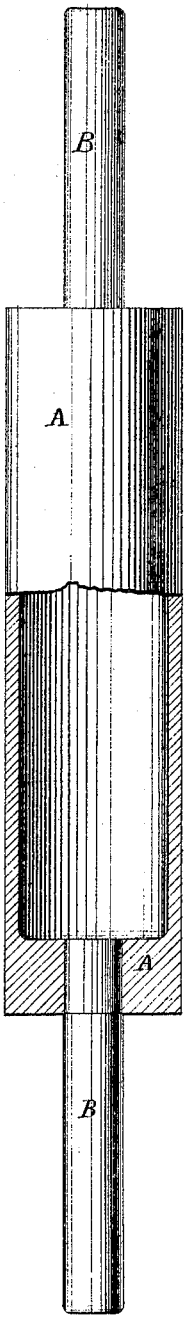
J. M. Stone,

Carding Mach.

No. 111,988. Patented Feb. 21. 1871.



Witnesses.

N. P. Lombard

Wm. C. Gibbard

Inventor.

Joseph M. Stone

UNITED STATES PATENT OFFICE.

JOSEPH M. STONE, OF NORTH ANDOVER, MASSACHUSETTS.

IMPROVEMENT IN THE CONSTRUCTION OF CYLINDERS FOR CARDING AND OTHER MACHINES.

Specification forming part of Letters Patent No. **111,988**, dated February 21, 1871.

I, JOSEPH M. STONE, of North Andover, in the county of Essex and State of Massachusetts, have invented a new Method of Constructing Small Cylinders for Carding-Machines and other similar purposes, of which the following is a specification:

In the construction of carding-machines for carding wool the small cylinders, such as the "strippers" and "workers," so called, have been heretofore generally made solid, of wood, having an iron shaft extending through the center to form an axis; and in a few instances it has been attempted to make them of metal, by using a piece of wrought or cast iron pipe to form the circumference, which was fitted upon heads upon a central shaft extending through the same, in order to make the cylinder light; and such cylinders have also been made of wrought-iron pipe, with solid gudgeons welded into the pipe, to form the bearing-shaft, said gudgeons not extending through the entire length.

The use of wood to form the body of the cylinder, as first mentioned, is objectionable on account of its shrinking and swelling from the moisture of the atmosphere; and the objection to the other modes of construction mentioned is their great cost.

My invention has for its object the construction of such small cylinders of iron at a small cost and of comparatively light weight, and having the further advantage of being able to renew and replace the shaft or gudgeons, when they become worn, without disusing the body of the cylinder.

Description.

In the drawing is shown a view of the cylinder, one-half of the length, or thereabout, being in section through the axis, and the other part in elevation.

The body or shell A of the cylinder is made of cast-iron, with the circumference made as thin as it can be cast conveniently and turned off. The ends of the shell are made of greater thickness, forming heads, as shown, with a small hole in the center of each, which are truly bored to receive the gudgeons B, which extend outward to form the shaft, which rests in the puppet-heads or other bearings in the usual way. The gudgeons are nicely fitted into the thick part at the end of the cylinder, and are driven in firmly, as is shown, which the great depth of metal outside of the fit of the gudgeons permits to be done without danger of splitting the cylinder. The card-clothing is wound upon the cylinder and secured in the usual way that is practiced with other card-cylinders when formed of iron.

I claim—

As a new manufacture, the cylinder herein described, consisting of a thin cylindrical shell having thick heads integral with the shell, and the exterior shafts fitted and driven into the said heads.

Executed September 22, 1870.

JOSEPH M. STONE.

Witnesses:

N. C. LOMBARD,

WM. C. HIBBARD.