(No Model.) 2 Sheets—Sheet 1.

J. F. SNEDIKER.

CLAMPING DEVICE FOR BUTTON HOLE SEWING MACHINES.

No. 263,979. Patented Sept. 5, 1882.

FIG. 1.

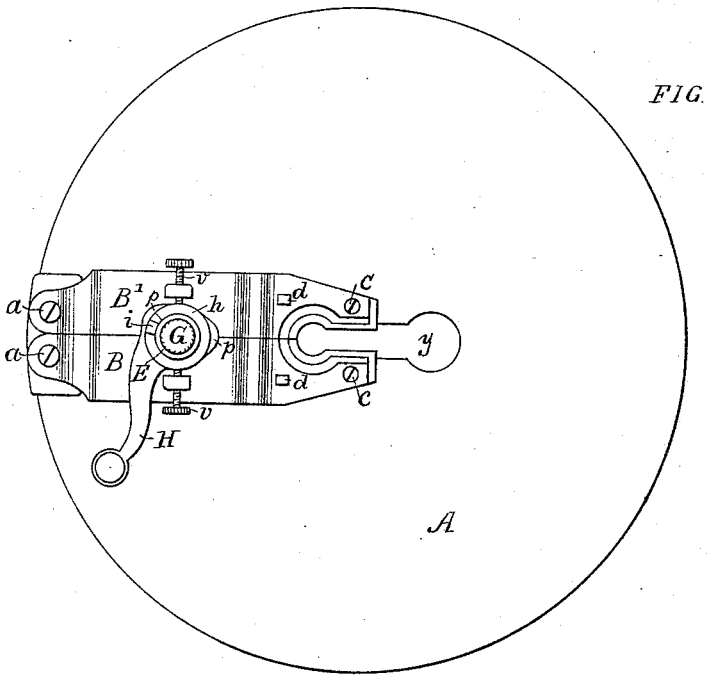


FIG. 2

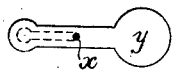


FIG. 3

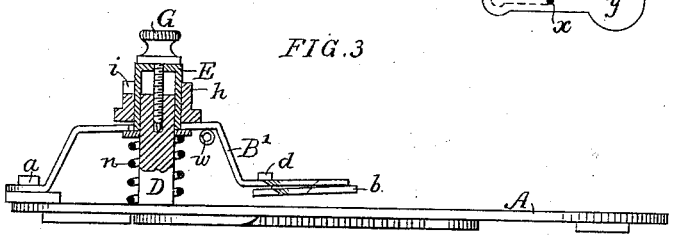
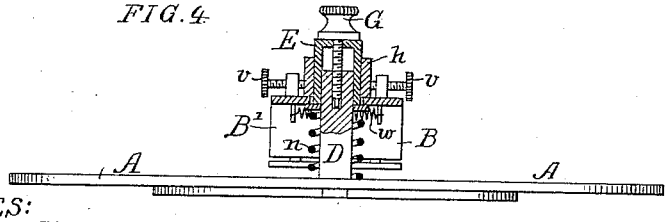


FIG. 4



WITNESSES:

James F. John

David S. Williams

INVENTOR:

James F. Snediker

by his attorneys

Howson and Sons

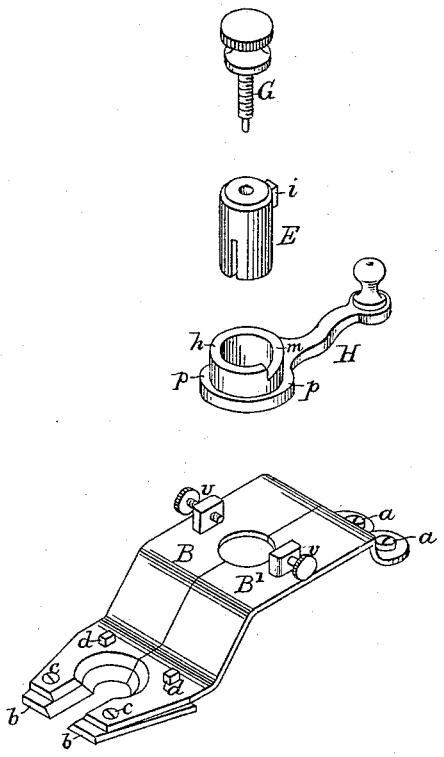
(No Model.) 2 Sheets—Sheet 2.

J. F. SNEDIKER.

CLAMPING DEVICE FOR BUTTON HOLE SEWING MACHINES.

No. 263,979. Patented Sept. 5, 1882.

FIG. 5.



WITNESSES:
James F. Tobin
David S. Williams

INVENTOR:
James F. Snediker
by his attorneys
Howson and Sons

UNITED STATES PATENT OFFICE.

JAMES F. SNEDIKER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE NATIONAL SEWING MACHINE COMPANY, (LIMITED,) OF SAME PLACE.

