(No Model.)

J. D. HORTON & F. S. LEE.

DEVICE FOR COLORING SHINGLES OR OTHER FLAT ARTICLES.

No. 454,356. Patented June 16, 1891.

Fig. 1.

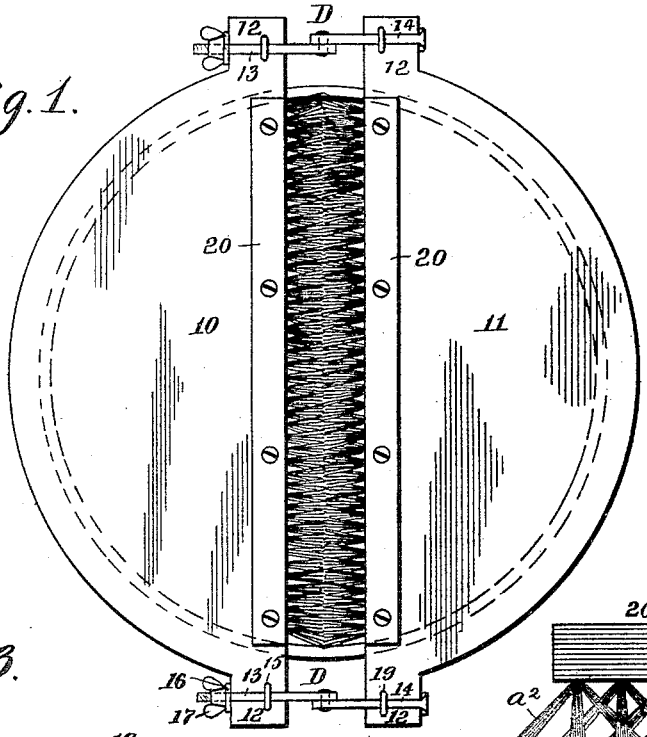


Fig. 4.

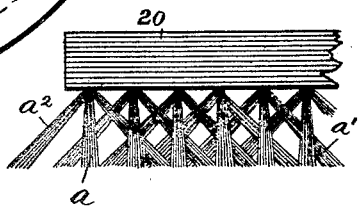
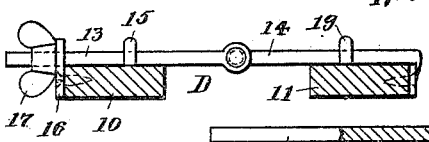


Fig. 3.



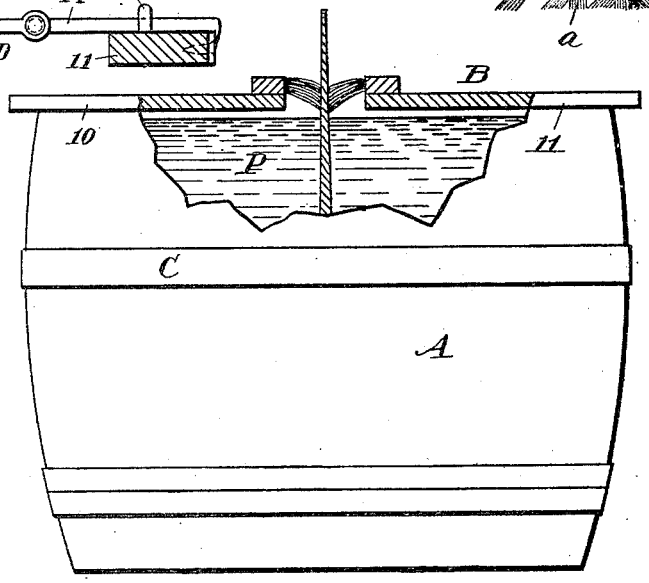


Fig. 2.

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JOSEPH D. HORTON AND FRANK S. LEE, OF CHICAGO, ILLINOIS.

DEVICE FOR COLORING SHINGLES OR OTHER FLAT ARTICLES.

SPECIFICATION forming part of Letters Patent No. 454,356, dated June 16, 1891.

Application filed January 21, 1891. Serial No. 378,537. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH D. HORTON and FRANK S. LEE, of the city of Chicago, in the county of Cook and State of Illinois, have invented a new and Improved Device for Coloring Shingles and other Flat Articles, of which the following is a full, clear, and exact description.

