(No Model.)

E. NORTON.

PAINT CAN.

No. 287,047. Patented Oct. 23, 1883.

Fig. 1.

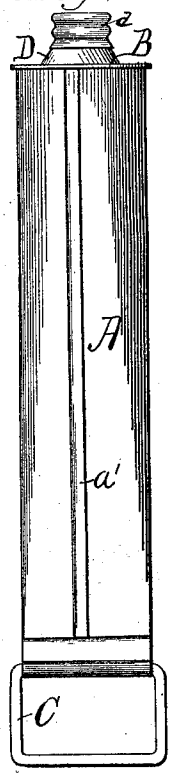


Fig. 2.

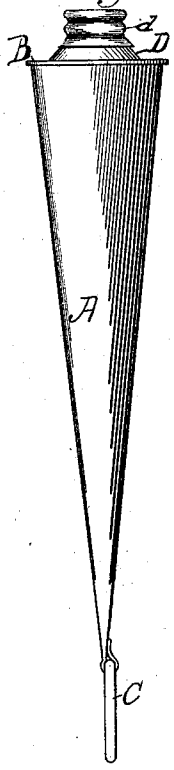


Fig. 3.

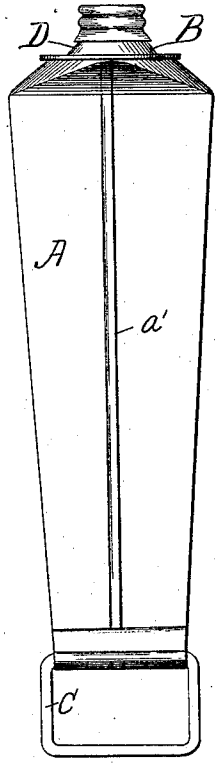


Fig 4

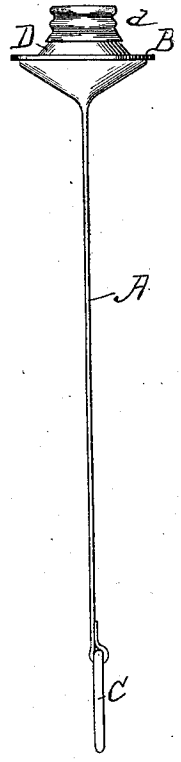


Fig. 5.

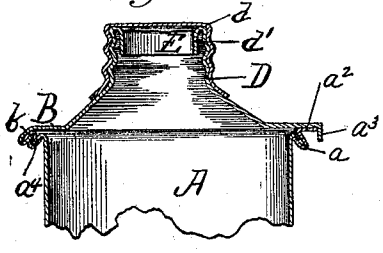
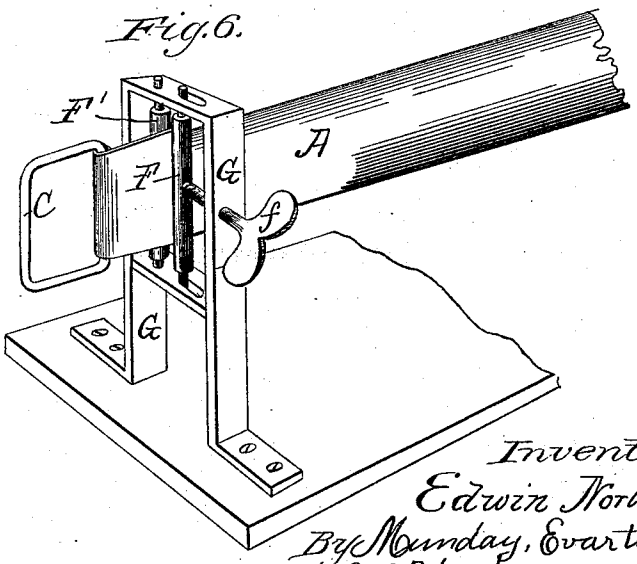


Fig. 6.



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By Munday, Evarts
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UNITED STATES PATENT OFFICE.

EDWIN NORTON, OF CHICAGO, ILLINOIS.

PAINT-CAN.

