(No Model.)

S. J. CARTER.

APPARATUS FOR COATING MOLDINGS.

No. 476,002. Patented May 31, 1892.

Fig. 1.

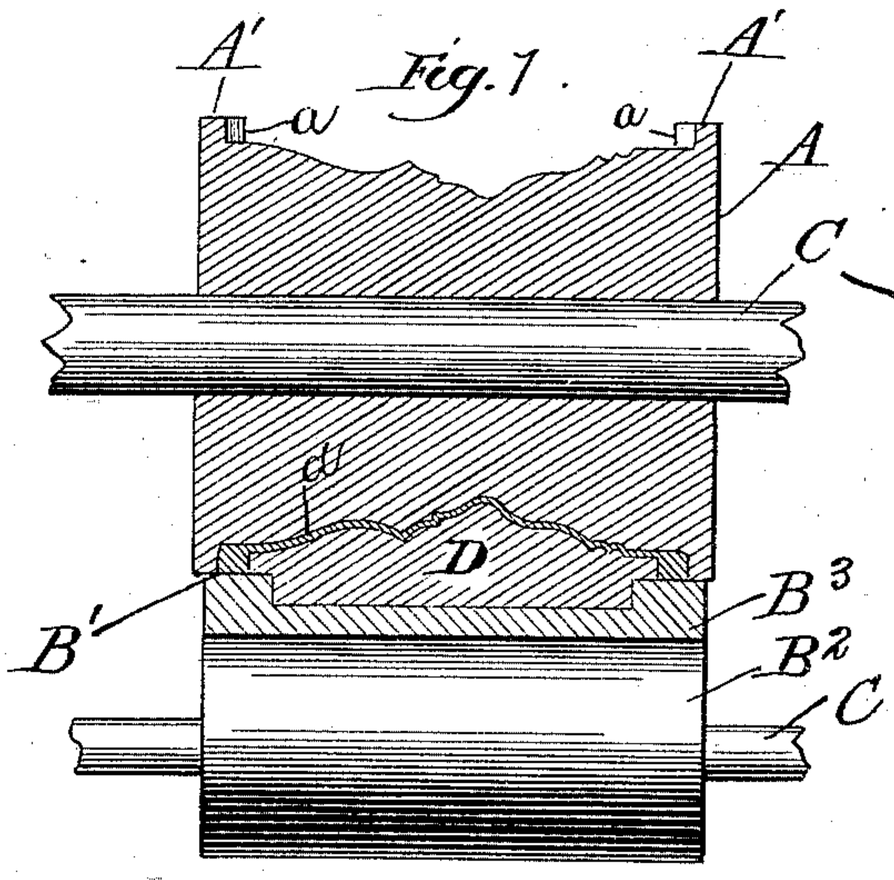


Fig. 2.

