

Jan. 15 , 1924.

1,480,936

I. GONDER

PUMP VENT CONTROL

Filed April 3, 1922

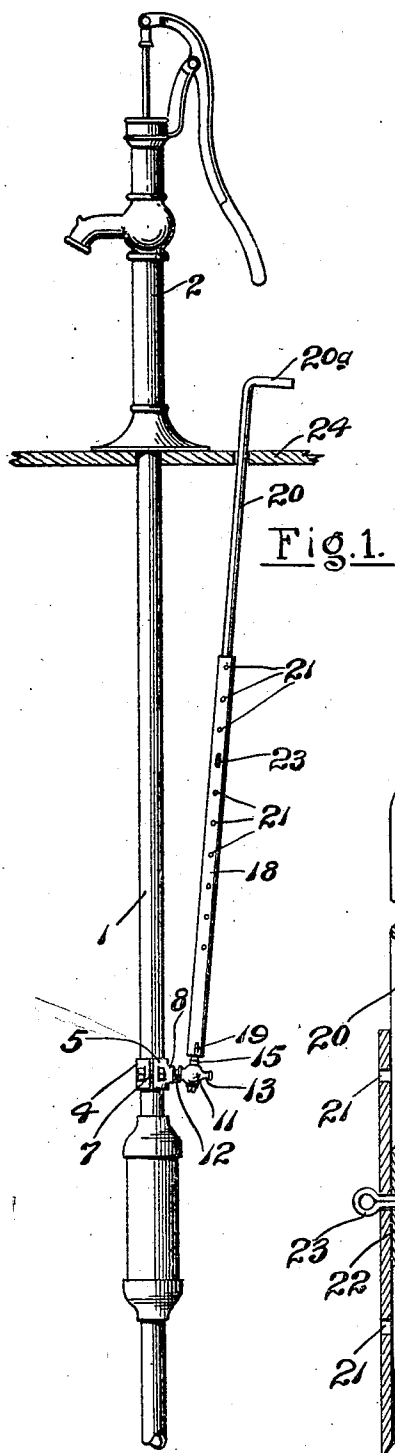


Fig. 1.

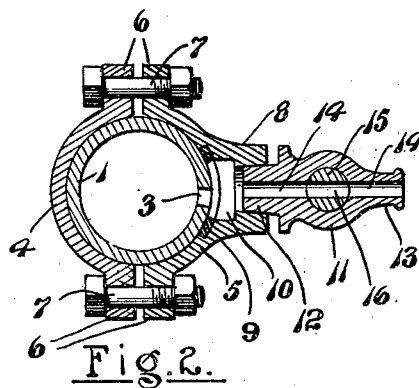


Fig. 2.

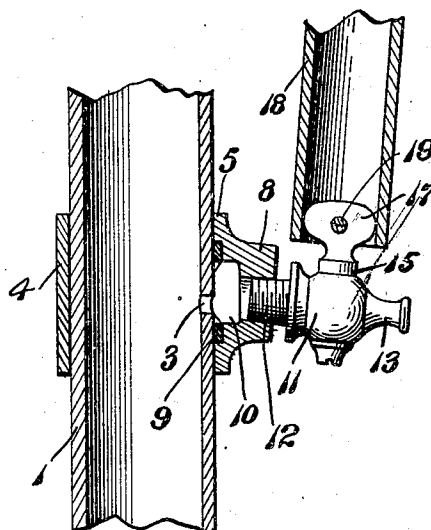


Fig. 3.

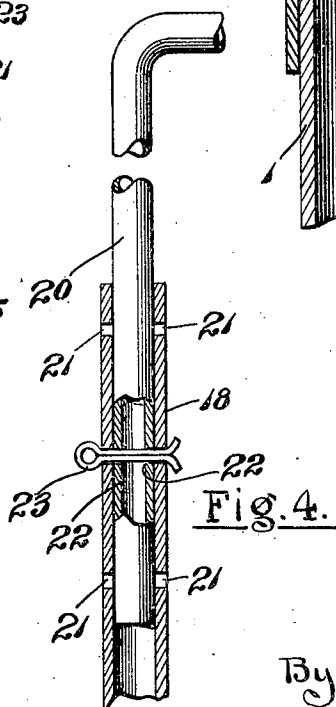


Fig. 4.

Inventor
Ivan Gonder

By Frank E. Liverance, Jr.
Attorney.

Patented Jan. 15, 1924.

1,480,936

UNITED STATES PATENT OFFICE.

IVAN GONDER, OF BENDON, MICHIGAN.

PUMP-VENT CONTROL.

Application filed April 3, 1922. Serial No. 548,935.

To all whom it may concern:

Be it known that I, IVAN GONDER, a citizen of the United States of America, residing at Bendon, in the county of Benzie and State of Michigan, have invented certain new and useful Improvements in Pump-Vent Controls; 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 pump vent control by means of which the water in a pump may be drained off above a certain level in the pump to guard against freezing and injury to the pump in cold weather, means being provided for opening the vent for such drainage and for closing the same when it is not needed as in warmer weather. My invention is directed to novel, simple and effective means for attaining this end, together with means for allowing such vent to be placed at different levels in different pumps, as may be required by different climatic conditions in different latitudes where pumps are used.

