

F. REICHERT.

PROCESS OF FORMING PAPER RIBBON-BLOCKS.

No. 183,972.

Patented Oct. 31, 1876.

Fig. 1.

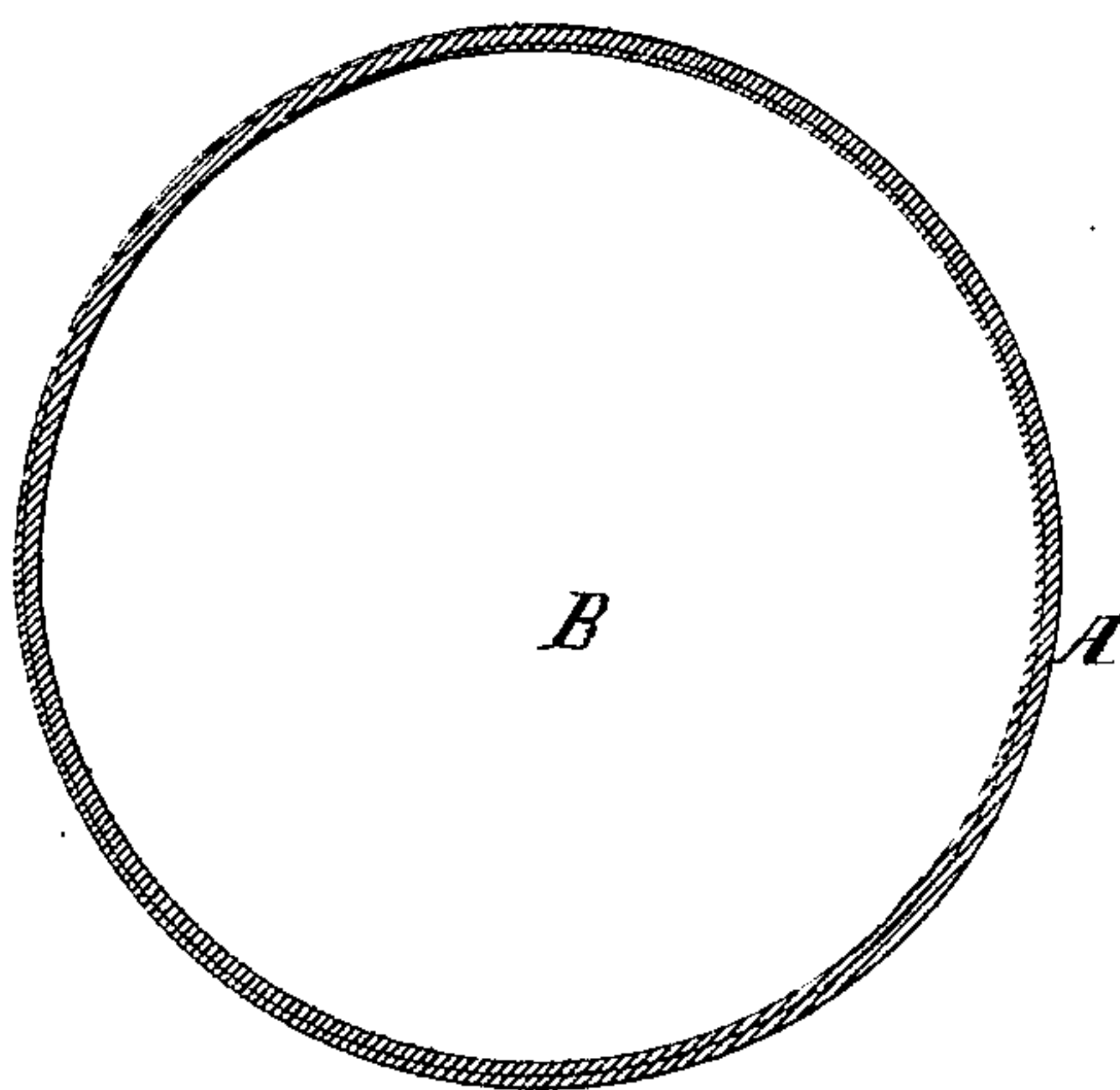
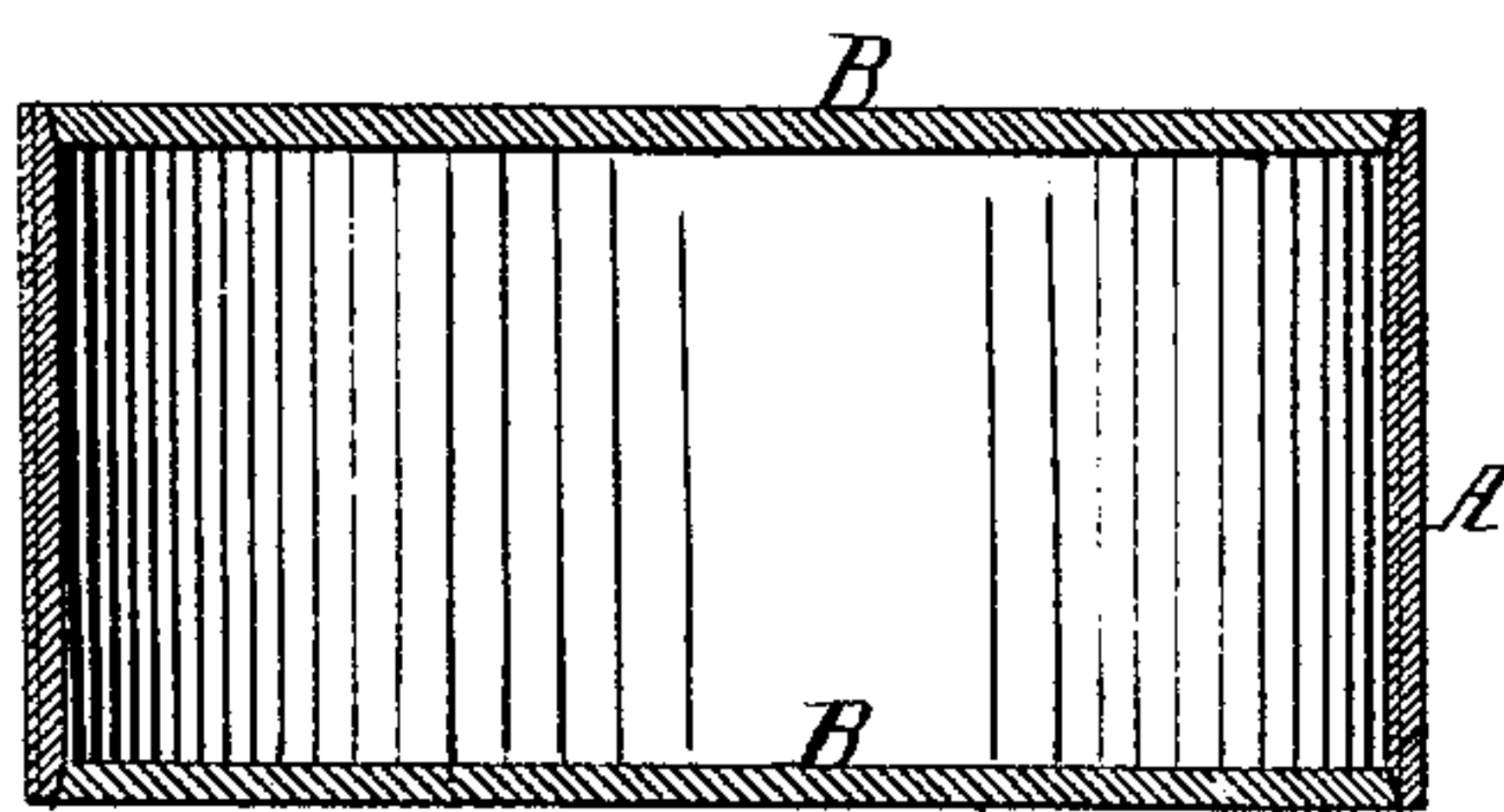


