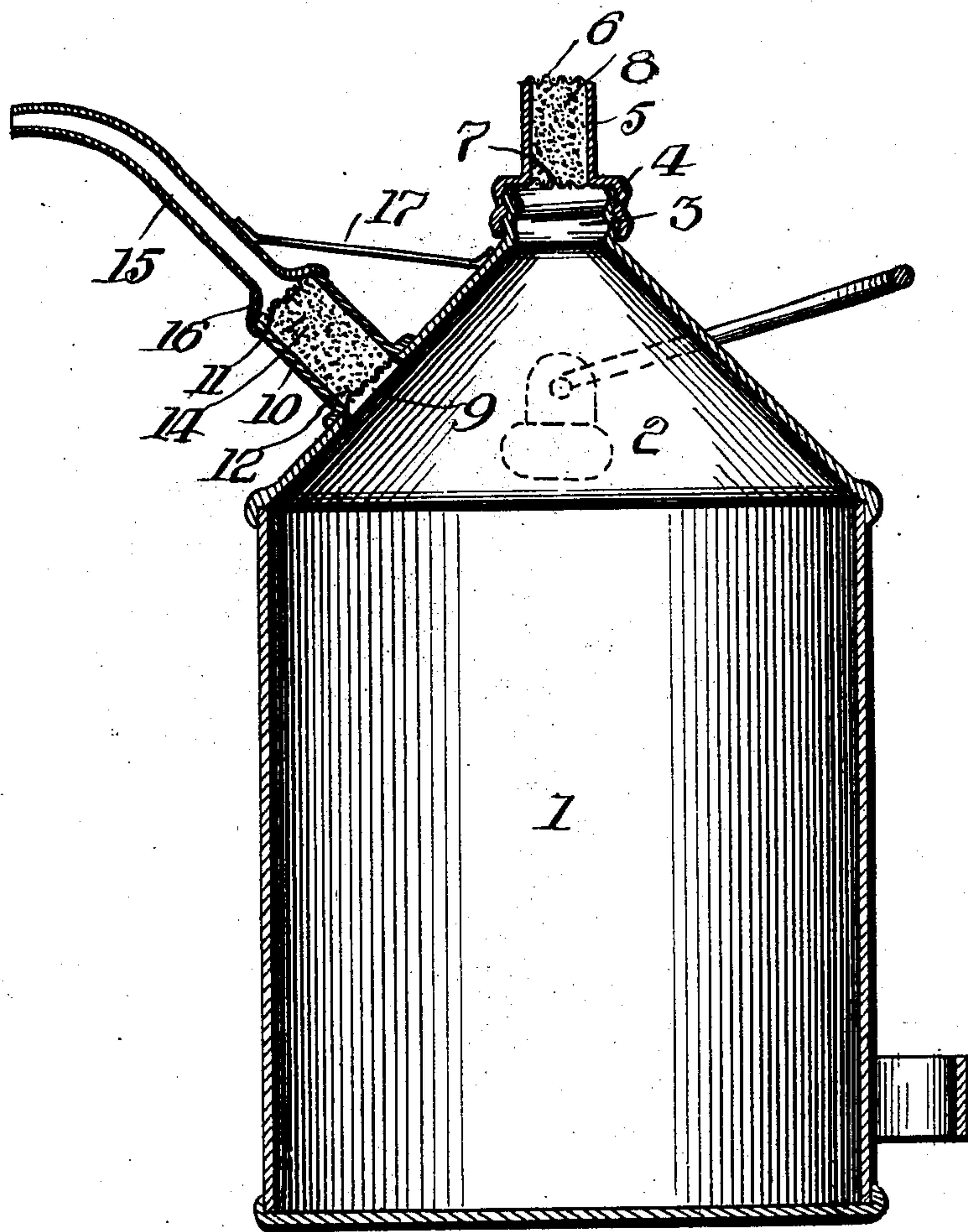


No. 750,089.

PATENTED JAN. 19, 1904.

J. CHILDS.
NON-EXPLOSIVE OIL CAN.
APPLICATION FILED SEPT. 3, 1903.

NO MODEL.



Witnesses:
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& Constance.

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UNITED STATES PATENT OFFICE.

JESSE CHILDS, OF HITE, PENNSYLVANIA.

