

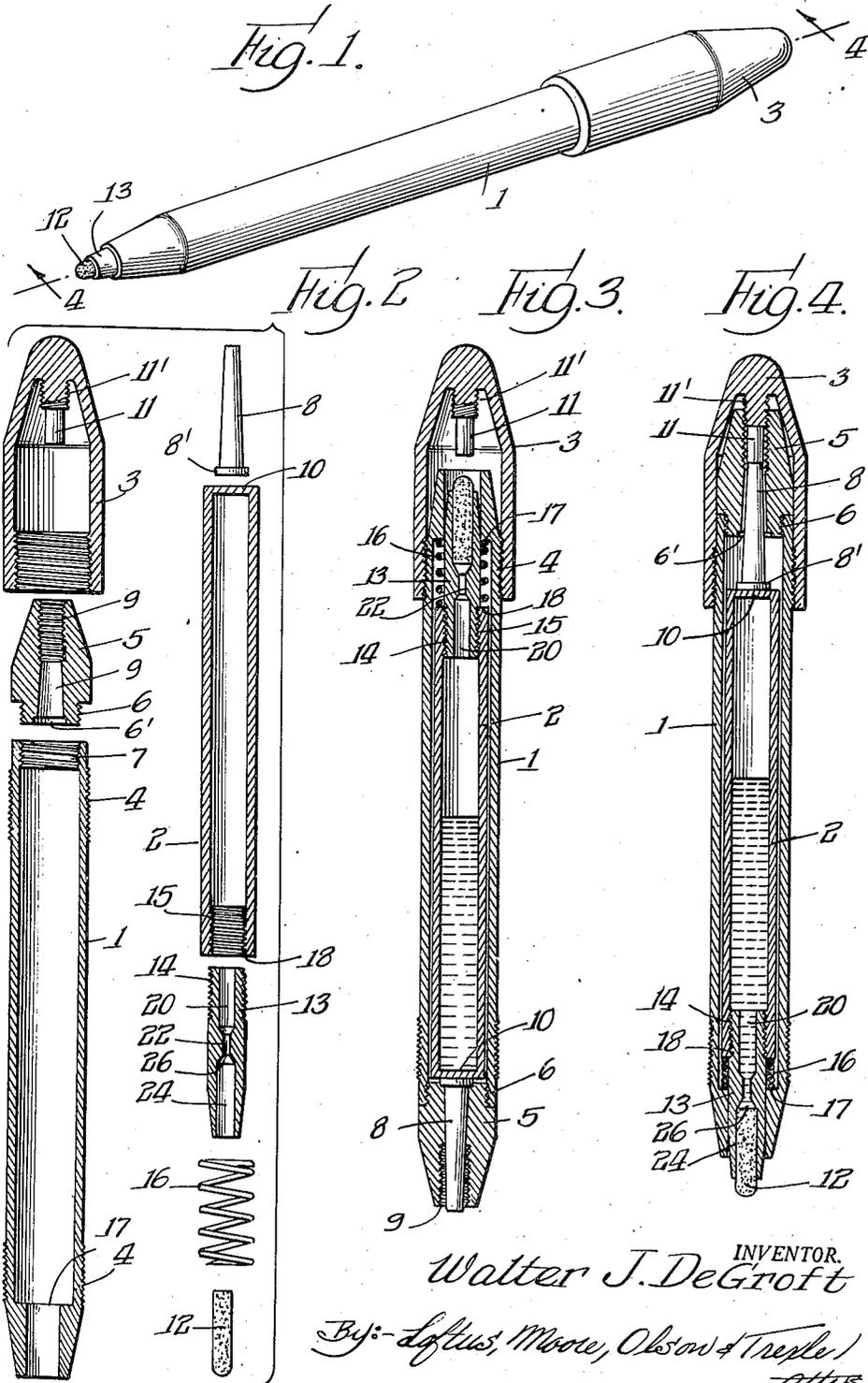
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MARKING PEN

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MARKING PEN

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1 Claim. (Cl. 15—134)

This invention relates to marking pens or applicators of the kind having a handle portion forming a liquid reservoir and a nib of an absorbent, yielding material for application of liquid to the surface to be marked, such for instance as wooden boxes, heavy cardboard boxes, and the like.

Among the objects of the present invention are to provide a marking pen constructed so that the likelihood of ink smearing onto the nib and into the cap of the pen and the hand of the user is reduced to a minimum; to provide a marking pen of the foregoing type wherein the nib or pen is normally housed within a tubular handle when not in use and wherein a part of the handle is operative when the device is to be used, to project the nib outwardly of the handle into writing position, the nib at all times being in fluid connection with the ink reservoir housed within the pen; to provide a marking pen comprising a self-contained pen unit including an ink barrel, a fitting for holding the absorbent nib or pen, including a constantly open, restricted connection from the reservoir to the nib whereby to maintain the nib filled with ink at all times and a tubular holder therefor including a cap adapted completely to enclose the pen when not in use, the cap being constructed to be utilized as a means for projecting the pen relatively to its tubular holder to project the nib therefrom to writing position, the cap being alternately used to completely enclose the housed nib when the nib is not being used for writing, all of which construction precludes the leaking of ink from the pen or the likelihood of ink being smeared upon the nib and into the cap of the pen and the hand of the user; to provide these and other objects of invention, as will be apparent from a perusal of the following specification when taken in connection with the accompanying drawing, wherein:

Figure 1 is a perspective view of my improved marking pen, shown ready for use;

Figure 2 is an exploded view showing all of the parts of the pen;

Figure 3 is a view showing the parts of the pen as they are positioned when not in use; and

Figure 4 shows a sectional view of the parts when being used.

