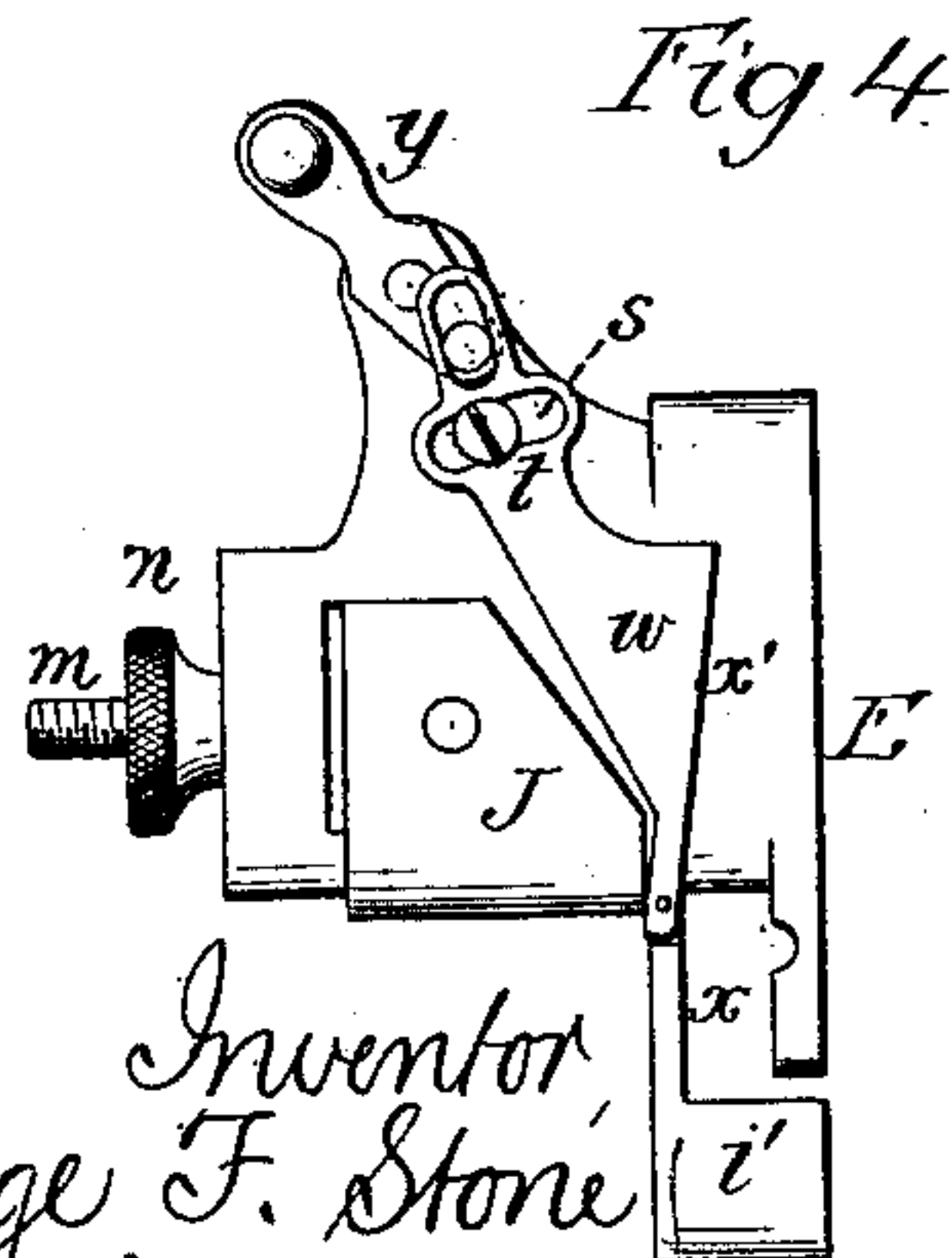
