Aug. 13, 1940. C. H. JOHANSON ET AL 2,211,331

MAGNIFYING PRESSER FOOT

Filed April 10, 1939

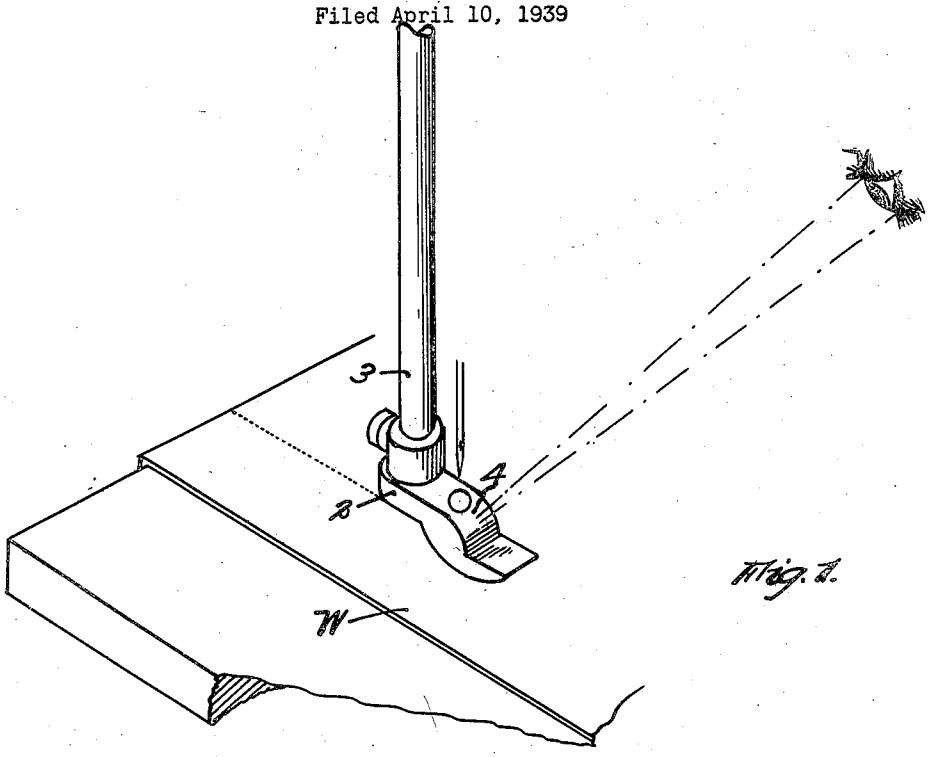


Fig. 1.

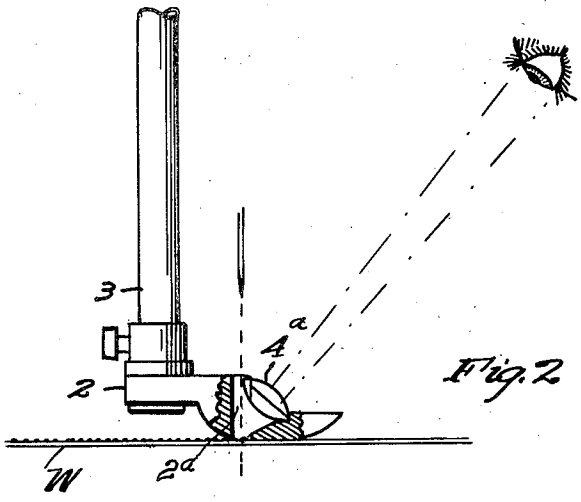


Fig. 2

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MAGNIFYING PRESSER FOOT

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2 Claims. (Cl. 112—235)

This invention is a presser foot for sewing machines and various other adaptations where it is desirable to have a presser device active on given work.

It is very trying on the eyes of sewing machine operatives to closely follow the stitching passing under the usual opaque or blinding presser foot, very especially so when the work is very fine, involving a fine silk or other thread in the work; the work being made more difficult when fine threads are used to make fine or small stitches on goods of the same color as the thread. It is therefore one of the objects of this invention to provide a transparent presser foot through which the given work under the device may be readily observed.

While in many cases the use of such a transparent presser foot will suffice, in other and fine work it is desirable that the work or stitch be considerably magnified to the end that a very great relief is felt by the operative where constant attention for considerable periods of time is unavoidable.

The invention consists of certain advancements in this art as set forth in the ensuing disclosure and having, with the above, additional objects and advantages as hereinafter developed, and whose constructions, combinations and details of means, and the manner of operation will be made manifest in the description of the herewith illustrated embodiment; it being understood that modifications, variations and adaptations may be resorted to within the scope, spirit and principle of the invention as it is more directly claimed hereinbelow.

Figure 1 is a perspective of the applied presser foot of one embodiment.

Figure 2 is a side elevation of the presser foot, partly sectioned of another embodiment.

The presser foot of this invention includes a rearward end or body 2 of any desired shape and size for fixed attachment to the lower end of a presser foot bar 3 or other machine element to which a work holding piece is normally used and disposed in normal view of the machine operative. Forwardly of the attaching body or end 2 there is provided or suitably formed a substantial transparent or lens part 4 focusing on one side on the stitch or work W, and reproducing an image at a suitable focal distance so as to be at an eye distance most comfortable to the operative having to constantly watch the work, and to entirely eliminate the usual close and straining position of the eyes incident to the use of an opaque, presser foot element.

The presser foot is preferably made in one integral unit of shatter-proof glass of the desired transparency so that it will be capable to stand the shock of being repeatedly snapped down onto the work and to take the load of the usual pressure spring.

A feature of the invention is that the rear surface of the magnifying lens part 4 is elevated above the plane of the work so that its transparency will not be diminished because of attrition or abrasion marks such as may be produced on the surface of the work-engaging toe of the presser foot.

Figure 2 shows an inserted disc lens 4^a disposed at one side of a needle aperture 2^a in the body 2 and the focal axis of the lens intersecting the path of the needle at substantially the plane of the stitch at the presser foot.

What is claimed is:

1. A stitch magnifying device including a presser foot body having an aperture therein for needle reciprocation and a magnifying lens mounted in said body and having its focal axis substantially intersecting a part of the aperture at about the stitch plane of the presser foot and the axis of the needle path.

2. A presser foot having a needle aperture, and a magnifying element rigidly incorporated as a part of the presser foot and disposed to one side of the needle path in said aperture and having its focal axis substantially intersecting the path of the needle at the plane of the stitch at the presser foot.

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