

(No Model.)

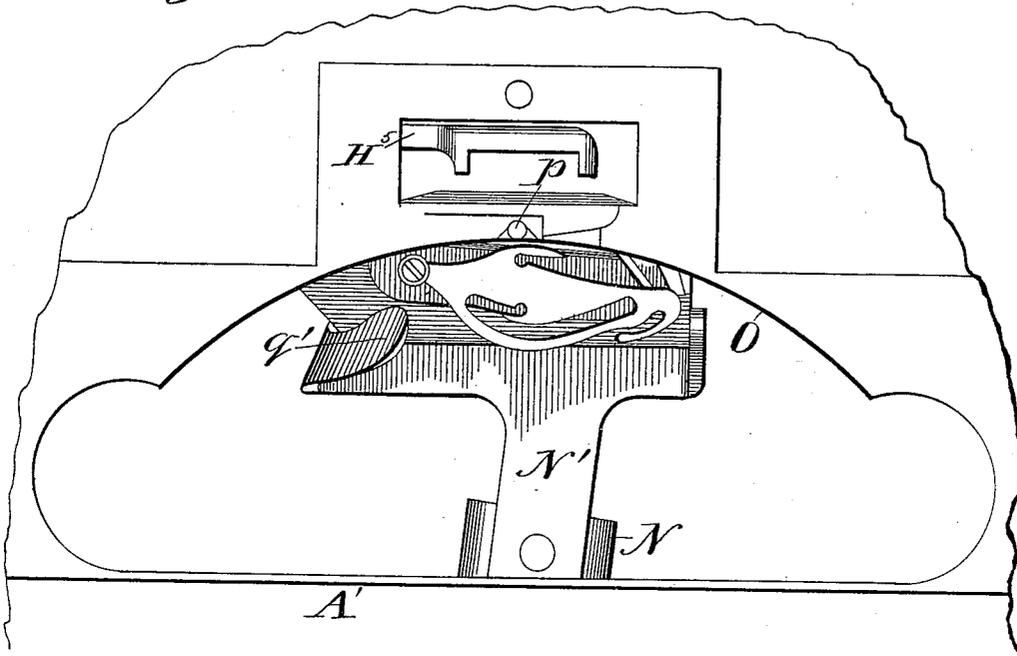
2 Sheets—Sheet 1.

R. WHITEHILL.  
SEWING MACHINE.

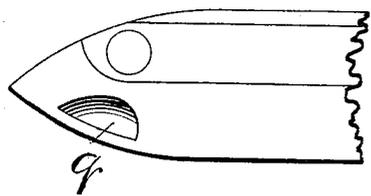
No. 326,822.

Patented Sept. 22, 1885.

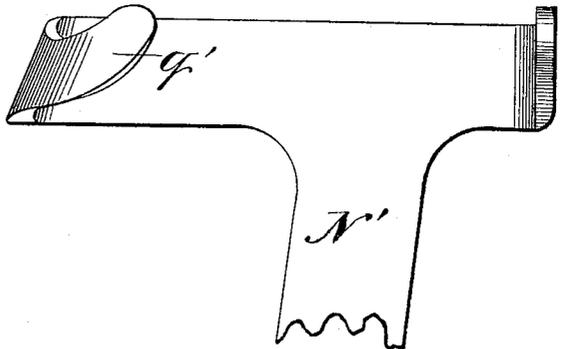
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



