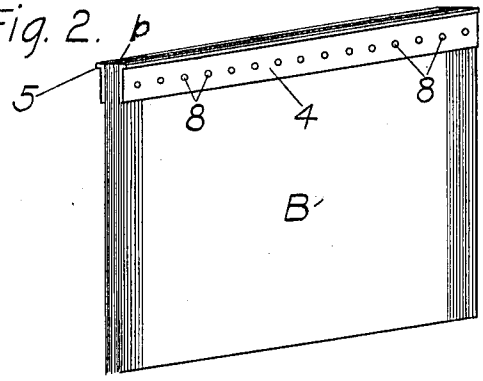
G. E. SEABOYER.

CALCIMINE BRUSH.

APPLICATION FILED MAY 16, 1911.

1,020,373. Patented Mar. 12, 1912.

Fig. 2.



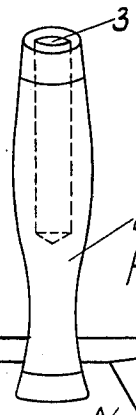
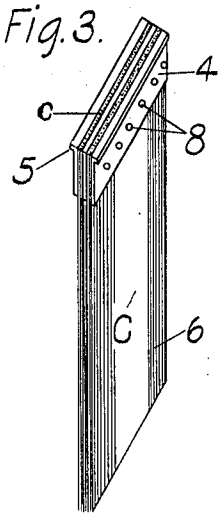


Fig. 1.

Fig. 3.



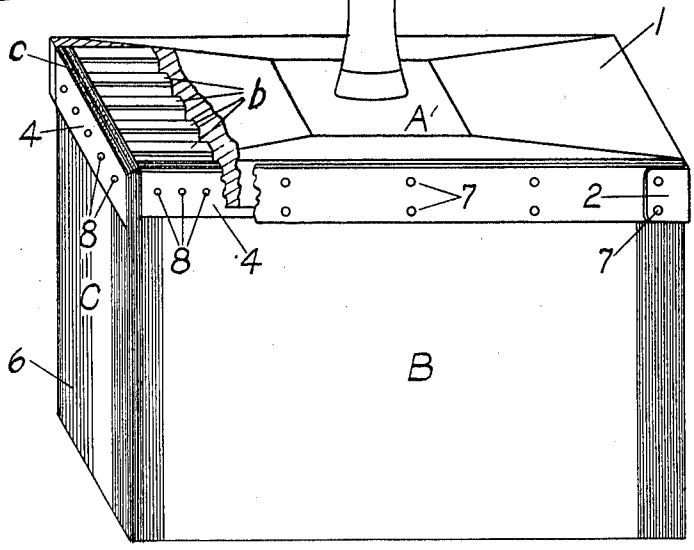


Fig. 5.

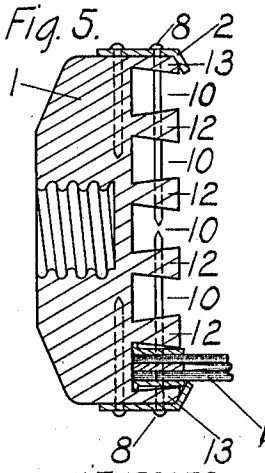
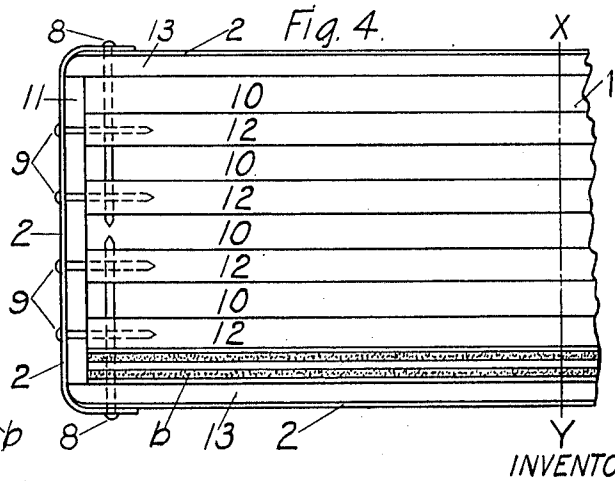


Fig. 4.



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CALCIMINE-BRUSH.

1,020,373. Specification of Letters Patent. Patented Mar. 12, 1912.

Application filed May 16, 1911. Serial No. 627,554.

To all whom it may concern:

Be it known that I, GEORGE E. SEABOYER, a citizen of the United States, residing at Wooster, in the county of Wayne and State of Ohio, have invented a new and useful Calcimine-Brush, of which the following is a specification.

My invention relates to improvements in brushes, and especially the class known as German calcimine brushes. Its object is to provide improved means for constructing and securing the brush material in the brush-head, so as to make a more pliable and lasting brush for its intended use.

