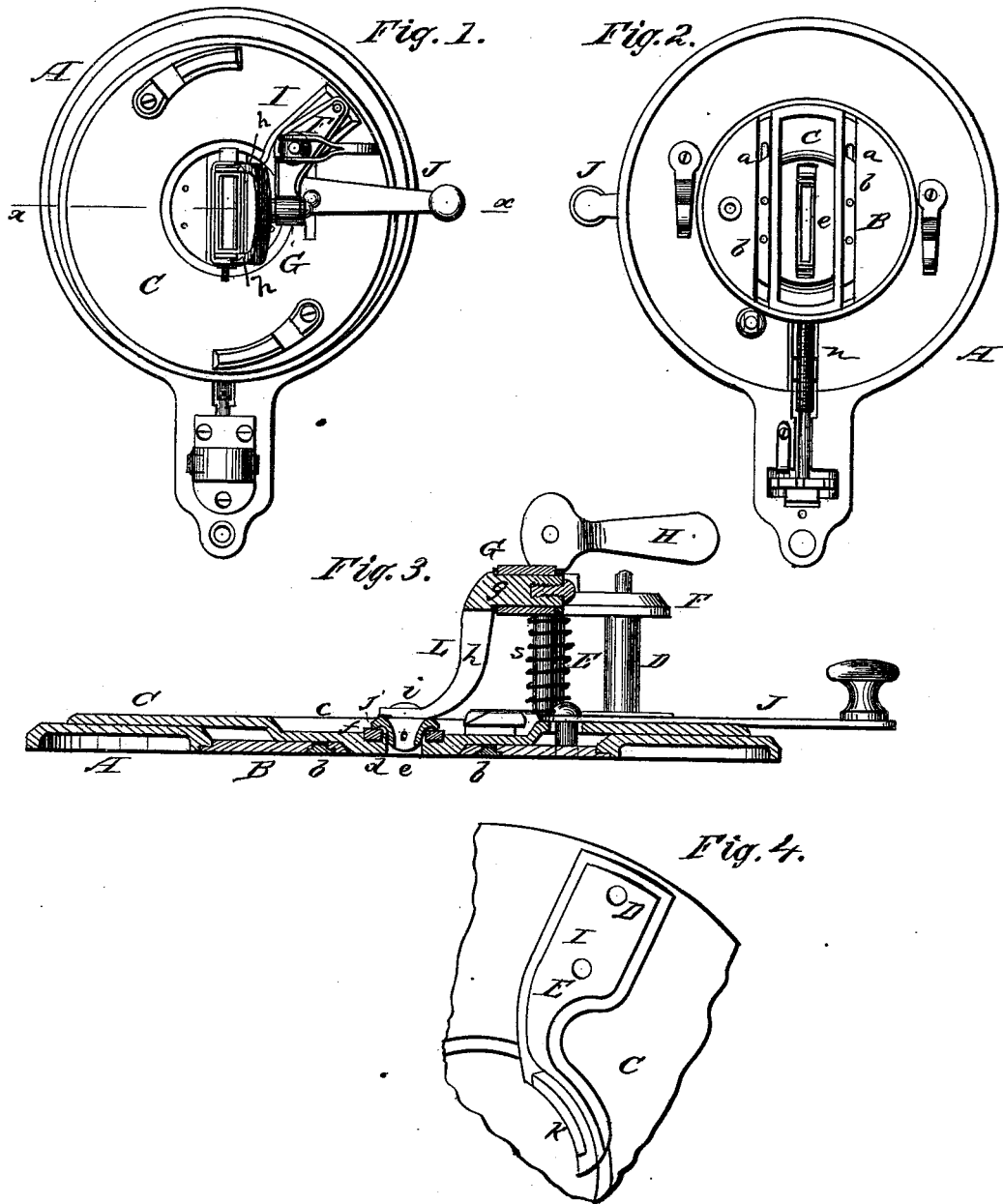


A. FARRAR.

BUTTON-HOLE ATTACHMENT FOR SEWING-MACHINES.

