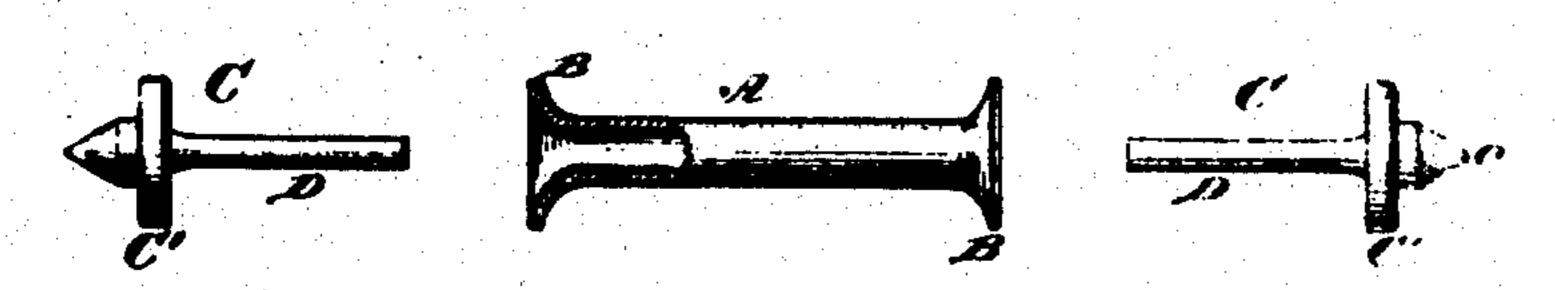
## BEST COPY AVAILABLE

D. M. CHURCH.
Bobbin for Sewing-Machine Shuttles.

No. 214,624.

Patented April 22, 1879.



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ATTORNEYS

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## UNITED STATES PATENT OFFICE.

DWIGHT M. CHURCH, OF DERBY, CONNECTICUT.

## IMPROVEMENT IN BOBBINS FOR SEWING-MACHINE SHUTTLES.

Specification forming part of Letters Patent No. 214,624, dated April 22, 1879; application filed December 10, 1878.

To all whom it may concern:

Be it known that I, DWIGHT M. CHURCH, of Derby, in the county of New Haven and State of Connecticut, have invented a new and valuable Improvement in Bobbins for Sewing-Machine Shuttles; and I 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.

The figure of the drawing is a representation, partly in section, of my bobbin, and the removable points to be used in connection

therewith.

This invention has relation to bobbins; and consists of two removable points, each consisting of a shank, head, and projecting point, in combination with a cylinder of paper having flanges at each end, as will be hereinafter fully described, and particularly pointed out in the claim.

Referring to the drawing, A represents the paper-cylinder, having outwardly-flaring flanges B, made of paper or paper pulp, in any desirable manner. C represents the wooden points, each being composed of the shanks

D, the head C', and the points proper, c. The shanks D are placed within the cylinder A, and, while they about against each other therein, the heads C' firmly support the flanges, and the points c project outward.

It will be observed that in the market it is only necessary to purchase one set of points with several spools of thread, as one set is readily applied to each, and a great saving is thereby effected. One set of points, if worn or damaged, may be replaced by a new one.

The heads C' serve efficiently to prevent the thread from throwing over, and the shanks D serve to strengthen and support the paper tube.

What I claim as new, and desire to secure

by Letters Patent, is-

The removable points C, each consisting of the shank D, head C', and point c, in combination with the paper-cylinder A having flanges B, substantially as set forth.

In testimony that I claim the above I have bereunto subscribed my name in the presence

of two witnesses.

DWIGHT M. CHURCH.

Witnesses:

JAMES J. SHEEHY, ROBERT EVERETT.