

(No Model.)

E. M. ACKERMAN.

SEWING MACHINE.

No. 387,479.

Patented Aug. 7, 1888.

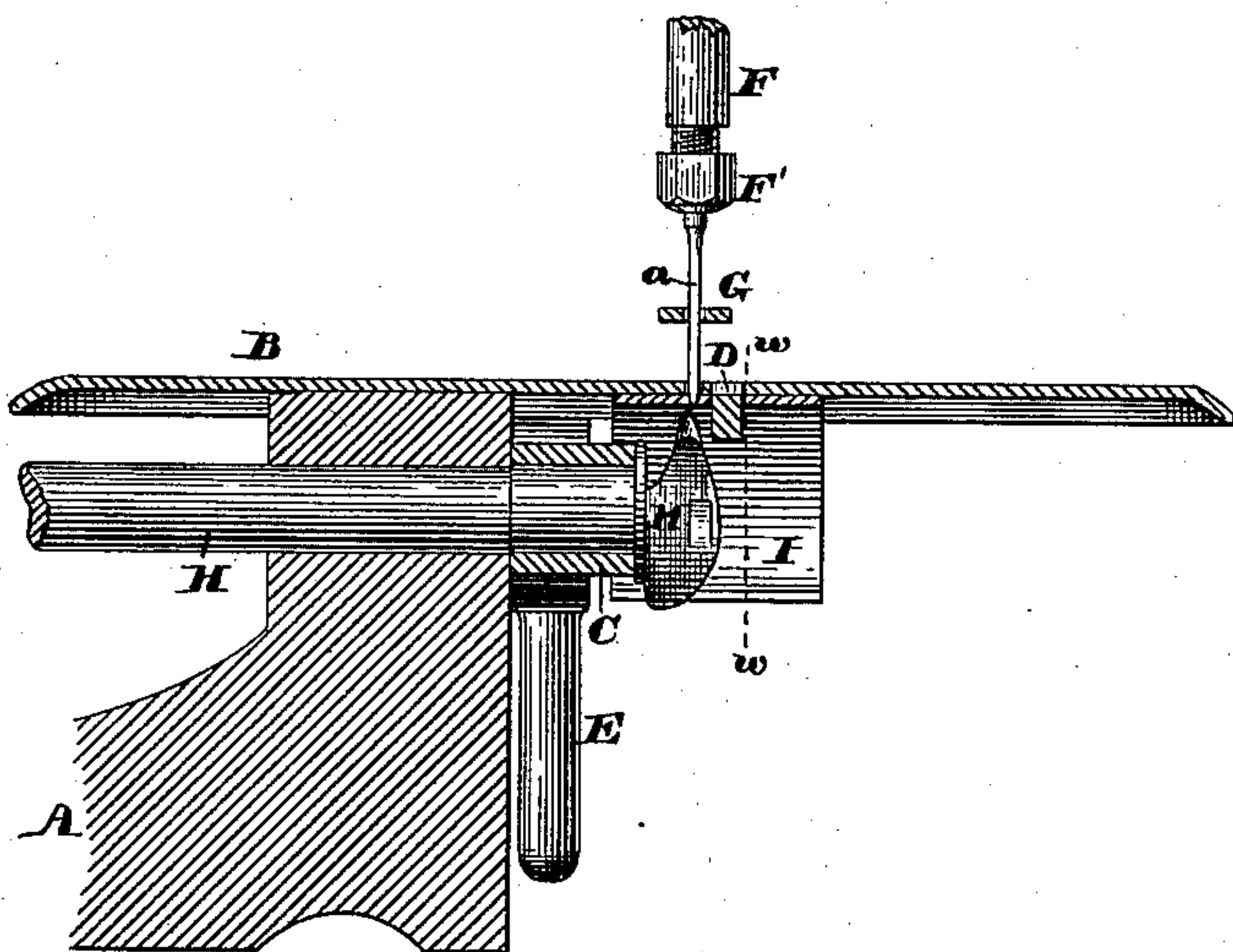


Fig. 2.