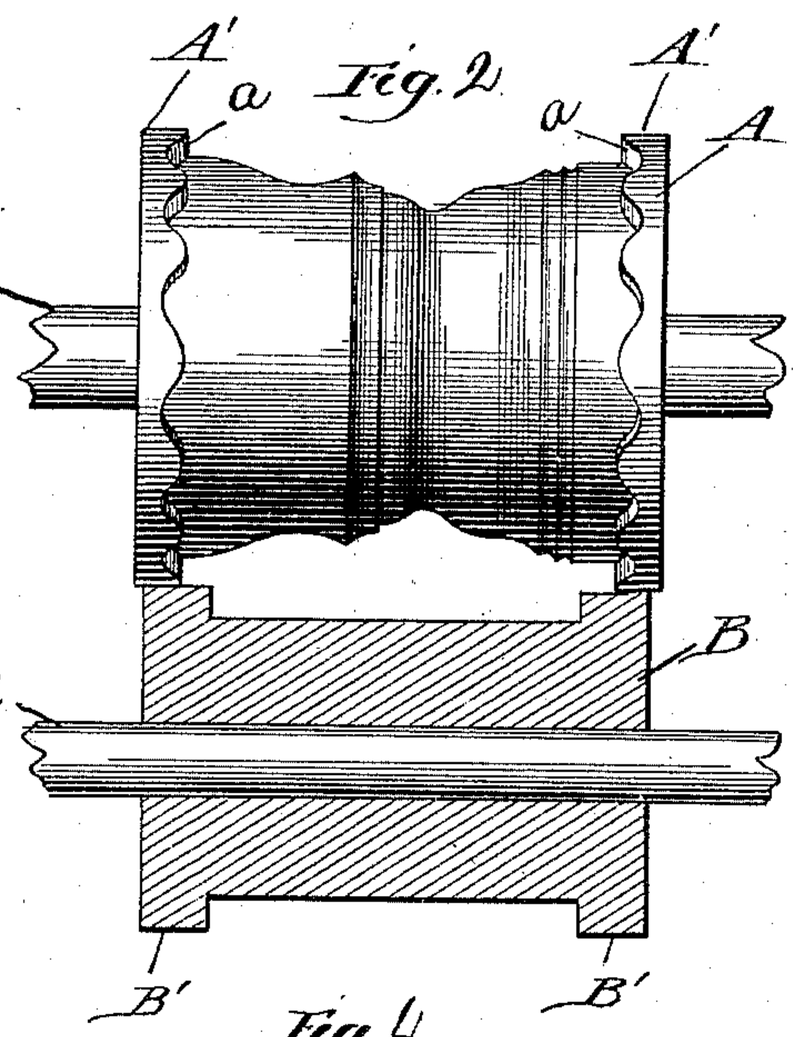


Fig. 3.

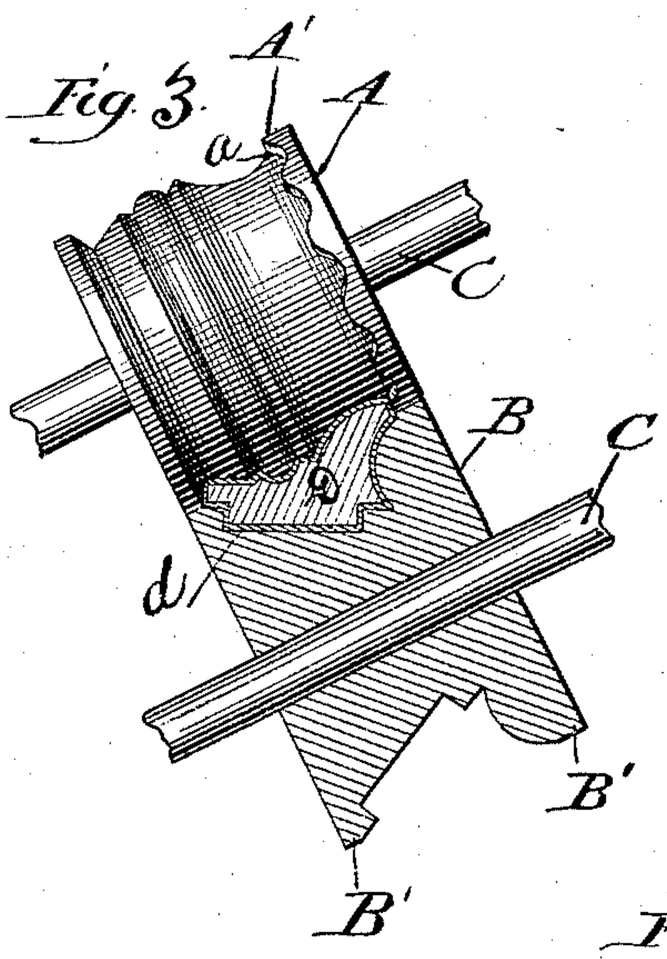


Fig. 4.

