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L. DAVIS

PAINT BRUSH

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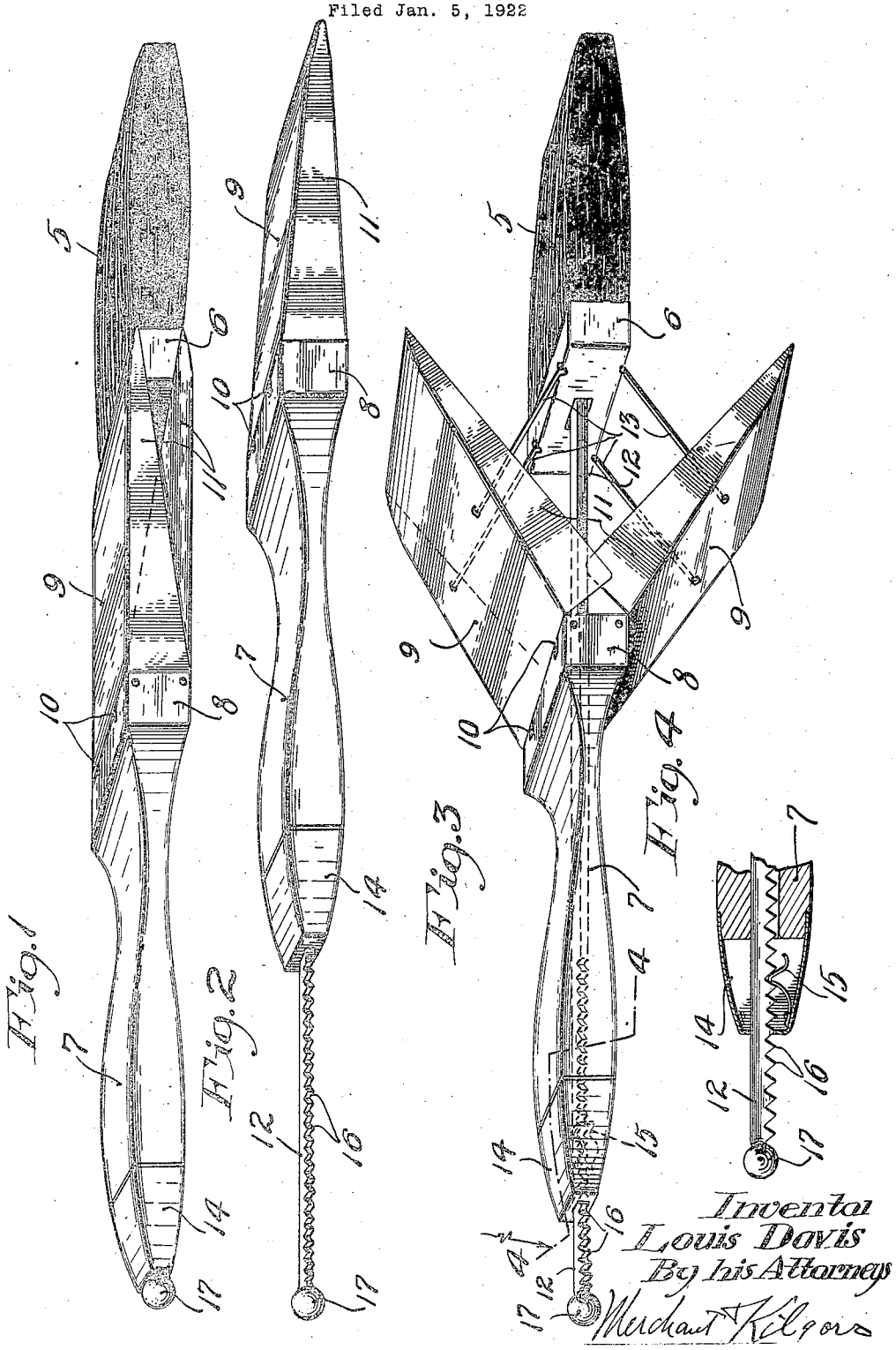

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UNITED STATES PATENT OFFICE.

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PAINTBRUSH.

Application filed January 5, 1922. Serial No. 527,096.

To all whom it may concern:

Be it known that I, LOUIS DAVIS, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Paintbrushes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to what may be generally designated as paint brushes, but which term is used in a broad enough sense to include all kinds of brushes to apply fluids to surfaces, such for example as what are usually designated as varnish brushes and calcimine brushes. It is a well known fact that paint brushes, except when they are very thoroughly cleaned, get hard very quickly and, moreover, when rested on their bristles, soon get out of shape. The cleaning of a brush requires considerable work and the wasteful use of turpentine or oil. Even when a brush is placed in oil, its bristles will be bent out of shape unless the brush is hung from its handle.

