(No Model.)

F. E. CLARK.

BUNDLING WALL PAPER.

No. 335,684. Patented Feb. 9, 1886.

Fig. 1.

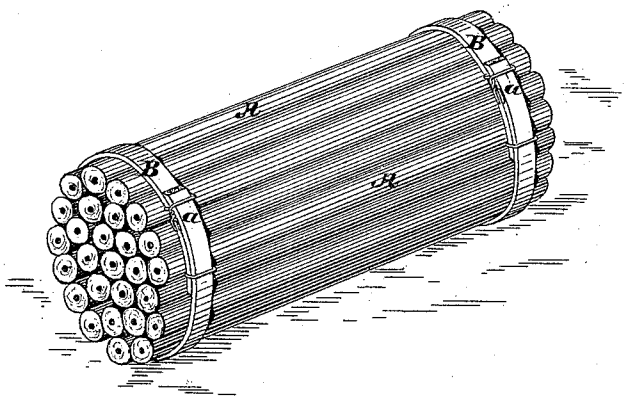


Fig. 2.

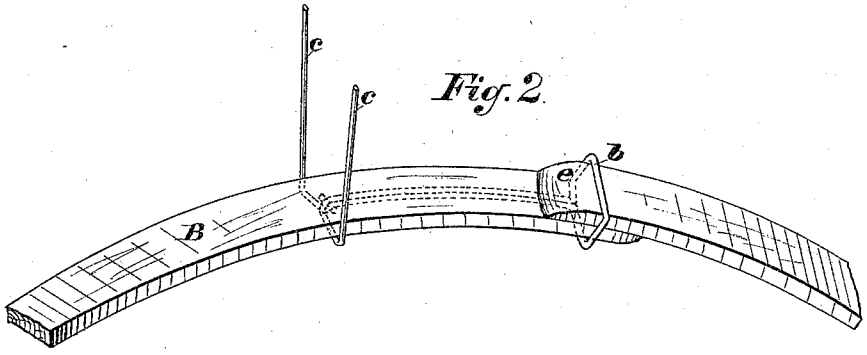
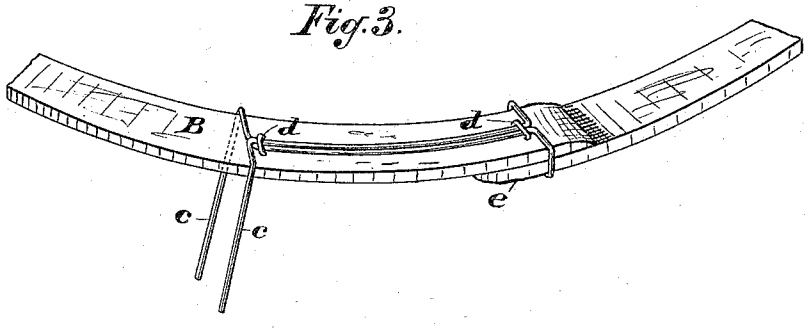


Fig. 3.



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UNITED STATES PATENT OFFICE.

FRANK E. CLARK, OF BROOKLYN, NEW YORK, ASSIGNOR OF ONE-HALF TO JAMES P. BARNETT, OF SAME PLACE.

BUNDLING WALL-PAPER.

SPECIFICATION forming part of Letters Patent No. 335,684, dated February 9, 1886.

Application filed September 25, 1885. Serial No. 178,212. (No model.)

To all whom it may concern:

Be it known that I, FRANK E. CLARK, a citizen of the United States, residing in the city of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Bundling Wall-Paper; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

Heretofore wall-paper when finished was rolled into cylindrical rolls, several of which, generally about twenty-five, were assembled together and were secured into an approximately cylindrical bundle by wrapping strings or small hemp cords around the bundle near the ends of the rolls and fastening their ends by tying them together. In this condition the paper was shipped from the factory and passed into the hands of jobbers, retailers, and consumers. Two serious disadvantages attach to wall-paper bundled in this way. The strings or cords in the frequent handling of the bundles, being generally the means by which they are grasped, lifted, and carried, cut into and disfigure the paper of the rolls which is in contact with the binding-string, so much so that in many cases it is necessary to cut off and throw away several thicknesses of the paper of the outside rolls. This same result is also produced by rolling the bundles along the floors of factories and shops, as is frequently done, the weight of the bundle resting upon the small cords, together with the rolling movement, having the effect to crinkle and injure the paper. Another disadvantage results from the flexibility of the binding-cords, which permits the bundles to depart from their cylindrical shape by their own weight, so that when rolled over the floor the surfaces of the outer rolls come in contact with the floor and drag upon it, instead of the bundles rolling along smoothly and easily, as would be the case were they secured by bands rigid enough to preserve the desired cylindrical shape. This wears and soils the paper oftentimes to such degree as to make it unserviceable. Both of the disadvantages above referred to are more apparent in moist weather when the paper becomes tender and easily impressed.