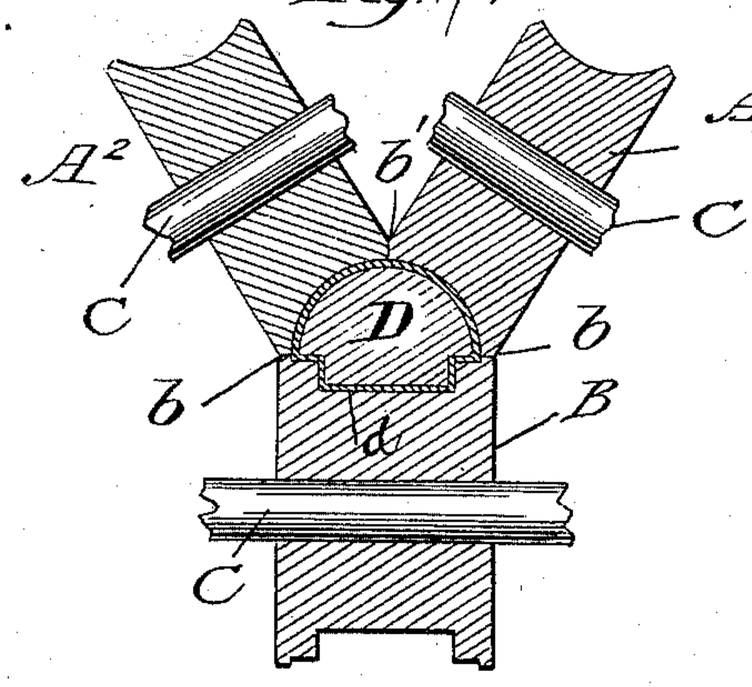
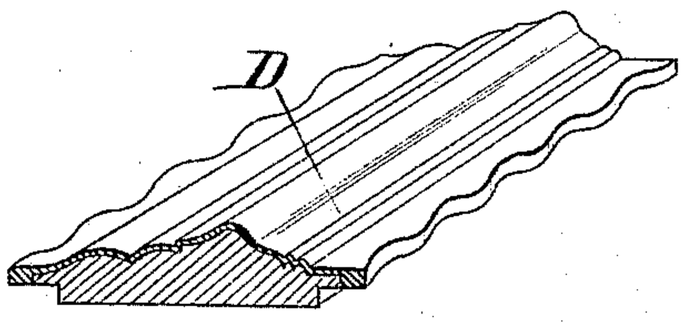


Fig. 5.



Witnesses:
A. J. Redmond.
W. T. Rayeroft.

Inventor:
Stephen J. Carter
By William O Robinson
Attorney.

UNITED STATES PATENT OFFICE.

STEPHEN J. CARTER, OF CHICAGO, ILLINOIS.

APPARATUS FOR COATING MOLDINGS.

SPECIFICATION forming part of Letters Patent No. 476,002, dated May 31, 1892.

Application filed January 2, 1892. Serial No. 416,880. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN J. CARTER, of Chicago, in the State of Illinois, have invented certain new and useful Improvements in Apparatus for Coating Moldings, of which the following is a specification.

My invention relates to apparatus for coating moldings with a plastic composition to be applied at one operation to the molding, either in plain or ornamental finish and to two or more sides, which lie in planes at right or acute angles to one another.

Heretofore plastic or ornamental coating has been applied to the molding by compressing the composition in short section molds, from which it was taken and softened by steam and bent to the shape of the molding and glued thereto. Another method was to press the composition on a metal plate by means of a figured roller, after which it was removed from the plate and bent to fit the shape of the molding and glued thereto; and these methods were especially necessary when any projecting ornamentation was to be applied to surfaces lying in planes perpendicular or at right angles to one another. Another method of applying ornamentation to the surface of moldings was by means of a figured roller, which only covered a portion of the surface of the molding and had its adjacent surface parallel to the surface of the molding, the molding being necessary to support the coating.

When smooth-surfaced coating was desired, and especially on more than one side of the molding, the same was applied by means of a die shaped to fit necessarily loose over the surface of the molding to be covered, in combination with which a box filled with sufficiently thin composition was drawn over the molding by hand or the molding passed through the same by machinery. This process had to be repeated from four to ten times, in order to get the proper thickness of composition and the surface sufficiently smooth.

