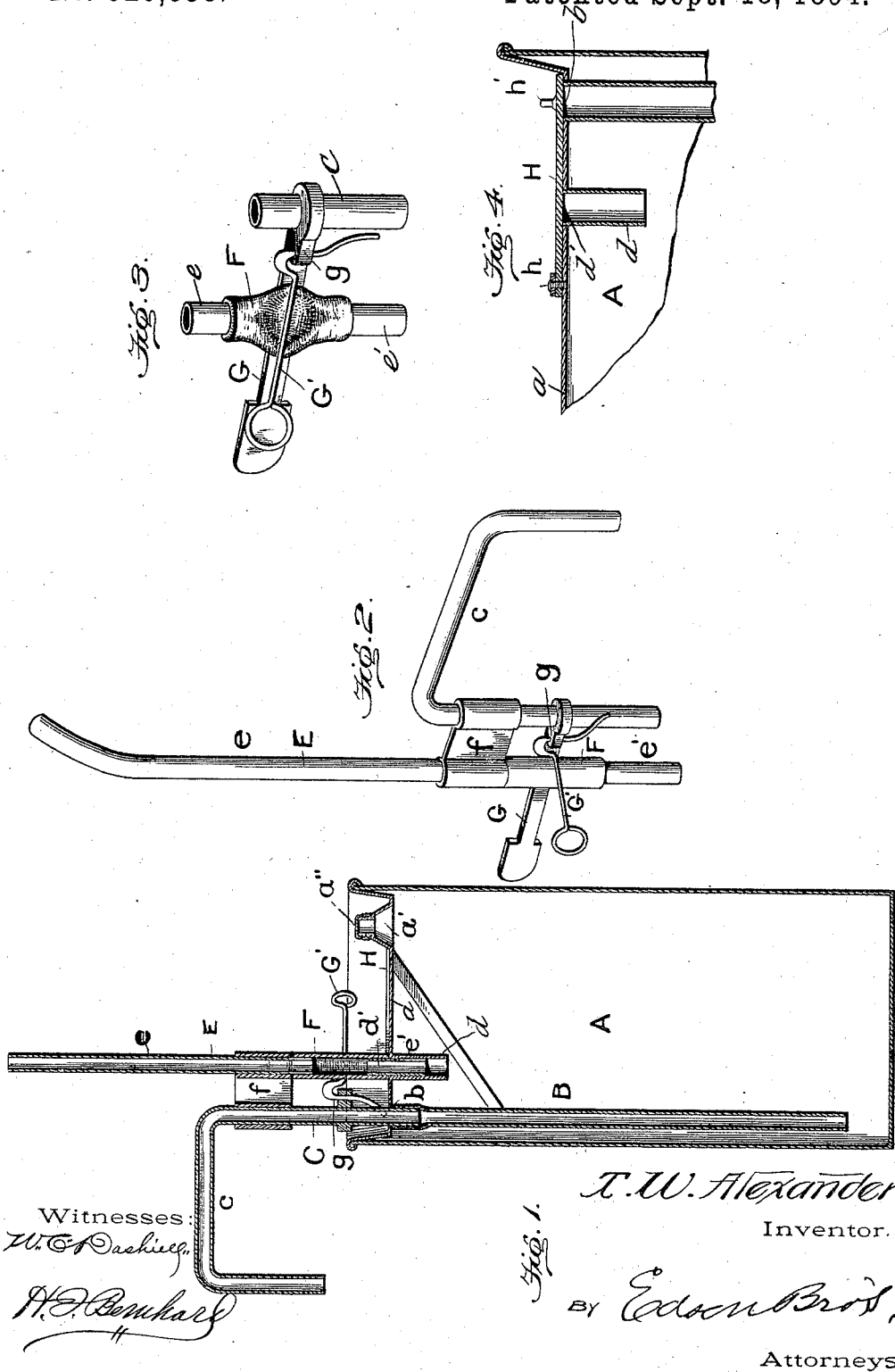


(No Model.)

T. W. ALEXANDER.
OIL OR GASOLINE CAN.

No. 526,338.

Patented Sept. 18, 1894.



Witnesses:

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Fig. 1.

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UNITED STATES PATENT OFFICE.

THEOPHILUS W. ALEXANDER, OF BURLINGTON, IOWA.

OIL OR GASOLINE CAN.

SPECIFICATION forming part of Letters Patent No. 526,338, dated September 18, 1894.

