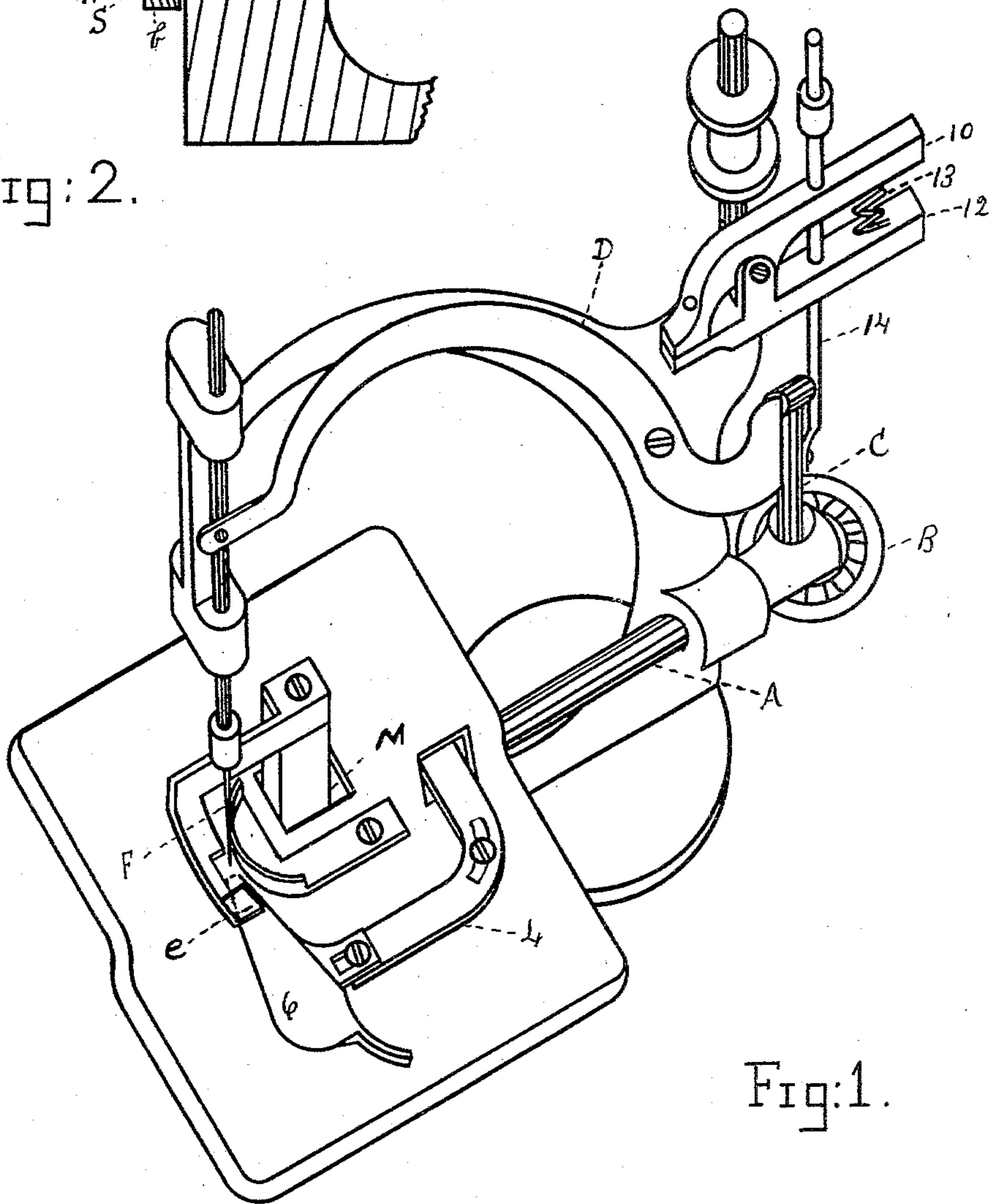


Fig: 1.

Witnesses.
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Inventor,
Rollin D. Tucker.
By O. B. Smith, Atty.

(No Model.)

