

(No Model.)

J. MACFARLANE.

METHOD OR PROCESS OF PREPARING STRIPS OF WOOD TO BE
CONVERTED INTO CYLINDERS.

No. 422,309.

Patented Feb. 25, 1890.

Fig. 1.

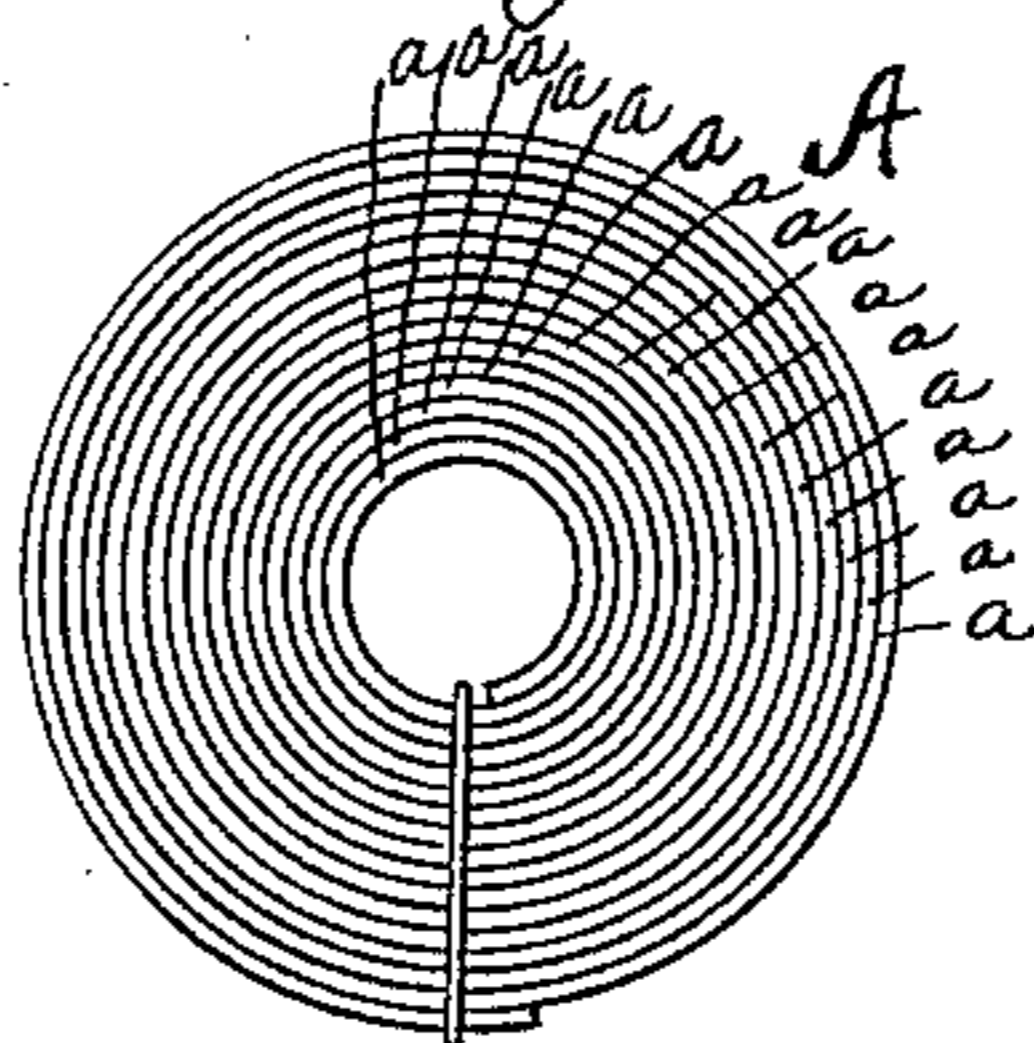


Fig. 2.