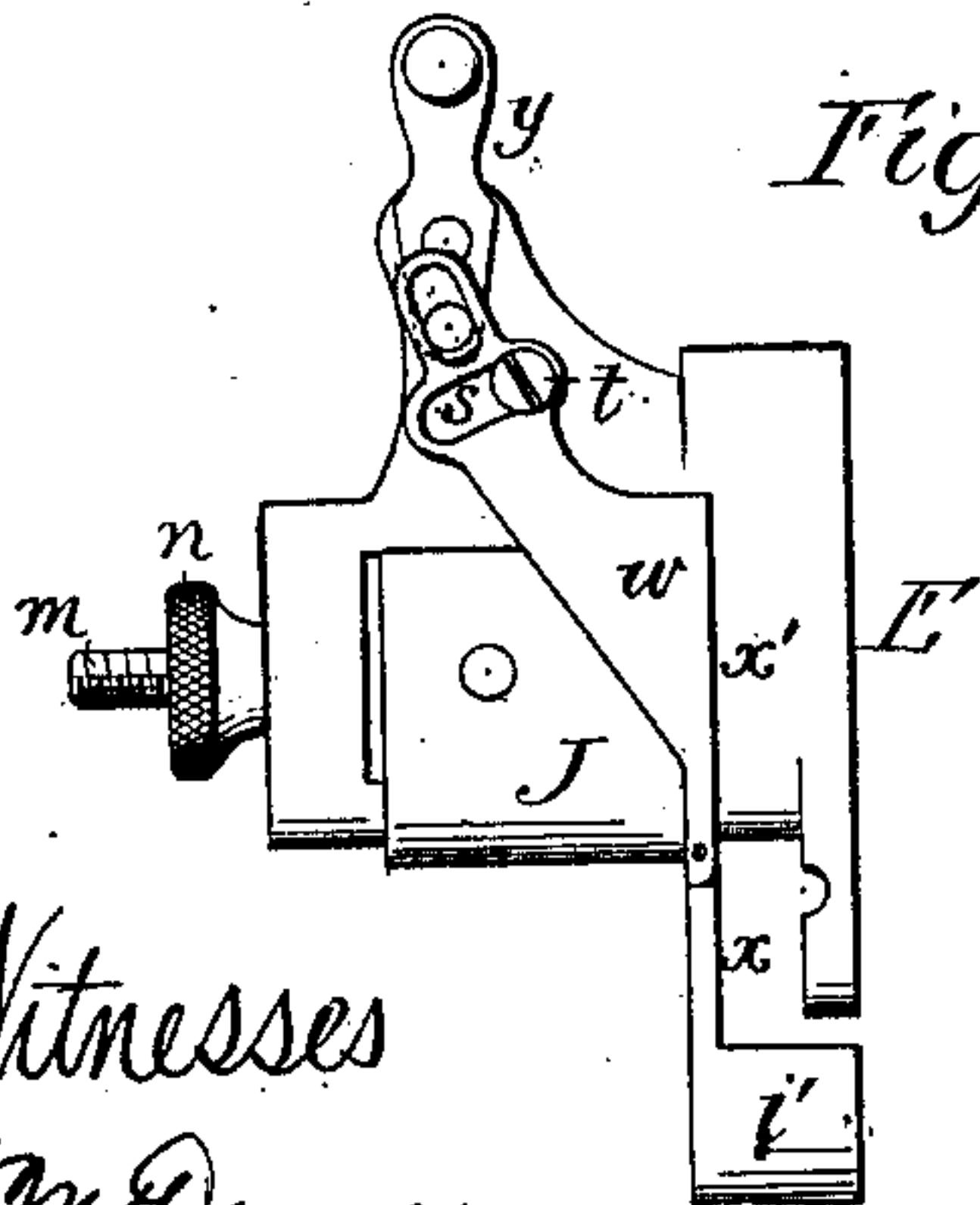