2 Sheets—Sheet 2.

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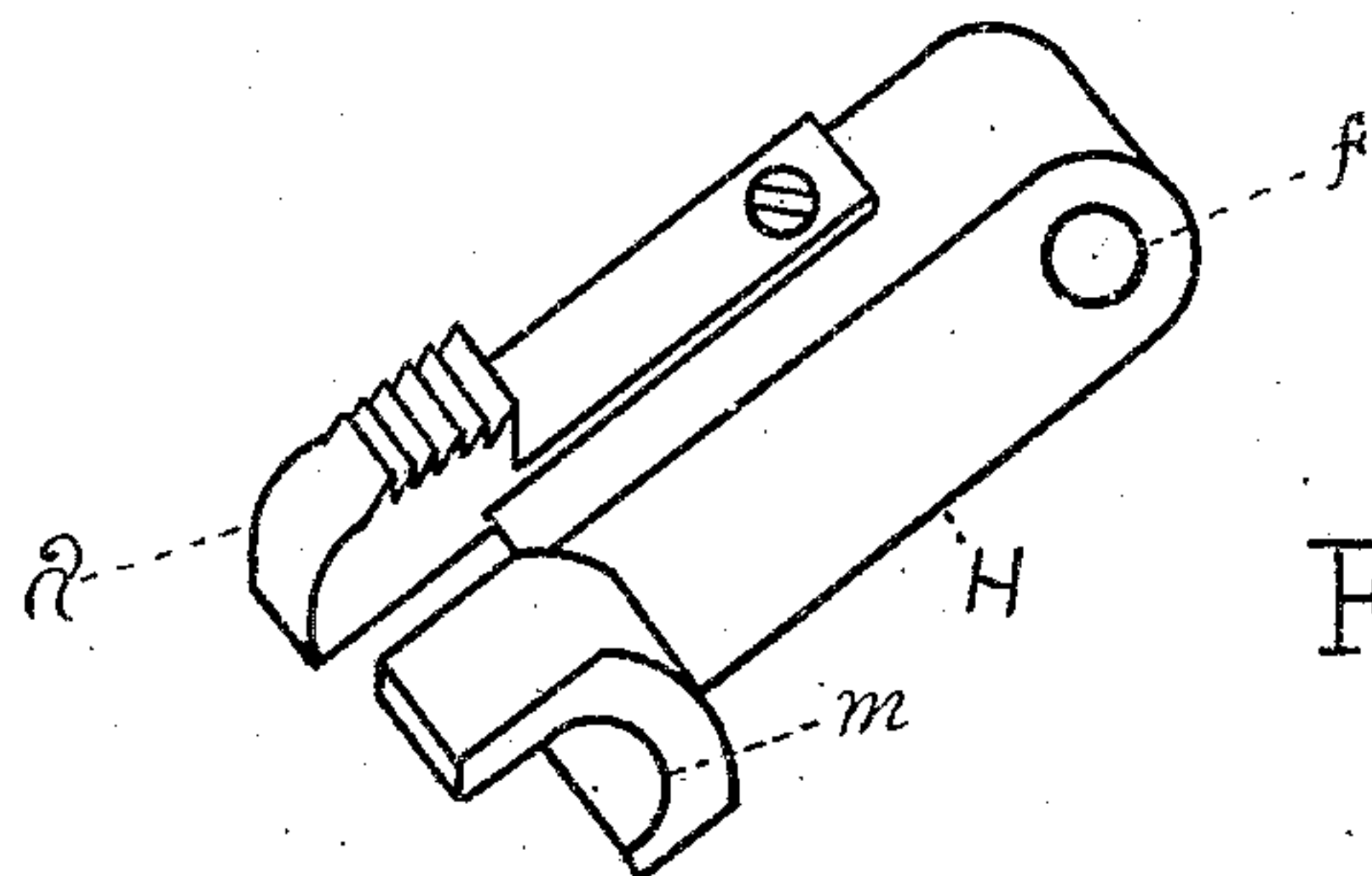


Fig: 6.

Fig: 5.