NON-EXPLOSIVE OIL-CAN.

SPECIFICATION forming part of Letters Patent No. 750,089, dated January 19, 1904.

Application filed September 3, 1903. Serial No. 171,735. (No model.)

To all whom it may concern:

Be it known that I, JESSE CHILDS, a citizen of the United States of America, residing at Hite, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Non-Explosive Oil-Cans, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to certain new and useful improvements in non-explosive oil-cans; and the object of the invention is to provide novel, simple, and efficient means to prevent the explosion of the gases in the can when the latter is brought in proximity to a flame.

Briefly described, the invention consists in providing the cap or cover for the filling-opening of the can with a chamber which is filled with a porous material, preferably sand, held therein either by a fine-mesh gauze at the ends of the chamber or by a finely-perforated plate at each end of said chamber. I also provide a chamber at the discharge-outlet, to which the discharge-spout is connected and with which said spout communicates, this chamber being also filled with a porous material, preferably sand, held therein either by a fine-mesh gauze or finely-perforated plates at the ends of the chamber.

The term "porous material" herein used for the sake of brevity refers to the filling as comprising a body in its entirety arranged in such a manner, or rather packed, that it will possess a certain degree of porosity, it being understood that a non-combustible material is employed which will permit the oil by virtue of the said porosity of the body to percolate therethrough, but will obstruct the bodily entrance of the flame.

In describing the invention in detail reference will be had to the accompanying drawing, forming a part of this application, and which drawing shows a central vertical sectional view of an oil-can constructed in accordance with my invention.

With reference to the drawing, 1 indicates the body of the can, which may be of any desired style, and where formed with the frustated cone-shaped top 2 is provided with the

threaded neck 3, on which the cap or cover 4 is threaded. This cap or cover is provided with a cylindrical extension centrally arranged on the top thereof, said cap extension 5 being closed at the outer end by a fine mesh wire 6 or a finely-perforated plate and at its lower end being closed by a like fine wire mesh 7 or perforated plate. The chamber within this extension between the meshes 6 and 7 is filled with a porous material 8, preferably a fairly coarse sand, which will not sift through the mesh, but is sufficiently porous to permit the air to pass through the same.

Cans of the type herein shown are usually provided with the outlet-port at a suitable point in the frustated cone-shaped top 2, and in the present illustration I have shown this outlet-port 9 about midway on one side of this top. On the outside of the top surrounding this outlet-port 9 I secure a cylinder 10, a convenient means of securing the same being by flanging the base of this cylinder and soldering the same to the outer face of the top. This cylinder is closed at its ends only by means of fine wire mesh 11 and 12, and the chamber within the cylinder is filled with a porous material 14, preferably sand, coarse enough so as to permit the same to sift through the mesh, but permitting the oil to permeate therethrough. While the oil will pass through this porous material, flames would be prevented from passing therethrough so as to ignite the gases in the can, which gases, as is well known, are what ignite and cause the explosion.

The discharge-spout 15 is preferably secured to the cylinder 10 by flaring the lower end of said spout, as at 16, and soldering or otherwise securing same to the cylinder. A brace 17, affixed to the spout 15 and to the can-top 2, securely fastens the spout and relieves the strain of the same from around the top 2 at outlet-opening 9.

The porous filling 8 permits the free ingress of air, while the porous filling 14 permits the free egress of the oil, but prevents the flame from entering into the can, it being understood, of course, that the flame is also prevented from igniting the gases through porous filling 8.

While I have described the invention in detail as it is practiced by me, yet it will be evident that various slight changes may be made without departing from the general spirit of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In combination with the can having a neck forming an outlet and an opening in its top constituting an inlet, of a body of sand packed so as to render said body porous, a foraminous closure at the upper and lower termination of said body for retaining the said body in its packed form, with cylinders having open ends

within which said body is mounted, said cylinders being arranged in said neck and in said outlet, the lower of the said foraminous plates facing the interior of the can, the cylinder of the inlet being adapted to be secured to the can over the said inlet, the upper of the plates within said cylinder constituting the top of the cylinder.

In testimony whereof I affix my signature in the presence of two witnesses.

JESSE CHILDS.

Witnesses:

WILLIAM CLARK,
LOUISA J. NORMAN.