Perkins & House, Oil Lan. Nº45,340, Patented Dec. 6, 1864.

Fig.1.



Witnesses. P. House

Gu S. Pa cutin

Inom Rolling Mark Gr. House.

United States Patent Office,

JOHN M. PERKINS AND MARK W. HOUSE, OF CLEVELAND, OHIO.

IMPROVED SAFETY OIL-CAN.

Specification forming part of Letters Patent No. 45,340, dated December 6, 1864.

To all whom it may concern:

Be it known that we, JOHN M. PERKINS and MARK W. HOUSE, of Cleveland, in the county of Cuyahoga, in the State of Ohio, have invented a new and useful Oil-Can, so constructed as to prevent the explosion of the same by the igniting of inflammable liquids contained within the can; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and the letters of reference marked thereon.

The nature of our invention consists in placing or forming within the neck or spout of the

can a series of tubes or passages.

Figure I shows the neck-piece and base of the spout screwed together, and a portion of both pieces removed to show the longitudinal passages through the inner piece.

The same letters indicate the same parts in

both figures.

A, Fig. I in the drawings, is the body of the can; B, the top of the can; C, the neckpiece; d, the base of the spout; g, the venttube; f f f f, Fig. II, the tubes or passages through which the liquids flow in discharging the contents of the can. These passages, whose diameters are proportioned to their lengths are to be constructed of such a size that flame will not pass through them. Openings one-sixteenth $(\frac{1}{16})$ of an inch in diameter and one-half $(\frac{1}{2})$ inch long have been found to resist the passage of flame perfectly. We prefer this size, as affording a free passage to heavy oils. Larger openings than one-sixteenth $(\frac{1}{16})$ of an inch require to be proportionally increased in

length. In the construction of a can upon our plan we feel assured that it possesses decided advantage over wire gauze, which may be used for the same purpose. To make a can perfectly safe against explosions by the use of wiregauze, it is necessary that it should be very fine, thus offering resistance to the ready flow of oils, and more especially when they contain an undue amount of paraffine or become chilled by a low temperature; and again, it often happens that chemicals, glue, and other foreign substances are found in oils improperly put upon the market. All these would tend to clog small apertures, and under certain conditions would render such a can nearly useless; but in one constructed upon our plan we obviate these difficulties. Should these passages ever become foul or obstructed, they are readily cleaned, are strong, and are not liable to get out of order, cannot be punctured, and, after repeated tests with benzole and other inflammable substances, we believe a can constructed as shown to be perfectly safe and nonexplosive.

What we claim as our invention, and desire to secure by Letters Patent, is-

The can substantially as described and for the purpose set forth.

JNO. M. PERKINS. MARK W. HOUSE.

Witnesses:

PROCTOR THAYER, L. P. THRALL.