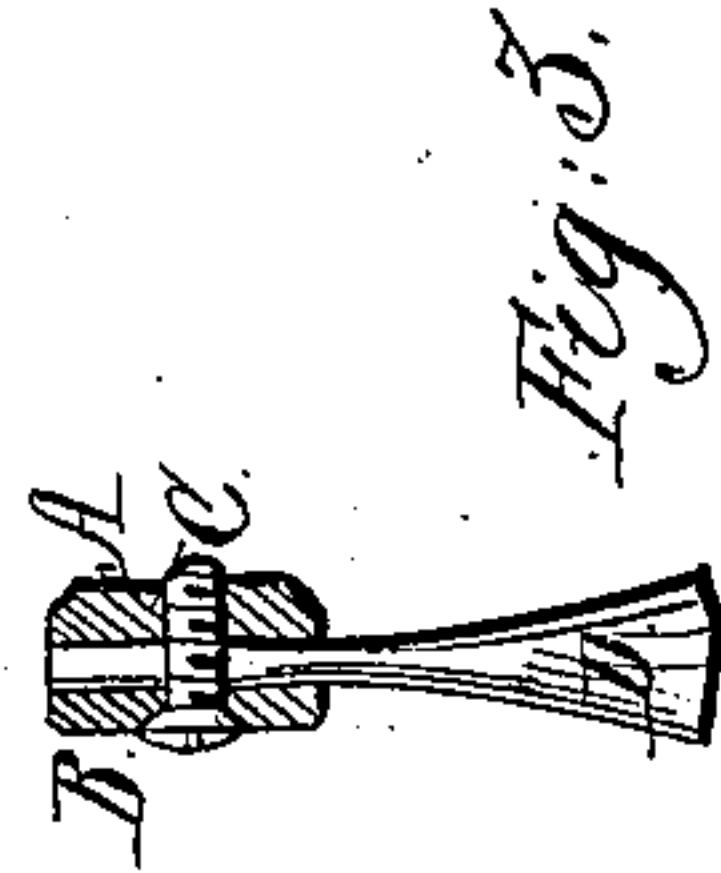
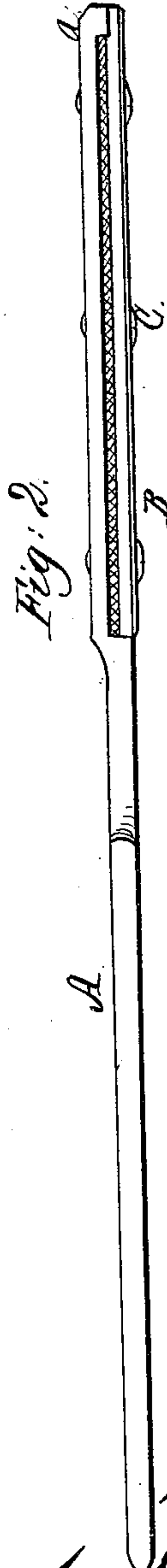
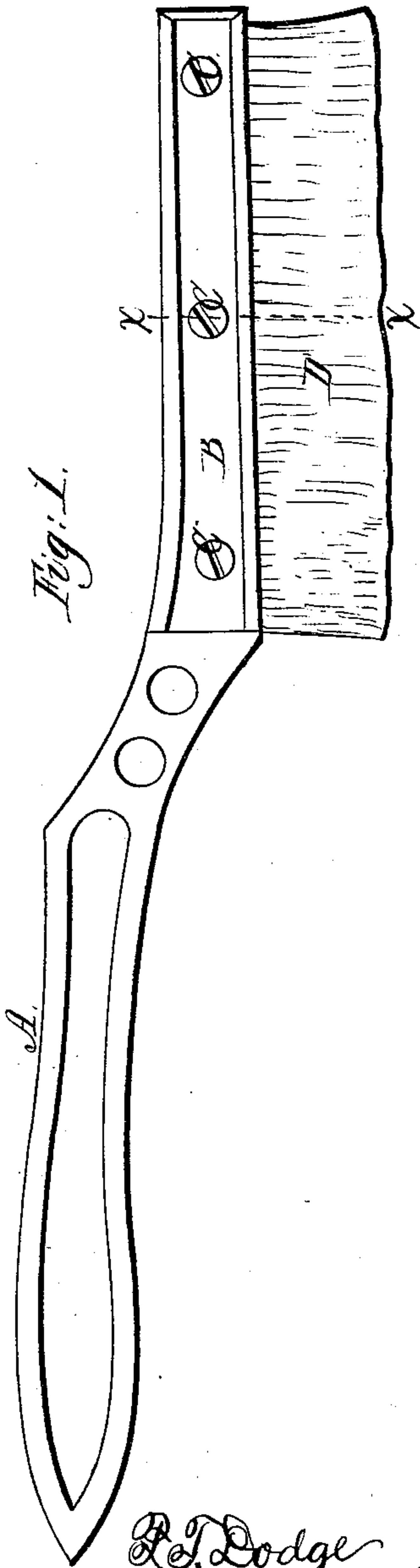


W. M. Newton,

Paint Brush,

N^o 81,101.