With these and other objects in view, I have made the invention described in the following description, and illustrated in the accompanying drawing, in which,

Fig. 1 is a side elevation of a pump equipped with my invention.

Fig. 2 is an enlarged transverse horizontal section through the pump at the vent opening therein.

Fig. 3 is a fragmentary enlarged vertical section through the vent control means, and

Fig. 4 is a fragmentary partial side elevation and vertical section of the manually operable means for operating the vent control means.

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

In the construction shown, a pipe 1 depends from the upper portion 2 of the pump and in one side of said pipe above the pump valve shown, a vent opening 3 is made out through which water may drain when the vent is open. A clamp comprised of two parts 4 and 5 is located around the pipe 1 at the opening 3, each half of the clamp having outwardly extending ears 6 through which bolts 7 may be passed to secure the clamp in place. The part 5 at one side has an extension 8 with an enlarged recess 10 therein,

and a gasket 9 is located around such recess and bears against the pipe 1, preventing any leakage of water which passes out of the pipe through the vent opening 3.

A pet cock having a casing 11 and a threaded extension thereto at one side, as indicated at 12 is attached to the projecting portion 8 of the clamp member 5, the extension threading into said portion 8, as shown in Fig. 3. The casing at its opposite side has an outlet extension 13, there being an opening 14 through the casing 11 to let the water out when the passage is open. A valve 15 with an opening 16 transversely through it is rotatably mounted in casing 11 said opening 16 in one position, that shown in Fig. 2 alining with the passage 14, while when turned to another position, the passage 14 is obstructed. When open, the water may freely drain from the pipe 1 from above the level of vent opening 3.

The valve 15 has a handle 17 at its upper end for turning the valve to different positions. A tube 18 passes over the handle and is connected therewith by a cotter pin 19. The tube extends upwardly for a distance and at its upper end receives the lower end of a tubular rod 20 which may be adjustably connected at different positions to the tube 18. To do this, openings 21 are made at spaced apart points in opposite sides of the tube 18 and like openings 22 through the tubular rod 20, a cotter pin 23 being passed through both the tube and rod where openings 21 and 22 come into conjunction. The change of position of the rod so as to have its openings 22 register with different openings 21 effects a different adjustment to correspond with requirements. The tubular rod extends upwardly through platform 24 on which the pump is mounted, and is formed with a handle portion 20^a at its upper end as shown.

It is evident that the pet cock may be closed or opened by turning the rod 20 on grasping handle 20^a thereof. The vent opening may be placed at any desired place in the length of pipe 1, the adjustability of the operating mechanism for the pet cock permitting this. It will be noted that the pet cock is tilted downwardly at an angle permitting a complete drainage thereof and it is further apparent that by reason of the enlarged recess at 10, it is not necessary that pains be taken to bring the vent opening 3 and the passage 14 in nice alinement.

The construction is simple, practical and efficient. The pump may be readily drained in cold weather, closed when any pumping is to be done and afterward opened, or left
5 closed all of the time after any danger of freezing is past.

The claims appended hereto define the invention and it is to be considered that any variations from the specific detail shown
10 that fall within the claims are comprehended by said invention.

I claim:

1. In combination a pipe having a vent opening in one side, a clamp surrounding
15 the pipe at said opening, one side of the clamp having a relatively large recess therein at the vent opening and having an outlet opening in its side communicating with the recess, a pet cock attached to the clamp in
20 said outlet opening, said pet cock including a rotatably mounted valve, a tube attached to the valve and extending upwardly therefrom, a rod telescoping into the upper end of the tube and provided with an operating
25 handle at its upper end, and means for connecting the rod to the tube at a number of different places to thereby adjust the combined length of the tube and rod, substantially as described.

30 2. In combination with a pipe having a vent opening in one side, a clamp surrounding the pipe at said opening, there being a relatively large recess made on the inner side of the clamp adjacent said vent open-

ing, and said clamp having an outlet open- 35
ing in its side communicating with the recess at the lower side thereof, a pet cock including a rotatably mounted valve attached at the opening in the side of the
40 clamp and extending outwardly and downwardly therefrom, a tube connected at its lower end to the upper end of said valve, a rod telescopically received in the upper portion of the tube and formed at its upper end
45 with a handle member, said rod having an opening therethrough near its lower end, and said tube having alined openings in its opposite sides at a plurality of spaced apart points in its upper portion, and a pin for
50 passing through the openings in the tube and rod, substantially as described.

3. In combination, a two part clamp adapted to be placed around and clamped to a pipe, one part of said clamp having an
55 outlet opening therethrough, a pet cock including a rotatably mounted valve attached to said part of the clamp at the opening therein, said pet cock extending downwardly
60 from the clamp at an angle to the horizontal, a tube connected at its lower end to the valve, a rod telescopically received in the upper end of the tube and formed at its
65 upper end with a handle member, and means to connect the tube and rod together at a number of different points to adjust the combined length of the rod and tube.

In testimony whereof I affix my signature
IVAN GONDER.