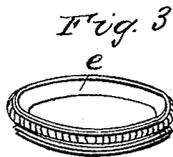
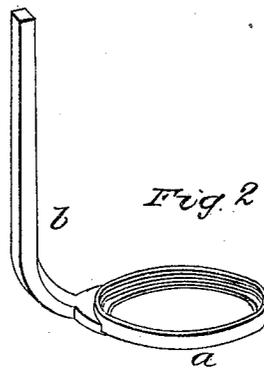
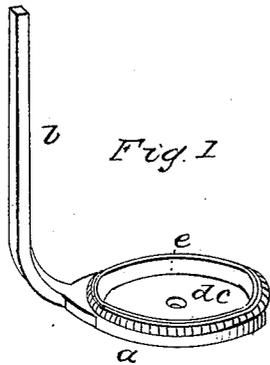


J. MOULSON.  
Sewing Machine.

No. 31,646.

Patented March 5, 1861.



witnesses  
*Lewis Storr*  
*Octavio H. San*

*John Moulson* Inventor

# UNITED STATES PATENT OFFICE.

JOHN MOULSON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO A. B. ELLIOTT, OF TROY, NEW YORK.

## IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 31,646, dated March 5, 1861.

*To all whom it may concern:*

Be it known that I, JOHN MOULSON, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Presser-Foot for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 represents a perspective view of a presser-foot embodying my invention, and Figs. 2, 3, and 4 represent detached parts of the same.

Previous to my invention it has been proposed to make the presser-foot of a sewing-machine of a transparent substance; but, so far as I am aware of, this method of construction has never come into practical use, although there is no doubt that the use of a transparent foot is accompanied with great practical advantages by enabling the operator to inspect the work up to the needle, and to watch, when necessary, the formation of the stitch. The cause of the disuse of such presser-feet, in my opinion, arises from the faulty manner in which it has been proposed to construct them, which is either by making the foot and shank that connects it with the machine of one piece of glass or by making the foot of glass and riveting it at one end to a metal shank. A presser-foot constructed upon either of these plans is deficient in strength when made as small as the exigencies of sewing render expedient, and if made large enough for strength is too bulky for convenient use in sewing.

The object of the first part of my invention is to obviate the defects of preceding transparent presser-feet; and it consists in a presser-foot for a sewing-machine which is a combination of a transparent perforated foot-plate with the shank of the presser-foot by means of a frame that holds the transparent foot-plate and connects it with the shank.

The object of the second part of my invention is to enable the operator to observe the work with greater facility; and it consists in the combination of the frame of the presser-foot with a transparent perforated foot-plate of convex form, which, acting as a convex lens, magnifies the work beneath it.

My invention may be embodied in various forms of presser-feet. That which I prefer is represented in the accompanying drawings,

where the shank *b* and frame *a* are made of metal and the form of the frame is circular. In this case the transparent foot-plate *c* is made of polished glass in the form of a disk or lens to fit the frame *a*, and it is perforated at *d* to permit the needle to play through it. The foot-plate is held in place in this instance in a groove in the frame, and as the frame in this instance surrounds the foot-plate the groove is formed by a rim upon the lower side of the part of the frame that is fast to the shank *b*, and by a follower, *e*, which is screwed into the frame *a* on top of the foot-plate, so that the rim of one part of the frame below and the follower above form the groove in which the edge of the foot-plate is retained.

When the second part of my invention is to be used the upper surface of the foot-plate is made convex, so as to magnify the work beneath it. The foot-plate can be highly polished on its under surface to reduce friction, and when connected with a mechanism that moves it for feeding purposes, as is the case with the presser-feet of some machines, the under surface may be toothed or made rough upon its external edge without nullifying the transparency in the line of the seam. The size of the transparent foot-plate, its shape, and the construction and form of the frame that combines it with the shank or leg, as well as the form of the shank and the materials of which all these are made, may be varied as circumstances require, or to meet the views of constructors of sewing-machines.

I do not claim broadly making the presser-foot of a sewing-machine of a transparent material; but

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

1. A transparent presser-foot for a sewing-machine, which is a combination of a transparent foot-plate with a shank by means of a frame that holds the foot-plate and connects it with the shank, substantially as herein described.

2. The combination of a presser-foot frame with a transparent perforated foot-plate of convex form, substantially as and for the purpose described.

JOHN MOULSON.

Witnesses:

LEWIS STOVER,  
OCTAVIUS A. LAW.