

(No Model.)

W. F. NESMITH.

PRESSER FOOT FOR SEWING MACHINES.

No. 391,981.

Fig. 1. Patented Oct. 30, 1888.

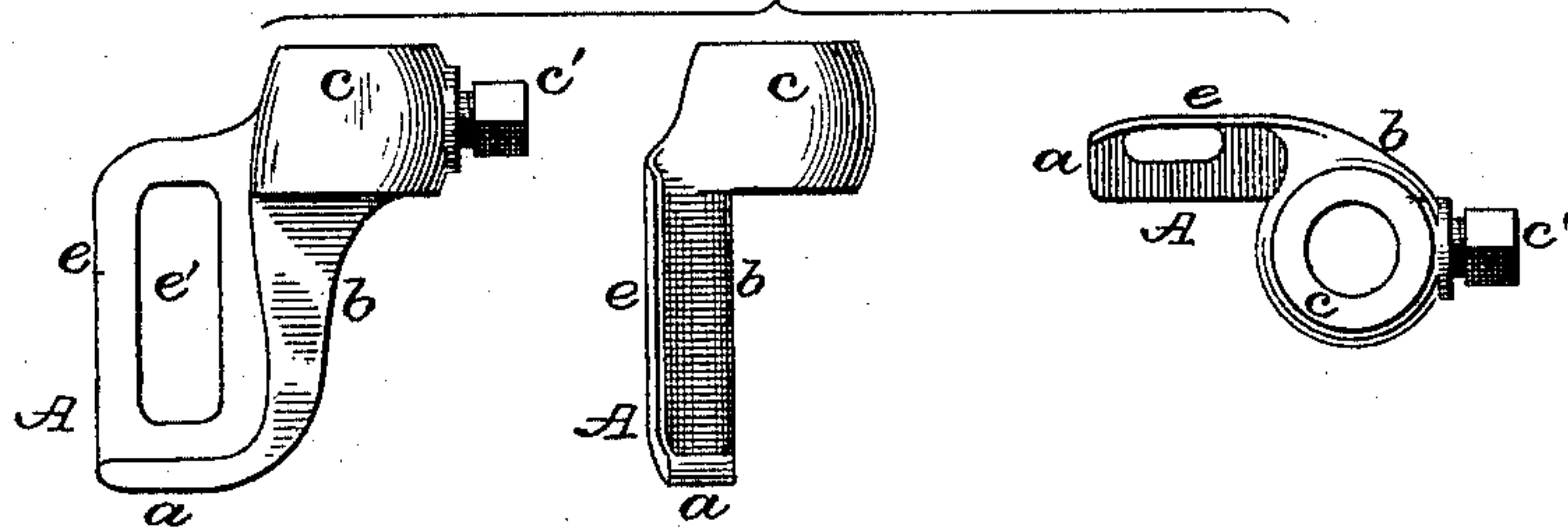


Fig. 4.

