E. WATERS.

METHOD OF MAKING PAPER CANS FOR PETROLEUM AND OTHER FLUIDS.

No. 193,387. Patented July 24, 1877.

Fig. 1.

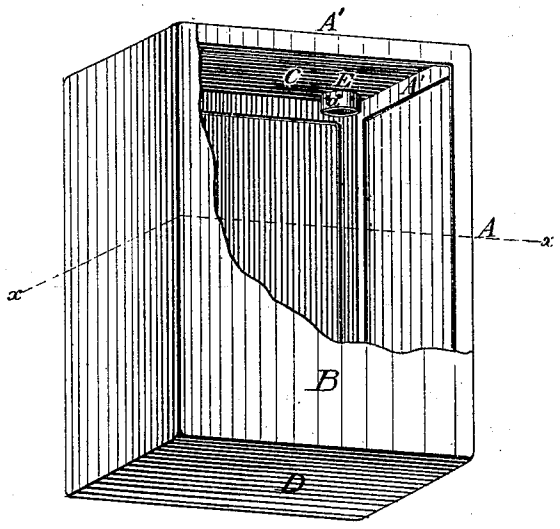


Fig. 2.

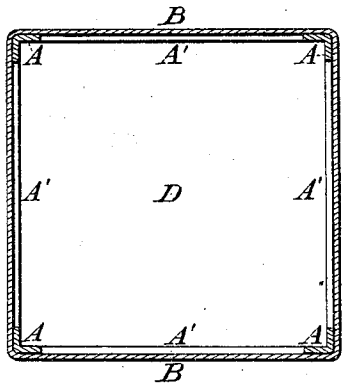
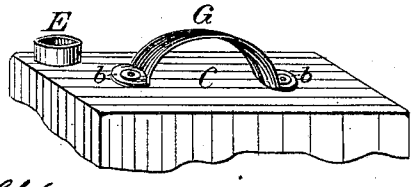


Fig. 3.



Attest:

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UNITED STATES PATENT OFFICE.

ELISHA WATERS, OF TROY, NEW YORK.

IMPROVEMENT IN METHODS OF MAKING PAPER CANS FOR PETROLEUM AND OTHER FLUIDS.

Specification forming part of Letters Patent No. **193,387**, dated July 24, 1877; application filed January 15, 1875.

To all whom it may concern:

Be it known that I, ELISHA WATERS, of Troy, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Method of Making Paper Cans for Petroleum or other Fluids; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to the construction or building up of paper cans or vessels designed for holding petroleum, or other volatile fluids; and has for its object to simplify and reduce the cost of manufacture of such cans.

In the drawing, Figure 1 represents a perspective view of a can, with one side partially removed, so as to show the interior construction. Fig. 2 is a horizontal section through the plane indicated by the line *x x* in Fig. 1; and Fig. 3 is a perspective view of the top part of a can, with the handle attached.

Similar letters of reference indicate corresponding parts in all the figures.

To make my improved can I first build up a frame-work, consisting of the uprights A and connecting-braces A′. The uprights A are made of paper, or any other suitable material, stamped into an angular shape, as plainly shown in Fig. 2. I then insert the head C and bottom D, made of paper, and build up the sides B by winding a sheet of paper of even width, corresponding to the height of the can around the frame-work, starting at one of the uprights A, to which the sheet is firmly secured, and continuing this operation until the desired thickness of the sides B has been attained.

It is essential that the sheet from which the sides B are built up should be of even width—that is, its two sides parallel to each other, so that the thickness of the sides will be the same throughout, both in the middle of the sides and along that part of them, above and below, where they are affixed to the lateral braces A′.

Before commencing the winding of the sheet which is to constitute the sides, the outside of the uprights A and braces A′ is covered with glue, so that the paper will firmly adhere thereto, and each successive layer or round of paper is firmly united to its predecessor by interposing a layer of glue or paste.

It is obvious that the paper used for the frame-work A A′, heads C D, and sides B should be rendered insoluble and oil-proof by suitable chemical treatment, either before commencing the building up of the can, or by immersing the finished can in chemical solutions that will have that effect.

After the can has been thus built up I cover it on the ends and sides with a sheet of paper, so as to close up the joints between the sides B and braces A′, and present a uniform and smooth appearance, after which the whole is coated with glue, paint, or varnish. The can is finished by the insertion of the bung or spout E, and affixing the handle G.

Having thus described my invention, I claim and desire to secure by Letters Patent—

The herein-described process of manufacturing square paper cans, consisting in, first, preparing a skeleton frame-work of the angle-pieces A and connecting-pieces A′; second, inserting the head C and bottom D in the upper and lower ends of said frame-work; and, third, closing the sides thereof by winding a continuous sheet of paper of a width corresponding to the length of the angle-pieces A around the skeleton frame until the requisite degree of thickness has been attained, substantially as and for the purpose herein set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

ELISHA WATERS.

Witnesses:

LOUIS BAGGER,

WM. BAGGER.