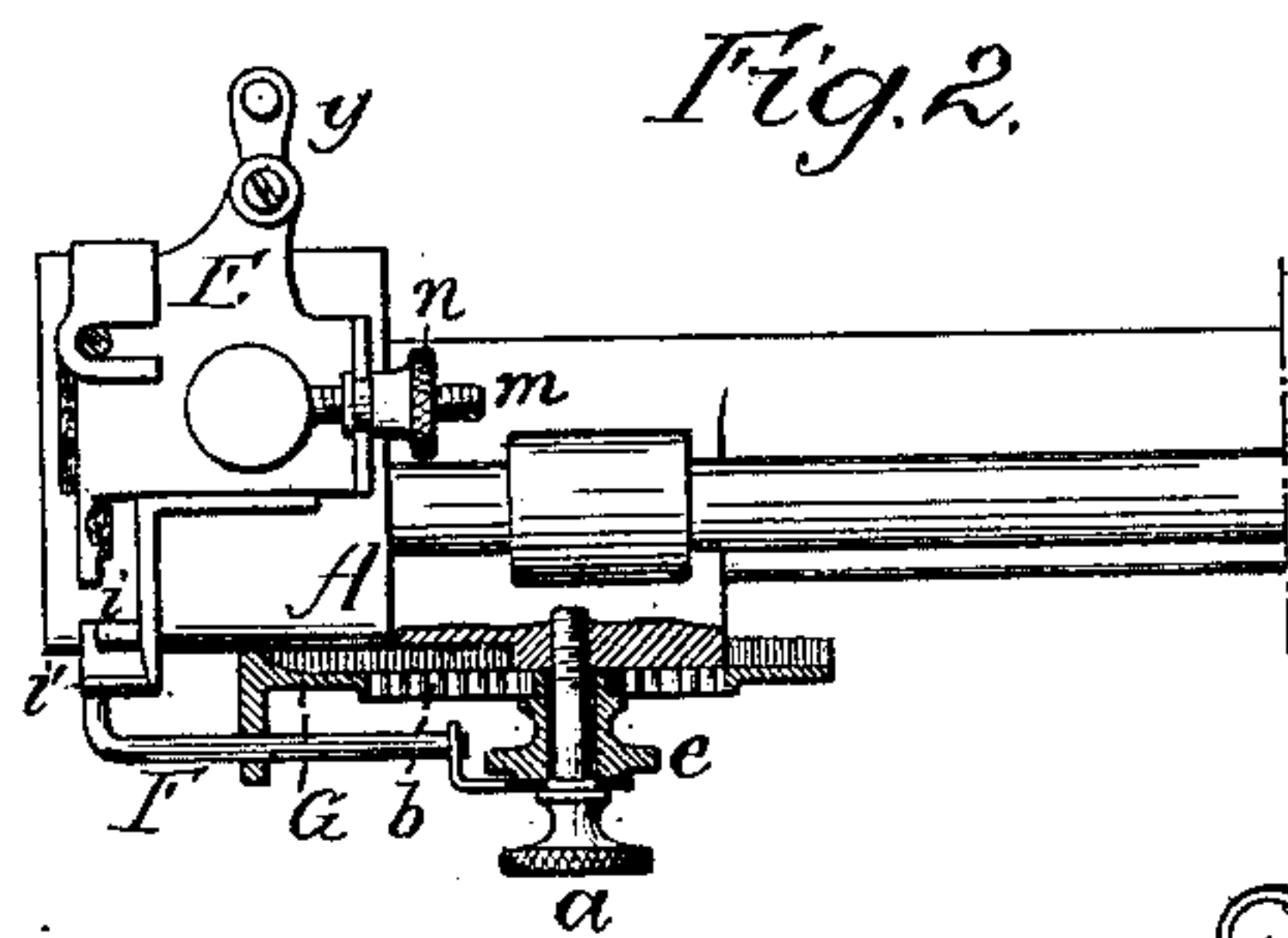
