

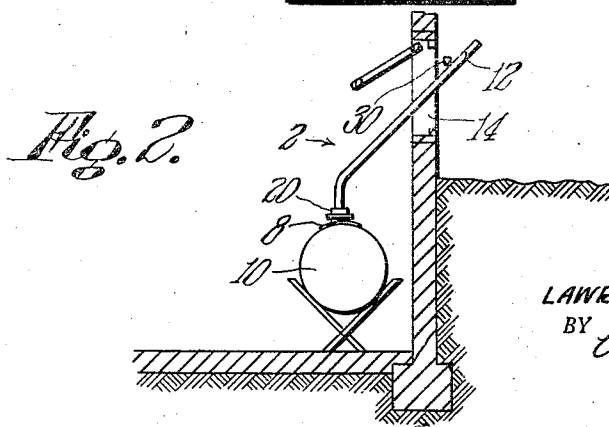
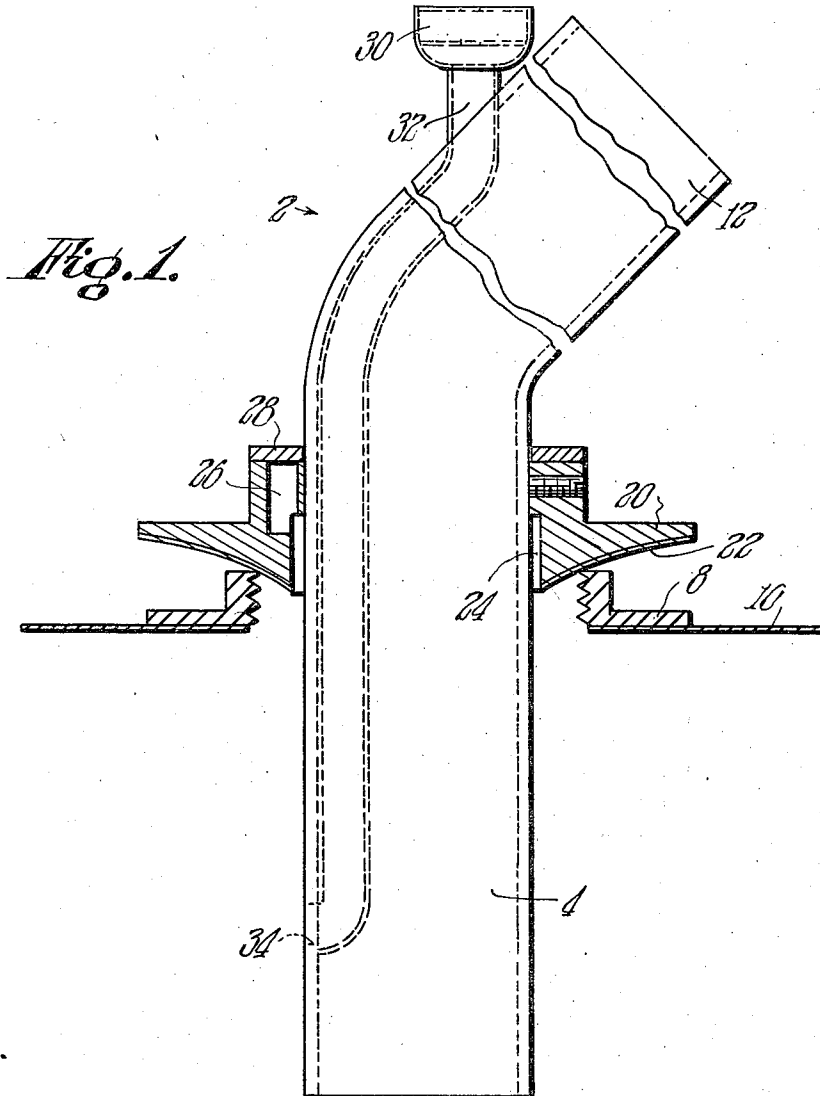
April 30, 1946.

L. A. CHOUINARD

2,399,167

TANK FILLER

Filed Aug. 28, 1944



INVENTOR.
LAWRENCE A. CHOUINARD
BY *Walter C. Ross,*
Attorney.

UNITED STATES PATENT OFFICE

2,399,167

TANK FILLER

Lawrence A. Chouinard, Indian Orchard, Mass.

Application August 28, 1944, Serial No. 551,612

2 Claims. (Cl. 226-66)

The invention relates to means for filling tanks and the like and the principal objects of the invention are directed to a fill pipe construction which is characterized by signal means for indicating when the tank is filled.