It is the object of my present invention to overcome these disadvantages by securing the bundles by means of flat hoops in the place of strings or cords, so that the paper will not be cut and disfigured, and by making the hoops of such rigidity that the bundles will retain their shape and the paper be kept from contact with the floor when the bundles are rolled over it.

My invention is illustrated in the accompanying drawings, in which Figure 1 is a view in perspective of a bundle of wall-paper bound with flat rigid hoops. Fig. 2 is a detail view of the ends of a hoop adapted for binding bundles of wall-paper, showing the fastening device. Fig. 3 is a detail view of the hoop, showing the fastening device upon the under side thereof.

In Fig. 1, A represents several rolls of wall-paper which have been assembled together to form a bundle of approximately cylindrical shape, and are secured in place by means of flat hoops B B, which are made of wood or similar material, and are provided with wire fastenings *a a*.

The hoop shown in the several figures of the drawings consists of a wooden body, B, to one end of which is attached a wire fastening, *a*, for securing the ends of the hoop together after it is forced tightly around the bundle.

The wire of which the fastening is made is preferably bent to form a loop, *b*, on the upper side of the hoop and near the end thereof, which loop is large enough to permit the other end of the hoop to slide through it, while the fastening ends *c c* of the wire are further along on the body of the hoop, preferably three or four inches from the loop. The wire is secured to its end of the hoop preferably by means of staples *d*, driven over it on the under side of the hoop and clinched down upon the upper side thereof.

The hoops are conveniently applied to the several rolls of paper to bind them into a bundle as follows: The desired number of rolls are piled together between the arms of a supporting frame or horse. These arms are arranged to be readily moved toward each other and to press and hold the rolls together. When the rolls are thus in place, the hoops, with the ends *e* inserted into the loops *b*, are slipped over the ends of the rolls and brought into position.

The rolls are then pressed together, and the ends *e*, by the hand of the operator or other means, are slipped along through the loops *b* till they pass between the free ends *c c* of the wire and forced tightly around the bundle, and then the ends *c c* of the wire are brought over the ends *e* of the hoop, and by pinchers or other proper tools are twisted together, thereby forcing and holding the ends of the hoop together, the twisted ends of the wire being afterward turned down by the edge of the hoop out of the way, as shown in Fig. 1 of the drawings.

It is remarked that the loop *b* serves not only as a guide to the ends *e* of the hoop when it is being slipped over the opposite end, but it also serves by holding the ends of the hoop together when the rolls are being pressed to form them into a bundle of cylindrical shape, there being a tendency, as the compressing-arms do not embrace the upper part of the bundle, for the rolls to rise up out of the cylindrical shape. The hoop held in place by the loop *b*, together with the pressure of the hand of the operator on the hoop, if required, prevents this.

It is readily seen from the above description and from the drawings that a flat hoop can be forced round rolls of wall-paper with such tightness and secured in such position as to bind them into bundles in such manner that the paper which is in contact with the hoops will not be liable to material injury in handling the bundles, and also that by reason of this rigidity of the hoops the cylindrical shape of the bundles is preserved, so that they can be readily rolled upon the floor without liability of soiling or injuring the paper by contact therewith.

What is claimed as new is—

1. A hoop adapted for bundling rolls of wall-paper, consisting of a flat wooden body having a wire fastening attached to one end thereof arranged to secure the ends of the wooden body together when overlapped.

2. A hoop adapted for bundling rolls of wall-paper, consisting of a flat body part and a fastening attached to one end thereof, the said fastening consisting of a loop through which the opposite end of the body part can be slipped, and means for securing the ends of the body part together when overlapped.

3. A bundle composed of several rolls of wall-paper brought into approximately cylindrical shape and secured in place by flat rigid hoops, substantially as and for the purpose set forth.

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