C. F. DENISON. Shuttle Bobbin for Sewing Machines.

No. 231,285.

Patented Aug. 17, 1880.

To a A

Witnesses.

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UNITED STATES PATENT OFFICE.

CHARLES F. DENISON, OF SPRINGFIELD, MASSACHUSETTS.

SHUTTLE-BOBBIN FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 231,285, dated August 17, 1880. Application filed December 29, 1879.

To all whom it may concern:

Be it known that I, CHARLES F. DENISON, of Springfield, in the State of Massachusetts, have invented a new and useful Improvement 5 in Shuttle-Bobbins for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, making part of this specification, and to the letters 10 of reference marked thereon.

The object of my invention is to secure the end of the thread to a shuttle-bobbin easily and quickly in winding it; and my invention consists of a shuttle-bobbin having its hub 15 roughened or provided with protuberances or spurs which will quickly catch and hold the thread when the latter is held against said spurs or roughened portion, as will be more fully hereinafter described.

The drawing represents a side view of a shuttle-bobbin made according to my invention.

In the drawing the shuttle-bobbin is represented as made in the ordinary manner, adapted 25 to any of the sewing-machines in common use, except that the hub A is provided with spurs or comparatively sharp protuberances a, of which there may be any desired number. These protuberances may be made in any convenient 30 manner—as, for example, by a sharp-pointed instrument being driven into the metal of the hub, raising sharp points outward; or the hub may be knurled by a knurling-tool, partially or wholly, or in any way, so that the surface 35 so operated upon may be somewhat rough, sufficiently so to catch the fiber of the thread

when the latter is held against the protuberances or roughness. A small spot may be provided with these protuberances upon the hub, as shown at b, or there may be a more extended 40 series of them, as shown at a, or the hub may be entirely covered with them. I prefer, however, that only a comparatively small portion of the hub should be provided with them, as it is not desirable that the thread should ad- 45 here to the hub its entire length, but only at the spot where the end is secured in commencing the winding.

A bobbin having its hub made rough or provided with protuberances, as above described, 50 may be wound with thread quickly by placing it in the device for winding usually attached to sewing-machines and setting it in motion, and the end of the thread is held against the sharp protuberances, which catch it quickly, 55 and the thread immediately commences to wind, and when the wound bobbin is in use in the machine the end of the thread, being held loosely, is easily released from the bobbin when unwinding.

Having thus described my invention, what I claim as new is—

A shuttle-bobbin for sewing-machines having its hub made rough or provided with protuberances to catch the end of the thread in 65 winding it thereon, substantially in the manner described.

CHARLES F. DENISON.

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Witnesses:

T. A. CURTIS, E. E. CURTIS.