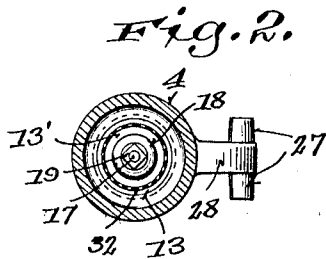
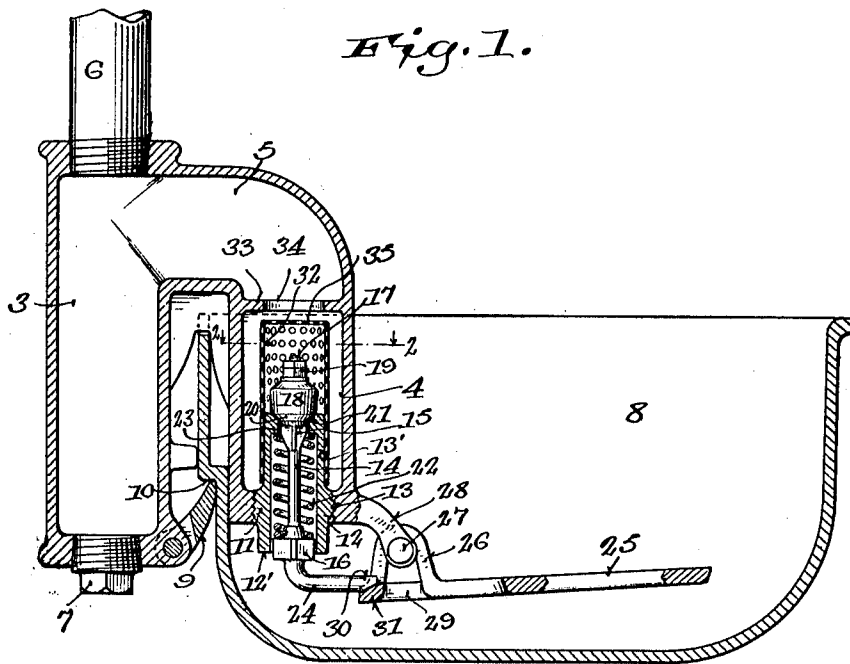


F. H. BOGDA.  
STRAINER VALVE.  
APPLICATION FILED APR. 19, 1919.

1,314,566.

Patented Sept. 2, 1919.



*Inventor*  
*Frank H. Bogda*  
*By Morsell & Keeney*  
*Attorneys.*

# UNITED STATES PATENT OFFICE.

FRANK H. BOGDA, OF HORICON, WISCONSIN.

## STRAINER-VALVE.

1,314,566.

Specification of Letters Patent.

Patented Sept. 2, 1919.

Application filed April 19, 1919. Serial No. 291,271.

*To all whom it may concern:*

Be it known that I, FRANK H. BOGDA, a citizen of the United States, and resident of Horicon, in the county of Dodge and State of Wisconsin, have invented new and useful Improvements in Strainer-Valves, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

The invention relates to stock watering bowls, and more particularly to the valve and valve mechanism used in connection with the bowl.

An object of the present invention is to provide a means for straining the water prior to its passage through the valve into the bowl.

With the above and other objects in view, which will appear as the description proceeds, my invention resides in the novel construction, combination and arrangement of parts, substantially as hereinafter described, and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the herein disclosed invention may be made as come within the scope of the claims.

In the accompanying drawing I have illustrated one complete example of the physical embodiment of my invention constructed according to the best mode I have so far devised for the practical application of the principles thereof, in which:

Figure 1 is a vertical sectional view through the device embodying the invention, and

Fig. 2 is a detail sectional view taken on the line 2—2 of Fig. 1.

In the drawing, the supply pipe consists of an inverted U-shaped pipe having vertically extending portions 3 and 4 connected by a transverse portion 5, said portion 3 being adapted to be engaged at either end thereof by means of a supply pipe 6. In the drawing I show the upper end of portion 3 as connected to the supply pipe, and the lower end shut off by a plug 7, though it will be understood that the water may be led in from either end.