Referring now to the drawing in detail, the pen comprises a pen handle in the form of a tubular casing 1, adapted to surround an inner tubular ink reservoir 2. This reservoir is shown in Figure 2 of the drawing as having one end permanently closed. In addition there is a cap 3 which threadedly engages the outer end of the casing

as at 4, see Figure 3, and the opposite end of the casing is provided with a head 5 which has threads 6 to cooperate with threads 7 on the interior of the casing 1. A plunger 8 is affixed to the closed end of the casing 2 and is positioned in a longitudinal bore 9 in the head 5. This bore 9 is provided with internal threads. The outer end of the plunger 8 contacts the end 10 of the ink reservoir so that when the plunger 8 is pushed in, the end of the ink reservoir is pushed longitudinally of the casing 1. The outer end of the plunger 8 is adapted to be contacted by an extension 11 formed on the cap 3. As shown in the drawing, the cap 3 is adapted to be threadedly engaged to either end of the tube 1. In the engaged position shown in Figure 3, it normally houses or encloses that end of the hollow tube 1; when it is removed from such end and threaded onto the opposite end of the tube 1, as shown in Figure 4, the threaded portion 11' of the extension 11 will threadedly engage the threads 9 of the head 5 of the casing 1, and the inner end of the extension 11 will be brought into contact with the outer end of the plunger 8 whereby to push or project the ink reservoir 2 and its fitting hereinafter to be described, including the nib, forwardly and outwardly of the opposite end of the holder handle 1.

The nib or applicator 12 of the pen is preferably of absorbent material. It is mounted in end registration by a sleeve member or fitting 13 which has threads 14 engaging internal threads 15 in the open end of the sleeve or pen reservoir 2. A coil spring 16 is adapted to be confined between a shoulder 17 of the handle 2 and the inner end 18 of the pen reservoir 2. This spring normally tends to project the sleeve 13, its attached fitting 14 and the nib carried thereby inwardly into the tubular handle portion 1. The fitting or sleeve 14 is provided with an ink passageway 20 which is provided with a restricted feed portion 22. The nib is mounted in the aperture 24 of the fitting with its end in contact with the restricted conduit 22 so that when the fitting is screwed home, carrying the nib, the inner end of the nib 12 will always be in contact with ink which can flow through the conduit 20 and the restricted conduit 22. Thereby the absorbent, felt nib 12 is constantly saturated with ink. This nib is removable for repair or replacement.

It will be noticed that the fitting is provided with a chamber 26 adjacent which the inner end of the nib is positioned when normally mounted in the fitting. This chamber 26 forms a fitting for the pen point or nib and also an arrangement

wherein ink is free to flow and be absorbed by the inner end of the nib. If desired, the extension 8 may be suitably attached to the end 10 of the reservoir 2 or may be separate therefrom, provided the flange on the larger end of the extension 8 is larger than the opening in the head 5. As a matter of fact, the head 5 is provided with a seat 6' to receive the flange 8' on this extension 8 when the pen reservoir 2 is spring pressed back into the handle 1. This provides a stop to limit the outward movement of the casing 2 or the extension 8 with respect to the tubular handle 1.

It will thus be apparent that I have provided a very simple type of marking pen which comprises a self-contained inner pen formed of the ink reservoir shell 2 with its extension 8, the fitting 14 demountably connectible therewith and carrying the marking point or nib 12, and being provided with a restricted conduit for feeding ink constantly to the nib, in combination with spring means normally to maintain this self-contained inner pen within the handle or housing 1, whereby to protect it from dirt or from smearing upon objects or the hands of the user; and in association therewith I have provided a cap 3 which is adapted threadedly to connect with the handle 1 to enclose the inwardly projected nib and close off this end of the pen. In addition, by forming the opposite end of the tubular handle 1 to take the cap 3, I am enabled to unscrew the cap 3 from the pen end of the handle and screw it onto the reverse end thereof, the cap being provided with the extension 11 and suitable threads, whereby when screwed on to said opposite end it will project the nib and the entire inner pen to writing position from within the handle 1. Thus it will be seen that when the pen is taken up for use, the cap 3 is unscrewed from one end and screwed onto the other end, which act uncovers the writing end of the handle barrel

1 and at the same time projects the nib, and in fact the entire inner end, longitudinally of the barrel 1, the nib projecting into writing position therefrom.

Obviously the invention is not limited to the specific details of construction disclosed herein but is capable of other modifications and changes without departing from the spirit and scope of the appended claim.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

A marking pen comprising a tubular ink reservoir having one end closed and the opposite end having a seat, a fitting adapted to close upon said seat, said fitting having a conduit therethrough open at all times and having a portion of restricted cross section and a nib seat communicating therewith, a permeable nib positioned in said seat an extension for the closed end of said reservoir, a tubular handle adapted to surround said ink reservoir, a bored head adapted to fit in one end of the tubular handle and to receive said extension, the opposite end of said tubular handle having a shoulder and an end opening adapted to receive the fitting and the nib, a spring disposed within said end of the holder and confined between said shoulder and the tubular ink reservoir whereby to retract the nib wholly within the end of the tubular holder, and a cap adapted to fit upon either end of said tubular handle and having means to close the nib-housing end of said tubular handle, said cap having an inward extension adapted to engage in the hollow bore of the head of the opposite end of said tubular handle to contact said reservoir extension and project the ink barrel relative to the tubular handle and project the nib from the opposite end of the bore of the tubular handle.

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