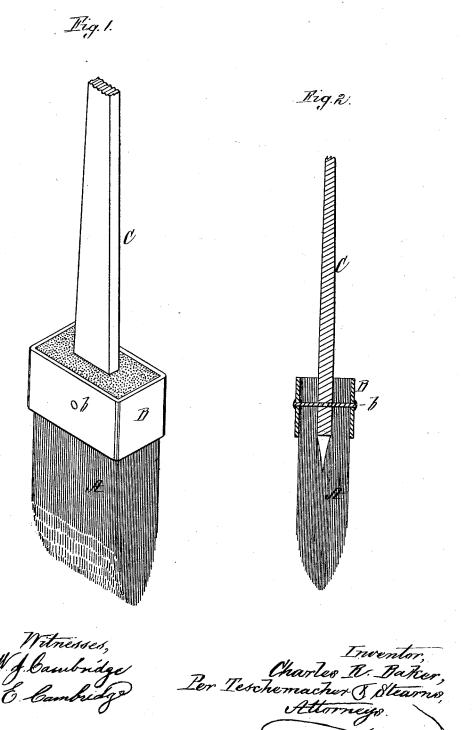
No. 168,363.

Patented Oct. 5, 1875.



UNITED STATES PATENT OFFICE

CHARLES R. BAKER, OF EAST CAMBRIDGE, MASSACHUSETTS.

IMPROVEMENT IN PAINT-BRUSHES.

Specification forming part of Letters Patent No. 168,363, dated October 5, 1875; application filed August 18, 1875.

To all whom it may concern:

Be it known that I, CHARLES R. BAKER, of East Cambridge, in the county of Middle sex and State of Massachusetts, have invented an Improvement in Varnish or Paint Brushes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a perspective view of a varnishbrush constructed in accordance with my invention. Fig. 2 is a vertical section through

the center of the same.

Varnish-brushes, as at present constructed, are oval or round, and are objectionable for the reason that they are thicker in cross-section at the center than at the edges, and therefore the center of the brush takes up and holds more varnish than the other portions, and, consequently, it is distributed unevenly over the surface to which it is applied, more varnish being laid on the line under the center of the brush, instead of being laid uniformly, as is desired. Attempts have been made to overcome this difficulty by pressing in the lower edges of the two opposite longer sides of the oval socket or ferrule, so as to cause the bunch of bristles to assume a flat shape, excepting at its edges. This operation, however, causes the bunch to be condensed to such a degree that the brush loses a portion of its elasticity and is incapable of taking up and holding a sufficient quantity of varnish, necessitating the frequent removal of the brush from the surface being varnished in order to obtain a new supply, which is objectionable, as it is very essential that the varnish be applied as rapidly as possible, owing to its tendency to "set."

My invention has for its object to successfully overcome all of the above mentioned difficulties, and consists in a varnish or paint brush, in which the butt-ends of the bristles are disposed in a rectangular form within a rectangular socket or ferrule, the brush being of uniform thickness and density throughout its entire width, which insures the varnish or paint being laid evenly on a surface, as de-

sired.

To enable others skilled in the art to understand and use my invention I will proceed to describe the manner in which I have carried it out.

In the said drawings, A represents the bristles, which, after being arranged with their "flag" ends resting on the curved bottom of a mold, in order to produce the required taper at the lower end, as described in Letters Patent of the United States granted to me June 15, 1875, are tied together, and their butt-ends introduced within a metallic socket or ferrule, B, which is of rectangular form. The handle C is then driven in and secured by a pin, b, in the ordinary manner.

secured by a pin, b, in the ordinary manner. By thus securing the butt-ends of the bristles in a rectangular socket, the thickness of the brush is made uniform throughout its entire width, thus causing the edges of the brush to take up the same quantity of varnish as any other portion of the brush situated in the same cross section. The degree of density is also such as to enable the brush to take up and hold the desired quantity of varnish.

By the employment of a brush constructed as above described an even coating of varnish is distributed over the entire surface to be covered, a sufficient quantity being taken up by the brush to avoid the necessity of frequent dipping incident to the employment of a brush in which the sides are flattened by compressing the lower end of the socket, as above referred to, and also dispensing with the labor of evenly spreading the varnish after it has been laid on by a brush of the old construction.

What I claim as my invention, and desire to secure by Letters Patent, is—

A varnish or paint brush, in which the buttends of the bristles are disposed in rectangular form within a rectangular socket or ferrule, substantially as and for the purpose described.

Witness my hand this 11th day of August, A. D. 1875.

CHAS. R. BAKER.

In presence of— P. E. TESCHEMACHER, W. J. CAMBRIDGE.