The numeral 8 designates a bowl which is detachably connected to the supply pipe by a pivoted catch 9 mounted on the pipe and engaging a projection or shoulder 10 on the bowl. The valve of this invention consists of a tubular sleeve 11 having a cylindrical threaded portion 12 secured in a threaded

opening 13 in the end of the portion 4 of the supply pipe, an integral nut portion 12' on the lower end thereof, and an upstanding reduced cylindrical portion 13' of the same diameter throughout on the other end thereof and projecting into the portion 4.

Slidably mounted in the sleeve is a valve stem 14 having guide-heads 15 and 16 ribbed to form radial passages and moving in the ends of said sleeve, and a rod portion 17 extending from the head 15 and upon which an aperture or conical valve head 18, preferably of rubber, is secured by lock nut 19. This head has a beveled portion 20 adapted to register on a beveled valve seat 21 in the top of portion 13' of the sleeve 11. The valve is normally held closed by a spring 22 interposed between the shoulder 23 in the sleeve and a head 16 of the stem. The valve stem is provided with an extension 24, and the stem may be turned in any position in the sleeve.

The means for operating the valve mechanism just described consists of a treadle plate 25 having spaced stirrups 26 which are adapted to be slipped on laterally projecting pins 27 on a lug 28 formed on the supply pipe. An opening 29 is also formed in the treadle plate, and the arrangement is such that the treadle may be moved from or connected with its pivotal support by introducing the lug 28 in a position lengthwise of the opening 29, and then turning the treadle so that pins 27 are brought in line with the stirrups 26 and move said parts into engagement with each other.

The end 30 of the extension 24 is adapted to be turned forwardly and be engaged by a part 31 of the treadle plate which is spaced but a short distance from the fulcrum defined by the pivot pins 27 so that on pressing the outer end of the treadle plate, a great leverage is obtained to move the extension 24 and consequently the valve stem upwardly against the action of the spring 22 to open the valve, making it possible to use the device for cattle or calves, as a slight pressure on the plate would open the valve.

A cylindrical strainer 32 has one end open and in snug engagement with the portion 13' of the sleeve 11, whereby the portion of the valve mechanism outwardly of the portion 13' of the sleeve is inclosed therein, and thus the valve seat is prevented from being clogged by foreign matter. A transverse partition plate 33 is disposed in the portion

4 near its top, and is provided with an opening 34 of a diameter less than that of the strainer 32. The partition 33 prevents the accidental dislodgment of the strainer 5 from portion 13' of the sleeve, as will be readily apparent.

In practice the wall 35 closing the end of the strainer adjacent the partition 33 may or may not be perforated, and should the 10 same be unperforated, the water would enter through the perforations in the side of the strainer. Foreign matter which is apt to accumulate in the portion 4 is removed by 15 detaching the bowl 8 from the supply pipe and removing the sleeve 11, as will be obvious.

What I claim as my invention is:

1. A device of the class described, comprising a supply pipe, a sleeve secured within 20 said pipe, valve means carried by said sleeve for shutting off the passage of water there-through from said supply pipe, a strainer member disposed within the supply pipe and having a portion thereof engaging with 25 said sleeve, said strainer inclosing the valve means, a projection formed on the inner wall of said supply pipe adjacent the end of the strainer member remote from said

sleeve, to retain said strainer in position, and means for operating said valve means. 30

2. A device of the class described, comprising a supply pipe, a sleeve projecting into said pipe, a valve head carried by the end of the sleeve disposed in said pipe 35 for shutting off the passage of water there-through, a cylindrical strainer covering the valve head and having one end open and in snug engagement with the portion of the sleeve in said pipe, and means for operating the valve head. 40

3. The combination with a supply pipe, of a sleeve secured within said pipe, a valve stem slidably mounted in said sleeve and carrying a valve head for shutting off the 45 passage of water therethrough, a cylindrical strainer disposed within said pipe, said strainer having one end open and engaged with said sleeve and its other end closed to inclose the valve structure, an apertured 50 transverse partition plate in said pipe and spaced from the closed end of said strainer to retain the same in position, and means for operating said valve.

In testimony whereof I affix my signature.

FRANK H. BOGDA.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."