No. 733,966. PATENTED JULY 21, 1903.

F. HORWART.

STOCK WATERER.

APPLICATION FILED JULY 26, 1902.

NO MODEL.

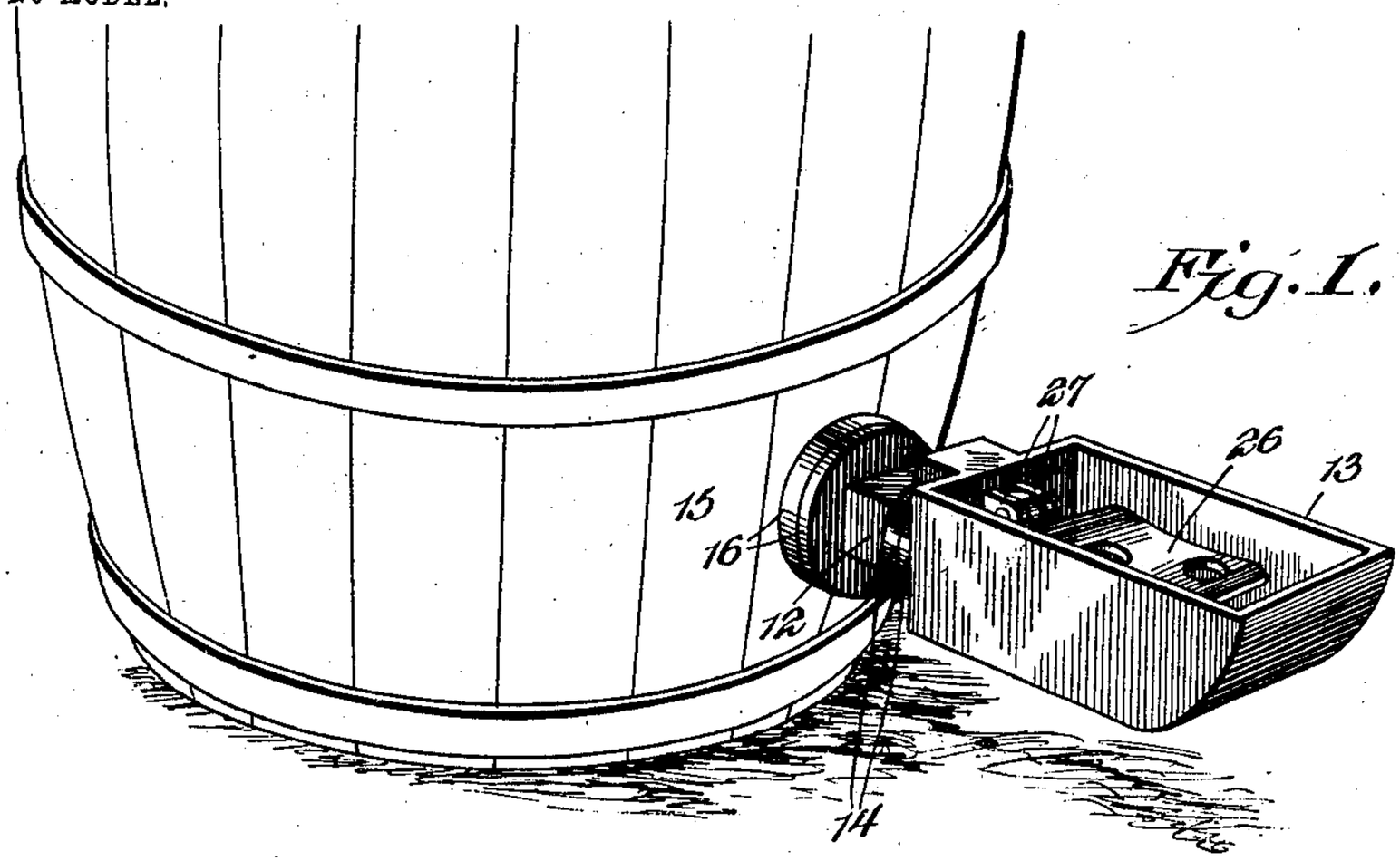

Fig. 1.

