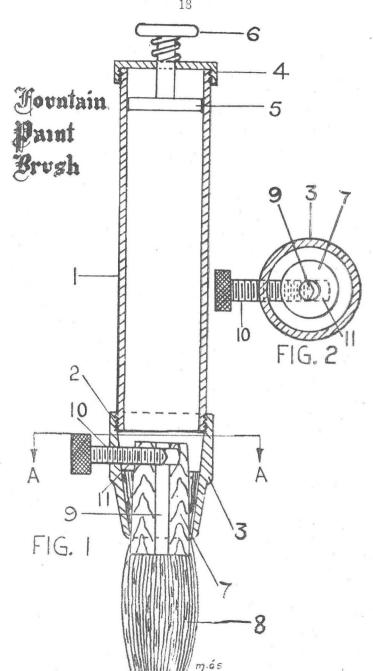
INTRODUCING A NEW FOUNTAIN BRUSH

By Malachy Sharkey.

In addition to its common use for the preservation of wood and metals, paint is also used by foresters, timbermerchants and others for marking trees. Described here-



under is a Fountain Paint-Brush invented by the writer which should prove of practical value to the forester for marking and numbering. Though originally devised for general painting and marking purposes the model, as illustrated, is specially adapted for forestry use.

This fountain brush carries its own supply of paint, while the flow of paint to the brush fibres can be regulated as desired. The brush consists of a hollow handle to which is connected a detachable brush-head. A channel through the core of the brush-head permits the flow of the paint to brush bristles, the flow of the paint being regulated by a shut-off valve. A detachable cap is affixed to the other end of the hollow handle.

In order that the construction of the brush may be clearly understood it will now be described with reference to the accompanying drawings in which :—

Figure 1 is a longitudinal section through the brush;

Figure 2 is a cross-section through line A-A of Fig. 1. Referring to the drawings, 1 is a hollow tubular handle, one end of which is provided with an external screw-thread 2 for connecting the brush-head casing 3. To the other extremity of the handle is attached a screw-cap 4, which carries a spring controlled plunger, operated by means of a hand-piece 6. By pressing this spring plunger the flow of paint to the brush fibres is started or assisted.

Mounted in the brush-head casing 3 is a timber core 7 around which the bristles 8 are mounted. The timber core is provided with a central channel 9 extending through the core to allow the passage of paint to the bristles.

The device to regulate or completely shut off the paint consists of a threaded pin 10 (Fig. 1 and Fig. 2) screwed into a side channel 11 and across central channel 9 so that the passage of paint through the latter can be regulated as desired.

In the model illustrated the central core is provided with only one channel. In a flat type brush there are a number of such channels. In this case the screw-pin 10 is replaced by a pivoting pin which has a corresponding number of channels at right angles to its length and when in position coinciding with the core channels. By rotating the pin the flow of paint through all the core channels is simultaneously regulated.

The handle is made of light metal or plastic composition, opaque or transparent, while the size of the handle is regulated to the quantity of paint to be carried. The illustrated model holds approximately 1 lb. of paint, sufficient for one day's constant marking. (Actual length of handle is one half longer than that shown in Figure 1—which had to be reduced to permit reproduction on Journal page). In filling the brush the cap 4 is unscrewed from the handle. The brush-head and cap can both be removed to facilitate cleaning. A cover is provided to fit over brush head encasing the bristles and protecting them when the brush is not in use. When the bristles become worn it will be possible to have the brush head re-bristled.

The advantages of this fountain-brush over an ordinary paint brush are many and might be summarized as being similar to those of a fountain pen over a plain pen. Its key characteristics are simplicity of design, ease and speed in working, and economy in use of paint. It is an "ever-ready" labour-saving device eliminating the need for carrying a paint box and thus resulting in greater speed and manipulating ability, as in the case of a person carrying note book, etc. when listing timber.

The brush is specially suitable where a big amount of marking or numbering has to be done over a continuous period. Although it is desirable to empty and clean the brush when laying it up, this is not essential as the shut-off valve and protective cap securely seal the brush, thus preventing oxidation of paint in the brush handle : A finished model has been used in the forest and has proved very satisfactory.

The design has been provisionally accepted in the Irish Patents Office and specifications for a final patent have been lodged in Ireland and Britain.