

E. H. CRAIGE.

Cloth Plate for Sewing Machines.

No. 67,635.

Patented Aug. 13, 1867.

FIG. 1.

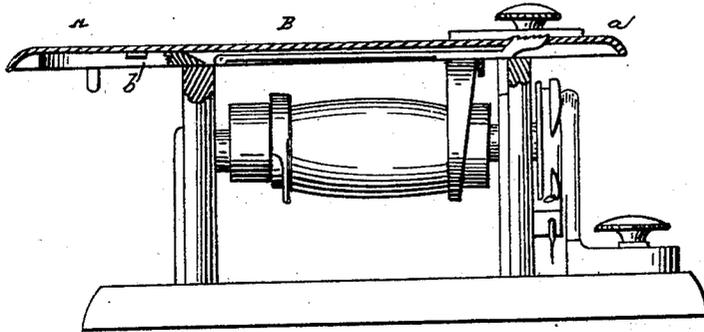


FIG. 2.

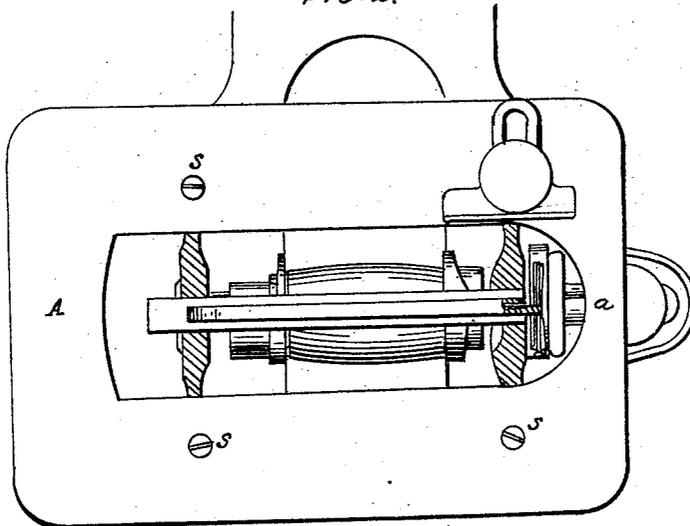
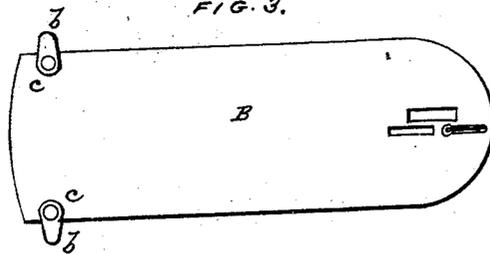


FIG. 3.



WITNESSES:

Geo. J. Southern
Gersten Berg.

INVENTOR.

E. H. Craige

By Paul Anton Hauff
his atty

United States Patent Office.

E. H. CRAIGE, OF BROOKLYN, NEW YORK.

Letters Patent No. 67,635, dated August 13, 1867.

IMPROVEMENT IN CLOTH-PLATE FOR SEWING MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, E. H. CRAIGE, of 334 Fulton street, in Brooklyn, in the county of Kings, in the State of New York, have invented a new and useful improvement in Sewing Machines; and I hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which drawing—

Figure 1 represents a longitudinal vertical section of this invention.

Figure 2 is a plan or top view of the same, the throat-piece having been removed to expose the parts below.

Figure 3 is an inverted plan of the throat-piece detached.

Similar letters of reference indicate corresponding parts.

This invention relates to an improvement in the manner of constructing the throat-piece of a sewing machine, and attaching the same to the cloth-plate, said improvement being particularly applicable to the Wheeler and Wilson machine, but which can also be used on machines of different construction.

The invention consists in combining with the cloth-plate of a Wheeler and Wilson machine a throat-piece which extends over the feeder, and which, when removed, furnishes an opening by which the feeder may be removed and the running parts cleaned and oiled. Said throat-piece is held in place by putting one part of it, or an attachment to it, under and against a projecting part of the machine or its plate, the opposite part being held to the machine or plate by any well-known means, such as a button or catch on one piece turning over or under the other, and the other sides or parts held by contact with the surrounding or adjoining parts of the machine or plate. If desired, the throat-piece may be held in place simply by one or more buttons situated on its under side, and attached to the same by a screw or rivet, or its equivalent, extending through said throat-piece in such a manner that the button or buttons can be readily turned by a screw-driver or key, and made to catch under some fixed part of the machine or plate, and thus hold the throat-piece thereto.