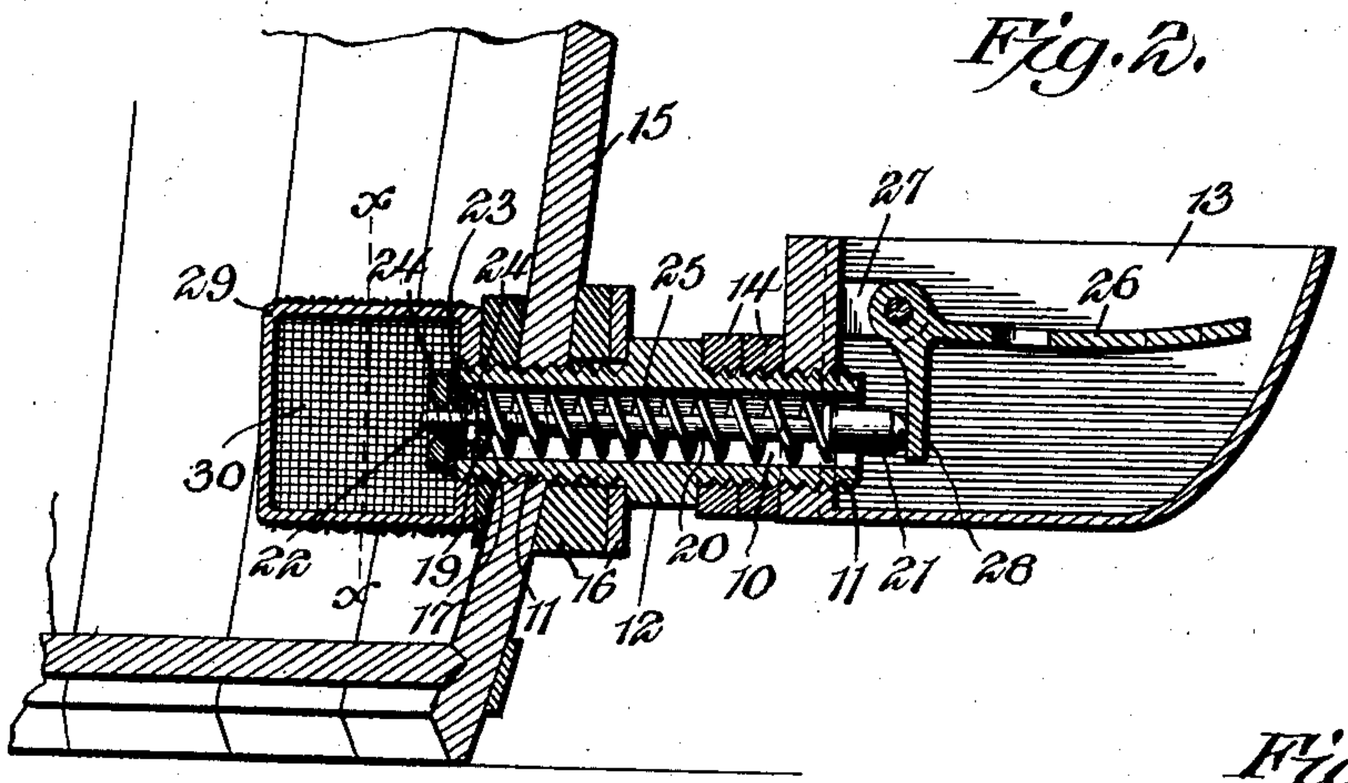

Fig. 2.

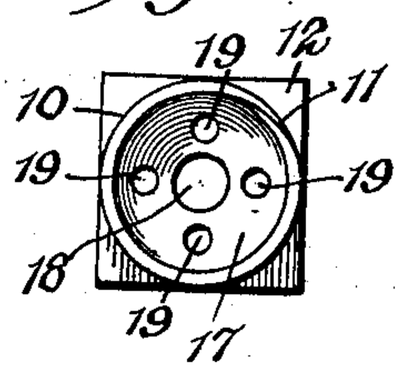

Fig. 3.

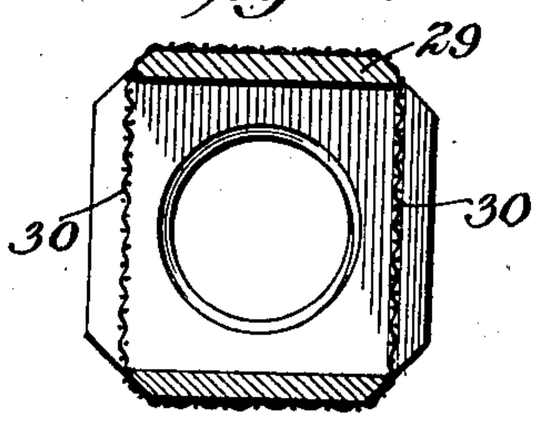

Fig. 4.

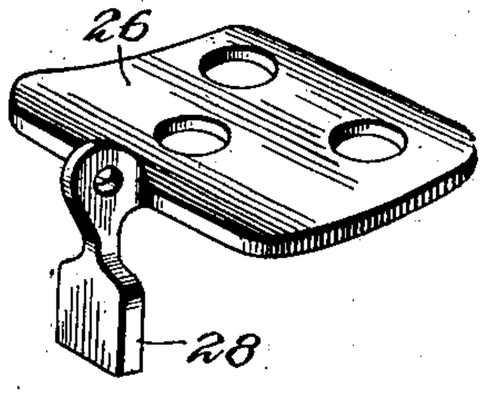

Fig. 5.

Witnesses
Howard D. Art.
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Attorney

No. 733,966. Patented July 21, 1903.

UNITED STATES PATENT OFFICE.

FÉLIX HORWART, OF LONG ISLAND, KANSAS.

