

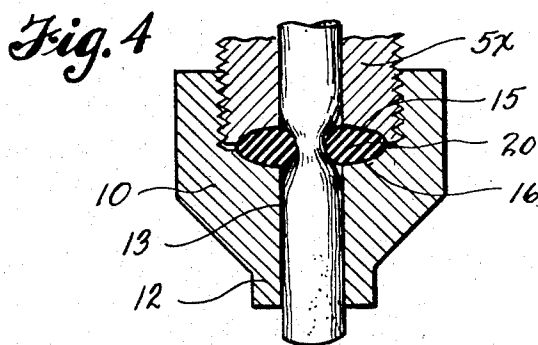
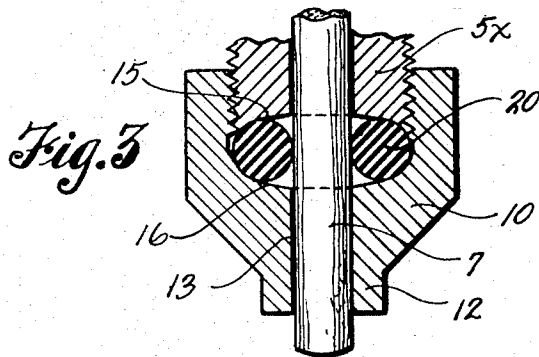
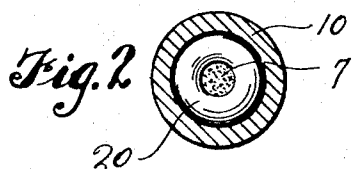
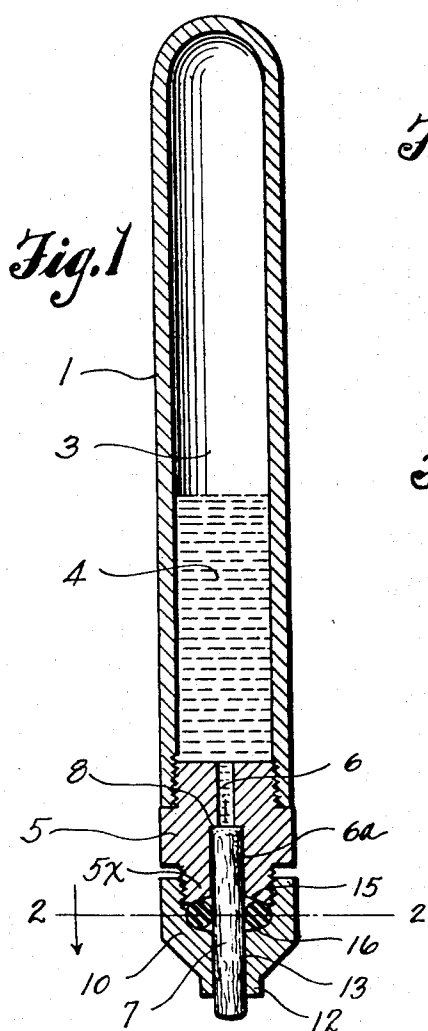
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FOUNTAIN BRUSH

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FOUNTAIN BRUSH

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1 Claim. (Cl. 15—138)

1

This invention relates to improvements in fountain brushes and it has reference more particularly to brushes of those kinds now quite extensively used in the ship building industry and in other metal fabricating industries for the marking of metal plates, templates, and the like, for cutting or for other purposes; such brushes being constructed somewhat after the fashion of a fountain pen in that they comprise a handle portion formed with a reservoir for containing a supply of marking fluid or ink, and having a fitting at one end mounting a wick or brush that extends at one end to the ink supply or into a passage that has direct connection therewith, and has its other extended from the fitting for use as a marking brush.

Explanatory to the objects and advantages of the present invention, it will here be stated that one of the main objections to the use of such brushes as heretofore made is the fact that they leak, and particularly when not in use, due to the continued flow of ink through the wick resulting from capillary attraction. When caps are applied over the end of the brush, they fill up with ink and this becomes an additional problem.

In view of this objectionable leakage in fountain brushes as they are now generally made, it has been the principal object of this invention to provide certain novel improvements whereby leakage of ink through the wick or brush may be overcome.