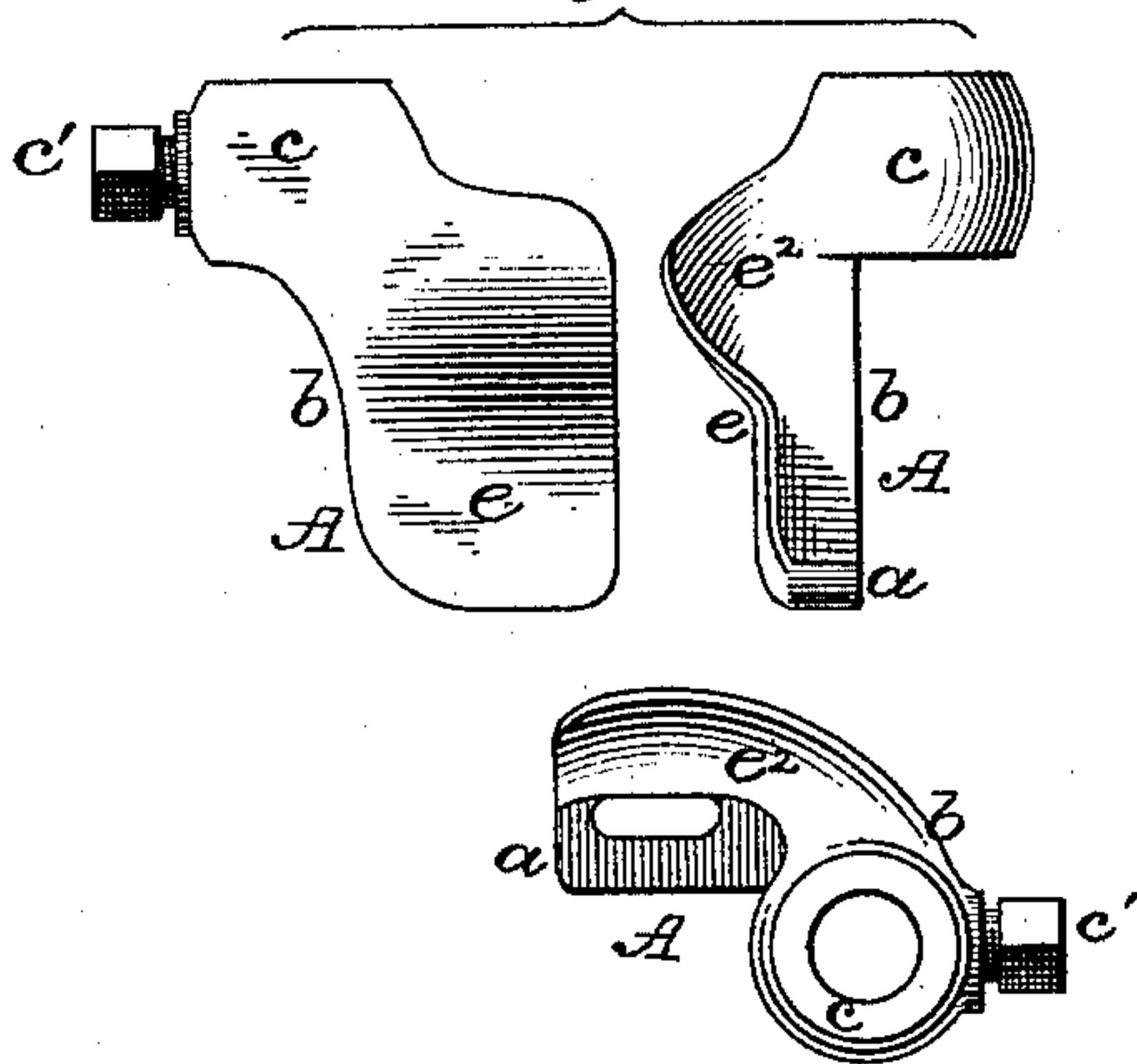


Fig. 2.