Application filed January 25, 1894. Serial No. 497,984. (No model.)

To all whom it may concern:

Be it known that I, THEOPHILUS W. ALEXANDER, a citizen of the United States, residing at Burlington, in the county of Des Moines and State of Iowa, have invented certain new and useful Improvements in Oil or Gasoline Cans; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to cans designed to contain coal oil, gasoline, or other fluid, intended to be supplied to lamps, stoves or other devices directly from the can or tank; and the primary object of the invention is to provide means whereby the contents of the can is discharged under atmospheric pressure between the fluid and the can and which means also has a siphonic action, when the air is discharged from the can, to draw a part of the fluid back into the can or tank and thus prevent the fluid from overflowing.

A further object of the invention is to construct the filling devices in a simple and inexpensive way, and to detachably connect the same to the can or tank so that the filler can be taken off and the can or tank closed by a suitable valve when it is desired to send the tank to a store or other place of supply to be refilled with fluid.

My invention consists in making the spout and air pipe detachable from the can or tank and in connecting the air pipe, the spout, and the shut-off devices, to enable the parts to be readily detached from or connected to the can or tank; and said tank is provided with a valve or covering plate for closing the openings or sockets in which the spout and air pipe are designed to be fitted.

The invention further consists in the construction of the air pipe and the shut-off mechanism. This air pipe is preferably made of rigid sections connected or joined by an elastic or compressible section, and this elastic section is designed to be compressed between two finger pieces which are attached to the filler-attachment formed by the connected spout and air pipe, whereby the passage in the air pipe can be quickly closed or opened by pressing the finger pieces together or releasing them: and the invention further

consists in the combination of devices, and in the construction and arrangement of parts, which will be hereinafter fully described and particularly pointed out in the claims.

I have illustrated the preferred embodiment of my invention in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a vertical sectional view through a filler-can or tank constructed in accordance with my invention. Fig. 2 is a detail perspective view of the filler attachment removed from the can or tank. Fig. 3 is an enlarged detail perspective view of a portion of the filler attachment, showing the oil-education pipe and the air pipe broken away, and the finger pieces pressed together to compress the elastic section of the air pipe. Fig. 4 is a detail sectional view through a portion of the can or tank, with the filler attachment removed, and the valve or covering plate adjusted to close the openings or sockets in the head of the can.

Like letters of reference denote corresponding parts in all the figures of the drawings, referring to which—

A designates the can or tank which may be of any suitable form, size and construction, and as is usual in this class of devices, the head, *a*, of the can is provided with a filling nozzle, *a'*, which is designed to be closed by a screw cap, *a''*. Within this can or tank is arranged the vertical education tube or pipe, *B*, which is suitably secured to the head, *a*, of the can and extends to within a short distance from the bottom of said can or tank, this education pipe being suitably braced within the tank and terminating in an opening or socket, *b*, through the head, *a*, of said can or tank, into which opening or socket is fitted the lower end of the discharge spout *C* forming a part of the filler attachment. This head, *a*, of the can or tank is further provided with a short pipe or nipple, *d*, which is secured to the inner lower side of the head and which terminates in an opening or socket, *d'*, through the head, *a*, the openings or sockets, *b*, *d'*, being situated quite close together to receive the discharge spout and the air pipe *E* of the filler attachment, and to enable both of these openings or sockets *b*, *d'*, to be closed by a single valve, *H*. This valve may be made in the form of a flat

covering plate, pivoted at one end, as at *h*, to the head, *a*, and provided with a finger piece, *h'*, at its other end, see Fig. 4, by which the valve can be swung or turned to one side of the openings or sockets, *b*, *d'*, to expose them, or to enable said valve to be closed over the openings or sockets to prevent spilling the contents of the can or tank.

The filler attachment consists of the spout C, the air pipe, E, and the shut off devices for opening and closing the passage in the air pipe, all of which parts are connected together so that the filler attachment can be readily connected to the head, *a*, of the can or detached therefrom. The spout, C, has its upper end formed into the "goose-neck" or curved discharge end, *c*, while the other straight part of the spout lies parallel to the air pipe, the lower extremity of the spout being slightly tapered to enable the spout to be tightly fitted in the opening or socket, *b*, whereby the spout is connected with the eduction pipe, B, to discharge the liquid from the can through the neck, *c*, into a lamp, stove or other object to be filled with the liquid contained in the can.