No. 185,823.

Patented Jan. 2, 1877.



WITNESSES:
C. A. West
O. W. Bond

INVENTOR:
Arthur Farrar

UNITED STATES PATENT OFFICE

ARTHUR FARRAR, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN BUTTON-HOLE ATTACHMENTS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **185,823**, dated January 2, 1877; application filed January 3, 1876.

To all whom it may concern:

Be it known that I, ARTHUR FARRAR, of Chicago, Cook county, State of Illinois, have invented new and useful Improvements in Button-Hole Attachments for Sewing-Machines, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a top view; Fig. 2, an under-side view; Fig. 3, a vertical section on line *x* of Fig. 1; Figs. 4 and 5, details.

This invention is an improvement upon a button-hole attachment now in use; and it consists in countersinking the cloth-plate at the center; in extending the cloth-plate down through the other plates, as hereinafter more fully described, so as to bring the cloth down upon, or near to, the bed-plate of the machine; in pivoting the cloth-clamp, as described, for the purpose of equalizing its pressure; and in providing the cloth-plate with a brace, as hereinafter described.

In the drawings, A represents the main plate, having a large circular opening in the center, adapted to receive the plate B, which rotates therein. C is the cloth-plate. It is countersunk at the center *c*, and there is extended down through the two plates A B, as shown at *d*, Fig. 3. In the under side of the plate B are two slots, *a*, also two grooves along the line of these slots, in which are the sliding bars *b*, which can be moved in the grooves. To these bars *b* the cloth-plate C is firmly secured by means of screws, which pass through the slots *a*. *e* is a slot in the plate C, for the passage of the needle. Near each edge of this slot is a yielding cushion, *f*. D E are two posts, secured at their lower ends to a brace or plate, I, upon the cloth-plate C. Around E is a spring, *s*. F is a bar, placed loosely upon D and E. Its inner end has a socket, G, to receive *g*, which is loosely secured by means of a washer and screw, as shown. L is the clamping device. *h h* are two arms, united to *g*, in the lower ends of which the part *i* of the clamping device is pivoted. This part *i* is so formed that it has projections *j* near the top, which engage with the yielding seat *f*, while the central portion extends well down into the slot in the plate C. J is a lever, by means of which C and B are rotated, as usual. I is a brace or strengthening-plate,

secured to the cloth-plate, and extending over the edge of the recess, as shown at *k*. This is desirable for strength, as the plate C is to be made of sheet metal. H is a lever so constructed and arranged that the clamp can be held upon the cloth with such pressure as may be required.

In use, the cloth is placed over the slot *e*, and by means of the clamp it can be pressed down into the same until it is on a line, or nearly on a line, with the cloth-plate of the sewing-machine, thus bringing the cloth down where it ought to be to insure the most perfect work, it being evident that it is desirable to have the cloth always occupy substantially the same position relatively to the working parts of the machine. Since *i* is pivoted in the arms *h*, and these arms are brought together at the top and pivoted at G, the pressure of the clamp on the cloth will be equalized, the parts adjusting themselves. The yielding seat aids in holding the cloth in place at all points.

The device is an improvement on that known as "House's," and it is to be secured to a sewing-machine as is the House device. The cloth-plate is moved along by means of the screw *m* and other devices, and is also moved to the right and left while the button-hole is being made, and the cloth-plate is rotated, all in a well-known manner.

The part *i* of the clamp is open at the center, to permit the passage of the needle.

What I claim as new, and desire to secure by Letters Patent, is—

1. The plate C, having its central portion depressed, in combination with the rotating plate B and clamping mechanism D, E, F, G, H, *h*, and *i*, constructed and arranged as shown, whereby the button-hole is brought close down on the work-plate during the process of stitching, as and for the purpose set forth.

2. The plate C, having its center portion depressed, extending through the rotating plate B, in combination with the clamp L, having part *i*, arms *h*, posts E D, cam H, and bar F, substantially as and for the purpose set forth.

ARTHUR FARRAR.

Witnesses:

E. A. WEST,
O. W. BOND.