J. W. MASURY.

Cans for Paints, &c.

No. 145,670. Patented Dec. 16, 1873.

Fig: 1.

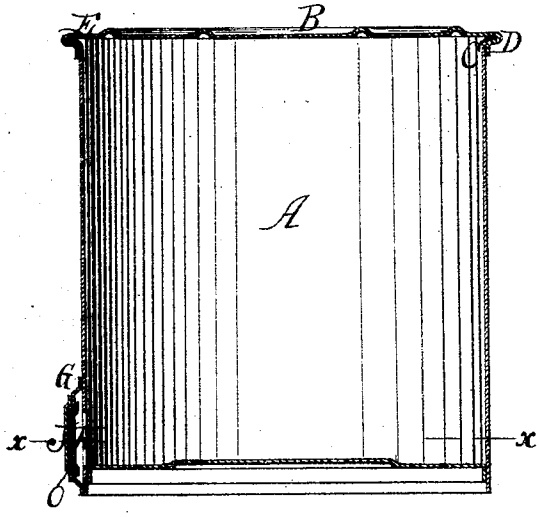

Fig: 3.

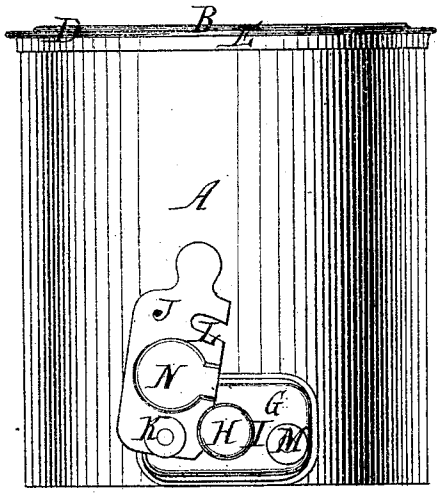

Fig: 2.

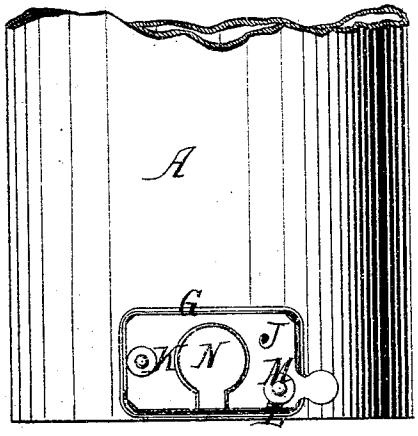

Fig: 4

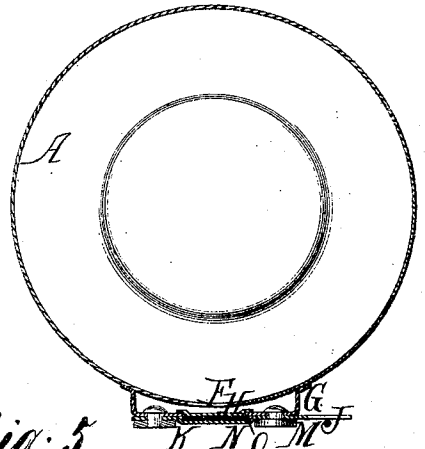

Fig: 5.

Witnesses:

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JOHN W. MASURY, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN CANS FOR PAINT, &c.

Specification forming part of Letters Patent No. **145,670**, dated December 16, 1873; application filed November 13, 1873.

To all whom it may concern:

Be it known that I, JOHN W. MASURY, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Cans for Paint and other Substances; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 is a vertical cross-section of my improvement. Fig. 2 is an elevation of the can, showing the valve as it appears when closed. Fig. 3 is a like elevation, showing the valve when open. Fig. 4 is a horizontal section in the line *x x*, Fig. 1. Fig. 5 shows the form of joint at the top of the cans, as heretofore commonly made.

Similar letters indicate corresponding parts.

This invention relates to cans for holding paints and other substances; and it consists, in the first place, in uniting the top or cover with the body of the can by a double joint, so that the solder used for closing the joint will not be liable to run into the interior of the can, and that the top or cover can be cut off by a horizontal cut, thereby avoiding the necessity of inserting the knife into the paint in cutting out the cover. The upper edge of the body of the can is bent outward to form a flange, and the edge of the top or cover is bent over and around the flange, in such a manner as to embrace it and come under the same, where it is soldered to the side of the can. This part of my invention is especially useful in that class of cans where the top is made of soft metal, intended to be removed by cutting it away. Heretofore such cans have been made with a joint, which permitted the solder to flow into the interior of the can, where it would adhere along the inside of the joint under the soft-metal top, and, by its hardness, prevent the easy and regular passage of the knife, and cause the edge of the opening to be uneven or rough. My invention obviates this defect by forming the joint in such a manner that the solder is prevented from getting into the can, and I am enabled to cut off the cover by a horizontal cut above and level with the bent-over part of the body of the can.

