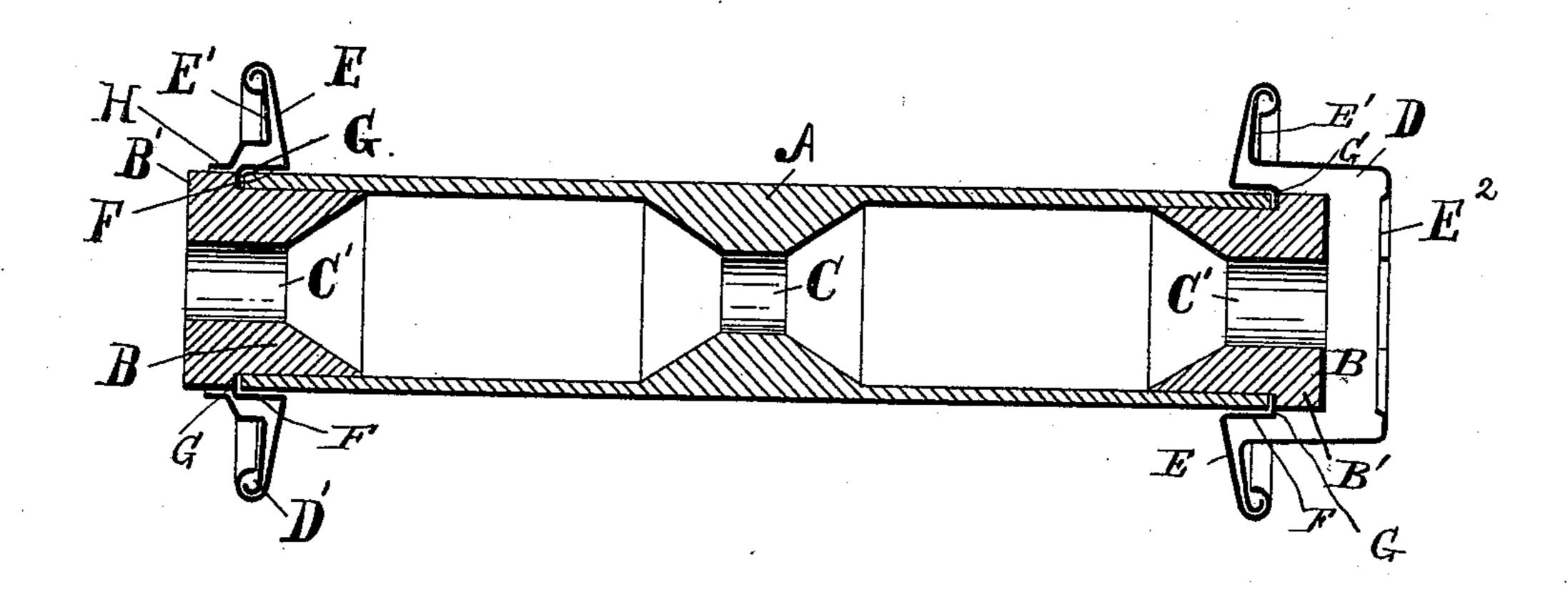
(No Model.)

G. PENDLETON, Jr. BOBBIN.

No. 602,240.

Patented Apr. 12, 1898.



WITNESSES:

Chester H. Higgins

Gurden Pendletin Jr.

INVENTOR

BY lanence Lange,
ATTORNEY.

## United States Patent Office.

GURDON PENDLETON, JR., OF CARBONDALE, PENNSYLVANIA, ASSIGNOR TO THE PENDLETON MANUFACTURING COMPANY, OF SAME PLACE.

## BOBBIN.

SPECIFICATION forming part of Letters Patent No. 602,240, dated April 12, 1898.

Application filed August 21, 1897. Serial No. 648,986. (No model.)

To all whom it may concern:

Be it known that I, Gurdon Pendleton, Jr., a citizen of the United States, residing at Carbondale, in the county of Lackawanna and State of Pennsylvania, have invented a new and useful Improvement in Bobbins; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to bobbins, particularly those used for spinning, winding, and doubling silk or cotton; and it has for its special object the improvement of bobbins with wooden barrels and metallic heads or flanges, the improvement being directed at the formation of the metallic heads or flanges and their attachment to the barrel.

The improved bobbin in which I embody my invention is formed with a wooden barrel and metallic heads formed by preference of two pieces of sheet metal bound together peripherally and formed with a collar fitted around the end of the barrel and an inward-projecting flange which is bound upon the end of the barrel by a wooden plug fixed therein, so that a light, cheap, strong, and durable construction is obtained.

In order that my invention may be clearly ascertained, I shall first describe the practice of the invention in detail and then particuolarly claim the same.

Reference is to be had by letters to the accompanying drawing, which is a sectional side view of a downspinner bobbin embodying my invention.

The form of bobbin shown has a wooden barrel A, in the ends of which are fitted the necks of wooden plugs B, having enlarged heads B'. The barrel is here formed with a central spindle-bearing C, and the plugs B with separate end spindle-bearings C'; but the bobbin may be provided with a single continuous bearing from plug to plug, if preferred, or otherwise constructed interiorly, without affecting the nature of my invention.

The form of my bobbin here shown is de-

signed for downspinning and has one metallic head D, formed with a key-recess E<sup>2</sup> for locking it to the spindle-base; but in other respects I make said head substantially like the other head D'—that is to say, I form each 50 head D and D' of an inner piece E of sheet metal and a corresponding outer piece E' of sheet metal, having their peripheries bound together preferably by the ordinary method illustrated. I bend up in a press the inner 55 edge of each inner bent piece E, so as to form a collar F, which fits closely around the respective end of the barrel A, and then bend it radially inward to form an annular flange G, which fits and bears on the end of the bar- 60 rel A. The necks of the headed plugs B being then fixed securely, as by gluing, in the ends of the barrel, the heads B' of said plugs bind the flanges G tightly on the ends of the barrel, and thus with the collars F secure 65 the metallic heads rigidly and strongly to the wooden barrel. In addition I prefer to form the outer piece E' of the metallic head D' with a collar H, fitting closely around the head of the corresponding plug B, so as to further 70 strengthen and stiffen said head D' on the barrel.

A bobbin formed of a barrel, headed end plugs, and metallic heads each formed of an 75 inner and an outer piece of sheet metal fastened together at their peripheries, the inner head-piece being formed with a collar fitted around the end of the barrel, and an inward-projecting flange bound between the end of 80 the barrel and the head of the plug and the outer head-piece being bent outward axially at its inner edge to form a collar fitting around the head of the end plug.

In testimony whereof I have hereunto set 85 my hand the 29th day of June, 1897.

GURDON PENDLETON, JR.
In presence of—
CLARENCE L. BURGER,
B. M. SCOTT.