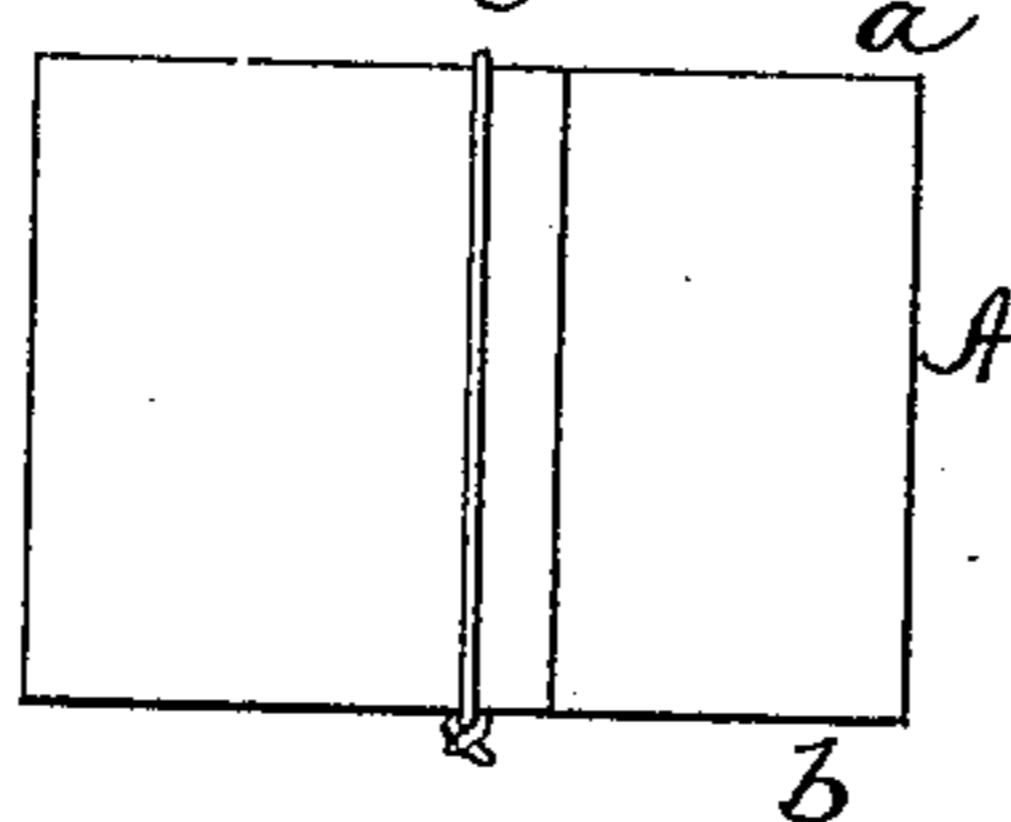
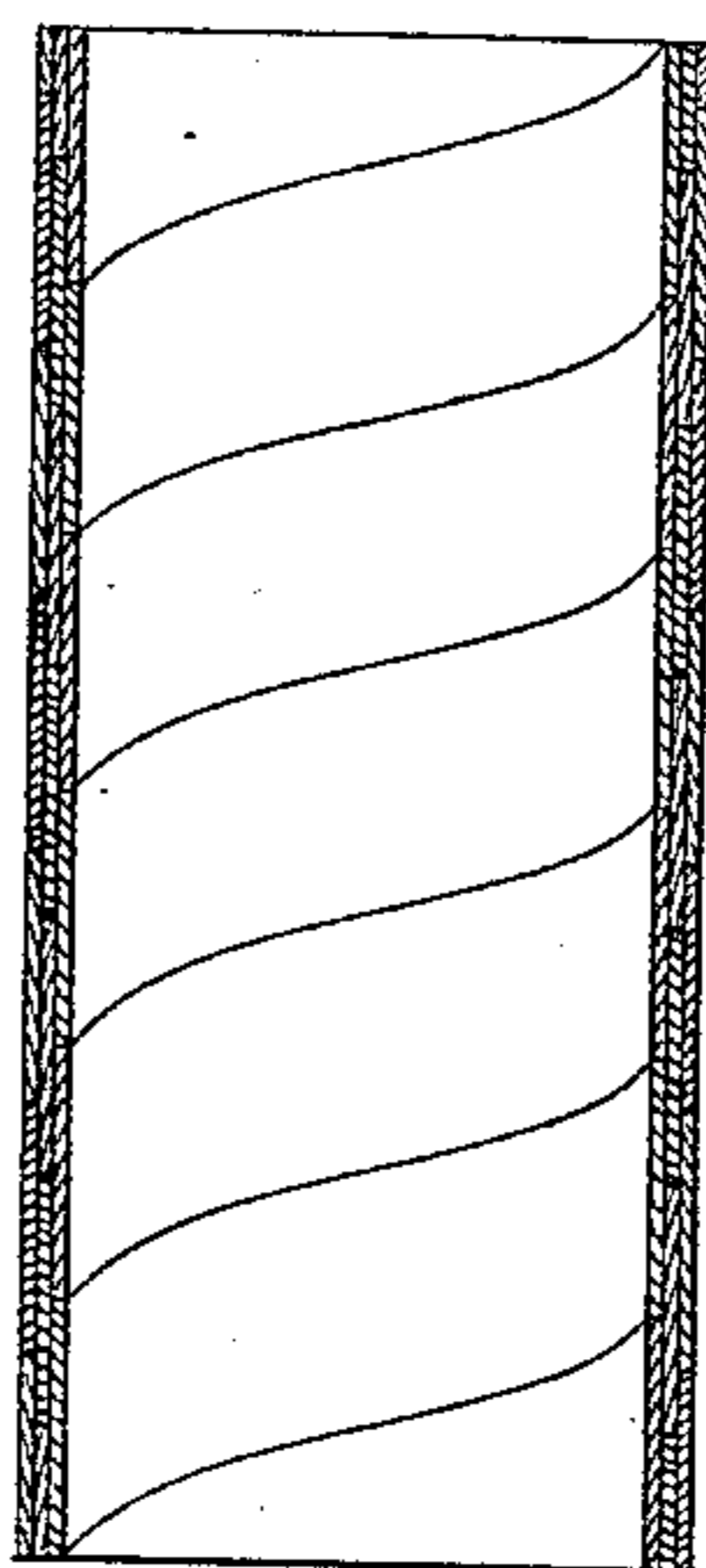