The novel features of the invention are adapted for broad application but find one use in connection with fuel storage drums.

It is customary to locate fuel storage drums in basements and in order that they may be accessible when the basement is locked, they are placed below a window or opening into the basement.

The construction of this invention makes it possible to deliver fuel to a drum located in a locked basement as will appear.

Various novel objects and advantages of the invention will be more fully referred to in connection with the accompanying description of the present preferred form thereof.

In the drawing:

Fig. 1 is an elevational view of the fill pipe of the invention with parts in section for clearness; and

Fig. 2 is a small scale sectional elevational and side elevational view to explain the invention.

Referring now to the drawing more in detail, the invention will be more fully described.

The tank filler includes a length of pipe 2 which has a lower end 4 for inserting in the opening shown of a fitting 8 of a drum or tank 10. An upper portion 12 of the pipe 2 is preferably disposed at an angle relative to the portion 4 so that the said upper portion may extend through a window opening 14 or the like with the said lower portion 4 inserted in a drum.

A flange 20 is secured to the pipe 2 and has a lower curving surface which may be provided with a facing 22 for resting on the member 8, as shown.

The curved surface is such that the lower portion 4 of the pipe may take various positions relative to the flange so as to substantially seal the opening in the said member 8.

The lower portion of the member 20 is provided with an annular recess 24 so that there is an air space around the pipe. One or more holes or ports such as 26 are provided in communication with the said space and a valve member 28 is provided that is movable up and down on the pipe 2. This member 28 normally rests on the member 20 to close the ports 26.

A signal 30 is provided which may be in the form of a whistle and it may be located at any point desired. An air connection leads to the signal and may take the form of a conduit 32 dis-

posed within or without the pipe 2. The lower end of the conduit is open and is disposed below the member 8. In the form of the invention shown the pipe 2 has an opening 34 in communication with the lower open end of the conduit 32.

With the pipe 2 having its lower end in the drum and with the member 20 resting on the member 8, a nozzle or other means may deliver fuel to the said pipe.

As the drum becomes filled with fuel the air displaced by the fuel is forced outwardly through the conduit 32 so as to operate the signal whistle and in that way it is known that the drum is being filled. As the fuel level in the drum increases the air pressure above that sufficient for operating the signal flows through the ports and lifts the valve member or the pressure is relieved by operation of the valve member. In this way, as the fuel level approaches the top of the tank the air pressure is sufficient to operate the signal while excess pressure is released by the valve member without interfering with the action of air on the whistle.

The signal may take any form desired, it being necessary only that the whistle or signal operate by air forced out of the drum as fuel is delivered thereto. When the fuel level reaches and covers up the open end of the conduit 32 the flow of air ceases so that the signal is not operated whereby the operator may know that the drum is filled to the desired level according to location of the member 20 with reference to the open end of the conduit.

The invention may be embodied in other specific forms without departing from the essential characteristics thereof. Hence, the present embodiments are therefore to be considered in all respects merely as being illustrative and not as being restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description, and all modifications and variations as fall within the meaning and purview and range of equivalency of the appended claims are therefore intended to be embraced therein.

What it is desired to claim and secure by Letters Patent of the United States is:

1. A fill pipe construction comprising in combination, a length of pipe having a lower end for insertion into the fill opening of a drum, a flange on said pipe above the lower end of the pipe having a lower surface for resting on a part of the drum around said opening to substantially seal the same, an air operated signal whistle secured to said pipe above said flange, air conduct-

ing means separate from the pipe having an upper end connected to the signal whistle and a lower open end disposed below said flange whereby when the lower end of the pipe is inserted in a drum and fuel is delivered through said pipe to the drum air displaced by the fuel flows to the signal, said flange provided with valved port means operable to release air displaced by fuel delivered to the drum.

2. A fill pipe construction comprising in combination, a length of pipe having a lower end for insertion into the fill opening of a drum, a flange on said pipe above the lower end of the pipe having a lower surface for resting on a part of the drum around said opening to substantially seal the same, an air operated signal whistle se-

cured to said pipe above said flange, air conducting means separate from the pipe having an upper end connected to the signal whistle and a lower open end disposed below said flange whereby when the lower end of the pipe is inserted in a drum and fuel is delivered through said pipe to the drum air displaced by the fuel flows to the signal, said flange provided with valved port means operable to release air displaced by fuel delivered to the drum, said means including ports extending upwardly through the flange from the lower side thereof and a valve member slidable up and down on the pipe for resting on said flange.

LAWRENCE A. CHOUINARD.