A represents the cloth-plate of an ordinary Wheeler and Wilson machine, said cloth-plate being secured to the frame or bed of the machine by four (more or less) screws, *s*, in the usual manner. B is the throat-piece, or that portion of the cloth-plate immediately surrounding the aperture for the feed-points and for the needle. This throat-piece is usually made movable, in order that it may be renewed, (it wearing out sooner than the other parts of the plate,) or that other pieces suited to special purposes (such as fine or coarse work, &c.) may be inserted in its stead, and in ordinary plates said throat-piece is small and answers no other purpose than that above named. The feeder of the machine, which has often to be removed in order to properly clean and oil it and other adjacent parts, is covered by the cloth-plate, which is held in place by three or more screws, and in order to reach said feeder and the adjacent parts, these screws must be taken out and the plate removed. The continual turning of the screws wears them and the plate to such an extent that in time said plate is liable to get out of its proper place and cause the breaking or bending of needles. In the operation of removing and replacing the plate, even skillful operators often dull or break the needles, and inexperienced ones find considerable other trouble and difficulty, especially in getting the "plate-cam" and the "feed-bar" into their proper relative positions. All these disadvantages I have obviated by extending the throat-piece B to such a distance over the feeder that by removing the same an aperture is produced through which the feeder and adjacent parts can be easily reached, so that the feeder can be removed and all the parts cleaned and oiled without taking off the cloth-plate. As ordinarily constructed, the throat-piece is attached to the plate by projecting tongues sliding in grooves, or other equivalent means, and it is inserted in a direction opposite to that in which the cloth is fed, and in consequence thereof the movement of the cloth and of the feeder, together with the jar of the working parts, tends to move it from its proper position and obstruct the working of the machine, causing the breakage of needles, and other injuries, unless some means are resorted to for holding said throat-piece in place, such as putting in a set-screw, which consumes time, or fitting the movable piece so tight that the friction will hold it, whereby the operation of removing the same is rendered difficult, or other well-known means, all of which involve trouble and loss of time. Furthermore, in machines of the ordinary construction the feeder is in such a position that it will not allow the throat-piece sufficient horizontal motion to go in or out unless the plate is loosened from its bed and raised above its proper level. These difficulties are obviated in my machines,

where the throat-piece is held at one end by a lip, *a*, on the plate, projecting over the bevelled edge of said throat-piece, and at the opposite end by one or more buttons, *b*, which are secured to the under surface of the throat-piece, and can be made to catch under the edge of the cloth-plate; or, instead of the lip *a*, any other suitable projection attached to the plate or bed of the machine may be made to catch over any fixed part of the throat-piece, and instead of buttons suitable cams or catches might be used, said catches being secured either to the plate or throat-piece, and made to catch in suitable loops, hooks, or eyes, on the other part. By this arrangement it is literally impossible for the most inexperienced operator to put the throat-piece in except it be right. The buttons *b* are attached to screws or rivets, *c*, (see fig. 3,) which turn in suitable sockets in the throat-piece, and which can be easily turned with a screw-driver or key, and as soon as the buttons are turned in the proper position a slight touch on the under surface of the throat-piece is sufficient to remove the same, and all trouble and loss of time in the removal of said piece are avoided.

It must be remarked that most of the advantages claimed for this invention were possessed by the improvement described in Letters Patent granted to me February 19, 1867, but that is more troublesome and expensive to make, requires more time to remove and replace, has more pieces to get lost or injured, and presents a more complicated appearance to learners.

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

1. In the Wheeler and Wilson and other sewing machines with a raised and movable cloth-plate, the combination with the cloth-plate *A* of a throat-piece, *B*, that extends over the feeder and furnishes an opening by which the feeder may be removed and the running parts cleaned and oiled without removing the cloth-plate, as set forth.

2. In the Wheeler and Wilson and other sewing machines with a raised and movable cloth-plate, any throat-piece which is held in place at one part by a lip, *a*, or its equivalent, and at the opposite part by one or more buttons or catches *b*, substantially as and for the purpose shown and described.

3. The arrangement, on the under side of the throat-piece *B*, of one or more buttons or catches, in combination with screws or rivets passing through to the upper surface, by means of which, with a screw-driver or key, said buttons can be turned, substantially as and for the purpose set forth.

E. H. CRAIGE.

Witnesses:

H. G. HULL,
W. HAUFF.