It consists mainly of constructing a series of thin, flat brushes—somewhat similar to the ordinary flat varnish brush—and then assembling the members of said series in a suitable block for a brush-head, said block having a like series of parallel grooves or furrows cut into its under surface and into which said series of brushes is solidly secured, and a gain or rabbet at each end into which is set and secured a like flat brush cross-wise; the entire series of brushes, including said ends, being tightly bound together within a ferrule which is secured to said block by nails or the like, which pass through said brushes cross-wise—all as hereinafter more particularly set forth and stated in the appended claims.

My invention is illustrated by the accompanying drawings in which similar letters and figures of reference indicate like parts.

Referring thereto, Figure 1 is a perspective view of a brush embodying my invention, being partly cut away at one end for better illustration. Fig. 2 is a view of one of the series of thin flat brushes such as I use, detached. Fig. 3 is a view of one of the brushes I use at the end of the block, detached. Fig. 4 is a view of the under surface of the block, showing so much thereof as is necessary for illustration. Fig. 5 is a cross-section of Fig. 4 on the line X—Y thereof.

In the drawings, 1 is a block, which may be made of any suitable wood, and constitutes the base of the entire brush-head. Along its under surface are cut a series of parallel grooves or furrows 10, as shown in Figs. 4 and 5, five being generally sufficient for a large size brush; said furrows are preferably cut about one sixteenth inch wider at the bottom thereof, so as to leave the intervening ridges 12 a like distance wider at their faces, thus adapting the furrows to receive the heads of the several thin flat brushes respectively, and form a dove-tail connection therewith. For this purpose, the upper margins *b* of the several brushes B may be enlarged so as to fill up the space at the bottom of each furrow 10 by means of a longitudinal bead or flange 5 along the upper and outer edge of the band or ferrule 4 thereof, as shown in Fig. 2. The brushes B are independently constructed and forced into said furrows 10 longitudinally, and in this connection, it is of advantage to spread a coating of brush cement within the furrow when the thin brush head is inserted, to completely fill up all space within the furrow, and more solidly secure the adjacent parts by the hardening of said cement.

A indicates the main brush-head; it is encircled by a suitable band or ferrule 2, shown in Fig. 1. The ferrule is secured to the block 1 by means of nails 7 half of which pass cross-wise through the series of thin longitudinal brush heads *b;* said nails are preferably inserted in pairs one above the other, substantially as shown in Fig. 1.

C indicates a shorter thin flat brush, a pair of which is constructed in all respects similar to the longitudinal brushes B aforesaid. Said brush C is set cross-wise one at each end of the block 1 adjacent the several ends of the longitudinal brushes B in a gain or rabbet cut across said block to accommodate the same as shown in Fig. 4. It is secured in said position, with its brush material 6 lying closely adjacent to the brush material of the brushes B, by means of nails 9 which pass through the head thereof into the ridges 12 in like manner as heretofore stated in respect to said brushes B, the ferrule 2 encircling and holding the same securely, as shown in Fig. 4.

By the means aforesaid the ends of the brush are neatly finished, and all the parts are securely bound together in a solid mass.

I am aware it is not new to construct a brush comprising a back having a series of longitudinal grooves extending from end to end thereof, and a series of strips, each provided with a row of bristle tufts fitted detachably to such grooves; also, that is not new to construct a brush comprising a series of strips attached to a backing, and having a row of bristles between and also surrounding said strips, and such I do not broadly claim.

My invention is differentiated therefrom, in that my longitudinal grooves terminate short of the end of the brush-head block, and in a groove or rabbet at each end thereof, said rabbet being cut at right angles thereto across each end of said block, each of said grooves and rabbets having fitted therein a thin flat brush terminating therewith. Said longitudinal brushes are supplemented by said transverse end brushes and in combination form a calcimine brush comprising a plurality of thin flat brushes, independently constructed, and secured in said respective channels in the block, the whole series of said brushes being surrounded by a ferrule secured thereto and to said block by fastening nails which pass through said several brushes into said block as aforesaid. Such novel combination of longitudinal and transverse brushes constructed as aforesaid, makes a calcimine brush of greater strength and better working qualities than heretofore—a brush which cannot leak or come apart, and which may be used in oil paints as well as in water colors.

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

1. A calcimine brush, comprising a block with handle thereto, said block provided with a series of longitudinal furrows cut along its under surface and a rabbet across each end thereof, a series of thin flat brushes, independently constructed, inserted and secured in said furrows respectively, a thin flat brush secured to said block cross-wise at each end thereof in said rabbets and adjacent the ends of said longitudinal series, a band or ferrule passed around said group of flat brushes, and secured against the same and to said block, substantially as set forth.

2. As an article of manufacture, a brush, having a block provided with a series of longitudinal furrows, each furrow wider at the bottom thereof than at the top, and a rabbet cut across each end of said block, a series of thin flat brushes, each having the outer margin of its head thickened to fit said widened bottom and secured therein, a thin flat brush secured to said block cross-wise adjacent the ends respectively of said longitudinal brushes in said rabbet, and a band or ferrule passed around the entire group of brushes and said block and secured solidly thereto, substantially as set forth and for the purpose specified.

In witness whereof, I hereunto set my hand this 17 day of April, 1911.

GEORGE E. SEABOYER.

Witnesses:

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A. D. METZ.