SPECIFICATION forming part of Letters Patent No. 287,047, dated October 23, 1883.

Application filed August 2, 1883. (No model.)

To all whom it may concern:

Be it known that I, EDWIN NORTON, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Paint-Cans, of which the following is a specification.

My invention relates to improvements in cans designed for putting up the more valuable or costly liquid or semi-liquid paints, such as are used for painting carriages and other fine work. Heretofore these paints have usually been put up in ordinary paint-cans, which are cut open at the top when the paint is desired to be used; but with these cans great difficulty and loss has been experienced from the paint drying up and a film forming over its surface after the can has been once opened and its contents partially used, owing to the fact that the can is not provided with means for again closing it tight, and that even if it were so provided it is no longer entirely full of paint. Attempts have been made to overcome these difficulties by providing the can-body with screw-threads and a screw-cork bottom or follower, so that the bottom may be screwed up toward the end or nozzle of the can, and the paint thus ejected as it may be required for use, and the can thus kept full of paint until it is all used, the size of the can being diminished as the follower or bottom is screwed toward the nozzle and the paint used; but this device has been found somewhat impracticable in use, owing to the fact that, the follower not being absolutely tight, the paint runs down between it, and the can-body, and, drying, it sticks the follower fast and renders it impossible to turn it. This defect is greatly aggravated if the can is filled with quick-drying paints, which is a characteristic of most carriage-paints.

In my invention the can-body is made of thin collapsible sheet metal, such as taggers tin. The edges of the blank are united together by a side seam. At one end a head provided with a screw-cap nozzle is double-seamed or otherwise secured to the can-body. The other end of the body is not provided with any head, but is simply folded flat upon itself, and thus closed, so that the can having only one head assumes a tapering or wedge-shaped appearance. The head of the can is secured to the body preferably by a double seam after the can is filled. The side seam of the body extends longitudinally along one of the flat sides of the tapering can, so that when the can is collapsed the soldered side seam will not interfere with the folding of the stock at the edges of the collapsed can. The nozzle is provided with a screw-cap, and also with a cork to tightly close the nozzle during shipment. To expel the contents from the can, I collapse its sides by passing its tapering end between suitable rollers or pressing devices and drawing the can through the same from one end to the other, thus pressing the can out into a flat sheet and expelling the contents through the nozzle. To facilitate drawing the can between the pressing devices, I provide its small or tapering end with a suitable handle. In this way the paint may be expelled from the can from time to time in any quantity desired, and as the can is collapsed as the paint is expelled the can remains solidly filled with the paint until it is all used up. The screw-cap of course serves to close the nozzle approximately tight, and it will also be understood that the opening in the nozzle is closely filled with the paint itself, so that only a very small surface of the paint can be exposed to the air.

In the accompanying drawings, which form a part of this specification, Figure 1 is a side view of a can embodying my invention, showing the same filled. Fig. 2 is an edge view of the same. Fig. 3 is a side view, showing the can collapsed. Fig. 4 is an edge view of the same. Fig. 5 is a detailed sectional view enlarged, showing the method of securing the head to the body; and Fig. 6 is a perspective view, illustrating the method of expelling the contents from the can.

In said drawings, A represents the can-body, which is made of thin collapsible sheet metal, preferably of taggers tin.

B is the head of the can, preferably secured to the body by a double seam, *b*. The body is provided with a seamless ring, *a*, soldered thereto, so that the side seam, *a'*, of the body will not interfere with the double-seaming of the head to the body. The flange a^2 of the seamless ring is folded with the flange a^3 of the head into a double seam. At the other end the body has no head, but is simply collapsed upon itself and soldered or otherwise closed tight.

C is a handle secured to the small or flat

end of the can, preferably by folding the flat extremity of the body over one branch of the handle, which is made of wire, before the handle end is soldered or closed, so that the same soldering operation will both close the end of the can and secure the handle thereto. The side seam, *a'*, of the can-body is located near the middle of one of the flat tapering sides of the can, so that when the can is collapsed to expel its contents the soldered side seam will not come to the edge of the can where the stock is folded, and thus interfere with its flattening out.

