

No. 686,286.

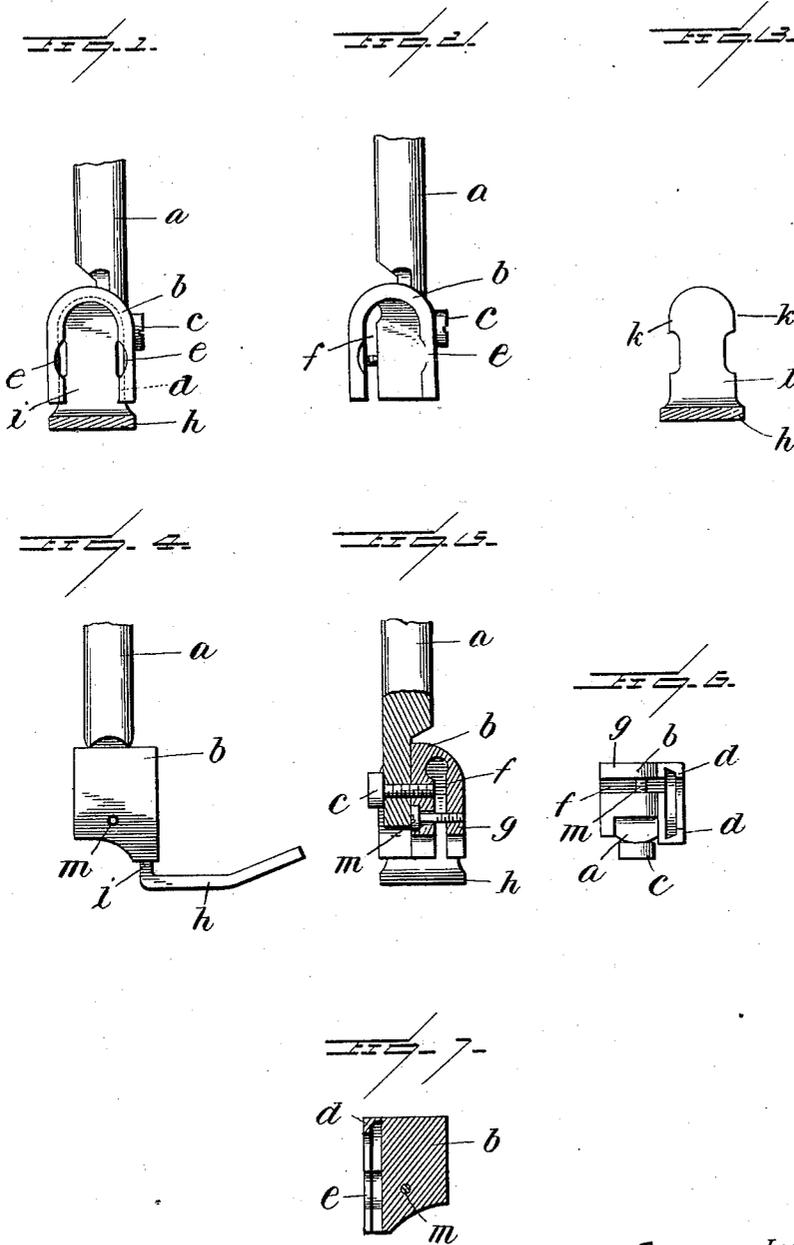
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J. M. GREIST.

PRESSER FOOT HOLDER FOR SEWING MACHINES.

(Application filed Mar. 14, 1901.)

(Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN M. GREIST, OF NEW HAVEN, CONNECTICUT.

PRESSER-FOOT HOLDER FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 686,286, dated November 12, 1901.

Application filed March 14, 1901. Serial No. 51,056. (Model.)

To all whom it may concern:

Be it known that I, JOHN M. GREIST, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Presser-Foot Holders for Sewing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has for its object to provide a simple device whereby a sewing-machine presser-foot may be conveniently and quickly placed in or removed from working position on the sewing-machine, whether the said presser-foot be an ordinary presser-foot or whether it be an attachment presser-foot, such as is used in connection with hemmers, binders, rufflers, tuck-markers, and the like. To this end the improved presser-foot holder comprises a socket piece or block which is secured, preferably by a screw, to the lower end of the presser-bar and which is recessed in a peculiar manner to receive the shank portion of the presser-foot or presser-foot attachment. The socket piece or block referred to is provided in its front face with a suitable recess, the sides and top of which are bounded by an undercut groove to receive a flat shank portion of the presser-foot, the front walls of said grooves being notched or cut away about midway of the vertical height of the recess and the flat shank portion of the presser-foot being recessed on its side, so that when the presser-bar is raised from the work by the ordinary presser-foot lifter the presser-foot can be removed simply by pulling it down slightly in its socket and then tilting its shank forward out of its socket, and another presser-foot may be inserted in the socket piece or block by entering the vertical shank portion of the presser-foot by a horizontal or tilting movement into the socket of the said block and then either by lifting the foot or lowering the presser-bar securely attach the foot in working position, all as will hereinafter be more fully explained.