Another part of my invention consists in a valve arranged to be secured to the side of a can over a discharge-opening, whereby the contents can be discharged at pleasure. The valve can be made of sheet metal, stamped in suitable dies, so as to fit the side of the can, and consists of a valve-plate, to which is pivoted a valve, which slides over the valve-opening, and is locked to the plate, when the valve is closed, by springing its free end under a button on the plate. The valve-opening is closed, by a disk or plate of thin metal, in such a manner that when the valve is secured to a can or package it is thereby hermetically sealed, the valve-plate being solid or without any opening in it, and the hole in the side of the can being covered over by the valve-plate, and the can may be safely transported or handled. When it is desired to draw out any of the contents of the can or package, the valve or gate is raised, so as to expose the thin metal disk, which is then cut away, so as to allow the contents to run out.

The letter A designates the body of a metal can or package for holding paint or other articles. B is its top or cover, made in whole or in part of soft metal capable of being cut with a knife, so that the top or cover can be removed. The mode commonly employed for uniting the top B to the body of the can is represented in Fig. 5, the edge of the top being bent over the upright edge of the body and soldered to its side. One disadvantage which attends that construction is that some of the solder penetrates the joint and forms hard, uneven projections at places along the inside of the can at or near the joint, so as to interfere with the knife when one proceeds to cut away the soft-metal cover, and prevent it from cutting evenly and close to the body of the can.

I make the joint in such a manner as to prevent the solder from flowing into the can, and permit me to cut off the cover by a horizontal cut. Fig. 1 of the drawing shows one mode of accomplishing this object, where the letter C designates a flange formed around the top edge of the body of the can by bending its edge to a horizontal or nearly horizontal position, over and around which flange I bend the edge D of the top or cover, in such a manner that the said edge comes under the flange C and

against the side of the can, where it is soldered. The flange C is, in this manner, inclosed within the fold E of the cover, which is, in practice, rolled down close upon the flange C, so as to effectually close the inner joint. This mode of uniting the body and top also gives additional strength and stiffness to that part of the can, and gives a good finish to the edge, and enables me to cut off the soft-metal cover or top by a horizontal cut, inserting the knife horizontally next to and above the flange C, without coming in contact with solder. The removal of the top or cover can thus be effected without pushing the knife downward into the can, or into the paint therein.

The second part of my invention consists of a valve, which I apply to the side of a can or package near its bottom, over a discharge-opening, F, cut in the can, in order that the contents may be drawn out at pleasure, and the can be again closed to prevent leakage and the access of air.

The valve-seat G may be made of sheet metal, stamped by dies to give it the proper shape to fit the side of the can or package, to which it is united, as shown in the drawing, by soldering its edges fast to the can, or in any other convenient manner. The valve-seat may be made of soft metal that can be cut with a knife, or it may be provided with a disk, H, of such metal, which is soldered over a valve-opening, I, made in the valve-seat, in such a manner that while the disk remains in place, or while the valve-seat of soft metal remains whole, the can or package remains sealed up; but when the disk is cut out, its contents can run out through the valve-opening, provided the valve is lifted. The valve consists of a sliding plate, J, one end of which is pivoted to one end of the valve-seat at K, while the other end is notched at L, to allow it to close down behind a button-catch, M, that projects from the other end of the valve-seat. The inner face of the valve has a recess, N, stamped or formed in it, to receive a packing, O, of paper or other suitable material, which is secured in the recess by glue or other fastening, and said recess is so arranged that the packing will cover the valve-opening when the valve is shut down.

It is obvious that while the disk H remains in place the can or package can be transported and handled the same as if it had no valve attached to it, and when it is desired to draw out any of the contents the soft or thin metal disk is cut out, and the contents are then free to run out until the valve J is closed down.

As my valve and valve-seat can be made of sheet metal, they can be produced at a comparatively small expense, while, by reason of the simplicity of construction, they are not very liable to get out of order.

When the valve is closed, the contents of the can or package are preserved from the air and from leakage.

What I claim as new, and desire to secure by Letters Patent, is—

1. A soft-metal top or cover, B, capable of being cut with a knife, combined with the body of a can, A, by forming a flange, C, as described, on the can, and bending the edge of the cover over and under the flange, and securing it under the flange, substantially as described.

2. The valve-seat G, adapted to be secured to the side of a can or package, and provided with a removable disk or part, H, of soft metal, at or over the valve-opening in the seat, substantially as described.

3. The valve-seat G, adapted to be secured to the side of a can or package, in combination with the valve J, substantially as described.

JOHN W. MASURY.

Witnesses:

FRED. L. MILLER,

FRANCIS B. CARLETON.