Patented Aug. 18, 1868.



Witnesses: P. L. Dodge
Assistant Do

Inventor:
W. M. Newton
by Dodge & Munn
his attys.

United States Patent Office.

WILLIAM M. NEWTON, OF BALTIMORE, MARYLAND, ASSIGNOR TO HIMSELF AND JOHN E. ARMENDT, OF THE SAME PLACE.

Letters Patent No. 81,101, dated August 18, 1868.

IMPROVED BRUSH.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM M. NEWTON, of Baltimore, in the county of Baltimore, and State of Maryland, have invented certain new and useful Improvements in Paint-Brushes, styled trenchers or pencils; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it.

Figure 1 is a side view of my improved brush.

Figure 2 is a top plan view of the same, and

Figure 3 is a vertical cross-section, on the line $x x$ of fig. 1.

My invention relates to certain improvements in the construction of that class of paint-brush denominated "trenches" and "pencils," which are used for painting the seams in hulls of vessels, and for the white-striping on brick walls, &c. Brushes of this class have hitherto been made of a flat strip of wood, having about one-half of its length fashioned into a handle, and being split vertically the remainder of the distance, and having the ends of the bristles introduced into this slit, and held there by means of glue, the stick or body being fastened together at the split end, by packing-thread wound around it in a groove near the end. Brushes thus constructed are very expensive, and do not well answer the purpose for which they are intended, as the bristles often become loose and fall out, and the brush, being of no further use, is thrown away; besides, when painting brick walls and similar rough surfaces, the bristles wear away very rapidly, and soon become too short to use. As these brushes cannot be repaired in any way when injured or worn, new brushes must be frequently purchased, thus causing great expense to the painter.

It is to provide against these difficulties that I construct my improved brush. My brush consists of a cast-metal frame, A, of the form shown in figs. 1 and 2, being formed into a handle at one end, said handle having, for the sake of lightness, some portions of the metal cut away, as in fig. 1, leaving a skeleton only. The other portion of the frame is intended to receive the bristles, and is made of less than half the thickness of the handle, and pierced with three or more holes to receive screws C; said screws being for the purpose of fastening to the frame A, a flat metal strip, B, of the same length and width as the thin portion of the frame. The screws C pass through this strip, and are tapped into frame A, as shown in fig. 3.

The bristles D forming the brush are held between the plate B and the frame A, as in figs. 2 and 3, they, in forming the brush, being laid flat, with their upper ends upon the frame A, along the thin portion; the plate B is then placed in position, the screws inserted, and the plate screwed down tightly in place. The brush is now complete.

To prevent the bristles of the front end of the brush from working out, I cast a lug, a , on the inside of the frame, as shown in fig. 2, and cut away enough of the metal on B to allow it to just pass down inside, thus securing the end bristles as firmly as those at any other point.

By using a frame of this kind, the brush may be made thinner or thicker, at pleasure. And when the bristles are worn or injured, they may be replaced by new ones in a moment, all that is necessary being to loosen the plate B by means of the screws C, draw out the old bristles, substitute the new ones, and screw the plate down again.

One great advantage of my brush is, that by it I can utilize the bristles from old worn-out paint-brushes which would otherwise be thrown away.

The upper ends of the bristles, the portion that comes within the frame, may be glued together, as in the wooden brushes, although I consider it no object, as they are held very firm without.

If found desirable in practice, the inside surfaces of A and B, the portion which bears upon the bristles, may be grooved or serrated longitudinally, the plain surface, however, answering every purpose.

By thus constructing a brush, I provide one that is much neater and stronger than the old style, the handle of which any painter can refill with bristles when the others are worn out, and the handle last a lifetime.

It is obvious that a brush may be made of wood on this plan, although it is considered no object so to do.

I am aware that a whitewash-brush has heretofore been made with a detachable plate for holding the bristles in place, and therefore I do not claim broadly the idea of a detachable or clamping-plate in brushes; but

What I do claim is—

The improved trencher-brush, consisting of the combined handle and frame A, made of a single piece of metal, and the plate B secured thereto, as herein shown and described.

WM. M. NEWTON.

Witnesses:

O. W. J. BOWLING,

JOHN H. HOLTHAUS.