

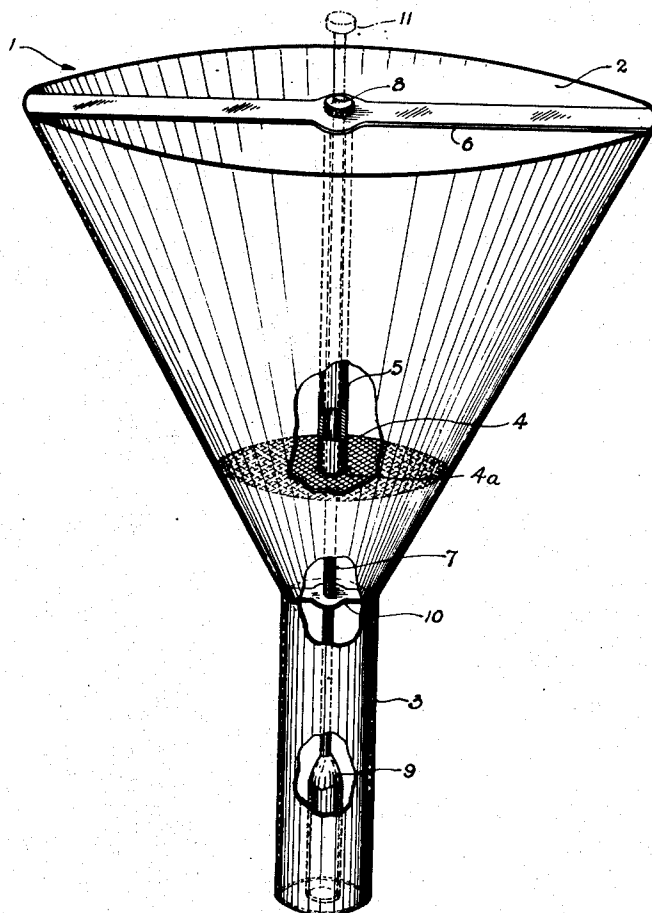
Sept. 21, 1954

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2,689,651

FILLING FUNNEL

Filed Oct. 24, 1952



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UNITED STATES PATENT OFFICE

2,689,651

FILLING FUNNEL

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Application October 24, 1952, Serial No. 316,637

2 Claims. (Cl. 210-155)

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This invention relates to filling funnels, more particularly for use in filling gasoline tanks and the like.

The need for a filling funnel having a gauge incorporated therein has long been recognized, since in the manual filling of tanks it is frequently impossible to know when the tank is approximately full without exercising considerable care. As a result, tanks frequently overflow during filling operations with consequent loss of liquid and undesirable spilling of the same. A very frequent filling operation of this nature is that involved in the gasoline tank of an outboard motor. In this instance, the spilling of gasoline on the motor and in the water constitutes a most dangerous hazard.

Furthermore, spilling of gasoline frequently occurs during the filling of gasoline tanks of motor cars and trucks, resulting in hazard, waste and marring of the body finish. In the case of elevated tanks on refrigerated trucks, for instance, the attendant does not have a full view of the inlet passage, and it is very difficult to determine conveniently the level of gasoline in the tank.

A number of gauge filling funnels have heretofore been proposed but none have been particularly suitable for filling of gasoline tanks and as a result there is no such funnel readily available on the market today.

It is an object of this invention to provide a gauge filling funnel which may be inexpensively and conveniently produced, which will be uniformly effective in operation, and which will be fully satisfactory for filling of gasoline tanks.

The invention will be described with reference to the accompanying drawing, in which the single figure is a perspective view of a funnel in accordance with the invention.

The device comprises a funnel 1 of standard construction having a conical body 2 and neck 3. A screen 4 may be provided and, as shown, extends transversely across the body with its edge in sealing engagement with the wall of the body. The screen 4 is adapted to remove water and other foreign material from the gasoline or other liquid being poured through the funnel.

A tube 5 is axially disposed with respect to the funnel, being carried by a cross bar 6 fixed to the edge portion of the body. The lower end of the tube is in sealing engagement with the screen 4 as by means of solder 4a. A rod 7 is reciprocally mounted in the tube 5 and is preferably in spaced relation to the wall of the tube, as shown, to minimize friction. The rod may be provided at one end with a stop or removable cap 8 which engages the upper end of the tube to limit downward movement of the rod in the tube. A float 9 is carried by the other or lower end of the rod. The float 9 may comprise a

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hollow cylinder, the diameter of which is preferably considerably less than that of the neck 3. With the rod in its lowermost position, i. e., with stop 8 in engagement with the tube 5, the lower end of float 9 is substantially level with the lower end of neck 3.

Preferably, a guide member is provided for the lower portion of rod 7 and, as shown, comprises a cross bar 10 fixed within the neck 3 above the float. The guide member is spaced sufficiently above the float to permit limited upward movement of the float and rod.

In use, the funnel is employed in the usual manner and when the level of liquid in the tank being filled rises above the neck 3 of the funnel, the float 9 will rise and move the rod 7 upwardly into the position shown in dotted lines. An end portion 11 of the rod will thus protrude above cross bar 6 to indicate that the tank is full. The end portion 11 may be of a contrasting colour, such as red, to accentuate the fact that the tank is full.

There has thus been provided a simple, effective, filling funnel which is particularly adapted for use in filling gasoline tanks, such as those employed in outboard motors, whereby the hazards of accidentally spilt gasoline are substantially avoided.

What is claimed is:

1. In a filling funnel having a body, a neck, and a screen transversely fixed within said body, a tube substantially axially arranged in said body and having one end fixed to said screen, a bar extending across the mouth of said body and having its ends fixed to the edge of said body, said tube having its other end fixed to said bar, said bar having an opening therein communicating with said tube, a rod slidably extending through said tube and opening and having one end extending into said neck, an enlarged cap fixed to the other end of the rod and engageable with the outer surface of said bar to limit downward movement of the rod, and a float carried by said first end of the rod and being located within said neck and in spaced relation to the wall thereof when said cap is in engagement with said outer surface of the bar.

2. A funnel as defined in claim 1, including a guide for said rod comprising a cross bar extending across said neck and having its ends fixed to the wall of said neck, said last-mentioned cross bar having a hole therein, said rod extending slidably through said hole.

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