J. O'KANE.

Marking Implement.

No. 168,407. Patented Oct. 5, 1875.

Fig. 1

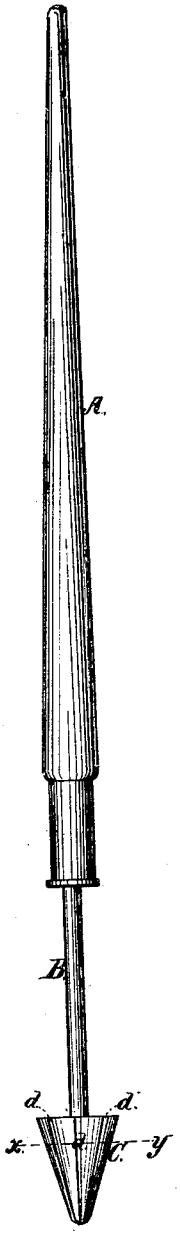


Fig. 3

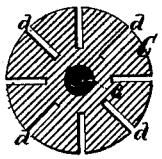
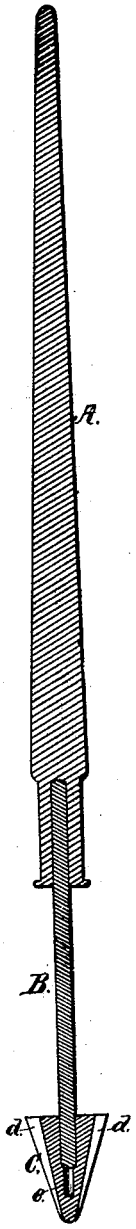


Fig. 2.



Witnesses.

W. F. Raymond.

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UNITED STATES PATENT OFFICE.

JAMES O'KANE, OF NEW YORK, N. Y.

IMPROVEMENT IN MARKING IMPLEMENTS.

Specification forming part of Letters Patent No. **168,407**, dated October 5, 1875; application filed July 26, 1875.

To all whom it may concern:

Be it known that I, JAMES O'KANE, of the city, county, and State of New York, have invented a new and useful Marking Implement, for applying fluids to surfaces, which implement is fully described in the following specification, reference being had to the accompanying drawing making part thereof.

The nature of my invention consists in the employment of a yielding and flexible point or tip, with channels in its sides for holding the fluid in temporary suspension while it is being spread or written onto surfaces; and while my device is adapted for applying fluids to surfaces for various purposes, its special object is to furnish a cheap and effective implement for writing in large characters—such as addresses on packages intended for transportation, and the like—as a substitute for the brush, it being, as I claim, much more manageable in the hand for making strokes in all directions, so that such writing can thereby be done with greater neatness and dispatch.

Figure 1 of the aforesaid drawing is an elevation of my implement. Fig. 2 is a sectional elevation of the same; Fig. 3, a transverse section on an enlarged scale of the flexible tip C, shown in Figs. 1 and 2, the section being taken on the line *x y*, Fig. 1.

The same letters in the several figures and in this specification refer to the same parts of the implement.

A of the drawings is a handle, of any convenient length and size for marking or writing. I make it, in preference, of wood, with a ferrule at its lower end, as shown in the drawing. B is a shank, inserted firmly and permanently into the handle, as shown in Fig. 2, and projecting an inch or more clear of the handle, its projecting point being slightly rounded or sharpened. This shank may be of iron or other suitable metal, or may be merely a prolongation of the wooden handle, if sufficiently hard. C is a tip, made of rubber, or other flexible and yielding material, conical in shape, and slightly rounded at the point. *d d d* are a number of deep narrow channels in the outer surface of the tip, running horizontally from the base to the point, growing shallower toward the point, as shown in Fig. 2. These channels have an action similar to that of the interstices between the bristles of a brush.

It is obvious that when the tip is immersed in a fluid, the sides of these channels, being nearly in contact, exercise a capillary attraction on the fluid, and thus hold it in suspension until it is drawn away by being spread on the surface of the object to which it is applied. The flowing of the fluid is assisted and expedited by the flexibility of the tip, which bends at each stroke, thus creating a movement in the channels which causes the fluid to detach itself and flow down. It will also be seen that this flexibility of the tip is of great value in applying a fluid to rough and uneven surfaces, for the point yields and accommodates itself to the inequalities of such surfaces.

In this feature the flexible tip has all the merits of a brush, while it is yet sufficiently rigid and manageable for making upstrokes, as well as down-strokes, which is so difficult with a brush.

e is a socket in the tip C, running horizontally from the base nearly to the point, and is designed for the reception of the shank B, which acts as a holder for the tip when the implement is in use. The socket is made a little smaller than the shank, so that by means of the flexibility of the material it will stretch and cling closely to the shank. The tip can be attached to the handle by various other methods, such as the arrangement of a socket in the handle; but I prefer the method I here adopt for the following reasons: The employment of the shank has several advantages, first, as a simple and effective device for holding the tip firmly when in use, as shown in Fig. 2, and as described above; second, as a means of adjusting the flexibility of the tip, which it is convenient to have more or less yielding, according to the different purposes for which it is used. This adjustability is gained by the different distances to which the shank may be inserted into the socket.

It is obvious, if the shank is pushed only partially down the socket, the tip will be left more flexible than when it is pushed quite to the bottom; and, again, by the intervention of

the shank, the tip is so far separated from the main part of the handle that the latter is less liable to be soiled by the fluid when in use.

There is also by this arrangement a considerable economy of material in the tip, and when one is worn out it can be more easily removed and replaced by another.

I claim as my invention, and wish to secure by Letters Patent—

1. A channeled flexible tip, C, substantially as and for the purpose set forth.

2. The handle A, with its shank B, in combination with a channeled flexible tip, C, substantially as and for the purpose set forth.

J. O'KANE.

Witnesses:
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