STOCK-WATERER.

SPECIFICATION forming part of Letters Patent No. 733,966, dated July 21, 1903.

Application filed July 26, 1902. Serial No. 117,102. (No model.)

To all whom it may concern:

Be it known that I, FÉLIX HORWART, a citizen of the United States, residing at Long Island, in the county of Phillips and State of Kansas, have invented a new and useful Stock-Waterer, of which the following is a specification.

The present invention relates to stock-waterers; and the object thereof is to provide an inexpensive and easily-manufactured structure of this character which can be readily applied to a suitable reservoir, said waterer being made up of a few simple elements so combined that there will be very little wear, the various parts being readily accessible.

The preferred embodiment of the invention is fully illustrated in the accompanying drawings and described in the following specification.

In said drawings, Figure 1 is a perspective view of the stock-waterer when in place upon a reservoir. Fig. 2 is a longitudinal sectional view through the same. Fig. 3 is an end view of the supply-pipe. Fig. 4 is a vertical section taken on the line X X of Fig. 2. Fig. 5 is a perspective view of the actuating-plate.

Similar numerals of reference designate corresponding parts in all the figures of the drawings.

In the construction shown in the accompanying drawings a supply-pipe 10 is employed, said pipe having its ends threaded, as shown at 11, and being provided with an intermediate head 12, which is angular in cross-section. A suitable drinking-trough 13 is threaded upon the outer end of the supply-pipe, and washers 14 are interposed between the trough and the head 12. The inner end of the pipe is arranged to be passed through the wall of a reservoir, as 15. Washers 16 are interposed between the rear face of the head 12 and said reservoir.

A web 17 extends across the inner end of the pipe, being provided with a central opening 18 and a plurality of perforations 19, arranged about the central opening. In said central opening is slidably mounted a valve-stem 20, the front end being provided with a head 21, the rear end being threaded, as shown at 22. Upon this rear end is arranged a valve 23, that is adapted to close the inner end of the pipe and is made adjustable by nuts 24, threaded upon the stem. A coiled spring 25 surrounds the stem and bears at one end against the head 21, the other end bearing against the web 17, thus normally holding the valve in its closed position. An actuating-plate 26 is pivoted to a pair of ears 27, arranged within the drinking-trough, this plate being disposed some distance above the bottom of said trough and extending across the same. It is provided with a depending finger 28, that bears against the end of the head 21 of the valve-stem, which head projects into the drinking-trough, as shown in Fig. 2.

The inlet end of the pipe 10 is covered by a substantially cubical boxing 29, having a threaded opening in one wall which receives the inner end of said pipe. This boxing has its opposite sides open, as shown in Fig. 4, said sides being covered by suitable strainer-screens 30, preferably formed of woven wire and entirely surrounding the boxing. This boxing therefore forms a casing within which the valve operates, and, furthermore, constitutes fastening means for holding the pipe in place and compressing the washers, so as to avoid all danger of leakage.

The mode of operation of this device will be perfectly obvious. In practice a small amount of water will remain in the bottom of the trough, so that an animal attracted thereby in attempting to reach the same will depress the plate 26, thereby forcing the stem 20 inwardly and opening the valve. As a result water will flow from the reservoir 15 into the drinking-trough until the animal's thirst is quenched, for when such animal raises its head the spring will force the valve-stem outwardly, thereby closing the valve and again raising the actuating-plate. This structure has many advantages over those now in ordinary use. In the first place, the angular head formed upon an intermediate portion of the supply-pipe affords a convenient place upon which an ordinary wrench may be gripped to screw the pipe in place, being arranged in a position where it can be conveniently reached. It furthermore constitutes abutments for the washers, so that said washers will be tightly compressed, and leaking thereby avoided. The spring will be

made of non-corrodible material, so that it will not be affected by moisture, and its tension may be readily regulated by adjusting the valve upon its stem. This valve, furthermore, is completely housed and protected by the boxing, though access may be readily gained thereto by unscrewing said boxing from the pipe.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a stock-waterer, the combination with a reservoir, of a supply-pipe having its opposite ends threaded and being provided with an integral intermediate angular head, a drinking-trough secured upon one end of the supply-pipe, the other end being engaged in the reservoir, and washers located upon the pipe on opposite sides of and bearing against the angular head, said washers being clamped by and between the angular head and the reservoir and trough respectively.

2. In a stock-waterer, the combination with a reservoir, of a trough, a supply-pipe leading to the trough and having a threaded end that passes through the wall of the reservoir, said pipe having a head located outside the reservoir, washers located on the pipe on opposite sides of the reservoir, a valve controlling the passage-way of the pipe and located at the inner end thereof, an angular boxing screwed upon the inner end of the pipe and covering the valve, said boxing bearing against the inner washer thereby constituting means for holding the pipe in the wall of the reservoir and having its opposite sides open, and screening covering said open sides.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FÉLIX HORWART.

Witnesses:
A. SEDMAN,
GEO. HALDERMAN.