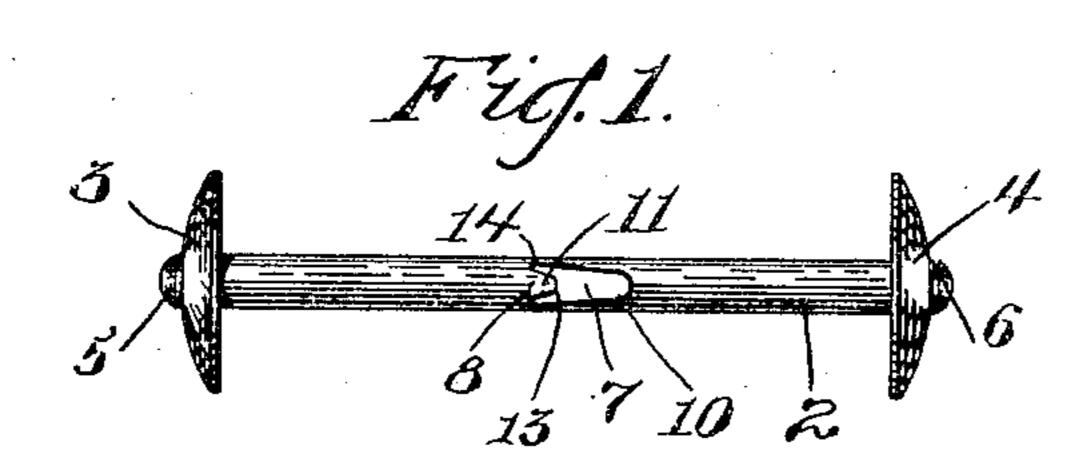
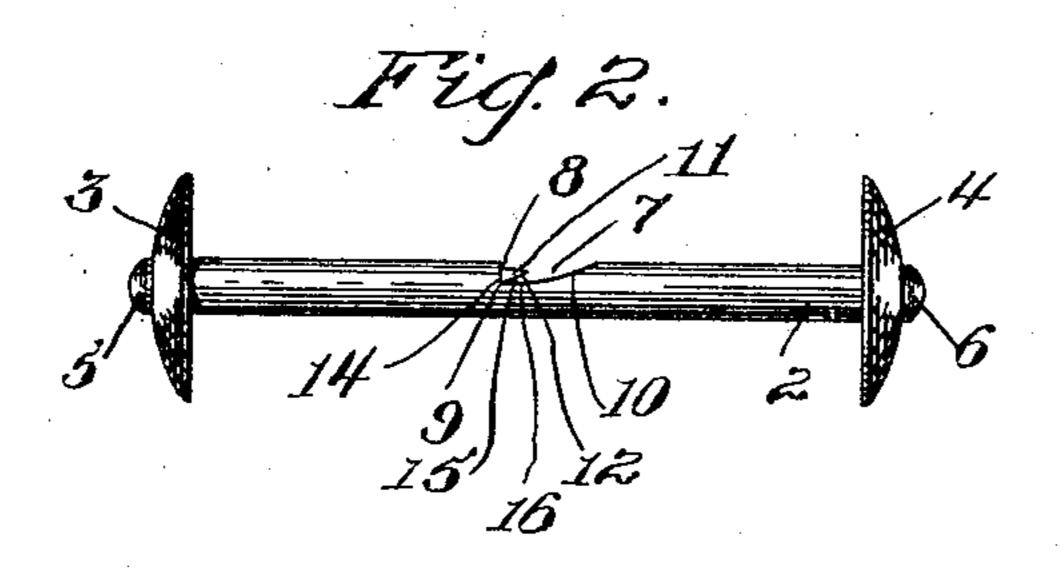
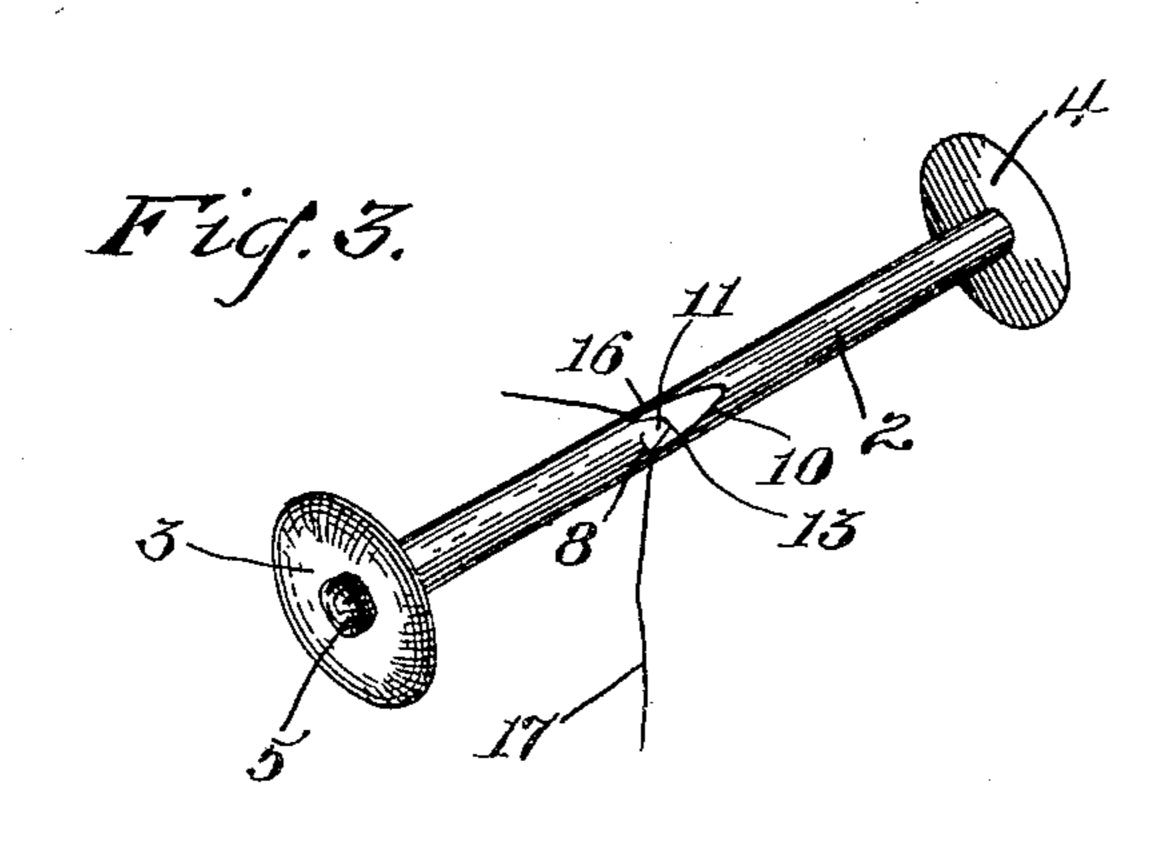
A. G. LAMB.
SHUTTLE BOBBIN.
APPLICATION FILED JUNE 11, 1904.

