

(No Model.)

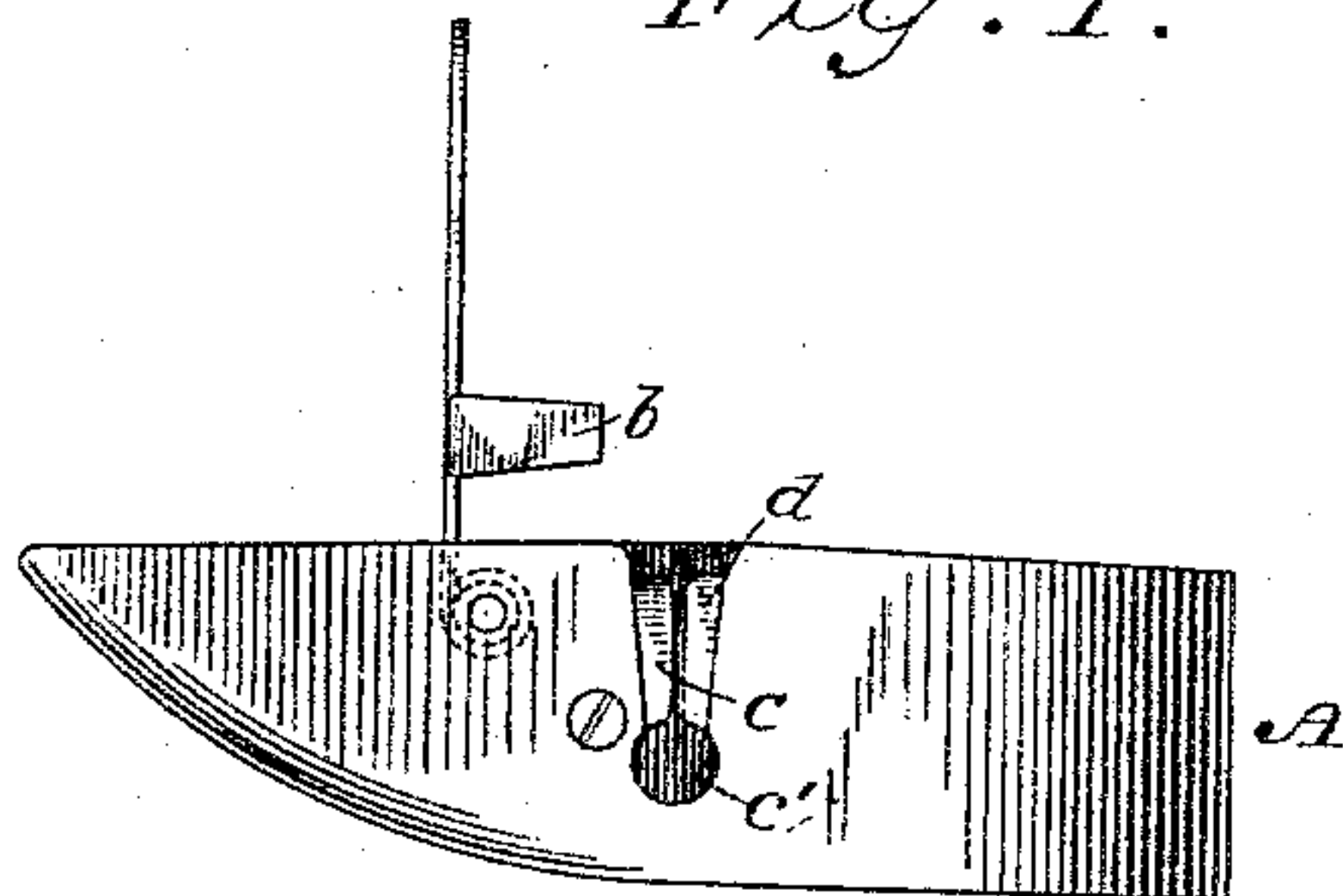
S. LARKIN.

SHUTTLE FOR SEWING MACHINES.

