

G. JUENGST.

Bobbins for Sewing-Machine Shuttles.

No. 135,125.

Patented Jan. 21, 1873.

Fig. 1.



Fig. 2.



Fig. 3.



Witnesses,

Chas. Smith  
Harold Serrell

Inventor

George Juengst  
Lemuel W. Serrell

att'y.

# UNITED STATES PATENT OFFICE.

GEORGE JUENGST, OF SOMERS, NEW YORK.

## IMPROVEMENT IN BOBBINS FOR SEWING-MACHINE SHUTTLES.

Specification forming part of Letters Patent No. 135,125, dated January 21, 1873.

*To all whom it may concern:*

Be it known that I, GEORGE JUENGST, of Somers, in the county of Westchester and State of New York, have invented Improved Bobbins for Sewing-Machine Shuttles, of which the following is a specification:

A bobbin for the shuttle of a sewing-machine requires to be very light and to occupy as little space as possible, so that the bobbin will hold a large amount of thread and not materially increase the weight of the shuttle. Bobbins have been made with a steel spindle and brass heads, that have been forced upon the ends of this spindle. In some instances the heads and the spindles have been soldered together. This involves considerable time and expense.

My invention consists in a sewing-machine bobbin made with a wire spindle and sheet metal heads that are secured to the spindle by the thin sheet metal of the heads being pressed into the metal of the spindle sufficiently to embed itself, and thereby the heads are held on very firmly, and can be made of very thin metal. This bobbin is a new article of manufacture that is cheap and strong. It will hold as much thread as can be introduced into the space provided, and when the bobbin is empty it may be thrown away, its cost being so small.

The spindle *a*, shown in Fig. 1 in enlarged size, is to be pointed at the two ends. There are two heads upon each spindle, and these are made circular and of the shape shown in

Fig. 2—that is to say, with a central hole; but this hole is not bored or cut out, but a pointed instrument is pressed through the metal and withdrawn. After the heads have been put upon the spindle swaging or compressing tools or dies are employed to flatten out the disk-heads, and so far compress back to the former position the metal of the disk that it will embed itself into the surface of the spindle sufficiently to form a recess that holds the head firmly upon the spindle, causing the same to resist any ordinary strain to which the parts are subjected.

The spindle itself may have slight indentations in it before the head is put on, into which the metal of the head is pressed, as aforesaid.

In Fig. 3 the spindle is represented of about the average size employed in sewing-machine shuttles.

I claim as my invention—

A bobbin for sewing-machine shuttles with a wire spindle and heads of thin sheet metal, the holes in the latter being spread by a punch to form projections that are afterwards pressed down against the spindle to secure the heads, substantially as set forth.

Signed by me this 31st day of October, A. D. 1872.

GEORGE JUENGST.

Witnesses:

GEO. T. PINCKNEY,  
CHAS. H. SMITH.