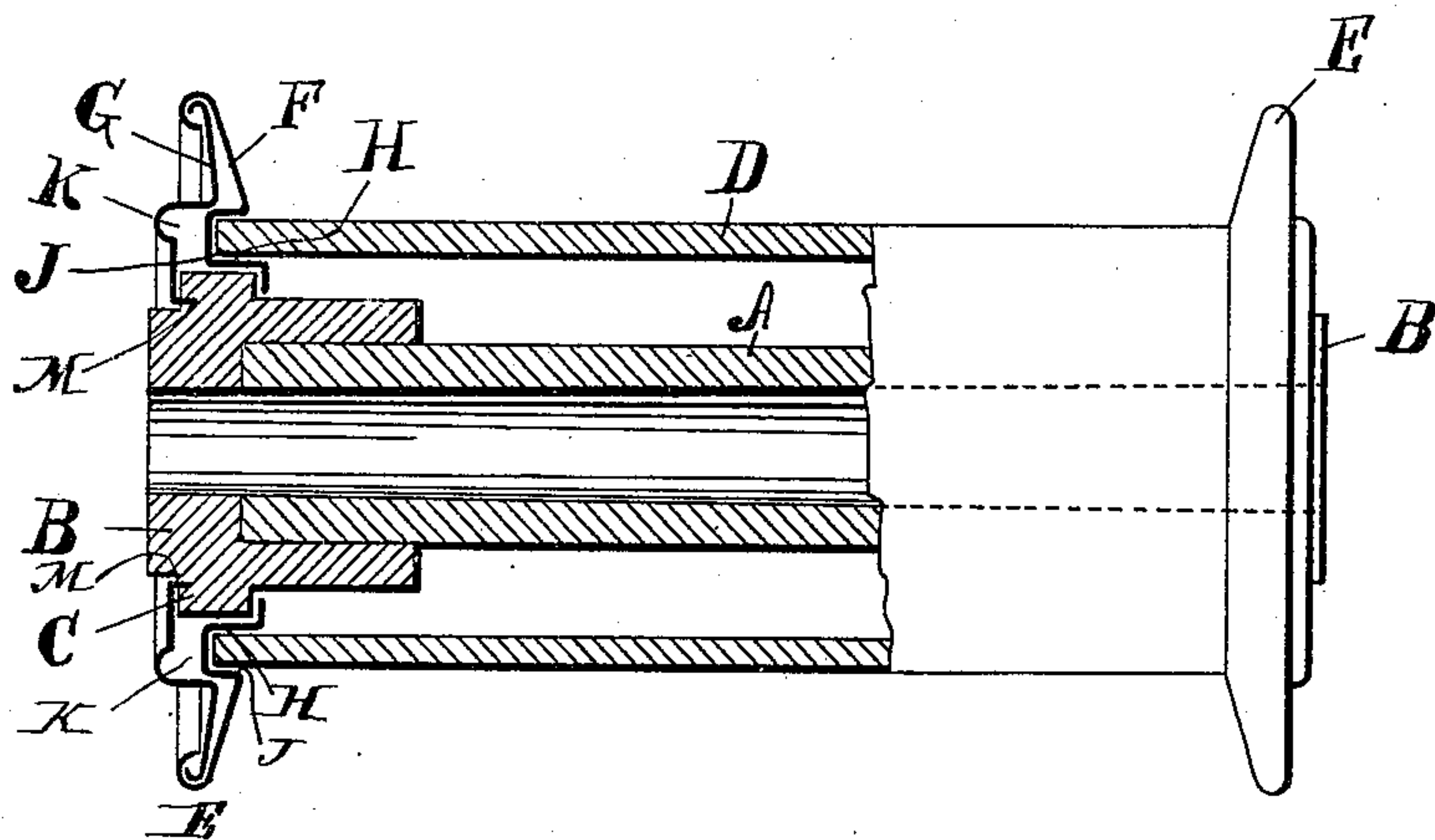


(No Model.)

H. D. KLOTS.
BOBBIN.

No. 602,260.

Patented Apr. 12, 1898.



WITNESSES:

Chas. H. Hitch
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UNITED STATES PATENT OFFICE.