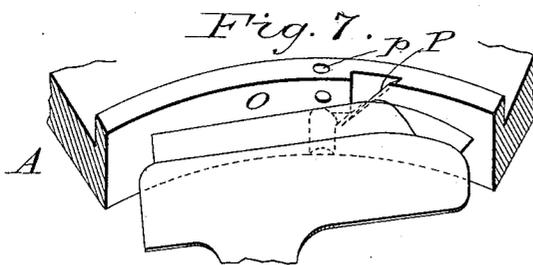
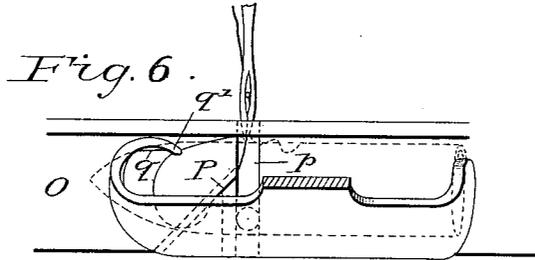
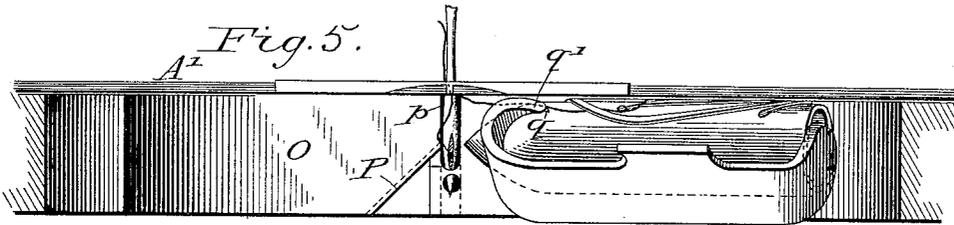
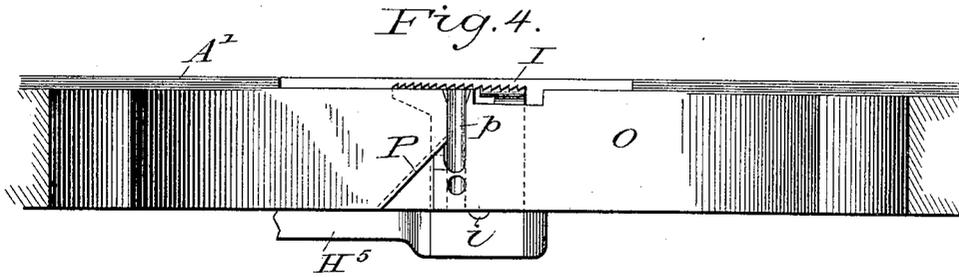
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Inventor:  
*Robert Whitehill*  
 By *Stout & Henderson*  
 Attorneys.

R. WHITEHILL.  
SEWING MACHINE.

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# UNITED STATES PATENT OFFICE.

ROBERT WHITEHILL, OF MILWAUKEE, WISCONSIN.

## SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 326,822, dated September 22, 1885.

Application filed April 20, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT WHITEHILL, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to sewing-machines; and it consists in certain new and useful improvements in the threading mechanism, which will be fully described hereinafter.

In the drawings, Figure 1 is a top view of a shuttle and race embodying my invention. Fig. 2 is a top view of the taper end of my shuttle. Fig. 3 is a like view of the cradle of the shuttle-carrier with the shuttle removed. Fig. 4 is a front view of the face of the race. Fig. 5 shows the position of the thread and shuttle with relation to the race when the carrier is just beginning a stroke. Fig. 6 shows in elevation the position of the same parts when the shuttle has fully taken the loop, and Fig. 7 is a bottom view of the same.

The shuttle-race O has the usual needle-well, *p*, in its center, and on one side of this well the metal is cut away to admit the upper thread from the needle to an inclined half-dovetailed ledge, P, which, as the shuttle takes the loop from the needle, detains the thread and guides it down beneath and around the shuttle, and thus permits of the use of a shorter needle than has heretofore been capable of use on a

shuttle-machine. The shuttle in its advance opposes that portion of the loop that comes from the ledge P, and therefore, as the tendency of the strain would be to lift the shuttle, I make a cavity, *g*, in the nose of the shuttle and provide the cradle with a horn, *g'*, that fits loosely in said cavity; and this horn, while it will permit the upper portion of the loop to slide under it, as it does not clamp the shuttle tightly, will prevent the shuttle from being lifted from its seat.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a sewing-machine, the combination, with a shuttle-race having a well or recess for the needle near its center, and an inclined undercut or half-dovetail recess, the upper edge of which communicates with the said needle-recess about midway vertically of the shuttle-race, or in the path of the point of the shuttle, of a shuttle having a cavity in its nose on its upper side, and a shuttle-carrier having a horn fitting loosely in said cavity, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

ROBERT WHITEHILL.

Witnesses:

S. S. STOUT,

H. G. UNDERWOOD.