Fig. 3.



Witnesses.

W. E. Piper.

A. L. Piper

Inventor.

James MacFarlane.
by Singleton & Piper, atty's

UNITED STATES PATENT OFFICE.

JAMES MACFARLANE, OF MALDEN, MASSACHUSETTS, ASSIGNOR TO THE
LIGNIFORM TUBING COMPANY, OF PORTLAND, MAINE.

METHOD OR PROCESS OF PREPARING STRIPS OF WOOD TO BE CONVERTED INTO CYLINDERS.

SPECIFICATION forming part of Letters Patent No. 422,309, dated February 25, 1890.

Application filed September 21, 1888. Serial No. 285,994 (No model.)

To all whom it may concern:

Be it known that I, JAMES MACFARLANE, a citizen of the United States, residing at Malden, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Methods or Processes of Preparing Strips of Wood to be Converted into Cylinders; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 is a representation in side view, and Fig. 2 in top view, of a strip of wood as prepared in accordance with the method hereinafter described. Fig. 3 is a longitudinal section of a tube formed of a series of said strips.

The nature of my invention is defined in the claim hereinafter presented.

In carrying out my method or process I make use of a long box-like chamber capable of being tightly closed, in which is arranged a system of steam-pipes properly located therein and perforated to emit steam to act upon a series of long flat strips of wood so supported and arranged in said chamber that the steam can circulate between them to act upon all portions of them to the best advantage, each strip being of uniform width and thickness throughout its length. After a series of strips of wood arranged in said chamber have been steamed therein to the necessary extent to render them pliable they are withdrawn from the chamber one at a time and wound spirally on an arbor, the edges of the successive coils being in the same planes, and when the winding of the strip is completed the outer end of it is secured to prevent the strip from uncoiling. It is then removed from the said arbor, said coiled strip being represented in Figs. 1 and 2, wherein A represents the strip of wood, and *a b* the edges thereof. As clearly indicated, the edges *a* are in one plane, and the

edges *b* are in one plane. The series of strips, when coiled as described, are next placed in a drying-chamber and subjected to a blast of dry air and thoroughly dried while in the coiled state. When dried, they are removed from the drying-chamber and packed away for future use, to be converted into cylinders or tubes for the formation of roving cans, pails, boxes, or articles of a similar character. Strips of wood of various kinds can thus be prepared in the manner described and kept in stock in large quantities, if desired, and, being dried in a coiled state, are much more convenient to use than strips in a moist and uncoiled state, and can be cemented or glued together when arranged on each other in several layers to much better advantage than when in a moist state; and, furthermore, when said strips are unwound from the reels on which they are placed when applied to a machine for converting them into a cylinder, and are wound spirally around a mandrel to form a cylinder, the resistance of the strip to being unwound causes it to tightly hug the mandrel, and facilitates the winding of the strip thereon in close contact with the surface of the mandrel.

Having described my invention, what I claim is—

The method or process of preparing strips of wood to be converted into tubes for use, substantially as described, it consisting, first, in steaming the said strips to render them pliable; next, in winding each strip spirally while pliable on an arbor, the edges of the successive coils being in the same planes, and securing said strip to prevent it from uncoiling; next, in subjecting the strips while coiled to a blast of dry air to dry them while in a coiled state, essentially as set forth, and for the purpose explained.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES MACFARLANE.

Witnesses:

S. N. PIPER,

THOS. S. WHITE.