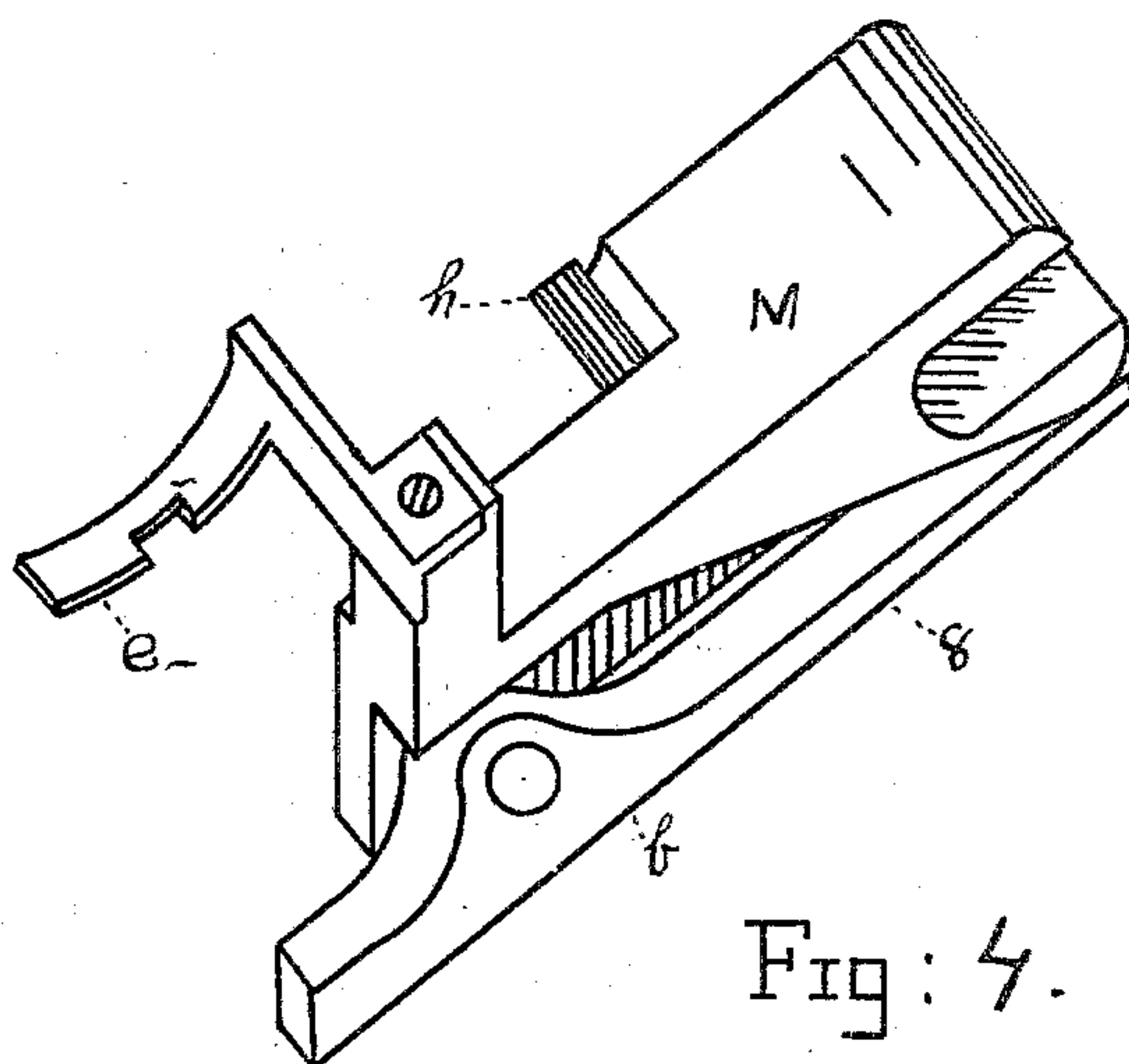
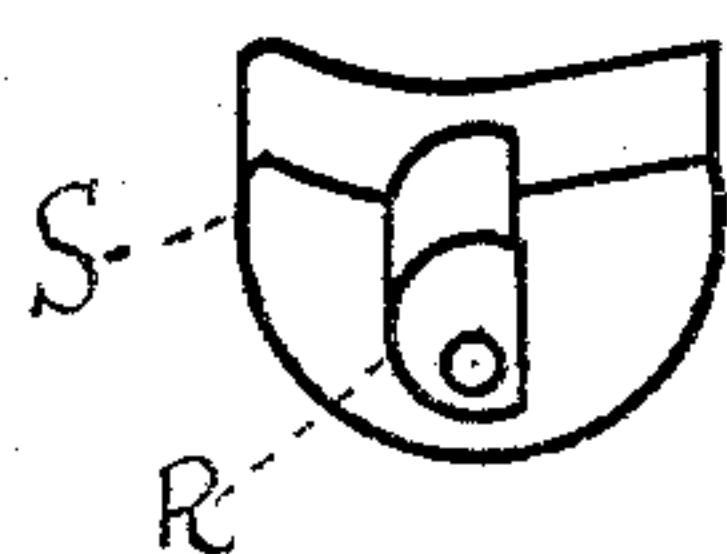


Fig: 4.