HENRY D. KLOTS, OF GARDEN CITY, NEW YORK, ASSIGNOR TO THE PENDLETON MANUFACTURING COMPANY, OF CARBONDALE, PENNSYLVANIA.

BOBBIN.

SPECIFICATION forming part of Letters Patent No. 602,260, dated April 12, 1898.

Application filed August 21, 1897. Serial No. 648,987. (No model.)

To all whom it may concern:

Be it known that I, HENRY D. KLOTS, a citizen of the United States, residing at Garden City, in the county of Queens and State of New York, 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 for spinning, winding, and doubling silk and cotton, and is particularly directed to those having a wooden barrel or body and metallic heads or flanges, my object being to improve the construction of the metallic heads and their means of attachment to the body.

The bobbin in which I embody my invention has a wooden core provided with annular ribs near each end and metallic heads, each formed of two pieces of sheet metal bound together peripherally, surrounding the core and bearing on opposite sides and the periphery of the said rib, so that the heads are light, stiff, strong, and rigidly secured to the body. The metallic heads are likewise formed with bent integral prongs on their inner edges, which are driven into the sides of the ribs to prevent the heads from turning on the core. I further form the metallic heads with annular recesses outside their rib-bearings, in which recesses I fit the ends of an outer barrel on which the silk or cotton is wound.

In order that my invention may be clearly ascertained, I shall first describe in detail the mode in which I carry my invention into practice, and then point out its several features in the claims.

Reference is to be had by letter to the accompanying drawing, which forms part of this specification, and which is a sectional side view of a bobbin embodying my invention.

A designates the wooden spindle-bearing core of my bobbin, which I prefer to provide with integral or, as shown, rigidly-attached wooden heads B, which I form with annular ribs C, adjacent to their ends.

D designates the wooden outer or winding barrel of the bobbin, which is here shown separate from the core A, but with which the core may be formed integrally or connected through the medium of an internal collar or

disk in a manner well known to those skilled in this art.

I form the heads E of the bobbin each of two pieces of sheet metal, an inner piece F and an outer piece G, bound together peripherally by preference in the ordinary manner illustrated.

I fit the inner edges of the head-pieces F and G closely around the respective wooden head B of the core, so as to bear on the inner and outer sides, respectively, of the annular rib C, and I form one head-piece, preferably, as in this case, the inner head-piece F, with a collar H to fit closely around the periphery of the rib C. The rib is thus tightly held between the collar H and the edges of the respective head-pieces bearing on its opposite sides. The peripheral union of the head-pieces F and G, which is of course accomplished subsequently, makes a strong and rigid attachment of the metallic head to the core and a peculiarly stiff and strong head.

To insure against the heads turning on the core, I form the inner edge of each, preferably outer metallic head-piece G, with integral prongs M, which are bent inward and driven into the wooden rib C around the core-head B. In each inner head-piece F, I likewise form an annular recess J outside the rib-bearings, in which the respective end of the outer barrel is received and firmly held, and I by preference form the outer head-piece G with an annular recess K to accommodate the annular rib formed on the outer side of the inner head-piece by the recess J.

By this construction an extremely light, strong, and serviceable bobbin is produced at a low cost.

I claim as my invention—

1. A bobbin formed of a wooden core having fixed peripheral ribs, a short distance from each end, and metallic heads each formed of an inner and an outer piece of sheet metal bound together peripherally, the inner edge of the outer head-piece encircling the core and bearing axially against the outside of said rib, and the inner head-piece bent axially to form a sleeve surrounding the periphery of said rib and bent radially to encircle the core and bear axially against the inside of said rib.

2. A bobbin formed of a wooden core hav-
ing fixed peripheral ribs, a short distance
from each end, and metallic heads each formed
of an inner and outer piece of sheet metal
5 bound together peripherally, the inner edge
of the outer head-piece bearing axially against
the outside of said rib and the inner head-
piece bent radially to encircle the core and
bear against the inside of said rib, then bent
10 axially to form a sleeve surrounding the pe-
riphery of said rib and then bent outward

radially and inward axially to form an annu-
lar recess around said sleeve, and an outer
barrel having its end seated in said recess
and surrounding said sleeve.

In testimony whereof I have hereunto set
my hand the 1st day of July, 1897.

HENRY D. KLOTS.

In presence of—

HERMAN MEYER,
B. M. SCOTT.