Our invention relates to a device for coloring shingles and other flat articles, and has for its object to provide a means whereby any flat article—such as a shingle, for instance—may be conveniently and expeditiously treated without waste of coloring material, as all surplus of such material is removed from the article during the process of staining.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the device. Fig. 2 is a side elevation, partly in section. Fig. 3 is a transverse section through the device; and Fig. 4 is a side elevation of one of the brushes detached.

In carrying out the invention any receptacle capable of holding the coloring compound in bulk is employed—as for instance, a tub A—and the cover B of such receptacle is the subject of the present application. The cover is fitted to the receptacle and is made in two sections 10 and 11, preferably of equal size, provided upon the periphery or margin at their inner faces with horizontal lugs or ears 12. The two sections of the cover are connected and held some distance apart by hinges D. Each of the hinges comprises two members 13 and 14, having their engaging ends pivotally connected. The members 13 of the hinges, as shown in Fig. 3, pass through one or more guide-staples 15 upon the upper face of the ear 12 of the cover-section 10 and through plates 16, secured to the outer edges of the ears. The outer ends of the members 13 are threaded, and upon the threaded portions of the members nuts 17, preferably wing-nuts, are secured. The members 14 of the hinges also pass through guide-staples 19 upon the upper faces of the ears of the cover-section 11; but the outer ends of the hinge members 14 are rigidly secured to the ears by means of screws, bolts, or equivalent fastening devices. Thus by manipulating the nuts 17 the cover-sections may be carried toward or from each other, as occasion may demand, and as the adjusting mechanism also serves as hinges, either cover-section may be lifted, rendering the interior of the covered receptacle readily accessible. A brush 20 is secured to each cover-section at or near and essentially parallel with its inner edge, and the bristles or flexible sections of the two brushes engage, as illustrated in Fig. 1.

The arrangement of the bristles of the brushes is peculiar, as shown in Fig. 4, one row a of the bristles being placed at a right angle to the back of the brush, while the next row a' extends at a lesser angle from the back in the direction of the right, crossing the row a diagonally, and the bristles of the third row a^2 incline in the direction of the left, also at a lesser angle than a right angle to the back and cross the second row diagonally. Any desired number of rows may be employed in the construction of the brush. By this construction it is obvious that a lattice-work of bristles is obtained, and the working-face of the brush is rendered very full, much more so than when the bristles are placed in the ordinary manner.

In operation, the cover-sections having been properly adjusted, the shingles or other objects to be stained or painted are forced down between the working-surfaces of the brushes into the coloring material below, and when the articles have been properly colored they are withdrawn upward also between the brushes, which remove all susplus material. When the shingles are forced down between the brushes, any coloring material contained therein is almost entirely forced out, rendering the brushes comparatively clean, and enabling them when the shingles are colored sufficiently to effectually remove all of the surplus coloring material from both faces.

Having thus described our invention, we

claim as new and desire to secure by Letters Patent—

1. A device for coloring flat articles and adapted to be located over a receptacle, consisting of two cover-sections connected by adjustable hinges, and brushes secured to the cover-sections, the working-surfaces of which brushes extend beyond the edges of the cover-sections practically to an engagement, substantially as shown and described.

2. A device for coloring flat articles and adapted to be located over a receptacle, consisting of a sectional cover, adjustable hinges connecting the sections of the cover, and brushes secured opposite each other, one to each cover-section, the bristles or working edges of which brushes extend over the inner edges of the sections and engage, as and for the purpose specified.

3. The combination, with a receptacle, of a cover constructed in two sections, laterally-adjustable hinges connecting the two sections, and brushes secured to the sections of the cover opposite one another, the bristles or working-surfaces whereof extend over the inner edges of the sections and engage, as and for the purpose specified.

4. A device for coloring flat articles and adapted to be located over a receptacle, consisting in a sectional cover or support, the inner adjacent edges of which are provided with brushes, the bristle faces of which face each other, each brush comprising a back, a row of bristles extending from said back at a right angle, a second row of bristles extending in direction of the right at a lesser angle than a right angle and crossing the first row diagonally, and a third row of bristles extending toward the left at approximately the same angle as the second row, the third row of bristles crossing the second row diagonally, whereby a lattice-work of bristles is obtained, substantially as and for the purpose specified.

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