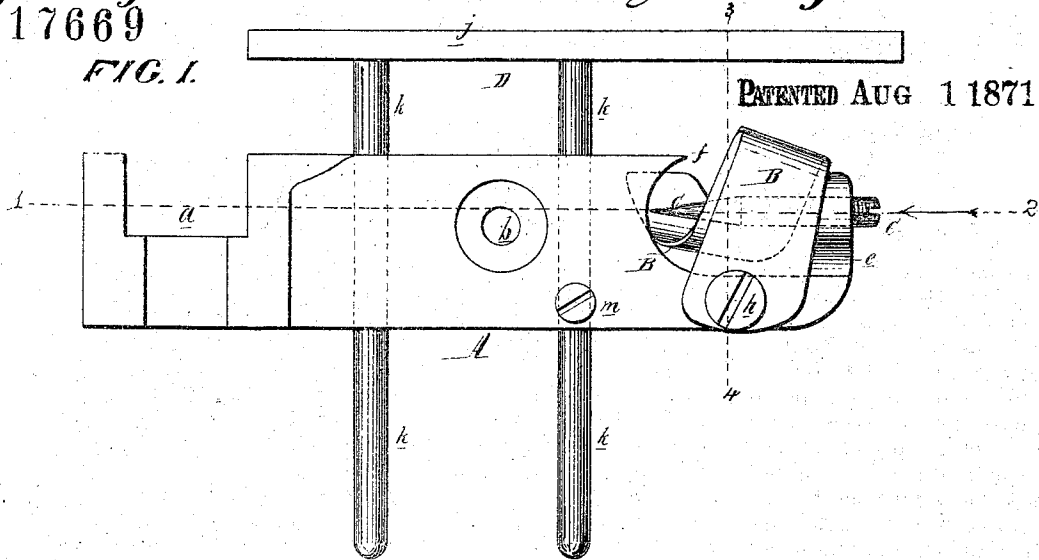


Thos. K. Ober,

Impr. Adjustable Hemmer & Feller for Sewing Machines.

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FIG. 1.



PATENTED AUG 1 1871

FIG. 2.

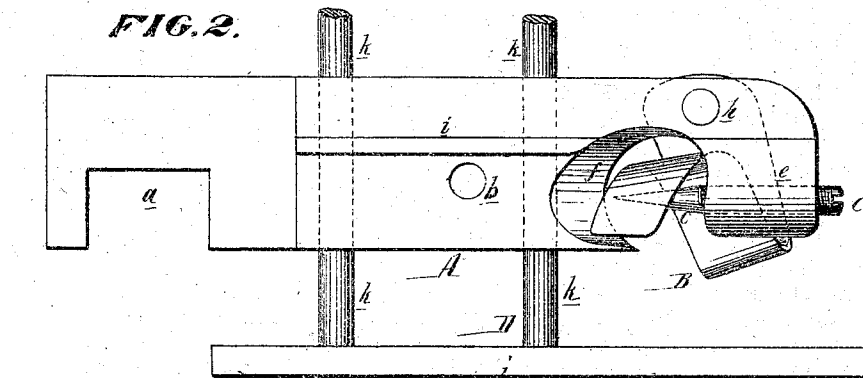


FIG. 3.

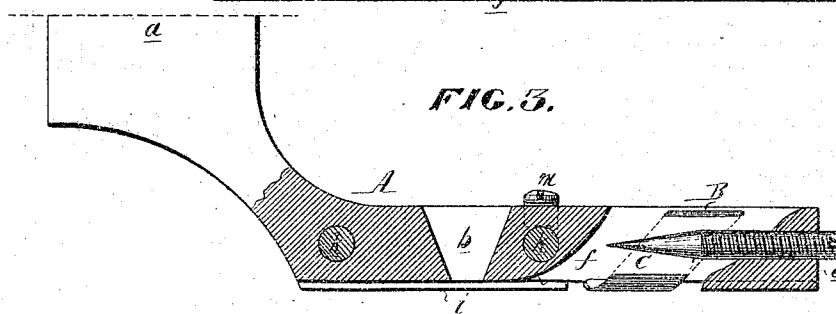


FIG. 4.

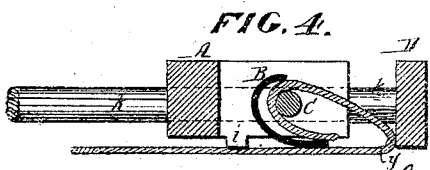
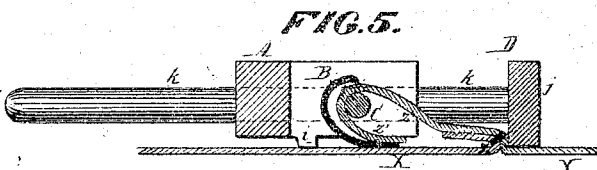


FIG. 5.



