

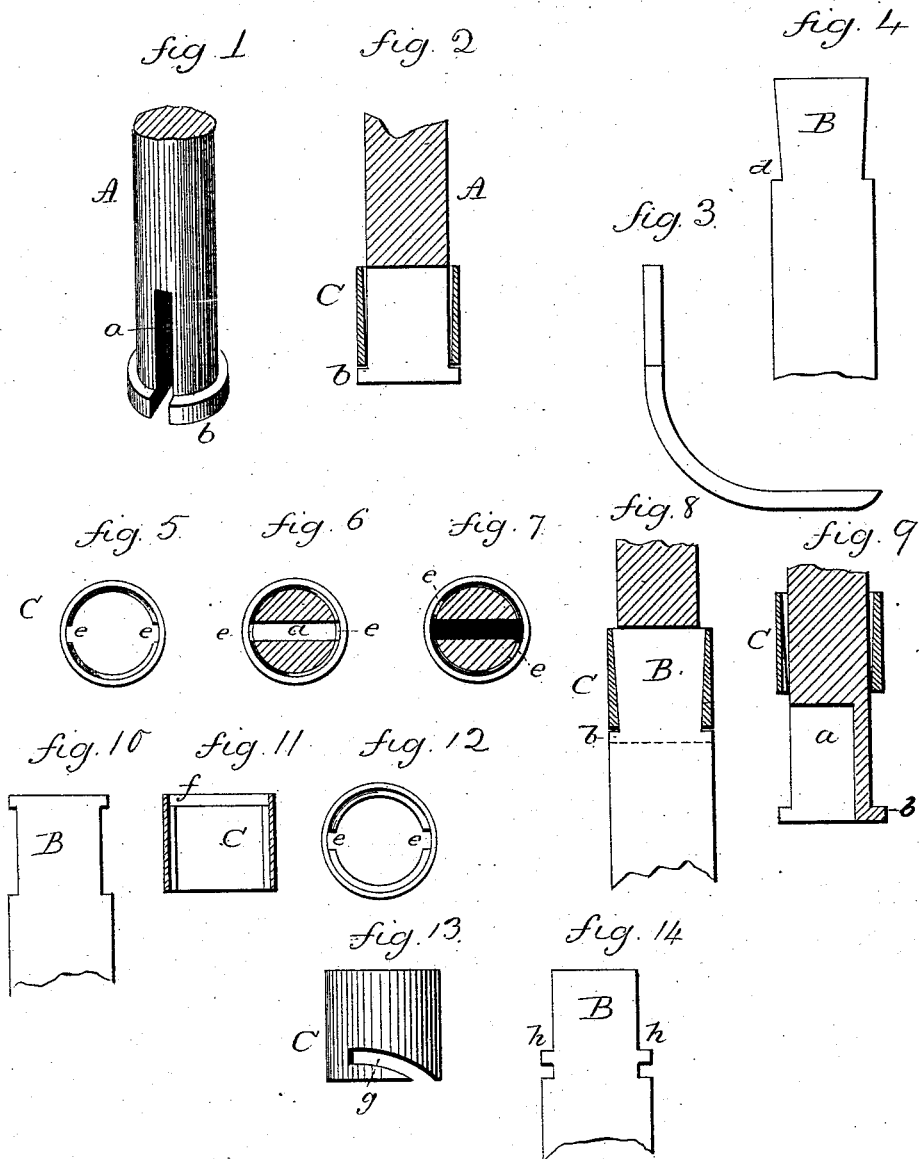
(No Model.)

S. HALLIWELL.

PRESSER FOOT HOLDER FOR SEWING MACHINES.

No. 302,127.

Patented July 15, 1884.



Witnesses
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UNITED STATES PATENT OFFICE.

SAMUEL HALLIWELL, OF NEW HAVEN, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THE SACKETT MANUFACTURING COMPANY, OF WALLINGFORD, CONNECTICUT.

PRESSER-FOOT HOLDER FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 302,127, dated July 15, 1884.

Application filed December 17, 1883. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL HALLIWELL, of New Haven, in the county of New Haven and State of Connecticut, have invented new
5 Improvements in Presser-Foot Holders for Sewing-Machines; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and
10 exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of the socket; Fig. 2, a vertical central section of the socket,
15 showing the sleeve thereon; Fig. 3, an edge view, and Fig. 4 a front view, of the presser-foot; Fig. 5, a top view of the sleeve; Fig. 6, a transverse section through the socket and sleeve, showing the grooves in the sleeve in
20 line with the slot in the socket; Fig. 7, the same as Fig. 6, with the sleeve partially rotated; Fig. 8, a section through the socket, showing the presser-foot and sleeve as interlocked; Figs. 9, 10, 11, 12, 13, and 14, modifications.

