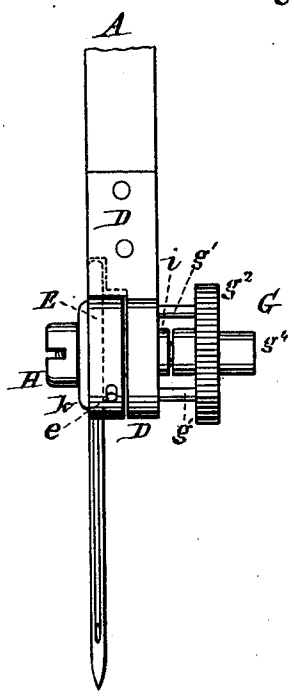
G. W. LEVIN.

MOVABLE NEEDLE-HOLDER FOR SEWING-MACHINES.

No. 185,766. Patented Dec. 26, 1876.

Fig. 1



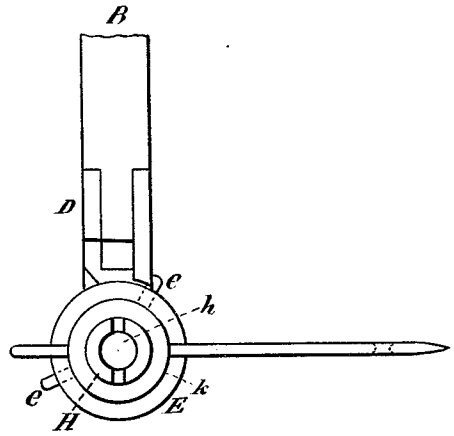


Fig. 2

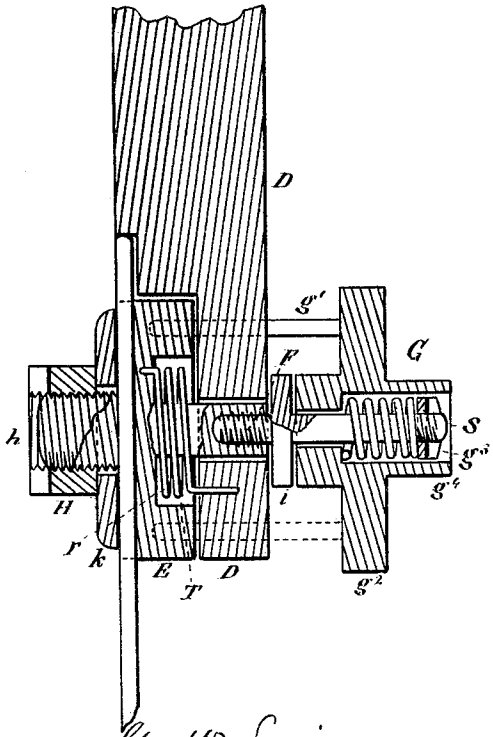
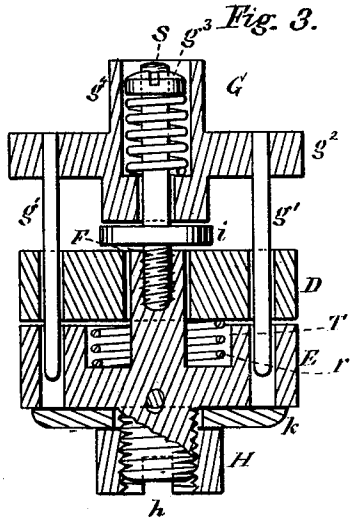


Fig. 3.



WITNESSES

James C. McGowan

Story B. Ladd

Geo. W. Levin INVENTOR

By Paine & Grafton

ATTORNEYS

UNITED STATES PATENT OFFICE.

GEORGE W. LEVIN, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF HIS RIGHT TO CHARLES E. BARRETT, OF SAME PLACE.

IMPROVEMENT IN MOVABLE NEEDLE-HOLDERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **185,766**, dated December 26, 1876; application filed August 5, 1876.

To all whom it may concern:

Be it known that I, GEORGE W. LEVIN, of Chicago, county of Cook, and State of Illinois, have invented a new and useful Improvement in Movable Needle-Holding Attachment for Sewing-Machines, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to save time and avoid annoyance in threading the sewing-machine needle, by bringing the needle from its normal working position to an angular position, more convenient for threading, after which the needle is returned to its original position, and there firmly held while the machine is at work.

To accomplish this I employ the combination, in a movable needle-holding attachment, of a fixed head, D, which is attached to or made a part of the needle-bar of the machine; movable disk E, to which the needle is attached, playing on the head D; locking device G, for holding the disk in position; projections or stop-pins *e*, for checking the movement of the disk at its normal and threading positions, as shown in the views Figure 1, A B, of the accompanying drawings, and the other devices hereinafter set forth and shown.

The attachment is illustrated more in detail in the vertical section, Fig. 2, and in the horizontal section, Fig. 3.

Like letters indicate like parts in each figure.

The disk E is held to the fixed head D, on which it plays, by the disk *i* on the screw F, which is screwed into the hub of the disk E, the hub passing through D, as shown. The disk is recessed at T, to accommodate a spiral spring, *r*, one end of which is fixed in the head D, and the other end in the disk. The bolts g^1 of the locking device G pass through the fixed head D into the disk E, and hold the disk E in position. The bolts g^1 are fixed to g^2, which is a flange fixed to the cylinder g^4. The cylinder g^4 plays on the shaft S, which is a continuation of the screw F. A spiral spring working within the cylinder g^4, around the shaft S, and held in position by the nut g^3, forces the bolts g^1 into position, thus locking the disk when the needle is in working position. A continuation of the disk E forms the hub *h*, on which a screw-thread is cut. The nut H works upon the hub *h*, and holds the needle in position, a washer, *k*, being placed between them. The needle passes through a hole into the hub *h*, and rests in a longitudinal groove cut into the face of the disk E. The groove not being cut as deep as the thickness of the needle, when the nut H is screwed down on the hub, it is brought against the needle, holding the same securely. The stops *e* are projections on the periphery of the disk, and check the movement of the disk at the position for threading the needle, and when in position for sewing.

By pulling out the flange or disk g^2, the bolts g^1 are withdrawn from the disk E, and the pressure of the spring in the recess T throws the disk E in convenient position for threading, as shown in view B, Fig. 1. After threading the needle, the disk is carried back to its normal position, where it is securely held by the bolts, as shown in Fig. 1, A, and Fig. 2.

To set a new needle, if the old needle has been removed, by loosening the set-screw H, pull back the disk g^2 and let the plate E fly up. The needle can then be inserted from the side, and then turned down into a vertical position and properly adjusted.

I claim as my invention—

The combination of the disk E, carrying the needle and made with stop-pins *e*, and with the hub passing through the fixed head D, which is attached to and a part of the needle-bar, with the spring *r*, the fixed head D, the bolts g^1, the plate g^2, shaft S, and spring surrounding it, when constructed substantially as described, and for the purposes set forth.

GEORGE W. LEVIN.

Witnesses:

MARSHALL BECK,

L. J. LEVIN.