NO MODEL.







Mitnesses: G.G. Triss. A. C. Mayners.

Inventor:
Amherst G. Lamb;
By inis attorney;

THI chards.

## United States Patent Office.

AMHERST G. LAMB, OF TORRINGTON, CONNECTICUT, ASSIGNOR TO THE DOMESTIC SEWING MACHINE COMPANY, OF NEWARK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

## SHUTTLE-BOBBIN.

SPECIFICATION forming part of Letters Patent No. 774,188, dated November 8, 1904.

Application filed June 11, 1904. Serial No. 212,090. (No model.)

To all whom it may concern:

Be it known that I, AMHERST G. LAMB, a citizen of the United States, residing in Torrington, in the county of Litchfield and State of Connecticut, have invented certain new and useful Improvements in Bobbins, of which the following is a specification.

This invention has reference to bobbins or cops, and particularly to that class of such devices which are used in the shuttles of sewing-machines.

It is an object of the invention to provide a device whereby the winding of the thread upon the spindle of the bobbin may be facili-

15 tated.

An embodiment of the invention is disclosed in the accompanying sheet of drawings, whereon—

Figure 1 illustrates a sewing-machine bobbin with a suitably-displaced spindle. Fig. 2 is a similar view to Fig. 1, and Fig. 3 is a perspective view showing the method of applying the thread before winding the same upon the spindle of the bobbin.

Similar characters of reference indicate corresponding parts throughout the figures.

The bobbin may be of the usual type now used in shuttles of sewing-machines, and may comprise a spindle 2, provided at each end 3° with a head 3 and 4, respectively, and each head may also be provided with a hub 5 and 6, respectively, adapted to fit any suitable bearings in any suitable shuttle.

At some suitable point in the length of spindle 2, but preferably about midway, such spindle is displaced or notched out, as at 7, and preferably in a manner shown, for instance, in Fig. 2, so that such displacement will form a square shoulder 8, transverse to the longitudinal axis of the spindle-tool and which extends somewhat down into the spindle into a point about where it is indicated at 9 in Fig. 2, and from this point the wall 10 of the notch gradually curves upwardly to 45 the outer wall of the spindle.

Preferably projecting from the shoulder 8 may be a tooth 11, which in the present instance extends outwardly into the notchedout portion, and the under side 12 of such tooth is preferably slanted from the outer ex-

tremity 13 of said tooth to the base 14 thereof, whereby to form a wedge-shaped opening
15 between the base 16 of the wall 10 and the
base 14 of the tooth 11. It will be understood, of course, that this tooth is adapted to
sufficiently flex so that when a thread 17 is
slipped under such tooth in a manner shown,
for instance, in Fig. 3, the same will be permanently maintained between the wall 10 of
the notch and the wall 12 of the tooth.

It will now be observed that I provide a simple and efficient means for grasping the thread during the initial winding of the bobbin, whereby to hold the former permanently thereon and to prevent it slipping during the 65 rotation of the bobbin, which is a desideratum, it being here understood that it has been heretofore inconvenient to wind the thread on bobbins, because the thread would slip from the spindle of the bobbin owing to the ten-70 sion under which the thread is held and which is necessary in order to wind the bobbins.

While I have specifically described the notch and the tooth in the particular relation shown, it is obvious that the precise arrangement or 75 construction of the device need not be adhered to within the purview of this invention.

Having thus described my invention, I claim—

1. A bobbin comprising a spindle and a pair 80 of heads, said spindle having a notch along one side thereof, said notch having a wall extending from the base thereof to the outer wall of the spindle, and a tooth located in said notch extending parallel with the axis of the spin-85 dle and having a wall slanting from the end of the tooth toward the wall of said notch.

2. A bobbin comprising a spindle and a pair of heads, said spindle having a notch along one side thereof, the wall of said notch curving 90 from the base thereof toward the outer wall of said spindle, a flexible tooth extending into said notch in parallelism with the longitudinal axis of said spindle, one side of said tooth slanting from the base of said notch to the 95 apex of said tooth.

AMHERST G. LAMB.

Witnesses:

DAVID L. FINN, WALTER HOLCOMB.