This invention relates to an improvement in
25 the method of attaching the presser-foot to the presser-foot bar of sewing-machines, the object being to avoid screws or detachable fastenings, yet make the attachment simple and effective;
30 and the invention consists in constructing the socket part, which is to receive the presser-foot, with a transverse slot, combined with a sleeve around the socket free for rotation, but
35 without longitudinal movement, the shank of the presser-foot constructed to pass into said slot when the sleeve is in a certain position, and so that when the shank is thus inserted the sleeve, being rotated, will engage the shank and hold it firmly in place, and as more fully
40 hereinafter described.

A represents the lower end of the presser-foot bar, in which is a vertical transverse slot, *a*, and around the lower end of the bar is radially-projecting flange *b*. The shank B of the
45 presser-foot is made in thickness corresponding to the width of the slot *a*. It is of dovetail shape, the width at the lower end being substantially that of the diameter of the bar or socket at the slot, and so as to form a shoul-

der, *d*, at each edge, it gradually expands up- 50 ward, so that the upper end, *e*, is broader than the diameter of the socket through the slot.

C is the sleeve, which is arranged around the bar A, and so as to rest upon the shoulder or flange *b* at the bottom, yet free for rotation. 55 Upon its inside it corresponds in diameter at the bottom to the diameter of the bar, but expands toward the top, corresponding to the dovetail shape of the shank B of the presser-foot. At diametrically-opposite points, as seen 60 in Fig. 5, vertical grooves *e* are made upon the inside of the sleeve, in width corresponding to the slot *a* in the socket. The depth of this slot is such that the diameter on the line through the slots is a little greater than that 65 of the width of the broad part of the shank B, and so that when turned to such a position that the grooves *e* coincide with the slot *a*, as seen in Fig. 6, the shank B may be passed up into the slot *a* through the sleeve. Then the sleeve 70 may be turned to one side, as seen in Fig. 7, to take the grooves *e* away from the shank. Then the inclined sides of the sleeve will engage with the corresponding inclined edges of the shank, as seen in Fig. 8, and hold the 75 presser-foot in place; or the shank may be first inserted and then the sleeve moved down onto it, it being turned so that the grooves *e* will coincide with the thus projecting sides of the shank. 80

Instead of making the slot entirely through the bar, it may be made, as seen in Fig. 9, from one side, the shank of the presser-foot in width corresponding to the slot, but its outer edge inclined. In that case the sleeve will first be 85 raised, as seen in Fig. 9, and then, when the shank is properly set in the slot, the sleeve will be moved downward over the shank and then turned, as before described.

Instead of locking by means of an inclined 90 or dovetail-shaped shank and corresponding tapering sleeve, the shank B may be of T shape, as seen in Fig. 10, the projections of the T-shaped part being greater than the diameter of the socket through the slot. In that case 95 the sleeve C, as seen in Fig. 11, is made with a shoulder, *f*, corresponding to the projections of the T-shaped part, the grooves *e* being

made vertically through the sleeve, as seen in Fig. 12, and as before described; or the sleeve may be constructed, as seen in Fig. 13, with a spiral groove, *g*, upon opposite sides, opening from its lower end upward, and the shank B constructed with a projection, *h*, from each edge, as seen in Fig. 14, which, when set into the shank, will project outward and engage the spiral slots in the sleeve, and so that turning the sleeve will tend to draw the shank into its place in the socket. In all cases the sleeve has a partial rotation and takes a bearing upon a shoulder on the socket to prevent its longitudinal movement.

15 I claim—

In a sewing-machine, the combination of the presser-foot bar, constructed with an annular

projecting flange, *b*, around its lower end, and with a transverse slot, *a*, extending through said flange; the presser-foot constructed with a shank corresponding to said slot, and with a projection to extend outside said slot, and the sleeve C, on said presser-foot bar, arranged to rest upon the said flange *b* as a bearing, and constructed upon its inside to permit the said projection on the presser-foot shank to pass above the flange *b* and then to engage said projection by a partial rotation of the sleeve when resting on said flange *b*, substantially as described.

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