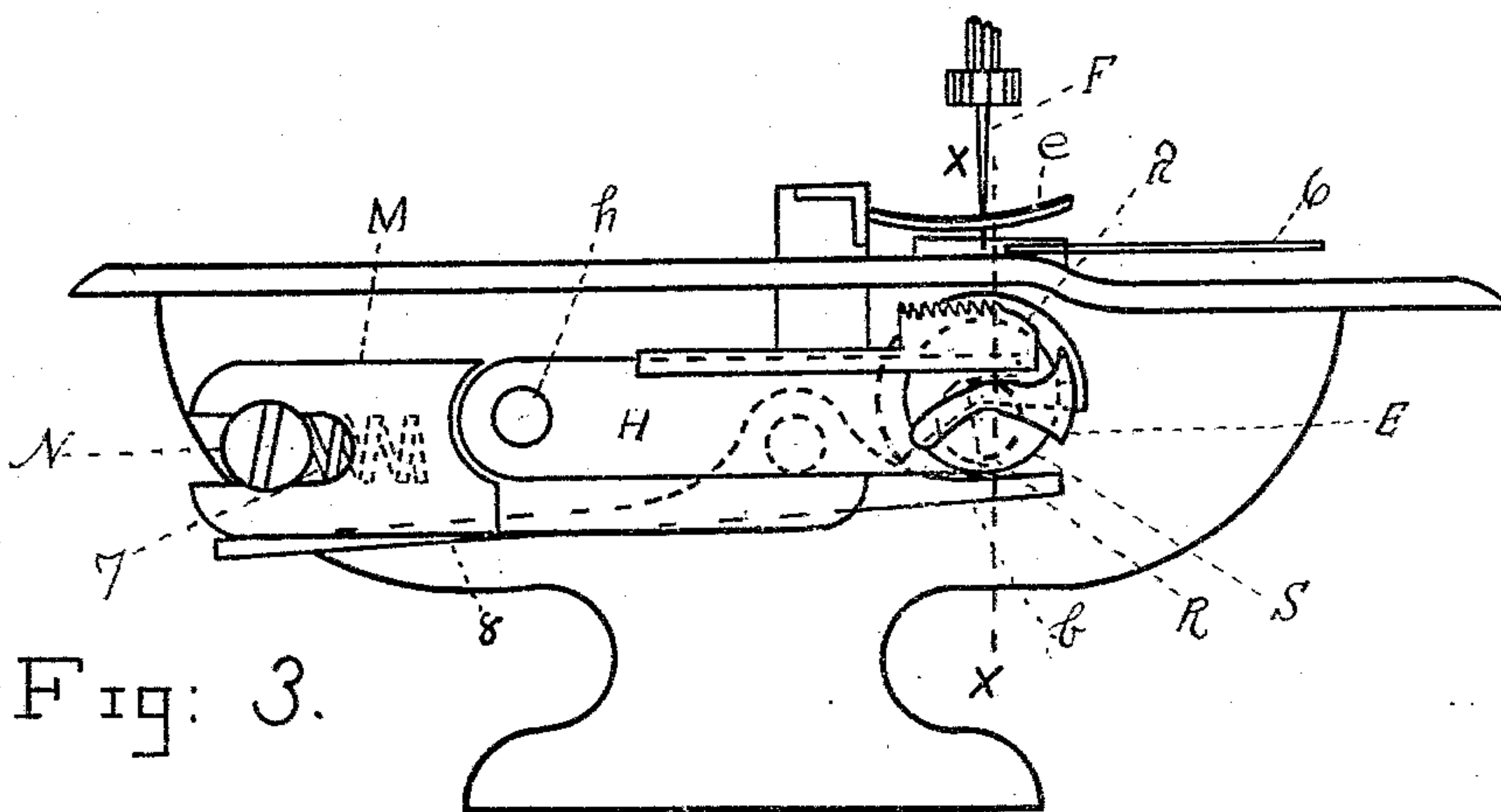


Fig: 3.