WITNESSES

Harry Smith
John Parker

Thomas K. Ober
by his Attys
Hewson & Son

UNITED STATES PATENT OFFICE.

THOMAS K. OBER, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN HEMMERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 117,669, dated August 1, 1871.

To all whom it may concern:

Be it known that I, THOMAS K. OBER, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented an Improved Adjustable Hemmer and Feller for Sewing-Machines, of which the following is a specification:

My invention consists of an adjustable hemming-and-felling device for sewing-machines, too fully explained hereafter to need preliminary description, the device being universally adjustable and adapted to any thickness of fabric or width of seam, and being of simple and economical construction.

Figure 1 is a plan view of my improved adjustable hemming-and-felling device; Fig. 2 an inverted plan view of the same; Fig. 3, a sectional view on the line 1 2, Fig. 1; Fig. 4, a transverse section on the line 3 4, Fig. 1, showing the operation of the device in hemming; and Fig. 5, the same as Fig. 4, showing the operation of felling. All the above views are drawn to an enlarged scale.

The frame of the device consists of a plate, A, furnished at one end with a projection, *a*, for convenience of attachment to the presser-arm of a sewing-machine, by which it is held down upon the work-plate, as usual. At or about the center of the plate A is the tapering needle-hole *b*, and at the outer end of the said plate is a projection, *e*, formed by an inclined and rounded recess, *f*, which extends entirely through the plate, as best observed in Fig. 3. A bent scroll-plate, B, of thin metal, is screwed to the top of the plate A by a single set-screw, *h*, and extends down into the recess *f* which is formed for its reception. This scroll-plate laps around a pointed or tapering tongue, C, which also extends into the recess *f*, and which consists of a threaded pin or set-screw adapted to a threaded opening in the projection *e* at the outer end of the plate A. The tongue, thus arranged, is capable of longitudinal adjustment from or toward the needle-hole, and the scroll-plate B can also be adjusted in respect to the needle-hole, or in respect to the tongue C or to the edge of the plate, the width of the space between the tongue and the said scroll-plate being regulated in accordance with the thickness of the fabric which is to be passed between the two. On the under side of the plate A, adjacent to the needle-hole, is a fixed gauge, *i*, for guiding the edge of the fabric, as hereafter described, and at one side of the plate A, parallel with and opposite to the gauge *i*, there is a long adjustable

gauge, D, consisting of a bar, *j*, attached to two long parallel rods, *k k*, which slide through openings formed for their reception in the plate A, these sliding rods enabling the bar or gauge *j* to be brought close up to or be moved outward from the plate, according to the width of the seam which is to be sewed, and the said rods can be secured after adjustment by means of a set-screw, *m*, on the plate A.

I will now proceed to describe the operation of the device in forming a single seam, or hemming, reference being had to Figs. 1, 2, and 4. The fabric is fed in the direction of the arrow, Fig. 1, the operator guiding the work, as usual. The extreme edge of the fabric is turned in or folded by passing it through the scroll-plate B and around the tongue C, as shown in Fig. 4. The main fold *y*, Fig. 4, is made against the gauge D, which thus regulates the width of the seam. After passing the scroll-plate, and while being sewed, the folded fabric is guided by the gauges *i* and C. The device, being universally adjustable, as before described, can be used for any thickness of fabric and for forming seams of any width.

The operation of the device in felling is shown plainly in Fig. 5, and is as follows: The two pieces of fabric, X and Y, are first sewed together at the point Z, as usual, and are then turned so as to conceal the raw edge of the piece X, the projecting edge Z of the other piece Y being then turned in by the scroll-plate and tongue and sewed down to the piece X, as before described, and as shown in Fig. 5, the first seam Z being guided by the gauge D, as shown in the latter figure.

I claim—

1. The plate *j* and its rods *k k*, in combination with the plate A, its scroll and pin, and its set-screw *m*, all constructed and arranged substantially as set forth.

2. The combination, with the recessed plate A, of a scroll-plate, B, extending into a recess in the plate A and adjustable therein, as set forth.

3. The adjustable tongue C, made in the form of a set-screw, adapted to a threaded opening in the plate A and arranged in respect to the scroll-plate B, substantially as herein described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

Witnesses:

THOMAS K. OBER.

WM. A. STEEL,
HARRY SMITH.