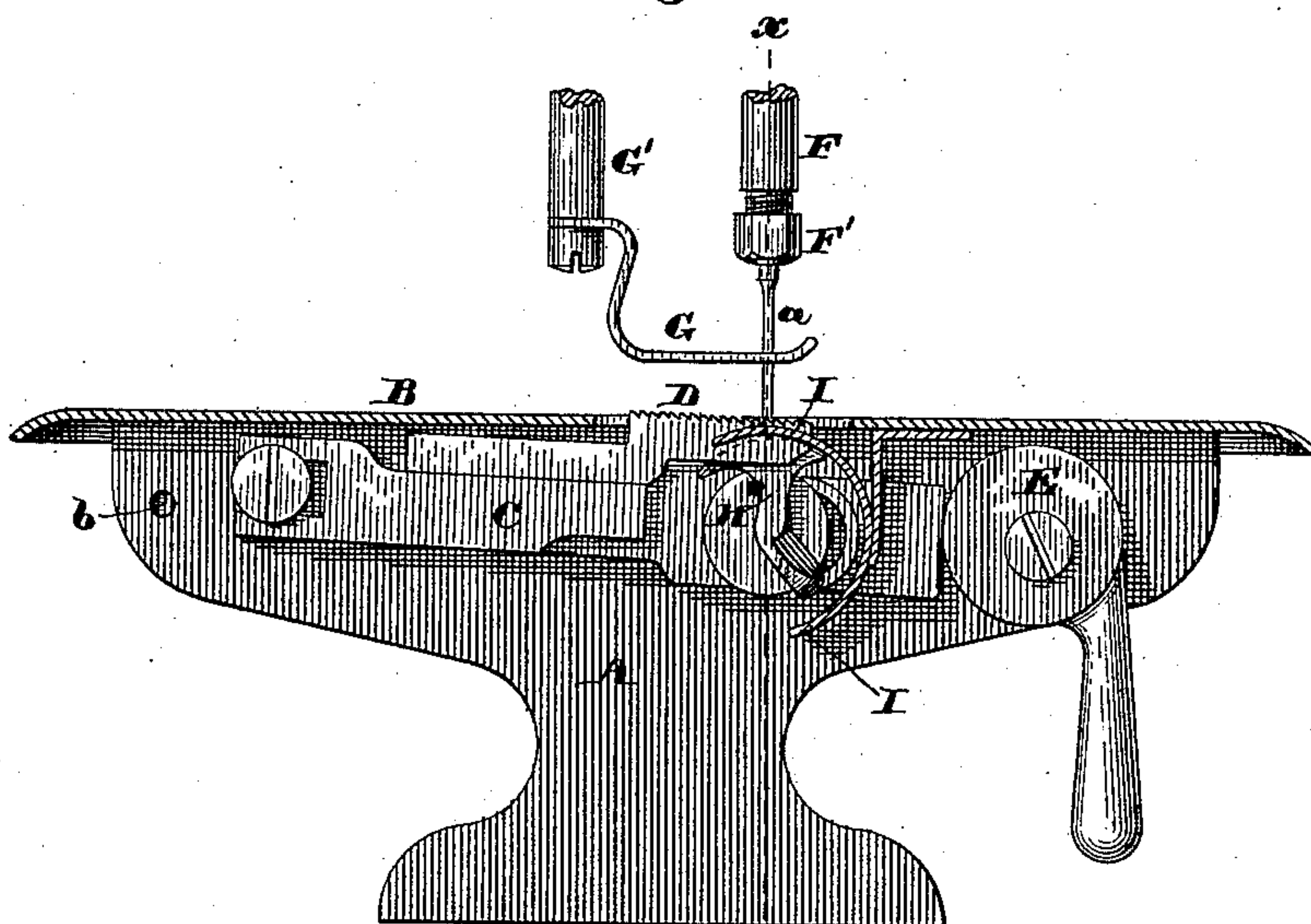


Fig. 1.

Witnesses:

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UNITED STATES PATENT OFFICE.

EMMA M. ACKERMAN, OF QUINCY, ASSIGNOR OF ONE-HALF TO WILLIAM M. COLBY, OF CAMBRIDGE, MASSACHUSETTS.

SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 387,479, dated August 7, 1888.

Application filed June 18, 1887. Serial No. 241,715. (No model.)

To all whom it may concern:

Be it known that I, EMMA M. ACKERMAN, of Quincy, in the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Sewing-Machines, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to that class of sewing-machines in which only one thread is used, and is especially adapted to the machines known as the "Willcox & Gibbs." In the use of these machines as heretofore constructed great care is necessary in placing the work and beginning the sewing to draw a proper amount of thread through the eye of the needle and pass it beneath the presser-foot toward the left. If this is not carefully and accurately done, the thread will be wound up on the looper, thus preventing the proper operation of the machine, besides causing a great deal of trouble to clear the thread from the looper, reset the work, and again adjust the thread. To overcome this objection and prevent the thread winding up on the looper is the object of my invention; and it consists in a segmental shield secured to the under side of the cloth-plate and surrounding the front and upper sides of the looper, with its inner curved surface in close proximity to the path of the point of the looper, as will be more fully described.

Figure 1 of the drawings is a sectional elevation of so much of a Willcox & Gibbs sewing-machine having my invention applied thereto as is necessary to illustrate my invention, the cutting-plane being on line *ww* on Fig. 2; and Fig. 2 is a partial vertical section on line *xx* on Fig. 1.

In the drawings, A is the stand or frame of the machine. B is the cloth-plate. C is the feed-bar; D, the feed-surface; E, the stitch-regulating cam; F, the needle-bar; F', the needle-nut; G, the presser-foot; G', the presser-foot bar; H, the looper; H', the looper-shaft, and *a* the needle, all constructed, arranged, and operating precisely as in the old pattern of the Willcox & Gibbs machine.

The looper, the feed-bar, and the main body of what is termed the "feed-surface" in the Willcox & Gibbs machines, as in general use

to-day, are inclosed in what is termed the "cap," pivoted to the stand or frame A at *b* by means of a clamping-screw which binds it to said stand or frame, so as to create sufficient friction to hold said cap in position with its upper edge in contact with the under side of the cloth-plate, and still permit it to be moved about its pivot to uncover the looper and feed-bar whenever it is desirable to obtain access thereto. This cap was designed to guard the work from being caught by the looper, but it does not prevent the thread being wound on the looper; but, on the contrary, it aggravates this difficulty by serving as a receptacle to catch the lint and pieces of thread and ravelings, which are caught by the looper and wound up thereon. To obviate this difficulty I dispense with the cap entirely and secure to the under side of the cloth-plate the semi-circular shield or guard I, having an interior diameter corresponding to the circle described by that part of the looper having the greatest radius, said shield or guard being so arranged as to cover the upper and front sides of the looper, as shown in Fig. 1, and is made of a width considerably greater than the axial length of the looper, as shown in Fig. 2, whereby it is made effective in preventing the work being caught by the looper when it accidentally gets pushed under the cloth-plate.

The shield or guard I does not inclose the looper at the rear and bottom sides thereof, by virtue of which fact the lint and ravelings which would otherwise lodge and accumulate in said shield drop through upon the table out of the reach of the looper, and are thus prevented from being wound up thereon.

I am aware that arched bed-plates are not new in sewing-machines, and that a cover completely inclosing the looper, but hinged for removal therefrom, is not new in like position, and I do not broadly claim a cover for the looper.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

In combination with the cloth-plate of a sewing-machine and with the looper, a semi-circular shield secured to the under side of said cloth-plate, having an interior diameter corresponding to the looper, arranged to cover the

upper and front sides of the looper, and extending axially beyond the looper, the said shield being open on its rear and bottom, whereby the lint and ravelings are dislodged and
5 the thread prevented from winding on the looper, substantially as described.

In testimony whereof I have signed my name

to this specification, in the presence of two subscribing witnesses, on this 13th day of October, A. D. 1885.

EMMA M. ACKERMAN.

Witnesses:

N. C. LOMBARD,

WALTER E. LOMBARD.