L. H. THOMAS.

MANUFACTURE OF PAPER BOTTLES.

No. 368,255.

Patented Aug. 16, 1887.

Fig. 1. Levi L. Thomas WITNESSES:

United States Patent Office.

LEVI H. THOMAS, OF CHICAGO, ILLINOIS.

MANUFACTURE OF PAPER BOTTLES.

SPECIFICATION forming part of Letters Patent No. 368,255, dated August 16, 1887.

Application filed March 9, 1887. Serial No. 230,316. (No model.)

To all whom it may concern:

Be it known that I, Levi H. Thomas, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in the Manufacture of Paper Bottles, of which the following is a specification.

The invention relates to the manufacture of bottles from paper; and it consists in a new method wherein anumber of bodies of the bottles are formed by one operation, the labels applied to the entire number at one time, the bodies then separated, the bottoms and heads introduced, and the bottles coated with great rapidity at very small expense and with uniform results, as hereinafter more fully described.

In the accompanying drawings, Figure 1 is a view in elevation of the paper tube or cylinder having a sheet of labels secured thereto. Fig. 2 is a view of the same after the cylinder has been separated to form the bodies of the several bottles, and Fig. 3 is an end view 25 thereof.

In practice I take a sheet of paper, which is rolled to form a cylinder of suitable length to form a given number of bottles. The paper is waterproofed or rendered non-absorbent in any approved manner, or paper which has been previously treated by any of the methods now generally in use may be employed.

Having decided as to the length of the cylinder which is to be formed, which will be determined by the number of the bottles to be formed, the sheet is rolled upon itself to form a cylinder, A, of the desired diameter. A sheet of labels, B, corresponding in length with the length of the cylinder A, of waterproofed paper, (the number of labels on said sheet corresponding to the number of bottles to be formed from the cylinder A,) is then securely pasted upon the cylinder in any convenient way, thus forming a cylinder having attached to it a sheet of labels, as indicated in the drawings. The cylinder with the sheet of labels attached is next cut into sections C, each cylin-

der forming, when cut, the determined number of bodies, and each section C having a label B applied thereto. The bottom and heads 50 are next introduced in any appropriate way and the interior of the bottle coated, when it is in a substantially finished condition.

By pursuing the steps I have indicated in the order set forth a number of important advantages are accomplished. To form each bottle separately and then apply the label is not only a much more tedious process, but causes embarrassment in applying the label and in other ways.

By using a waterproofed paper important results are secured, both in application of the interior coating, which is usually applied in a heated condition, and also in the application of the label, which is not so likely to be disfigured by blisters, caused by the escape of moisture from the paper which has not been properly dried. A great saving of time is also accomplished and uniformity of results ecured.

What I claim as my invention, and desire to 70 secure by Letters Patent, is—

1. The method herein described of forming paper bottles, which consists in first forming a roll or cylinder of paper; second, applying a sheet of labels; third, cutting the cylinders 75 into sections according to the number of bottles; fourth, introducing the head and end, and, fifth, coating the bottles thus formed, substantially as described.

2. The method of forming paper bottles, 80 which consists, first, in waterproofing a sheet of paper; second, forming a cylinder of said sheet; third, cutting the cylinder into sections, and, fourth, coating the interior surface of each section after the insertion of the ends, 85 substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 24th day of February, A. D. 1887.

LEVI H. THOMAS.

Witnesses:
GEORGE COOK,
HERMAN GUSTOW.