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UNITED STATES PATENT OFFICE.

ROLLIN D. TUCKER, OF LYNN, MASSACHUSETTS.

WELT-GUIDE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 387,963, dated August 14, 1888.

Application filed June 24, 1885. Serial No. 169,631. (No model.)

To all whom it may concern:

Be it known that I, ROLLIN D. TUCKER, of Lynn, in the county of Essex and Commonwealth of Massachusetts, have invented certain Improvements in Welt-Guides, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to an improvement in welt-guides; and the nature thereof is fully described hereinafter, and specifically pointed out in the claim.

Referring to the drawings, Figure 1 is an isometrical projection of a machine constructed in accordance with and embodying my invention. Fig. 2 is a vertical longitudinal section of the feed mechanism, made on line *x x*. Fig. 3 is an end elevation of the machine. Figs. 4, 5, 6 are views of detached parts of the mechanism, to be referred to hereinafter more specifically.

The shaft A is provided with a pulley, B, to which power may be applied to operate the machine. Connected to the shaft A, as shown, is a crank-arm, C, that operates to vibrate the needle-arm D. Said shaft A is provided on its end with the customary looper E, that operates, in connection with the needle, to form the usual chain-stitch, and these parts are constructed and arranged in the usual and customary manner of constructing the so-called "Willcox & Gibbs Machine."

In some classes of sewing it is common to insert a welt-strip between the two pieces of material united together into a seam; and to facilitate the introduction of this welt-strip constitutes the main object of this invention. Heretofore it has been customary to employ for this purpose a fixed welt-guide; but objection arises to the use of such a guide, as it must necessarily be located back from the needle-hole, thus giving space between the end of the guide and the needle where it is difficult to keep the welt in place. This difficulty increases as the sewing is done in curved lines or angles.

In Letters Patent of the United States granted to me on the 23d of June, 1885, No. 320,898, I have described a mechanism designed to overcome this difficulty. In that

mechanism the welt-guide was attached to one of the feed-clamps, and was moved therewith up to and back from the needle-hole, and for some classes—perhaps for most classes—of work such an arrangement of the welt-guide is quite sufficient; but in some cases it is advisable, in order to stop puckering, to have the welt-strip pay out a little faster than the material is moved, as when seaming small curves or sharp angles, and to this end it is necessary to have the welt-guide moved independently of the feed-clamps. In this invention, therefore, which is designed in part to obviate this difficulty, I mount the welt-guide 6 upon one end of elbow-lever or arm 4, which, being pivoted or journaled, as shown, on the screw, connects by its opposite end with a cam, 5, mounted on the shaft A. (See Fig. 2.) The revolving of this cam vibrates the arm 4, thereby moving the welt-guide up to and back from the needle-hole.

It will be observed that the arm 4 is rendered adjustable on its journal-pin, and the amount of movement given to the guide may be modified by simply changing the position of the arm on its journal. It may also be modified by changing the cam 5. It may of course be moved simultaneously with the feed-clamps, or otherwise, when preferred. It may be given the same or more or less movement than the feed-clamps. By reason of these adjustments and modifications the machine may be adapted to do all kinds of work with ease and expedition. An ordinary binder or braid-guide placed upon the arm 4, instead of the welt-guide, adapts the machine to the work of binding, and will be found to produce more satisfactory results than when the ordinary fixed binder or braid-guide is used. To further assist in keeping the welt-strip between the two pieces of material, I have devised a feed mechanism composed of two clamps arranged to clamp the opposite sides of the material and carry the same forward; and while I partly show this mechanism in the present application, I make no claim for it herein, as it is the subject of an application filed on the 23d of September, 1885, Serial No. 177,930.

Having thus described my invention, I claim—

5 In a sewing-machine, a welt or braid guide arranged to permit movement up to and back from the needle-hole, and a pivoted lever adapted to impart said movements to the guide, said lever being held adjustably upon its pivot-pin, whereby it is adapted to

regulate the amount of movement of the guide relatively to the movement of the feed-clamps, 10 substantially as described.

ROLLIN D. TUCKER.

Witnesses:

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C. C. TUTTLE.