(No Model.)

E. D. AVERELL.

PACKING FOR BOTTLES.

No. 463,300. Patented Nov. 17, 1891.

Fig. 1.

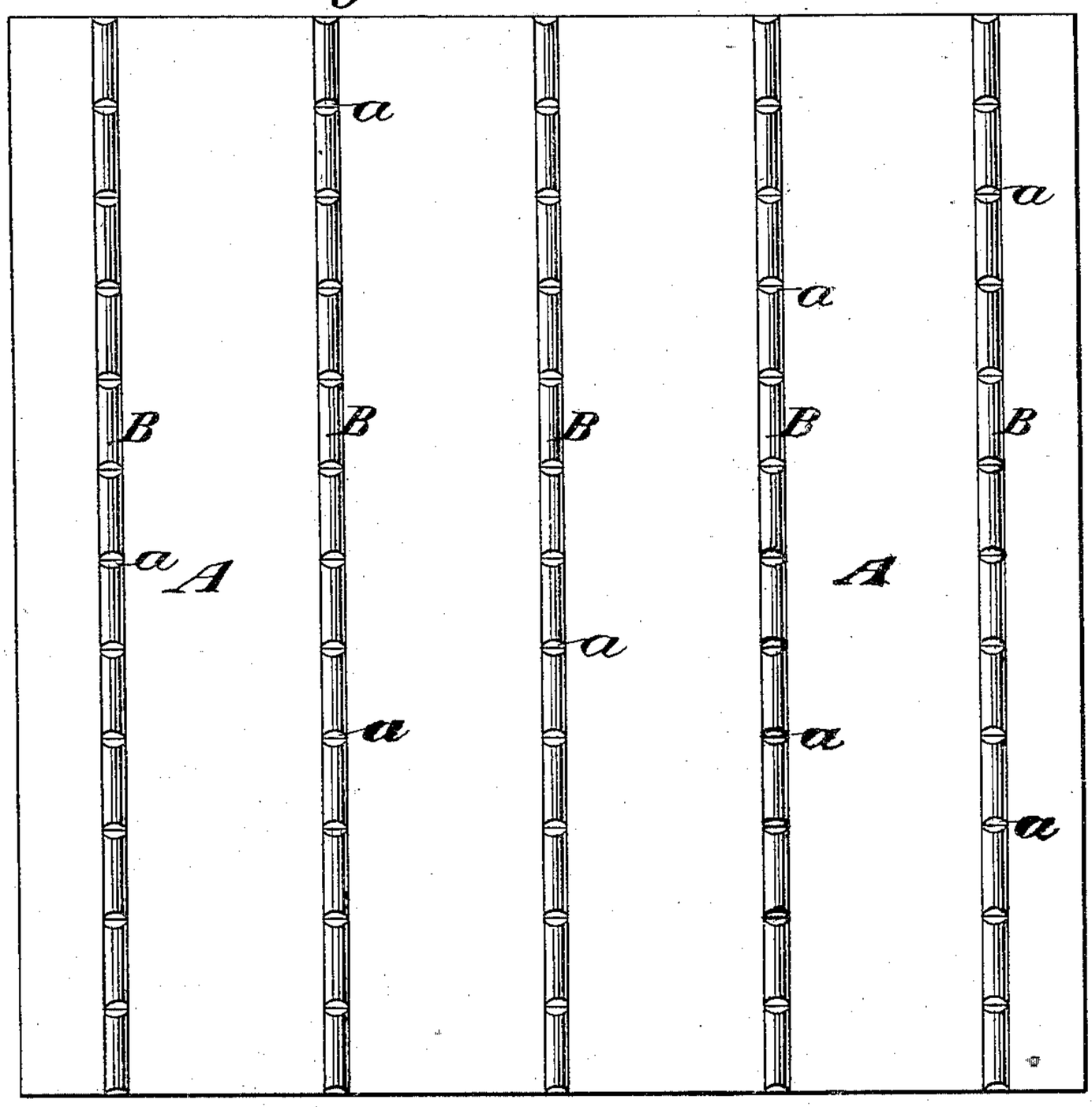


Fig. 2.

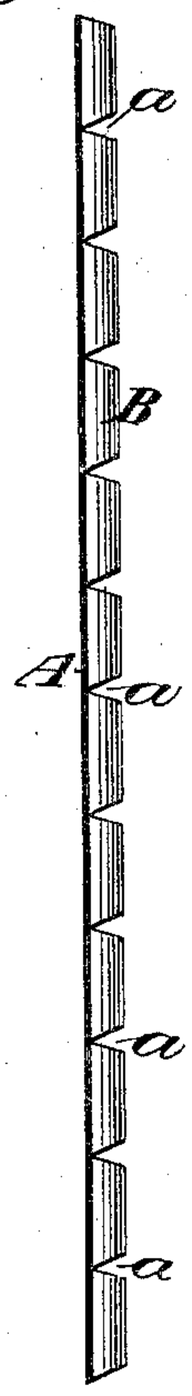


Fig. 3.