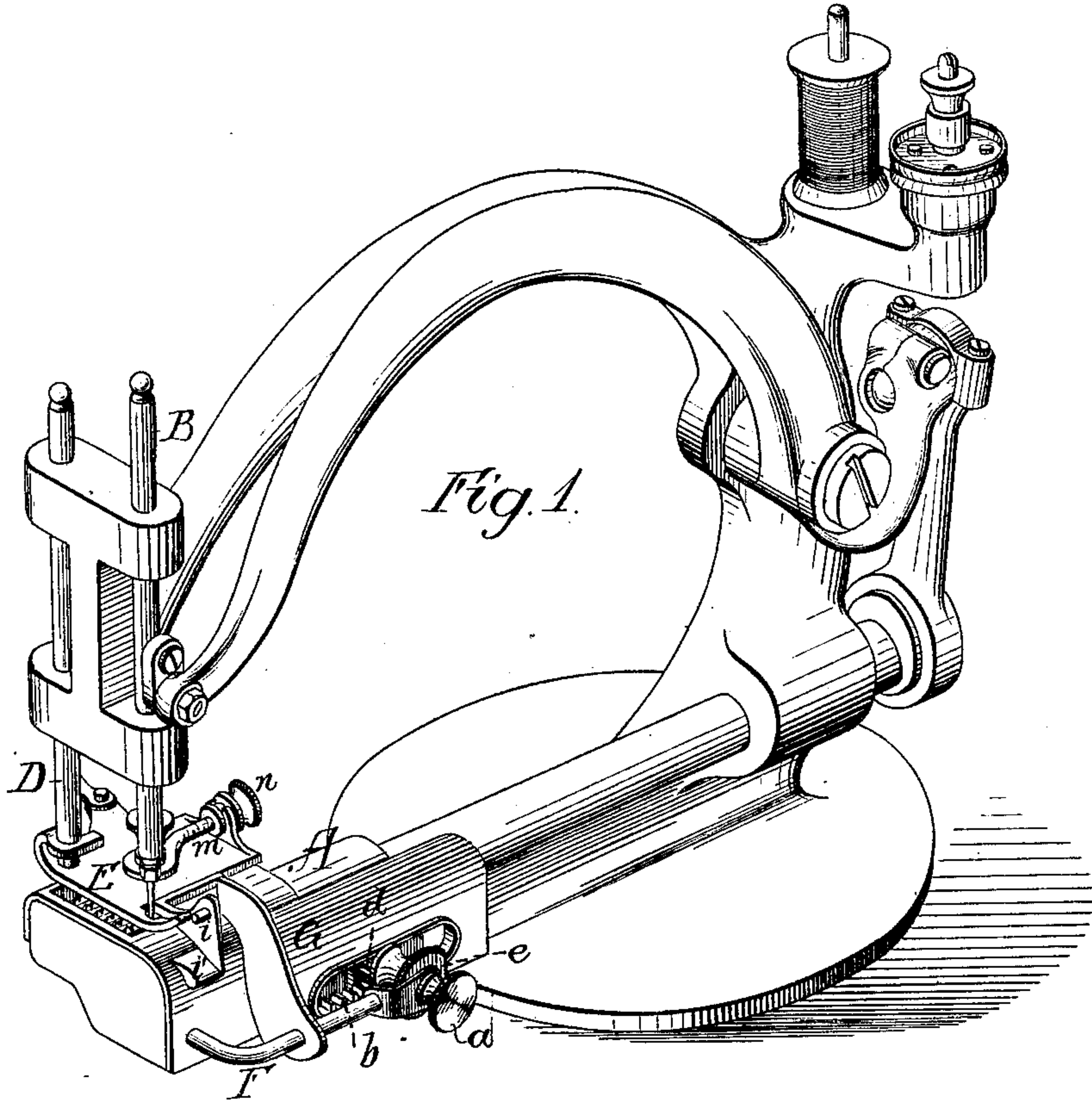