If any ornamentation was desired, some one of the above-mentioned methods of applying ornamentation was used; but it has been found impracticable to apply ornamentation at one operation to more than one side or along the edges and side of the molding, or to those parts which would be approximately at right angles to one another by any of said methods.

It is the object of my improvement to provide an apparatus consisting of two or more rollers running in conjunction and adapted to surround the molding which will apply the coating to two or more sides of the molding at a single passage of the molding through the apparatus, the molding and the plastic covering being fed between the rollers together in such a manner as to cover either in a plain or ornamental manner two or more sides lying at any angle to one another or to the entire surface of the molding, as desired. This object I have attained by the apparatus illustrated in the accompanying drawings, in which—

Figure 1 represents a sectional elevation of a pair of rollers and a shoe designed to coat the sides and edges of the molding in the manner described. Fig. 2 is a sectional side elevation of a pair of rollers designed to do the same work as that represented in Fig. 1 without the aid of the shoe. Fig. 3 is a sectional elevation of a pair of rollers adapted to cover the four sides of the molding. Fig. 4 is a sectional elevation of three rollers adapted to cover the four sides of the molding. Fig. 5 is a perspective view of a section of molding covered on the top and side edges by means of the roller and shoe shown in Figs. 1 and 2.

It is necessary in order to produce the effect that certain portions of the roller and shoe should be in continuous contact, so as to form an opening between them through which the molding and coating material can be simultaneously passed in such a manner that the coating will be compressed against the sides of the molding which it is desired to coat.

In the drawings, Figs. 1, 2, and 3, A designates the upper roller, which is provided with a smooth projecting part A′, having scalloped or figured edges *a* at right angles to the smooth portion A′; and in Figs. 2 and 3 B designates the bottom roller, which has the smooth parts B′, adapted to impinge upon the parts A′ of the rollers A. In Fig. 1 a plain roller B^2 carries a shoe B^3, which has the surfaces corresponding to B′ which impinge the part A′ of the roller A.

In Fig. 4 two rollers A^2 A^2 are placed oppo-

site to the roller B, which have the impinging surfaces at *b* substantially the same as in the other figures described, and also beveled edges at *b'*, whereat the rollers A^2 impinge each other, so as to form a continuous opening on all sides of the molding. The several rollers are supported each on a shaft C (shown in fragment and designed to be supported in bearings in a suitable frame) and operated by suitable mechanism of ordinary construction, which it is not deemed necessary to describe, as the same does not constitute any part of the invention claimed.

In Figs. 1, 3, and 4 the molding D is shown between the rollers or roller and shoe, and *d* designates the plastic covering.

It should be observed that the opening between the rollers is of the shape of the cross-section of the molding, slightly larger than the diameter of the molding, so that the molding and material forming the covering composition can be fed through the opening, whereby the entire space will be filled and the plastic material will be compressed upon the molding and caused to adhere thereto and to draw it through the machine.

By the old mode of applying plastic coatings to moldings the edges of the wood which forms the moldings were left unfinished when passed through the apparatus and were required to be cut away and afterward finished by hand, which at best is a very slow process and requires considerable skill, and the latter or hand portion of the work was much more expensive than all the previous or machine part of the operation.

By the use of my apparatus the coating can be fed in with the molding on two or more sides at the same time in such manner as to complete the finish along the edges of the coating when only a part of the surface is coated, or the entire stick can be coated all over, so that in either case no hand-work is required, and the complete article can be furnished at less than one-half of the cost by the old method.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In an improvement in apparatus for coating or ornamenting moldings, the combination of two or more rollers provided with portions of their surface which are adapted to impinge one another and other portions which are not in contact, which are adapted to form an opening surrounded by a continuous wall having the shape of the molding in cross-section, between which the molding and the plastic material can be fed, substantially as specified.

STEPHEN J. CARTER.

Witnesses:
A. J. REDMOND,
W. T. RAYCROFT.