

N. ROBERTS & A. E. LAKE.

Shuttle for Sewing-Machine.

No. 132,108.

Patented Oct. 8, 1872.

Fig. 1.

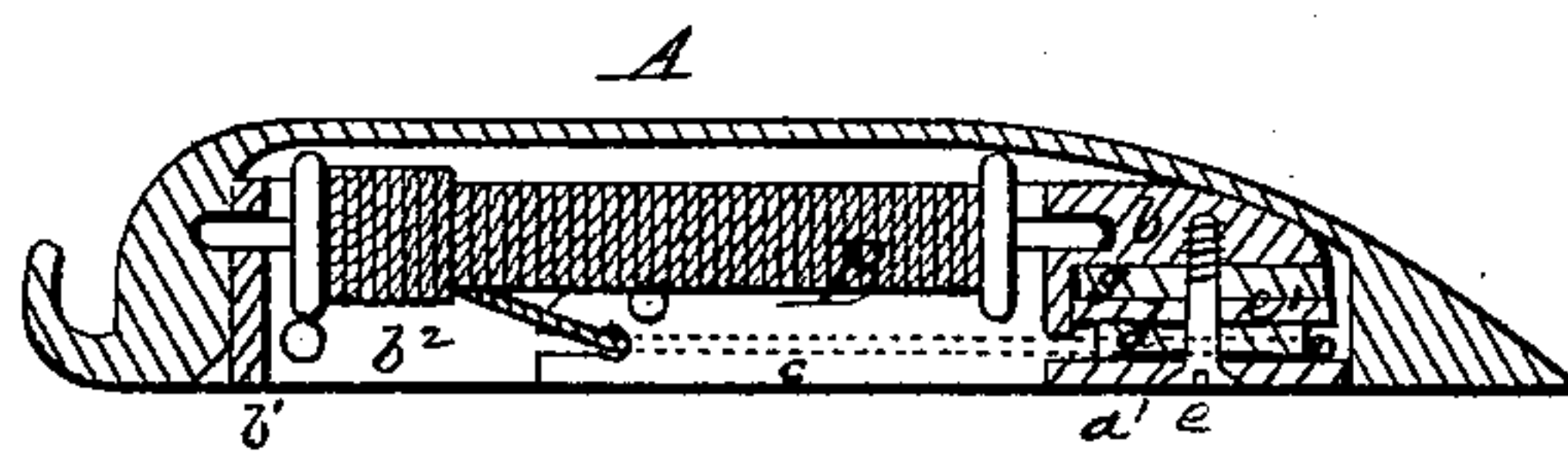


Fig. 2.

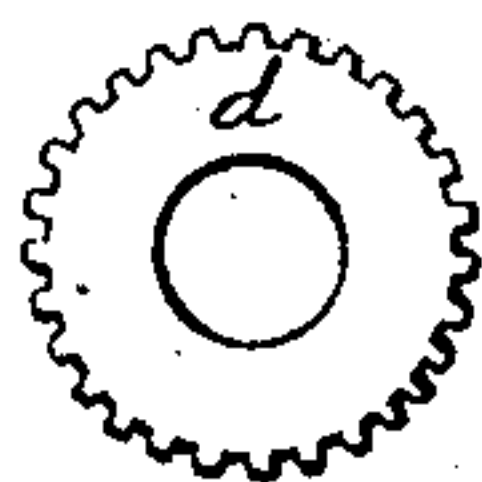


Fig. 3.



Fig. 4.



WITNESSES.

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NATHAN ROBERTS AND ABRAM E. LAKE, OF KENDALLVILLE, INDIANA.

IMPROVEMENT IN SHUTTLES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **132,108**, dated October 8, 1872.

To all whom it may concern:

Be it known that we, NATHAN ROBERTS and ABRAM E. LAKE, of Kendallville, in the county of Noble and State of Indiana, have invented a new and valuable Improvement in Sewing-Machine Shuttles; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a sectional view of our invention. Figs. 2, 3, and 4 are details of the same.

This invention has relation to sewing-machine shuttles; and the novelty consists in introducing at the forward end of the shuttle a horizontal wheel having vertical ribs or serrations upon its edge, around which the thread from the bobbin passes and receives tension, said wheel being arranged as hereinafter described.

Referring to the drawing, A represents a sewing-machine shuttle; B, the spool or bobbin, having its bearings in the projections b b^1 of the pivoted frame b^2 , the raising of which will enable the bobbin to be taken out. The rear end of the bobbin-spindle enters a recess in the shuttle behind the projection b^1 . To the side of the frame is secured a tension-spring, c . d represents the serrated wheel, secured at the forward end of the shuttle, outside the projection b , by means of a screw, e . The wheel rests on a washer-plate, e' ,

which is separated from the projection b by means of an India-rubber cushion, g , which serves to press said washer against the wheel and to thereby tighten said wheel. On the outside of the wheel is placed a plate, a' , through which the screw e passes. The serrations, ribs, or corrugations of the wheel extend in vertical lines between its upper and lower faces, so that there is no annular groove in the circumference of said wheel. By turning said screw the tension may be regulated. The thread from the bobbin passes around the tension-wheel, as shown, first passing behind the plate or spring c , then into the recess occupied by said wheel, and finally out through an aperture in the wall of the shuttle or otherwise. To allow the thread to be adjusted the frame b^2 holding the wheel is turned out on its pivot.

What we claim as our invention, and desire to secure by Letters Patent, is—

The shuttle herein described, having the horizontal tension-wheel d vertically ribbed or serrated around its circular edge, the cushion g , and the clamp-screw e , all constructed and arranged as and for the purpose specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

NATHAN ROBERTS.
ABRAM E. LAKE.

Witnesses:

GEORGE W. RESADEL,
A. H. DAVIDSON.