The head B of the can is provided with a screw-nozzle, D, and screw-cap *d*. The nozzle D is and may preferably be made of thin sheet-zinc, and for cans less than three inches in diameter I deem it preferable to make the head and nozzle in one piece, as the sheet-zinc disk may be readily united by a double seam or other suitable folded or soldered joint with the can-body. The nozzle D is provided with an inturned flange, *d'*, thus forming a smooth wall or bearing for the cork E. The cork E is inserted after the can is filled, in order to close the can tightly and prevent leakage or evaporation of the contents during shipment. This cork is protected from injury or displacement by the screw-cap *d*. The screw-cap serves to close the can approximately tight, while its contents are being used from time to time, as may be required.

The seamless ring *a* is secured to the exterior of the can-body, a flange, a^4, being turned outward on the can-body, to which it is soldered. By securing the seamless ring to the outside of the can-body, I am enabled to collapse the body close up to the head. To expel the contents from the can, the flat or wedge-shaped end of the can is inserted between two pressure devices, preferably a pair of rollers, one of which is adjustable, so that the handle can be inserted between them, and then, by means of the handle, drawing the can through between the rollers, thus collapsing the can and expelling the contents.

In Fig. 6, F and F' represent a pair of rollers mounted in a suitable frame, G, the roller F being adjustable by means of a thumb-screw, *f*. Any other suitable pressure device or clamp, however, may be used for collapsing the can.

In practice the can may be collapsed by squeezing it with the hand until a great part of its contents are used, when it may be completely collapsed and its entire contents expelled by passing it between the pressure device.

It is preferable to make the blank from which the can-body is formed wider at one end than the other, so that the flat end of the can will be about equal in width to the diameter of the head or nozzle end. When so made, the body, when collapsed, will appear of the form shown in Fig. 3. The blank, however, may be made as wide at one end as the other, in which case its edges will be parallel when collapsed, instead of tapering. The head is secured to the can-body after the can is filled, so that the can may be readily filled, its whole diameter being open.

I am aware of the common paint-tubes having screw-nozzle and screw-cap heretofore generally in use for artists' paints, and I hereby disclaim the same, as forming no part of my invention.

I claim—

1. In a paint-can, the combination of a thin sheet-metal collapsible body having one head seamed thereto and provided with a screw-cap nozzle, the other end of the body being flattened out and closed, substantially as specified.

2. The combination of a thin sheet-metal collapsible can-body, A, having its side seam, *a'*, on one of the flat sides of the can, with head B, secured to said body by a seam and provided with screw-nozzle D and cap *d*, the other end of said body being flattened out and closed, substantially as specified.

3. The combination of the wedge-shape or tapering thin sheet-metal collapsible can-body A, the flat end of said body being about equal in width to the diameter of the other end, with head B, secured by a double seam to said can-body and provided with screw-nozzle D and cap *d*, the side seam, *a'*, of said body extending along one of its flattened sides, so as not to interfere with the collapsibility of the can, substantially as specified.

4. The combination of the collapsible can-body having one end closed by collapsing or flattening it out, and provided with a handle secured to said flattened end, with a head provided with a screw-cap nozzle united to the can-body by a suitable seam or joint, substantially as specified.

5. The combination, with collapsible can-body A, provided with a seamless ring, *a*, of head B, having its flange a^3 folded into a double seam with the flange a^2 of said seamless ring, screw-nozzle D, provided with inturned flange *d'*, screw-cap *d*, and cork E, fitting within said inturned flange, and handle C, secured to the flat headless end of said can-body by folding and soldering said flat end over said handle, substantially as specified.

6. The tapering wedge-shape collapsible can having its side seam on one of its flattened sides, and provided with a handle at its flattened end and a head at its other end double-seamed thereto, and having a screw-cap and cork nozzle on said head, substantially as specified.

7. In a paint-can, the combination of a thin sheet-metal collapsible body having one head seamed thereto and provided with a nozzle, the other end of the body being flattened out and closed, substantially as specified.

Chicago, Illinois, July 30, 1883.

EDWIN NORTON.

Witnesses:

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EDMUND ADCOCK.