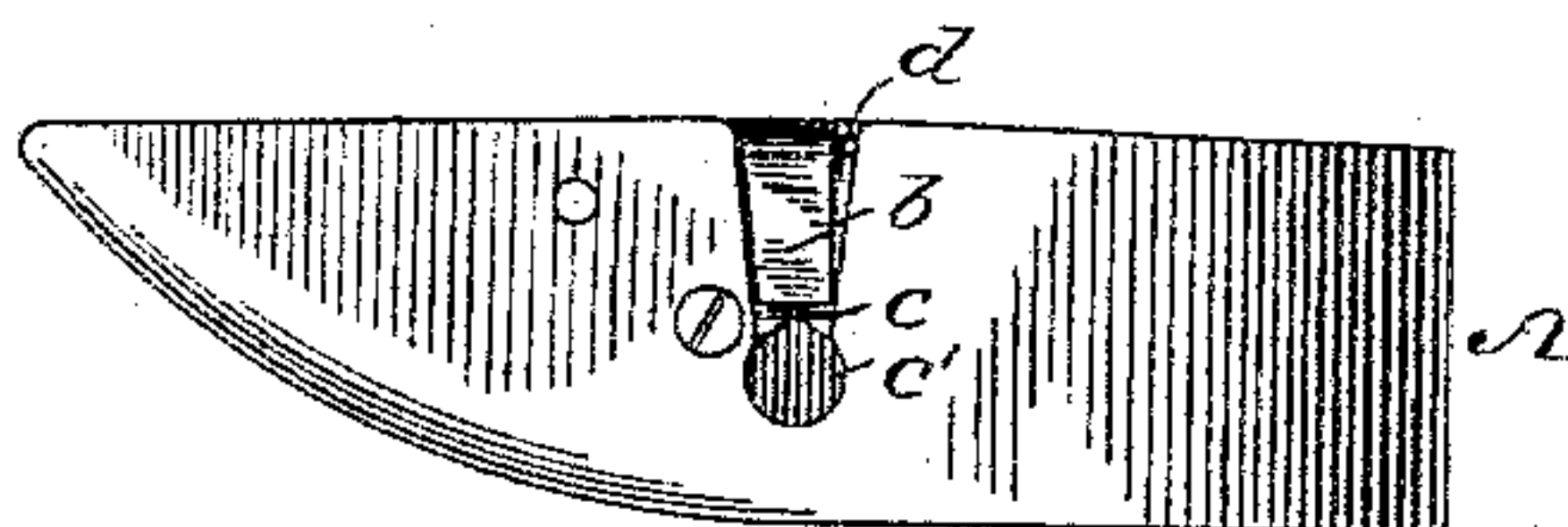
No. 323,345.

Patented July 28, 1885.

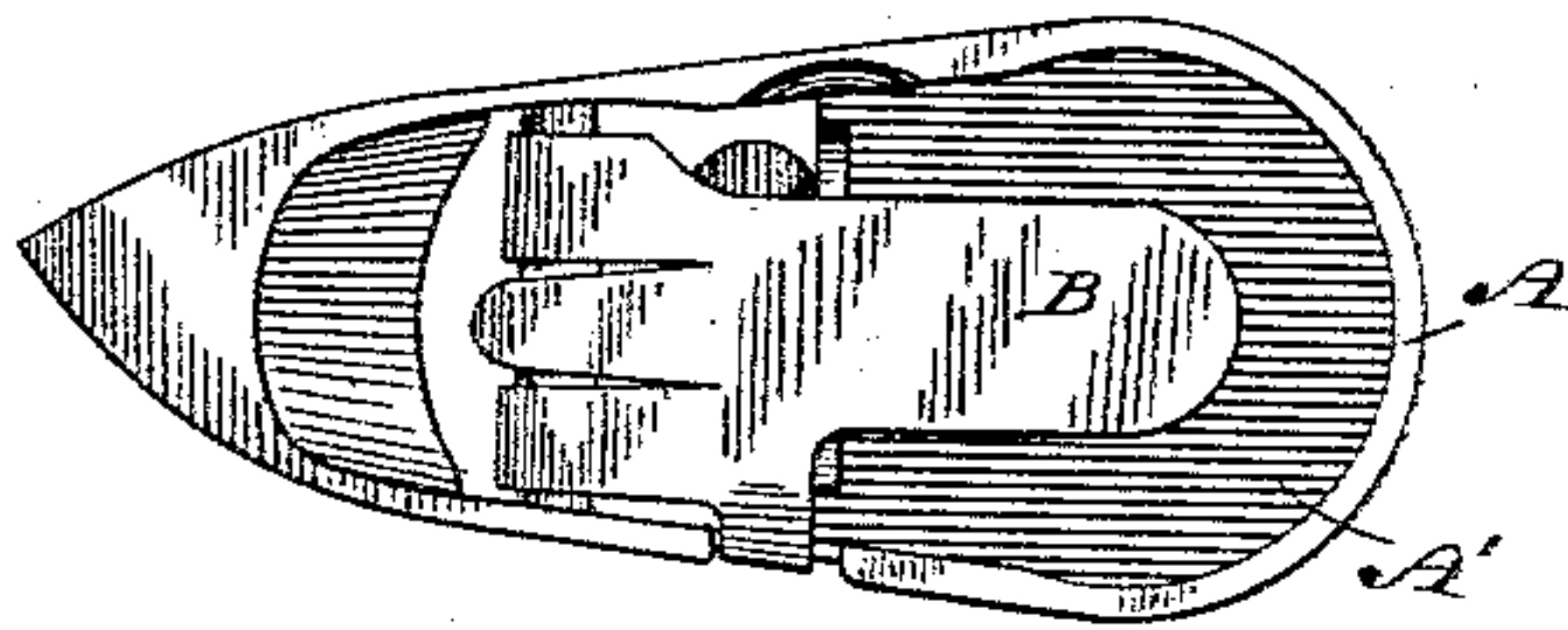
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES

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INVENTOR

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# UNITED STATES PATENT OFFICE.

SAMUEL LARKIN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE AMERICAN BUTTON HOLE, OVERSEAMING AND SEWING MACHINE COMPANY, OF SAME PLACE.

## SHUTTLE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 323,345, dated July 28, 1885.

Application filed January 31, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL LARKIN, of the city and county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Shuttles for Sewing-Machines, of which the following is a specification.

My invention relates to that class of shuttles shown in the reissued patent of George Reh-fuss, No. 10,103, of May 2, 1882.

The object of the improvement is to prevent the thread from slipping out of the eye of the shuttle.

In the accompanying drawings, Figures 1, 2, and 3 are different views of a shuttle.

The shuttle A, which is in general construction substantially the same as that of the Reh-fuss shuttle, is provided with a hinged plate, B, on the open side of the shuttle, which serves to hold the bobbin in the bobbin-receptacle A'. The thread from the bobbin is passed through a slot, c, in the top wall of the shuttle into the eye c'. A lip, b, on the hinged plate B serves to close the slot c and prevent the thread from slipping out of the eye.

The general construction thus far referred to is substantially the same as that shown in the Reh-fuss patent referred to, and more detailed description is unnecessary. In the Reh-fuss patent, however, the slot which is cut into the top wall of the shuttle has its edges flush with the top face of the shuttle, and the retaining-lip on the hinged plate covers this slot and lies above the top face of the shuttle.

In my improved shuttle I cut a depression or groove, d, from the edge of the shuttle into the eye, and then cut the slot c in the bottom of this groove, as clearly shown in Fig. 1. The retaining-lip b is preferably formed with square corners, and when the hinged plate is turned down so as to retain the bobbin in place the lip lies in the groove or depression d; but its

square end preferably does not reach quite to the eye c', as shown in Fig. 2. With this construction the lip lies flush with the top face of the shuttle, and the thread is prevented from slipping out of the eye, for the following reason: When the thread in the eye of the shuttle draws into the slot c, it comes against the square end of the lip b, and if it be drawn sideways in either direction cannot pass under the square corner of the lip, because it will strike the edge or side wall of the groove d, and cannot drop down low enough to pass around and under the square corner of the lip. Again, if the thread is drawn sidewise and inwardly, or toward the flat side of the shuttle, it will obviously draw across the top of the square corner of the lip, and cannot possibly pass under it.

I am aware of the construction shown in Patents Nos. 241,770 and 257,926, and do not, therefore, claim such subject-matter.

I claim—

1. A shuttle-body formed with an eye, a groove leading from the edge of the body to the eye, and a thread-slot cut in the bottom of the groove, in combination with a retaining-lip formed with square corners, which lies in said groove.

2. A shuttle-body formed with an eye, a groove leading from the edge of the body to the eye, and a thread-slot cut in the bottom of the groove, in combination with a thread-retaining lip formed with square corners, which lies in said groove, but does not reach quite to the eye.

In testimony whereof I have hereunto subscribed my name.

SAMUEL LARKIN.

Witnesses:

SAML. WILCOX,  
A. BIRCH STAUFFER.