My invention provides an attachment for brushes which will serve to enclose the bristles in a substantially airtight housing when the brush is out of use, thus making it unnecessary to clean the brush except when it is to be put away for a very long time. When the brush is in use, the attachment is not in the way but affords an extended head that may be gripped in the hand of the user. A brush of this kind is, therefore, very desirable for use by painters, who have several brushes and who frequently change brushes and carry the same from place to place. In such use of the brushes, the brushes, when out of use, are simply enclosed in the housing and set aside where they will be properly protected and properly held in shape until again used. These housings also permit the brushes, without cleaning, to be placed in a carrying case and carried from place to place. Of course, these brushes do not need to be placed in oil to keep the same from hardening nor, of course, when the brush is to be placed away for a long time, in which case the brush can be cleaned, but even then the housing will hold the same in shape.

In the accompanying drawings, which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings:

Fig. 1 is a perspective showing the brush designed in accordance with my invention and adjusted for use;

Fig. 2 is a perspective showing the brush with its housing closed;

Fig. 3 is a view showing the housing opened up and in a position intermediate or between the positions shown in Figs. 1 and 2; and

Fig. 4 is a fragmentary section taken on the line 4—4 of Fig. 3.

The brush comprises the usual bristles 5 set into a head 6, which latter is preferably made quite narrow longitudinally of the brush. The brush handle 7 is provided with a cap 8 of substantially the same general outline as the head 6. To the opposite sides of the handle cap 8, sheet metal housing plates 9 are hinged at 10. These housing plates 9 are made to fit quite closely against the sides of the bristles 5, and they are provided with overlapping closely engaging side flanges 11. When the cap 8 is pressed against the head 6 and the housing plates are closed against the bristles, the free edges of said plates will come together and the side flanges 11 will completely close the sides of the housing, thus enclosing the bristles within a substantially air-tight housing and holding the bristles in perfect form.

To the central portion of the brush head 6 is rigidly secured a long stem or bar 12 that works freely through a longitudinal passage formed in the handle 7 and extended centrally through the cap 8. This stem 12, therefore, guides the handle 7 and cap 8 for sliding movements toward and from the brush head 6.

For automatically opening and closing the housing plates 9, wire links 13 are pivotally connected thereto and to the brush head 6. Preferably, these links 13 are arranged in pairs, the members of the pairs being parallel.

The handle 7 is shown as provided with a hollow sheet metal cap 14 provided within the spring-acting dog or detent 15 that is engageable with notches or teeth 16 formed on one edge of the stem 12. Said stem 12

works freely through the slot in the outer end of the cap 14 and is preferably formed at its outer end with a knob or head 17.

When the handle and parts connected thereto are slid on the stem 12 toward the brush head 6, from the position shown in Fig. 1, the housing plate 9, by the links 13, will first be opened up, as shown in Fig. 3, and will then be closed against the bristles, as shown in Fig. 2. When said handle and parts connected thereto are slid outward from the position shown in Fig. 2, said housing plates will again be opened up, as shown in Fig. 3, and will then be closed together or against the brush head 6, as shown in Fig. 1. The engagement of the spring-acting dog or detent 15 with the teeth on the stem 12 serves to hold the handle on the stem in whatever position it may be set. Hence, when the housing plates are closed as shown in Fig. 2, they will be held in such closed positions, and when adjusted as shown in Fig. 1, they will be held against the brush head 6, thereby affording a long extension to the brush head, which is adapted to be very firmly gripped in the hand while the brush is being used.

The device described may be applied to brushes at comparatively small cost, and will be found efficient for all of the purposes had in view. Moreover, it will increase the life of the brush and always keep the same in good form and ready for use.

What I claim is:

1. The combination with a brush head having a projecting stem, of a handle slidable on said stem, and housing plates hinged to said handle and adapted to enclose the bristles when said handle is slid toward the brush head.

2. The combination with a brush head having a projecting stem, of a handle slidable on said stem, and housing plates hinged to said handle and adapted to enclose the bristles when said handle is slid toward the brush head, said housing plates being securable against the brush head when said handle is slid on said stem away from the brush head.

3. The construction defined in Claim 1 in further combination with a spring-acting dog on the brush handle engageable with notches on said stem for the purpose described.

4. The combination with a brush head having a projecting stem, of a handle slidable on said stem, housing plates hinged to said handle and adapted to enclose the bristles when said handle is slid toward the brush head, links pivotally attached to said housing plates and to the brush head, and a spring-acting dog on the brush handle engageable with notches on said stem to hold said handle against sliding movements in one position in which said housing plates enclose the brush and in another position in which said housing plates are held closed against the brush head.

In testimony whereof I affix my signature.

LOUIS DAVIS.