The air pipe E is constructed in sections so as to accommodate the elastic and compressible tube or hose, F, which forms a part of the shut off devices. The upper and lower sections, *e*, *e'*, of the air pipe are preferably made of metallic tubing or pipe, and to the adjacent ends of these sections, *e*, *e'*, are connected the ends of the elastic and compressible tube, F, the connections between the pipes, *e*, *e'* and F being such as to form air tight joints. The upper section, *e*, of the air pipe extends a considerable distance above the goose neck *c* of the spout, while the lower section, *e'*, of the air pipe is slightly tapered at the lower extremity, to enable the same to be tightly fitted in the opening or socket *d'* in the head, *a*, of the can.

The spout C and the air pipe E are rigidly fastened together by means of the bridge piece, *f*, suitably fastened to said spout and air pipe; and on the spout is supported the means for compressing the elastic tube F between the sections *e*, *e'*, of the air pipe so as to close the passage through the air pipe E. This compressing means for the tube or hose, F, in the preferred embodiment of my invention consists of the two finger pieces, G, G', designed to bear against opposite sides of the elastic tube, F. One of these finger pieces, G, is fixed to the spout, C, in any suitable way, while the other finger piece, G', is pivoted or hung, as at *g*, to the spout or to the fixed piece, G, so as to move or yield in a horizontal direction toward or from the elastic tube, F. It is evident, however, that both of the finger pieces can be hung or pivoted but I prefer to make one of them stationary and the other movable as the expansive force of the elastic tube serves to throw or move the pivoted member outward when the finger pressure is released.

This being the construction of my can and filler, the operation may be described as follows: The can or tank is filled with a suitable liquid up to a line below the air inlet nozzle, *d*. To adjust the filler attachment, the valve H is swung or turned to one side, to expose the openings, *d'*, *b*, and the attachment is fitted to the head of the can, with the spout C in the opening or socket, *b*, and the air pipe in the other opening or socket, *d'*. The extremity of the goose-neck, *c* having been fitted in a lamp-fount or the filling orifice of a vapor-stove, or other object, air is forced through the air pipe and into the can or tank, either by blowing with the mouth into the upper end of the section, *e*, of the air pipe or by a suitable compressible bulb. When sufficient pressure of air is exerted upon the fluid in the tank, the fluid will flow out of the pipe B and the spout C into the lamp, stove or other object, and the finger pieces, G, G', are pressed together and held upon the tube F to close the passage through the air pipe as long as it is desired to cause the fluid to pass from the can into the lamp, &c. If the oil overflows the lamp, or other object, or for any reason it is desired to draw a part of the oil back into the can, it is only necessary to keep the extremity of the spout C beneath the surface of the oil and quickly release the finger pieces, G, G', to allow the tube F to expand and permit the air to escape from the tank or can, thereby creating a suction and giving to the spout C and pipe B a siphonic action, as will be readily understood.

It will be seen that my improved can and filler are designed to fill a lamp or stove without tilting or tipping the can in any way, and that the oil can be prevented from overflowing by simply releasing the finger pieces to permit the air to escape and cause the spout and eduction pipe to act as a siphon.

I am aware that changes in the form and proportion of parts, and in the details of construction, of the devices herein shown and described as an embodiment of my invention can be made by a skilled mechanic without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such modifications and alterations as fairly fall within the scope of my invention.

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

1. The combination of a can provided with an eduction pipe, a spout communicating with said eduction pipe, an air pipe having an elastic tube or hose, and the fixed and movable finger pieces supported on the spout and arranged on opposite sides of the tube to press or bear upon said tube or hose, when they are closed together for the purposes described, substantially as set forth.

2. A filler attachment consisting of the spout, an air pipe provided with an elastic tube or hose, a bridge piece connecting the spout and air pipe rigidly together, and fin-

ger pieces supported on the spout to embrace and compress the tube or hose, substantially as and for the purposes described.

3. A filler attachment for cans or tanks
5 consisting of a spout, an air pipe united by a bridge-piece to the spout and provided with an elastic hose or tube, a rigid finger piece fastened to the spout and arranged to bear against one side of the elastic tube, and a piv-

oted finger piece adapted to bear against the 10 opposite side of the tube, for the purposes described, substantially as set forth.

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

THEOPHILUS W. ALEXANDER.

Witnesses:

J. F. BARR,
JOHN S. FEUR.