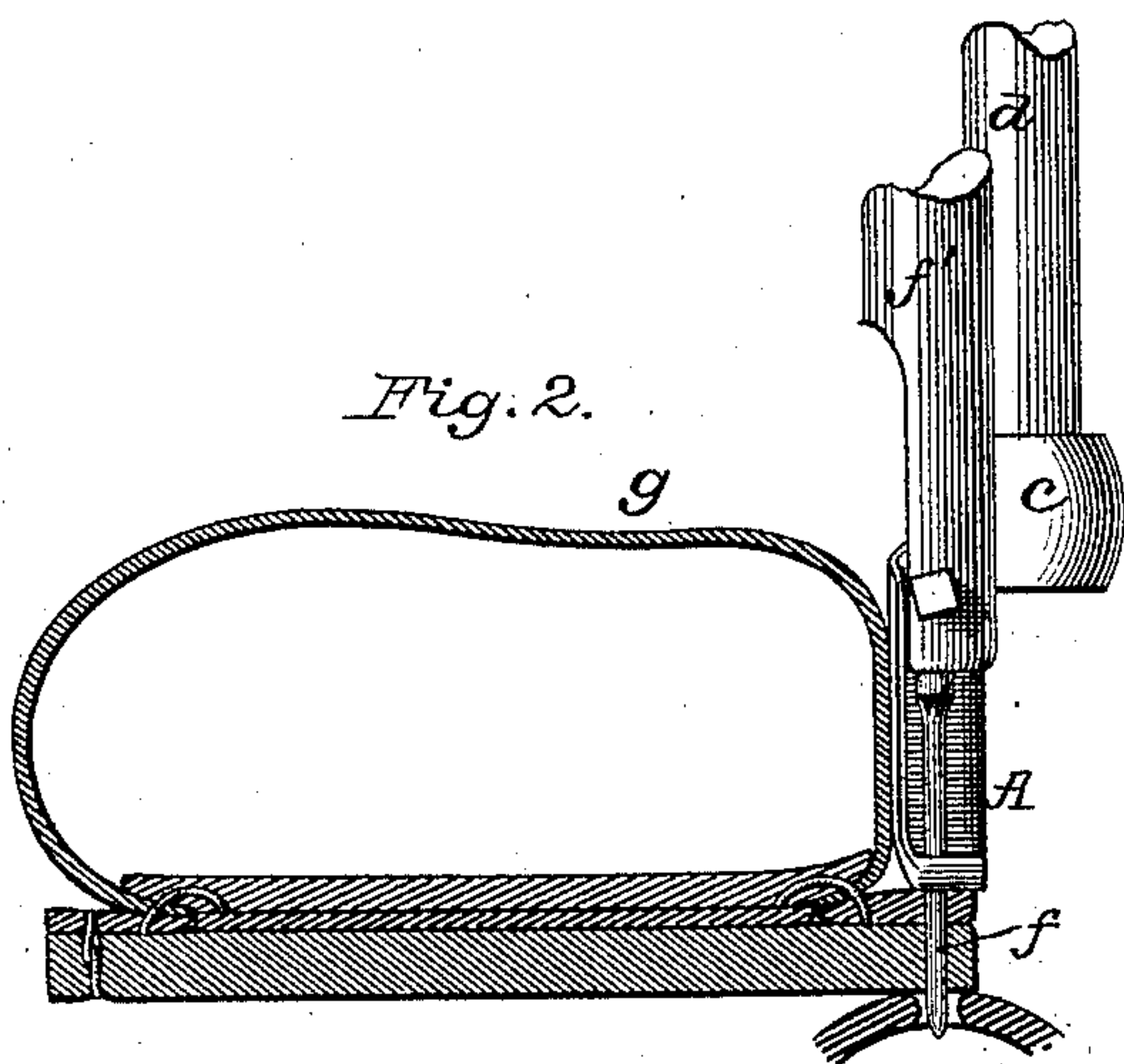
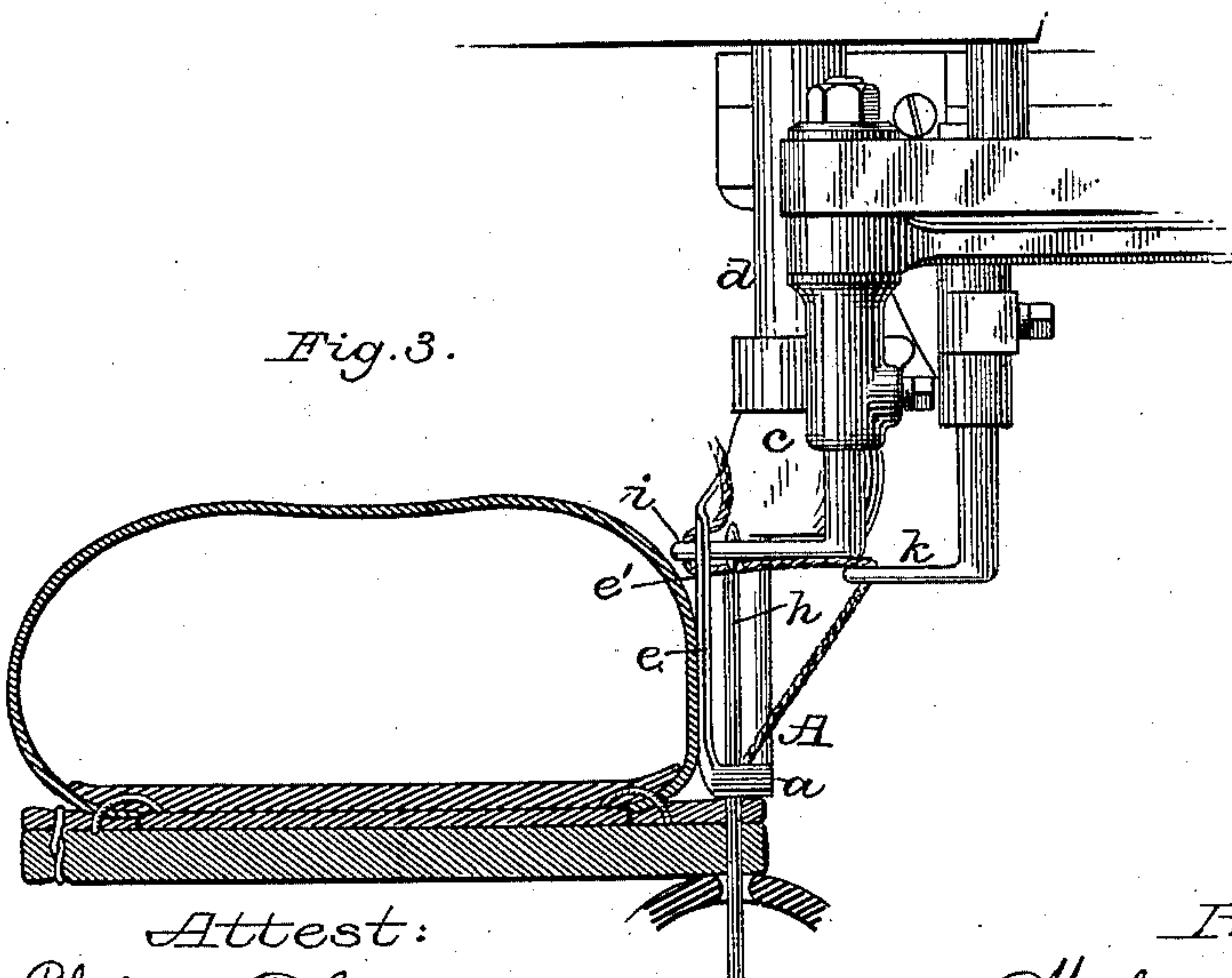


Fig. 3.