In the accompanying drawings, Figure 1 is a front side view of a presser-foot with the new socket piece or block secured thereto and the presser-foot in position in said socket piece or block, the front portion of the presser-

foot being removed for clearness of illustration. Fig. 2 is a front side view of the presser-bar and socket-piece with the presser-foot removed; and Fig. 3 is a detail view of the presser-foot with the toe portion cut away, as in Fig. 1. Fig. 4 is a side view of the presser-bar and socket-block with the presser-foot in working position, and Fig. 5 is a rear side view of the same with a portion of the socket-block cut away. Fig. 6 is a detail bottom view of the socket-block and presser-bar, and Fig. 7 a central vertical section of the socket-block.

Referring to the drawings, *a* denotes a presser-bar, and *b* a socket-block attached to the lower end thereof by a screw *c* passing through the reduced lower end of the presser-bar received in the groove in the side of said socket-block. The socket-block *b* is provided in its front face with a flat recess, the sides of which are undercut to form overhanging flanges *d*, partly cut away about midway of their height to provide notches *e* in said flanges. The undercut groove forming the flanges *d* is preferably slightly dovetailed in cross-section throughout its extent both at the sides and top of the recess referred to, said recess being open at its bottom and closed at its top. The socket-block *b* is provided with a vertical slit *f*, forming a slightly-yielding wing *g* on one side of said block.

The presser-foot *h* is provided with a vertical shank portion *i*, the opposite sides of which are notched, leaving above the notches in the sides of the said shank projections *k* of such dimensions that said projections can pass by the notches *e* in the flanges *d* in inserting the said shank flatwise, by a horizontal or tilting movement, into the socket formed in the front face of the socket-block *b*.

The wing *g* is joined to the body of the socket-block by a screw *m* turning loosely in the body of said block and tapped in the said wing, so that by turning said screw the wing may be sprung or adjusted slightly in order to make the presser-foot fit in its socket with the desired degree of tightness, so as to obviate the necessity of making such a perfect fit of the presser-foot in its socket in the construction of the parts, as would otherwise be necessary. The screw *m* also serves to brace

or stiffen the wing *g* against such side strain as is liable to occur with presser-foot attachments, such as tuck-markers, which are extended laterally to the right a considerable distance and which therefore impose considerable side strain on the presser-foot.

With the parts constructed as above described and with the presser-foot in the position which it ordinarily occupies when it has been raised by the usual presser-foot lifter a presser-foot may be inserted in the socket-block simply by bringing the projections *k* on the side of the upper portion of the vertical flat shank of the presser-foot into register with the notches *e* in the flanges *d* at the sides of the socket in the front of the presser-foot, and thereby entering the shank of the presser-foot into its socket, either by a tilting or horizontal movement, after which the presser-foot can be slipped upward to the position shown in Fig. 1 or may be brought into such position by lowering the presser-bar and the socket-block attached thereto. Owing to the slightly-dovetailed form of the groove bounding the socket in the piece or block *b* the upward movement of the presser-foot relative to the socket-block or the downward movement of the socket-block relative to the presser-foot will force the top of the flat shank portion of the presser-foot into the dovetailed groove at the top of the socket in such a manner as to cause it to wedge therein slightly with sufficient friction to hold it firmly in place, but without such a positive hold on said shank as will prevent the presser-foot from being readily removed, so that to remove the presser-foot when the presser-bar has been lifted it is only necessary to press down slightly on the presser-foot to bring the projections *k* at the sides of the vertical shank portion of the presser-foot into register with the notches *e*, when the presser-foot can be removed by tilting it forward slightly or by a straight horizontal movement.

From the foregoing it will be understood that I provide a presser-foot holder of such construction that a presser-foot can be quickly inserted into or removed from working position without requiring the loosening or removal of a screw or even without requiring movement of the holding-lever, such as has heretofore sometimes been used for securing the presser-foot in place, while at the same time the presser-foot when in working position is firmly held in place without any possibility of its becoming loosened.

Having thus described my invention, I

claim and desire to secure by Letters Patent—

1. A presser-foot-holding device consisting of a socket-block provided with a recess open at its bottom and closed at its top to receive the shank of the presser-foot and which recess is bounded at its sides and top by an undercut groove in the socket-block, combined with a presser-foot having a shank portion adapted to be entered into said recess.

2. A presser-foot-holding device consisting of a socket-block provided with a recess open at its bottom and closed at its top to receive the shank of the presser-foot and which recess is bounded at its sides and top by a dovetailed undercut groove in the socket-block, combined with a presser-foot having a shank portion adapted to be entered into said recess.

3. A presser-foot-holding device consisting of a socket-block provided with a recess open at its bottom and closed at its top to receive the shank of the presser-foot and which recess is bounded by an undercut groove in the socket-block, combined with a presser-foot having a shank portion adapted to be entered into said recess, the flanges forming the front walls of said recess being notched and the shank of said presser-foot being provided with projections adapted to be passed through said notches in entering the presser-foot into its socket.

4. A presser-foot-holding device consisting of a socket-block provided with a recess open at its bottom and closed at its top to receive the shank of the presser-foot and which recess is bounded by an undercut groove in the socket-block, the said socket-block having a vertical slit *f* to form a slightly-yielding wing *g*, and said socket-block being provided with a screw, as *m*, turning loosely in said socket-block and being threaded in said wing, thus adjustably connecting the latter with the body of said block, combined with a presser-foot having a shank portion adapted to be entered into said recess, the flanges forming the front walls of said recess being notched and the shank of said presser-foot being provided with projections adapted to be passed through said notches in entering the presser-foot into its socket.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN M. GREIST.

Witnesses:

P. RAYMOND GREIST,
W. C. GREIST.