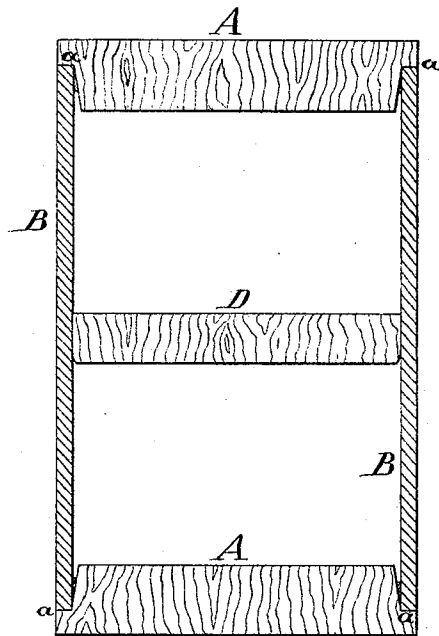


J. BECK.
Ribbon-Rollers.

No. 152,321.

Patented June 23, 1874.



Witnesses;

Inventor;

Amos Hornum.

W. C. Dey.

James Beck
by his atty J. L. Stetson

UNITED STATES PATENT OFFICE

JAMES BECK, OF NEW YORK, N. Y.

IMPROVEMENT IN RIBBON-ROLLERS.

Specification forming part of Letters Patent No. **152,321**, dated June 23, 1874; application filed February 18, 1874.

To all whom it may concern:

Be it known that I, JAMES BECK, of New York city, in the State of New York, have invented certain Improvements relating to Ribbon-Rollers, of which the following is a specification:

These important articles of manufacture are preferred solid on account of the superior appearance of the ends and the firm support they afford for the labels. The shrunken and distorted appearance common with pasteboard rollers impairs the sale of the ribbons. Solid wood rollers are heavy. Attempts have been made to produce combined wood and pasteboard rollers. William Obrist in 1873 patented such, with the ends turned smaller and pushed entirely into the cylindrical pasteboard casing. It is difficult or impossible to produce a roller by such means which will be smooth at the edges of the ends; and, if successful in this, they would obviously present the cheap soft pasteboard material to the eye immediately under the ribbon, and impair the appearance.

I have devised a construction which overcomes all the difficulties, presents a continuous wood surface at the end, allows the pasteboard to be cut and put together roughly, and yet produces a strong and perfect roller, requiring little labor or skill. It is only important that the pasteboard shall be in a true cylindrical form and sufficiently stiff. The ends may be irregular within wide limits.

The accompanying drawing is a central longitudinal section.

A A are ends of wood, turned by machinery or otherwise, with a shoulder, *a*, corresponding to the thickness of the pasteboard. Within the shoulder the form is a little tapered. Outside of it it is cylindrical, and exactly equal in diameter to the pasteboard main body B. The bodies B are scarfed and

glued together by hand or by machinery, and allowed to become firm. The interior at each end is touched around with glue by hand or by machinery, and the end pieces A A are introduced with a slight turning motion. The taper of the inner ends aids in distributing the glue, aids in the introduction, and avoids pushing the glue too much inward. The middle piece D, having only the diameter of the interior, is secured by glue, separately introduced, and left at or near the central position. It is easy to push this middle piece into an approximately correct position by hand or by machinery, and there is no necessity for its being exactly placed. Small short rollers are sufficiently stiff without the middle piece, but large or thin ones require it.

The ribbons, when mounted on my improved rollers, present all the appearance of the solid wood rollers, without their weight. They are sufficiently strong to withstand the clamping force which is employed to revolve the roller in winding on the ribbon. The ordinary compound rollers are liable to fail in this process.

I claim as my invention—

1. As a new article of manufacture, the ribbon-roller described, having the wood ends A formed with a shoulder, *a*, abutting against the ends of the cylindrical pasteboard shell B, as herein specified.

2. The compound roller described, having the cylindrical pasteboard shell B, and shouldered wood ends A *a*, and the central bracing-piece D, combined as herein specified.

In testimony whereof I have hereunto set my hand this 16th day of February, 1874, in the presence of two subscribing witnesses.

JAMES BECK.

Witnesses:

ARNOLD HÖRMANN,
WM. C. DEY.