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UNITED STATES PATENT OFFICE.

WALTER F. NESMITH, OF BROCKTON, MASSACHUSETTS, ASSIGNOR TO THE
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PRESSER-FOOT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 391,981, dated October 30, 1888.

Application filed June 4, 1885. Serial No. 167,605. (No model.)

To all whom it may concern:

Be it known that I, WALTER F. NESMITH, of Brockton, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Presser-Foot for Sewing-Machines; and I do hereby declare that the following specification, taken in connection with the drawings furnished and forming a part of the same, is a clear, true, and complete description of my invention.

Presser-feet embodying my said improvements are applicable to any machine having a hook-needle and a laterally-vibrating thread-arm and adapted to locate a line of stitches at or near the junction of two substantially-rectangular surfaces of such more or less heavy materials as are employed in the manufacture of boots, shoes, harness, and traveling-bags; and the prime object of my invention is to enable fair stitching to be done in securing uppers to the bottoms of boots or shoes without defacing the uppers by the contact therewith of an awl or a needle, or both, and at the same time to afford proper freedom for the movements of the thread-arm. For accomplishing these ends I have devised a presser-foot having a bearing-face provided with a slot for the passage of a hook-needle, and at the outside of said slot a vertical shield or guard which is slotted or recessed for the reception of the outer end of a thread-arm while delivering thread to the needle.

To more particularly describe my invention I will refer to the accompanying drawings, in which—

Figure 1 in several views illustrates my guarded presser-foot. Fig. 2 illustrates the same in working position with an awl and its bar as when the awl is puncturing and feeding during the operation of fair-stitching an upper of a shoe to its sole. Fig. 3 in a similar manner illustrates the same while the needle is receiving thread from a vibrating thread-arm. Fig. 4 in three views illustrates the presser-foot with its guard or shield modified in its construction.

The guarded or shielded presser-foot A has the slotted bearing-face *a*, the shank *b*, the offset-collar *c*, and set-screw *c'*, substantially as

heretofore, and it is mounted on the presser-bar *d* in the usual manner.

As shown in Fig. 1, the guard or shield *e* is preferably integral with the shank and stands parallel with the outer side of the shank *b*, and also with the slot in the bearing-face, and although vertical, it is slightly outside of the plane occupied by the outer side of said slot, so as to afford ample space for thread between the inner surface of the guard and the needle.

As shown in Fig. 2, the awl *f* in traversing the slot in the presser-foot has ample space alongside of the inner surface of the shield or guard; but the awl-bar *f'* should be cut away on its outer side, as shown, for obviating its contact with the upper portion of said guard. The shoe-upper *g* is wholly kept away from the awl by the guard, and is wholly protected against contact therewith and with its awl-bar.

As shown in Fig. 3, the hook-needle *h* in rising through the slot in the presser-foot is also obviously shielded from contact with the shoe-upper *g*; but inasmuch as the thread-arm *i* must of necessity pass its outer end beyond and around the path of the needle, the guard is cut away or slotted, as at *e'*, for the reception of the end of said arm when at its extreme forward position. The shoe-upper *g* will usually be exposed to the intermittent contact of said arm, but with little apparent objectionable effect, and even this can be readily obviated, if desired, by outwardly curving or flaring the upper portion of the shield, as shown in Fig. 4, to afford a recess, *e''*, in lieu of the slot *e'*, as shown in Figs. 1 and 3, the flexibility of a shoe-upper enabling it to readily retire by its contact with the upper surface of the curved or flaring portion of the shield. In thus providing a recess in the guard, which affords a free space for the outer end of the thread-arm to vibrate in, it will be obvious that it is quite immaterial how said recess may be formed, whether by cutting away or otherwise dispensing with a portion of the metal in the guard—as, for instance, at the slot *e'* of Fig. 1—or by merely displacing said metal—as by a bend or curve—as at the recess *e''* of Fig. 4.

The collar *c* being offset from the shank *b*, as

shown, affords below the bar *d* a space within which the thread-finger *k* may vibrate in harmony with the needle and the thread-arm, as in the Campbell wax-thread sewing-machines.

5 Having thus described my invention, I claim as new and desire to secure by Letters Patent—

A presser-foot having a bearing-face provided with a slot for the passage of a hook-needle, and at the outside of said slot a ver-

tical shield or guard which is recessed, substantially as described, for the reception of the outer end of a thread-arm while delivering thread to the needle.

WALTER F. NESMITH. [L. S.]

Witnesses:

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MARY C. PUFFER.