G. F. STONE.

Braid Guide for Straw Braid Sewing Machines.

No. 231,370.

Patented Aug. 17, 1880.



Witnesses  
J. M. Dummer  
Harry Smith

Inventor  
George F. Stone  
by his Attorneys  
Howson and Son



# UNITED STATES PATENT OFFICE.

GEORGE F. STONE, OF MEDFIELD, MASSACHUSETTS, ASSIGNOR TO HENRY FRIEDBERGER, OF PHILADELPHIA, PENNSYLVANIA.

## BRAID-GUIDE FOR STRAW-BRAID SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 231,370, dated August 17, 1880.

Application filed January 14, 1880.

*To all whom it may concern:*

Be it known that I, GEORGE F. STONE, of Medfield, Norfolk county, Massachusetts, have invented new and useful Improvements in Braid-Guides for Straw-Braid Sewing-Machines, of which the following is a specification.

The object of my invention is to so construct the braid-guides of a straw-braid sewing-machine that the adjustment of the movable portion of the lower guide may be readily effected and the layer or mat of braid guided either in a straight or in an inclined course.

In the accompanying drawings, Figure 1 is a perspective view of a straw-braid sewing-machine with my improved guides applied thereto; Fig. 2, a sectional plan of part of Fig. 1, and Figs. 3 and 4 inverted plan views of the presser-foot and the guides carried thereby.

A represents part of the frame of the machine; D, the presser-bar; B, the needle-bar; E, the presser-foot, and F the guide for the lower layer of braid, said guide consisting of a bent rod secured in position at one side of the frame A by means of a bolt, *a*, adapted to a threaded opening in said frame.

Straw braid such as is used in making hats varies in width—that is to say, some portions of the braid are wider than other portions—and as it is necessary in sewing the braid that one edge of the same shall always be held in contact with the guide F, it is usual to employ in connection with said guide an adjustable plate, G, having a flange for bearing against the other edge of the braid, this plate being adjusted in one direction or the other as the braid becomes narrow or wide.

Heretofore the plate G has been secured in position after adjustment by clamping the same between the frame A and rod F by means of the bolt *a*, whereby said rod is secured to the frame, so that in order to adjust the plate G it became necessary to first loosen the bolt *a* with one hand, then to adjust the plate with the other hand, and finally to secure it in position by again tightening the bolt, a time-consuming operation requiring the use of both hands of the operator.

This objection I overcome by forming in the slotted portion of the plate G a rack, *b*, to which is adapted a pinion, *d*, secured to or forming part of a tubular stud, *e*, the latter turning loosely on the bolt *a*, and having a roughened rim, whereby it may be readily manipulated by the thumb and finger of the right hand in order to turn the pinion and shift the plate G in one direction or the other. The pinion might be adapted to a pin or bolt independent of the bolt *a*, if desired, although it is preferable to adapt it to the bolt *a*, as this insures compactness.

The presser-foot E is provided with the usual block J, having a projecting finger, with stud *i* and curved lug or separator-plate, *i'*, the said block J being rendered adjustable in respect to the presser-foot by means of the screw-rod *m* and nut *n*, so as to vary the distance from the needle of the edge of the mat of braid which bears against the guiding-edge *x* of the block, thereby varying the extent to which one layer of braid overlaps the other.

The block J carries a pivoted plate, *w*, the edge *x'* of which forms a continuation of the guiding-edge *x* of the block, said plate *w* being rendered adjustable in respect to the block J by means of a lever, *y*, carried by said block J, the long arm of this lever having a suitable handle and its short arm being furnished with a pin adapted to a slot in the plate *w*, as shown in Fig. 3.

To a segmental slot, *s*, in the plate *w* is adapted the stem of a set-screw, *t*, the head of which bears on the plate with friction sufficient to retain said plate in any position to which it may be adjusted by the lever *y*.

By this means the edge *x'* of the plate *w* may be adjusted at an angle in respect to the edge *x* of the block J, as shown in Fig. 4, so as to aid in turning the mat of braid when the tip or rim of the hat is being sewed; or said plate *w* may be adjusted so that its edge *x'* is in line, or thereabout, with the edge *x* of the block J, thereby permitting the braid to pass through the machine in a straight line when sewing the side of the crown of a hat.

I claim as my invention—

1. The combination of the sewing mechan-

ism, the fixed guide F, the plate G, having a rack, *b*, and the pinion *d*, adapted to the rack *b*, and having an operating-stud, *e*, all substantially as set forth.

5 2. The combination of the sewing mechanism, the presser-foot, the guide-block J, the plate *w*, and means for adjusting said plate *w* independently of the block J, whereby the shaping of the hat is facilitated, as specified.

10 3. A presser-foot having a guide-block, J, with independently-adjustable plate *w*, and mechanism for adjusting said guide-block and plate, all substantially as specified.

4. The combination of the sewing mechanism,

the presser-foot, the guide-block J, the 15 pivoted plate *w*, and the lever *y*, as set forth.

5. The combination of the sewing mechanism, the presser-foot, the guide-block J, the pivoted plate *w*, having a segmental recess, *s*, the friction-screw *t*, and means for adjusting 20 said plate *w*, as specified.

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

GEORGE F. STONE.

Witnesses:

ALEXANDER PATTERSON,  
HARRY SMITH.