Fig. 2.



Witnesses

Otto Hufeland  
Robert Miller.

Inventor.

Frederick Reichert  
by  
Van Santvoord & Hauff

his attorneys

# UNITED STATES PATENT OFFICE.

FREDERICK REICHERT, OF NEW YORK, N. Y.

## IMPROVEMENT IN PROCESSES OF FORMING PAPER RIBBON-BLOCKS.

Specification forming part of Letters Patent No. **183,972**, dated October 31, 1876; application filed July 14, 1876.

*To all whom it may concern:*

Be it known that I, FREDERICK REICHERT, of the city, county, and State of New York, have invented a new and useful Improvement in Process of Forming Ribbon-Blocks, of which the following is a specification:

This invention relates to a certain novel process or mode of applying and securing in position within a hollow paste or card board cylinder the end pieces or heads while the material composing the cylinder is in a moist or wet condition, so that said ends or heads will be firmly retained in position by the shrinkage of the cylinder as the same dries, whereby the use of paste or fastening devices can be dispensed with, and a cheap and durable ribbon-block produced.

In the drawing, Figure 1 represents a horizontal section of my improved ribbon-block, and Fig. 2 a vertical central section through the same.

The letter A designates the cylindrical body of the ribbon-block, which is composed of two or more layers of paper, card-board, pasteboard, or other similar material, wound upon each other, and secured together by means of paste or other cement. B B represent the end pieces or heads, which are formed of pasteboard, card-board, or other suitable material of suitable thickness, and of a diameter slightly less than the internal diameter of the cylinder A while in a moist or wet condition, so that they may be conveniently inserted in the ends of the same. Said heads or ends may, if preferred, be formed with beveled edges, as shown, in order that they may be conveniently inserted in the cylinder; but this is not necessary. The said heads B B are inserted while the material composing the cylinder is moist or wet, preferably just after applying the paste. As the material of the cylinder dries it shrinks, binding the heads or

ends firmly therein, rendering it unnecessary to employ paste or fastening devices for the purpose.

I am aware that paste or card board ribbon-blocks have heretofore been used; but, as hitherto constructed, the ends or heads have been inserted after the cylinder has become dry, and in order to secure them properly within the cylinder they have been made of a diameter exactly corresponding to the internal diameter of said cylinder, or slightly larger than said internal diameter, and forced into the ends of the cylinder, being secured therein by means of paste or fastening devices. As thus constructed, it has been found difficult to readily insert and secure the ends or heads, and a further objection has been experienced in the tendency of the heads to shrink and become loose from the cylinder. To obviate this the heads have been supported by an internal cylinder smaller in diameter than the external one, which increases the expense of the article.

By my invention it will be seen that a ribbon-block is constructed that can be cheaply made, and which is free from the objections enumerated.

What I claim, therefore, and desire to secure by Letters Patent, is—

The process herein described of securing the card or paste board heads or ends to the hollow cylinder of a ribbon-block made of card-board, pasteboard, or paper, the same consisting in inserting said heads into the cylinder while the material of the latter is in a moist or wet state, and securing them in position wholly by the contraction of the cylinder upon said heads, as hereinbefore set forth.

FREDK. REICHERT. [L. S.]

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.