Oct. 21, 1924. 1,512,017

W. E. FIELD

DRINKING GLASS FILLER

Filed Dec. 18, 1922

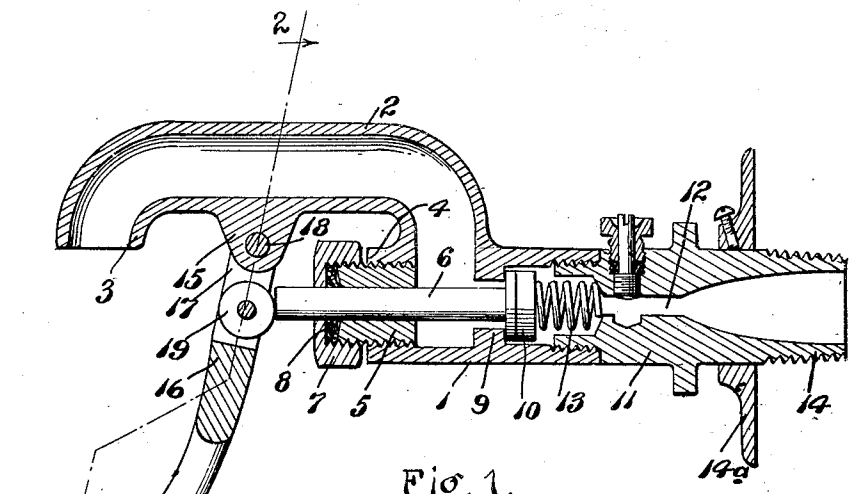


Fig. 1.

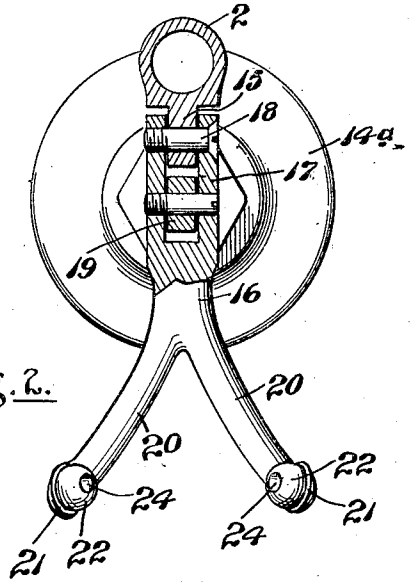


Fig. 2.

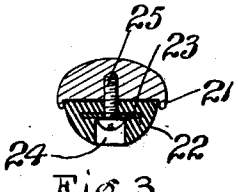


Fig. 3.

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UNITED STATES PATENT OFFICE.

WILLIS E. FIELD, OF GRAND RAPIDS, MICHIGAN.

DRINKING-GLASS FILLER.

Application filed December 18, 1922. Serial No. 607,499.

To all whom it may concern:

Be it known that I, WILLIS E. FIELD, a citizen of the United States of America, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Drinking-Glass Fillers; 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.

This invention relates to a drinking glass filler of the same type as that shown in my pending application for patent, Ser. No. 499,895, filed Sept. 12, 1921, Patent 1,442,140, Jan. 16, 1923, and has for its primary object and purpose the provision of several improvements in construction whereby the operation thereof is simplified and the structure rendered more durable and at the same time more perfect in operation, obviating any possibility of binding or sticking of the parts which may sometimes occur after service with the first construction long enough that contacting parts thereof may become worn or flattened. A further object of the invention is to make a device of this character wherein the glass contact members may be readily replaced if lost or worn so as to be useless, a simple means of connection thereof to the device being used. Other objects and purposes than those specifically stated will appear as understanding of the invention is had from the following description, taken in connection with the accompanying drawing, in which,

Fig. 1 is a central vertical longitudinal section through the glass filler of my invention.

Fig. 2 is a transverse vertical section taken substantially on the planes of the broken line 2—2, of Fig. 1 and looking in the direction indicated by the arrows, and

Fig. 3 is an enlarged transverse section through the rubber contact members against which the glass bears and showing the manner of detachably connecting the same.

Like reference characters refer to like parts in the several figures of the drawing.

In the construction of the glass filler device, a tubular body 1 of metal is used having an integrally cast and upwardly and forwardly extending water outlet member 2 at its front end terminating in a down turned nozzle 3. Below the rear portion of the member 2, the body is extended forward for a short distance, as indicated at 4, making a boss which is interiorly bored and threaded for the reception of an exteriorly threaded plug 5, it being designed that the plug shall be coated with solder as it is to be inserted in the boss so that a water tight connection is made. The plug has a longitudinal opening therethrough through which a valve rod 6 freely passes, and a packing retaining cap 7 is threaded on to the projecting end of the plug, the rod passing therethrough and extending a distance in front of the cap and packing 8 held between the cap and end of the plug to insure against water escape around the rod.

The passage through the body is restricted at one point by an inwardly projecting annular member 9 whereby a stop is made for a valve 10 at the rear end of the rod 6. A coupling member 11 with a longitudinal water passage 12 therethrough has connection to the rear end of the body 1 and the front end of the coupling has the passage enlarged to make a socket for the reception of a coiled spring which bears at its forward end against the valve head 10, acting to normally close the device against the passage of water. The rear end of the coupling 11 is exteriorly threaded, as indicated at 14 for its ready connection to a tank or other container of water. And the usual flange 14ª to come against the outer side of the tank and cover the point of connection of the device thereto is adjustably mounted on the coupling, as shown.

An operating member for the valve is located in front of the front end of the rod 6, a lug 15 being cast with and at the under side of the outlet member 2 from which the operating member pivotally depends. This member, indicated at 16, is divided at its upper end to make two spaced apart legs 17, the upper ends of which pass one to each side of lug 15, and a pivot pin 18 passes through said legs and the lug. A roller 19 is rotatably mounted on and between the legs 17 in a position such that the forward end of the valve rod 6 bears thereagainst. At its lower portion, member 16 is divided and branched outwardly to make two arms 20, each terminating at its lower end in a recessed socket 21 in which rubber contact members 22 are seated. The contact members have metal plates 23 embedded therein and each has an opening

24 extending inwardly from the outside for the passage of a screw and its head, as shown at 25, the screw passing through the plate 23 and entering a suitable opening in the end of the arm secures the contact member in place. This contact member is easily replaced when it becomes worn or is displaced and lost, through this simple detachable construction.

This construction of glass filler is very simple and compact and exceptionally durable. The glass is pressed against the contact members 22, moving the operating member 16 to the rear and displacing the valve 10, thereby allowing the passage of water which flows out of the nozzle 3 into the glass, stopping immediately as soon as the glass is moved away from the operating member. The roller 19 is partially turned as it is pressed against the end of the rod 6 and this change of position coupled with an elimination of any frictional rubbing of the end of the rod 6 against the roller saves the same from wear and keeps the same in perfect condition at all times. Also there is no tendency to press downwardly against the rod from friction and make a possibility of the rod binding or sticking as it is moved inwardly from such pressure. The construction is durable and efficient and stays in perfect condition even after long service.

I claim:

A device of the character described, comprising a body having a passage therethrough and an overhanging outlet member terminating in a downwardly turned nozzle, a lug cast on said outlet member, an operating member having two spaced apart legs at its end passing one to each side of the lug, a pivot passing through said legs and lug, a roller rotatably mounted between said legs a short distance from the lug, a valve normally closing the passage in the body, a valve rod extending from the valve and at its outer end bearing against the roller, said valve being moved to open position on operation of the operating member and pressure of the roller against the end of the rod, substantially as described.

In testimony whereof I affix my signature.

WILLIS E. FIELD.