CLAMPING DEVICE FOR BUTTON-HOLE SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 263,979, dated September 5, 1882.

Application filed July 15, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. SNEDIKER, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Clamping Devices for Button-Hole Sewing-Machines, of which the following is a specification.

The object of my invention is to so construct a clamping device for button-hole sewing-machines that the same may be readily adapted to the different classes of work to be done and may be manipulated with facility.

In the accompanying drawings, Figure 1 is a plan view of the device; Fig. 2, a diagram; Fig. 3, a side view, partly in section; Fig. 4. a rear view, partly in section; and Fig. 5, Sheet 2, a perspective view with the parts detached from each other.

A is the plate to which the leather, cloth, or other material has to be clamped, this plate having an opening, *y*, of the character shown in the detached view, Fig. 2, and being so traversed that button-hole stitches will be made in the course indicated by the dotted lines by mechanism of which the needle *x* is an element.

As my present invention does not relate to mechanism for traversing the plate, but simply to the clamping devices, it will suffice here to refer to the Patent No. 252,984, granted to the assignees of W. W. Abbott, January 31, 1882, as showing an example of traversing mechanism for the plate. Two spring clamping-arms, B B′, are secured at their outer ends to the plate A by set-screws *a*, which also serve as pivot-pins, as will appear hereinafter, these arms being bent to the shape substantially as shown in Fig. 3, and to the outer end of each arm is loosely connected a clamping-plate, *b*, which will accommodate itself to the material against which it is pressed.

In the present instance a set-screw, *c*, passes through each arm and into the plate in such a manner that the latter can oscillate freely, the plate being confined laterally by a projection, *d*, fitting freely in an opening in the arm.

It may be remarked here that pressure-plates *b* of different lengths are required—short plates for short button-holes, such as those of boots and shoes, and longer plates for such button-holes as those of coats, &c.—and that the plates can be readily removed when they have to be replaced by others of different lengths.

A pin or post, D, is secured to the plate A, and over this pin a sleeve, E, is fitted snugly, but so as to slide freely, a feather or other device, however, preventing the sleeve from turning on the pin. The pin D and its sleeve E occupy a central position between the two clamping-arms, which are cut away to receive the sleeve, so that the latter cannot interfere with the movement of the said arms.

The hub *h* of a lever, H, is adapted to turn to a limited extent on the sleeve E, and the upper edge of the hub is cut away so as to form a cam, *m*, for bearing against a projection, *i*, on the sleeve, so that as the hub of the lever bears on the clamping-arms the latter will be depressed when the lever is moved in one direction and will rise when it is moved in a contrary direction, for a spiral spring, *n*, coiled round the pin D, or any other suitable spring, tends to elevate the clamping-arms.

As leather or fabric differing in thickness has to be clamped by the arms to the plate A, it is important that provision should be made for depressing the arms to different extents, the movement of the lever to cause the depression being always the same.

A set-screw, G, passes through the top of the sleeve E and into the pin D. The more the sleeve is depressed by turning this screw in one direction (the projection *i* being depressed with the sleeve) the greater will be the depression of the outer ends of the arms B B′ and their clamping-plates, and on turning the screw in the opposite direction there will be a less depression of the arms during the movement of the lever H.

A prominent feature of my invention is the stretching of the material by and between the clamping-arms, so as to spread open the incision made for the button-hole, just as these arms are concluding their downward movement and just as the material is receiving its final pressure against the plate A. In order to effect this purpose I form on the hub *h* of the lever H two cam-like projections, *p p*, which bear simultaneously against projections on the clamping-arms, and move the same apart on the pivots *a a* just as the lever H is concluding its

movement, thereby stretching the material beneath the clamping-plates just as it is receiving its final pressure.

It should be understood that the clamping-arms are connected together by a spring, *w*, which tends to close the arms when they are free from the influence of the projections *p* on the hub of the cam-lever.

In sewing button-holes in leather, however, this stretching operation will be objectionable. Hence I make the projections on the clamping-arms adjustable, so that they can be moved beyond the range of the cams *p p* on the lever H, the projections consisting of two set-screws, *v v*, the points of which may be brought under the influence or freed from the influence of the said cams on the lever.

I claim as my invention—

1. The combination of the pivoted clamping-arms with the lever H, having cams *m* and *p*, whereby a single movement of the lever is caused to effect the depression of the arms and the spreading or separation of the same, as set forth.

2. The combination of the pivoted clamping-arms, the cam-lever H, the sleeve E, having an abutment for the lever, the adjusting-screw G, and the lifting-spring *n*, as set forth.

3. The combination of the lever H, having cams *p*, with the pivoted clamping-arms having adjustable projections *v* for being acted upon by said cams *p*, as set forth.

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

JAMES F. SNEDIKER.

Witnesses:
HARRY DRURY,
HARRY SMITH.