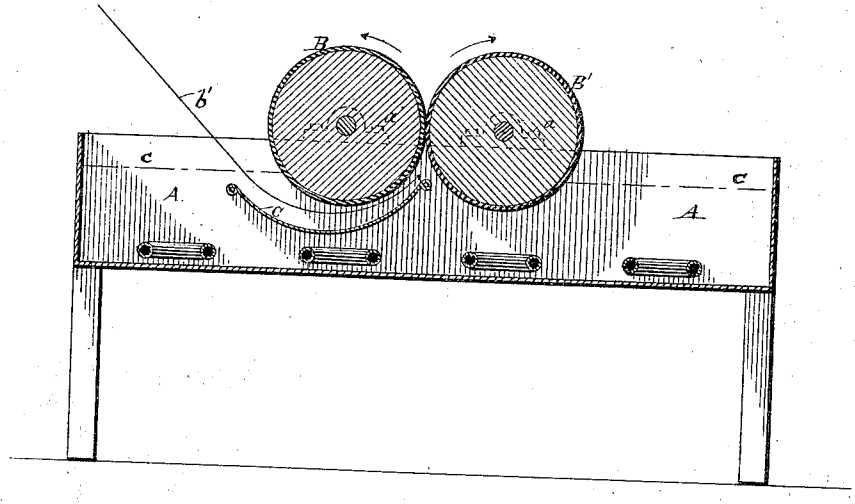
(Specimens.)

E. G. SPARKS.

WAXED PAPER BAG.

No. 395,520. Patented Jan. 1, 1889.



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WAXED-PAPER BAG.

SPECIFICATION forming part of Letters Patent No. 395,520, dated January 1, 1889.

Application filed November 10, 1888. Serial No. 290,427. (Specimens.)

To all whom it may concern:

Be it known that I, EDWARD G. SPARKS, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Waxed-Paper Bags, of which the following is a full, clear, and exact description.

This invention relates to waxed-paper bags, intended to preserve their contents from the access of air, moisture, &c.

The invention consists in a bag made with its pores and inside surfaces charged with compressed wax, and its outside surfaces freed or nearly freed from the wax, as will be hereinafter fully described and claimed.

By the term "wax," as used in this specification, I mean any suitable kind of mixture of wax, paraffine, or analogous substances suitable for rendering paper air and water proof.

The ordinary method of making waxed-paper bags consists, as described in Patent No. 76,110, in first heating the paper bags to about 212° Fahrenheit, then immersing them in a hot waxing bath of about 350° Fahrenheit, then placing the bags in an oven heated to about 250° to 275° Fahrenheit, and allowing the bags to remain there until, by the action of the heat, a portion of the waxing material drips off from the bags. The bags thus made are objectionable in use, as they are heavily charged both inside and out with the wax and have a greasy disagreeable feeling and appearance upon the outside. They are, moreover, difficult and expensive to make, and involve the consumption of a large and unnecessary amount of wax, which is a costly material. For these reasons it has heretofore been impossible to supply the public with satisfactory waxed-paper bags.

The improved bag which forms the subject of my present invention is free from the above-mentioned difficulties and objections, and it constitutes a new and improved article of manufacture, capable of being supplied to the public at a low cost.

I give herewith a drawing representing an apparatus such as I use in the manufacture of my improved bag. The drawing is a side sectional elevation of the machine. It consists of a suitable tank, A, for containing the wax, which is melted by steam-pipes that pass through the tank and connect with a suitable steam-generator, all constructed and arranged in the ordinary well-known manner.

Suitably mounted upon the upper part of the tank A is a pair of squeeze-rollers B B′, made adjustable in respect to each other by screws, *a*, or in any other proper way. The rollers B B′ are turned by suitable belts from an ordinary driving-shaft, not necessary to be here shown. Underneath the roller B, I arrange a curved deflecting-plate, C, as shown. Motion being imparted to the rollers B B′ in the direction of their respective arrows, the paper bags are fed or pushed in by hand under the surface of the wax in the direction of the arrow *b′* into contact with the plate C, which serves to direct the front end of the bag upward between the rollers B B′, by which the bag is seized and drawn under the hot wax, and the bag, together with the adhering wax, is at the same time compressed with great force between the rollers B B′, which compression has the effect to drive the wax that adheres to the outside of the paper into and through the pores of the paper to the inside of the bag, where, owing to the comparatively soft nature of the paper surfaces that are here pressed together, the wax adheres and remains solidified and compressed in an even coat upon the said interior faces of the bag, and the bag, after passing through the rollers, is discharged in a finished condition therefrom. Such portions of the wax as did not pass through the pores of the paper to the interior of the bag are pressed off the exterior of the bag by the rollers and made to drop back into the tank. The line of the surface of the melted wax in the tank is indicated by *c c*. The bag thus made is found to be comparatively free from wax upon its exterior surfaces, while its interior surfaces—that is to say, the inside of the bag—are covered with a hard and uniform coating of compressed wax, which renders the bag air and water proof, and in use preserves its contents from the destructive effects of air and moisture.

As a result of my invention I dispense to a great extent with the use of wax upon the exterior of the bag and chiefly place the wax upon the inside of the bag, where it is most needed. I thus not only save a very large amount of costly wax heretofore wasted upon

the outside of the bag but I produce a better article at a cheaper cost than has ever been made. My improved bag is better because the exterior of the bag is comparatively free from wax, and consequently has a better appearance and feel than the bags as ordinarily waxed, while the pores of my bag are charged with compressed wax and the interior surfaces of the bag are evenly covered with a coating of hard compressed wax.

Having thus fully described my invention, I claim as new, and desire to secure by Letters Patent—

As an improved article of manufacture, the within-described paper bag having its pores and interior surfaces charged with compressed wax and its exterior surfaces freed or nearly freed from the wax, as set forth.

EDWARD G. SPARKS.

Witnesses:
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