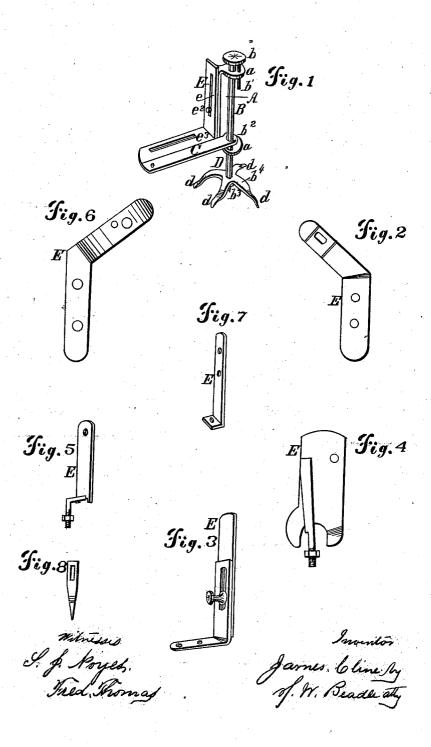
J. CLINE,

## Sewing-Machine Guide.

No. 81,604.

Patented Sept. 1, 1868.



## UNITED STATES PATENT OFFICE.

JAMES CLINE, OF EATON, OHIO, ASSIGNOR TO JOHN WALLS, OF THE SAME

## CLOTH-GUIDING ATTACHMENTS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 81,604, dated September 1, 1868.

To all whom it may concern:

Be it known that I, JAMES CLINE, of Eaton, in the county of Preble and State of Ohio, have invented a new and useful Compass-Guide for Sewing-Machines; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to an improved attachment for sewing-machines, which I call a

"compass-guide."

It consists, principally, of a fixed springpoint, with revolving radial arms, and is intended for use in sewing circular and ornamental work. Its manner of operation will be fully described hereinafter.

Figure 1 represents a view, in perspective, of my compass-guide; and Figs. 2, 3, 4, 5, 6, 7, views of parts detached.

In the drawings, A represents a standard, bent at each end to form the guides a a, in which latter are holes, as shown, for the reception of the pin B. B represents a pin, having a vertical movement up and down in the guides a a. It is provided with a milled head, b, for convenience of handling, to the under side of which is attached a guide-pin, b', which latter moves in a hole in the upper guide a. It is also provided with a fixed washer,  $b^2$ , between the guides, upon which rests the free end of spring C, as shown. A spiral spring may be placed between the washer and upper guide, if preferred. The lower end of pin B is provided with a nedlepoint,  $b^3$ . D represents a holder for the cloth, which revolves upon the lower part of pin B, being held in place by the shoulder formed by the diminution of the pin and by the nut b4. It is provided with four or more radial arms, which, curving downward, are bent at right angles at the ends to form the pins d.

E represents the connecting-piece, by means of which attachment is made to the sewing-This piece necessarily varies for machine.

different machines.

E, Fig. 1, represents a connecting-piece capable of adjustment. Its upright part is provided with a slot, e, through which passes the connecting-screw e<sup>2</sup>. By means of this slot the compass-guide is adjusted up or down, to suit the varying thickness of the cloth. It is also provided with a slot,  $e^3$ , in

its horizontal part, by means of which the guide is adjusted nearer to or farther away from the needle, for the purpose of sewing a larger or smaller circle, as may be desired.

E, Fig. 2, represents the connecting-piece for the Wheeler & Wilson and Elliptic machines. E, Fig. 3, represents the connectingpiece for the Grover & Baker machine; E, Fig. 4, for the Howe; E, Fig. 5, for the Singer; E, Fig. 6, for the Florence; and E, Fig. 7, for the Empire. These connecting-pieces are all attached to the presser-foot, with the exception of that of the Grover & Baker machine, which is attached to the head-block. They may be all adjusted in the manner described for E, Fig. 1, or in some simple modification of it, adapting it to the machine used.

The operation of my invention is as follows: The cloth having been properly adjusted upon the machine, the pin B is set at the center of the circle to be sewed, the needle being, of course, on the circumference. The points D of the holder settle into the cloth, and prevent it from puckering or drawing. Motion having been given to the machine, the cloth is fed about the pin B, the holder D revolving with it. A complete circle is formed in this way, or parts of circles. An infinite variety of ornamental forms may be produced by a

person of taste.

A modification of the holder is shown in Fig. 8. In this the arms are made separate, and each is provided with a longitudinal slot. They are secured in place by a nut or thumbscrew upon the pin. By this arrangement the arms may be adjusted in or out, to obtain a more or less extended hold upon the cloth, as larger or smaller circles are made.

If desired, the holder may be altogether dispensed with, and the pin alone be used.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is-

The revolving holder D, constructed as described, in combination with pin B, standard A, and spring C, as and for the purpose de-

This specification signed and witnessed this 4th day of June, 1868.

JAMES CLINE.

Witnesses:

ROBERT CONARROE, J. M. SHEAFER.