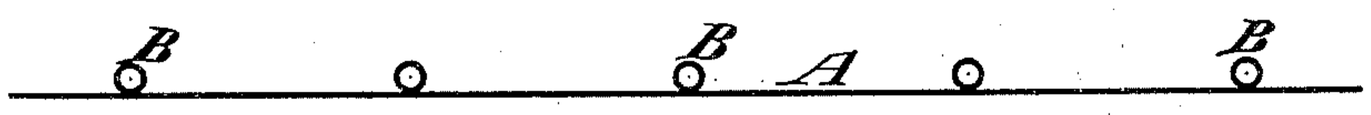
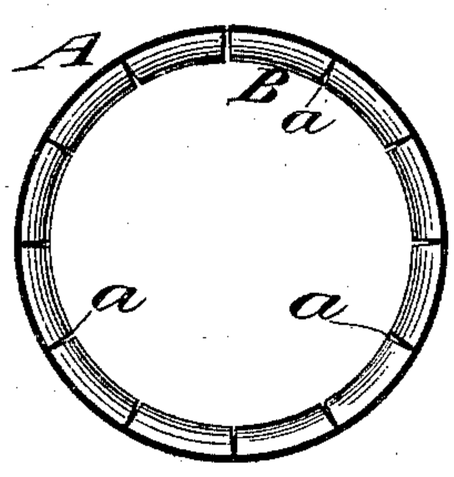


Fig. 5.

Fig. 4.



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PACKING FOR BOTTLES.

SPECIFICATION forming part of Letters Patent No. 463,300, dated November 17, 1891.

Application filed June 29, 1891. Serial No. 397,790. (No model.)

To all whom it may concern:

Be it known that I, ELLICOTT D. AVERELL, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Packing for Bottles and other Fragile Articles, of which the following is a specification.

A packing for bottles and other fragile articles embodying my invention consists of a sheet of paper having incorporated with it a series of tubes of the same material in which are open transverse notches at intervals throughout their length to permit an easy flexure in the direction of their length in the wrapping of the sheet about the bottle or other article with the said tubes running around the latter.

Figure 1 is a face view of the packing laid out flat. Figs. 2 and 3 are edge views of the same at right angles to each other, corresponding with Fig. 1. Fig. 4 represents the packing rolled up as in wrapping it around the bottle. Fig. 5 is an edge view corresponding with Fig. 3, illustrating a modification of the invention.

Similar letters of reference designate corresponding parts in all the figures.

A designates the sheet of paper, and B designates the paper tubes incorporated with it, the said tubes being arranged parallel with each other across or along the face of the sheet A and having in them at intervals in their length transverse notches *a a*, which are open to their interiors. These notches are made by cutting out portions of the tube to form therein openings, the width of which is greatest at those portions of the tubes farthest from the face of the sheet, as shown in Fig. 2.

In the examples 1, 2, 3, and 4 the tubes B are represented as made of paper separate from the sheet and incorporated with the sheet by sticking them on by means of glue or adhesive material or cement.

In Fig. 5 the tubes B B are formed integral with the sheet by gathering in at regular intervals parallel portions of the sheet, which may be easily done by suitable machinery while the sheet is in a moist condition, the form of the tubes being set by drying and the notches *a* being cut or made in the tubes after the sheet and tubes have become dry.

In either example of my invention represented and described the open transverse notches in the tubes provide for easily rolling up the packing-sheet A in the direction of the length of the tubes, as shown in Fig. 4, the said open notches giving the necessary flexibility for that purpose.

I am aware that a bottle-packing has been made of a sheet of paper having attached to it continuous tubes filled with hay or straw; but such tubes had no notches in them and were not intended to and could not permit the packing to be rolled up in the direction of the length of the tubes like my packing, but only permitted the rolling in a direction transverse to the length of the tubes. I am also aware that corrugated paper to form blanks for boxes has been simply creased across the corrugations to permit said blanks to be bent to form the angles of the boxes; but such creases in the corrugations did not permit the packing to be rolled up with facility in a direction parallel with the corrugations, while the notches in the tubes of my packing opening into the said tubes afford the greatest facility for rolling the packing in the direction parallel with the tubes.

What I claim as my invention, and desire to secure by Letters Patent, is—

A packing for bottles and other fragile articles, consisting of a sheet of paper and a series of tubes having in them at intervals throughout their length notches, which are open to their interiors, the said tubes being incorporated with the sheet, with the said open notches presented away from the face of the sheet, substantially as herein described.

ELLICOTT D. AVERELL.

Witnesses:
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