More specifically stated, it is the object of this invention to provide means in connection with the wick mounting fitting whereby the flow of ink along the wick may be choked off completely, or restricted to any extent desired, as a means of regulating its flow to best suit the work being done.

It is a further object of this invention to provide a brush in which the flow of ink along and through the wick may be partly or completely restricted by the forced contraction of a washer, or gasket through which the wick passes, and to provide a fitting on the end of the brush that may be rotated to accomplish this function of the gasket.

Still further objects of the invention are to be found in the details of construction of its parts, in their combination, relationship and use, as will hereinafter be fully described.

In accomplishing these and other objects of the invention, I have provided the improved details of construction, the preferred forms of which

2

are illustrated in the accompanying drawings, wherein—

Fig. 1 is a longitudinal sectional view of a fountain brush embodying the present improvements.

Fig. 2 is a cross sectional view of the same, taken on line 2—2 in Fig. 1.

Fig. 3 is an enlarged, sectional detail showing the resilient, wick constricting gasket; the section being in the axial plane of the wick mounting fittings.

Fig. 4 is a similar sectional detail showing the gasket compressed to effect its constricting pressure against the wick.

Referring more in detail to the drawings—

1 designates what may be called the handle portion of the brush; this being of tubular form, closed at its outer end and formed interiorly with a chamber 3 for a supply of paint, ink or other marking fluid designated by reference character 4.

Threaded into the lower end of the tubular handle, is a fitting 5 that is formed with an axial bore 6 from end to end. The lower end portion of this bore, designated at 6a, is somewhat diametrically enlarged and it contains the upper end portion of a marking brush or wick 7 therein as clearly seen in Fig. 1. The difference of the diameter of the upper part of the bore and the lower part provides a downwardly facing shoulder 8 against which the upper end of the wick engages to limit its upward travel in the bore. In that position, its upper end is in direct contact with the supply of ink through bore 6.

The lower end portion of the fitting 5 terminates in an exteriorly threaded nipple 5x and a cap 10 is threaded onto this. The lower end portion of the cap tapers to a part 12 of small diameter and formed axially of this is a bore 13 through which the lower end portion of the wick extends as a brush for marking in the intended use of the device.

As observed best in Figs. 3 and 4, the lower end portion of the nipple 5x is inwardly concaved as at 15, and the oppositely related bottom surface of the cap 10 is likewise downwardly cupped or concaved, as at 16, and encircling the wick is an annular gasket 20, of doughnut shape and composed of rubber or similar compressible, resilient material. When this gasket is free of any force of compression, its central opening expands to the diameter of the wick and ink will flow freely and naturally along the wick. However, upon threading the cap 10 inwardly on the nipple, the washer 20 will be compressed and due

3

to its compressibility, under the pressure of walls 15 and 16, its central passage will be constricted accordingly to a smaller diameter and this will tighten about the wick, as has been shown in Fig. 5, and restrict the flow. By tightening the cap to its full extent, the gasket passage will be so constricted that flow of liquid along the wick will be entirely choked off. By adjusting the diameter of the passage, through adjustment of the cap 10, the flow of ink may be regulated as desired.

Thus, when the brush is not in use, any possibility of leakage may be avoided by a full tightening of the cap.

With the brush so constructed, the objection of leakage in use may be entirely overcome and furthermore, the flow of ink to the brush may be regulated to a desired degree.

The improvement is simple, inexpensive and effective in use, and may be applied to brushes of the kind shown and to other analogous uses.

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

A fountain marking device of the character described comprising a hollow body portion forming a reservoir for a supply of marking liquid and terminating in a threaded nipple, a wick mounting tip adjustably threaded onto one end of the said body, a wick contained axially in the

4

said tip with one end portion extended therefrom as a marking brush, and its other end portion extended into the body portion through said nipple for contact with the liquid in the reservoir to supply the brush end by its flow in the wick, said nipple and tip having oppositely related beveled surfaces surrounding the wick, a wick clamping element of annular form contained in the said tip between the said beveled surfaces and adapted to be acted on by a threaded adjustment of the tip on the nipple, to selectively increase or decrease the clamping action against the wick, and thus to regulate the flow of liquid there-through to the brush end.

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