(No Model.)

H. W. CLAPP.

ANIMAL WATERING TROUGH.

No. 439,290. Patented Oct. 28, 1890.

Fig. 1.

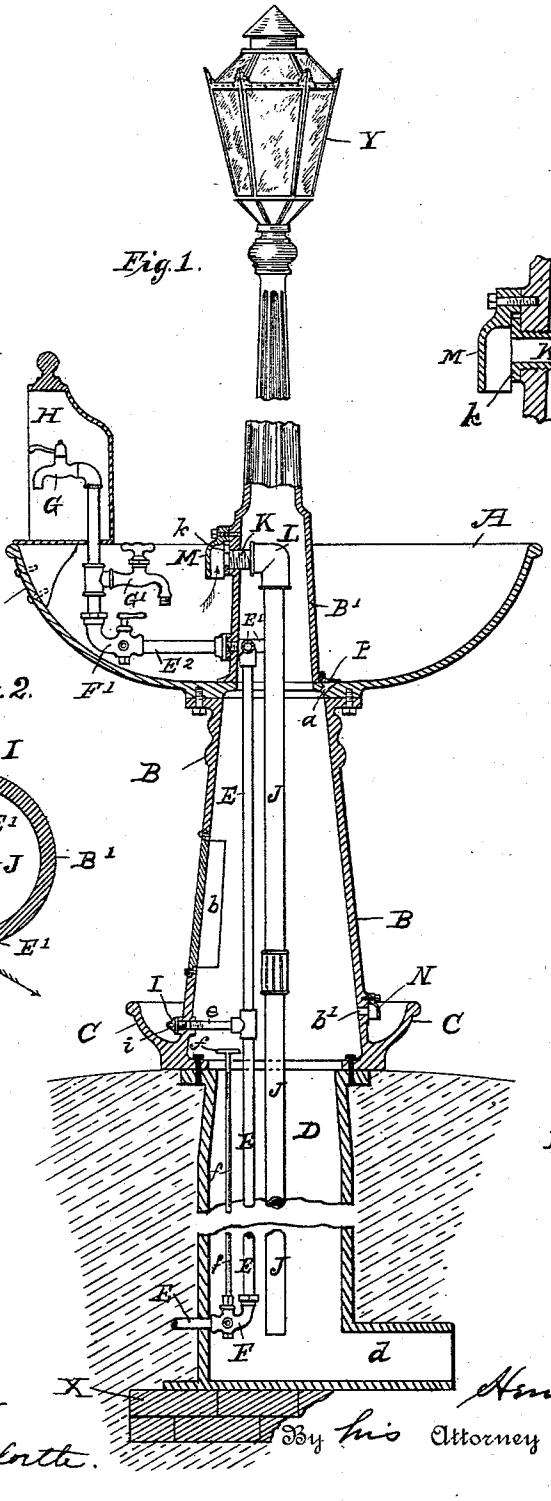


Fig. 3.

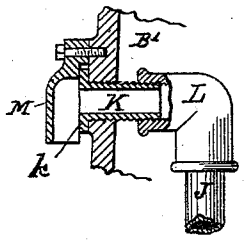


Fig. 4.

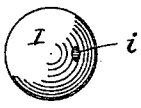


Fig. 2.

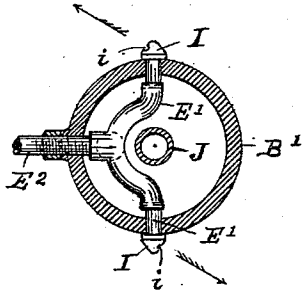
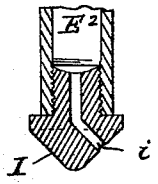


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

HENRY W. CLAPP, OF CONCORD, NEW HAMPSHIRE.

ANIMAL WATERING-TROUGH.

SPECIFICATION forming part of Letters Patent No. 439,290, dated October 28, 1890.

Application filed June 21, 1890. Serial No. 356,214. (No model.)

To all whom it may concern:

Be it known that I, HENRY W. CLAPP, a citizen of the United States, residing at Concord, in the county of Merrimac and State of New Hampshire, have invented certain new and useful Improvements in Animal Watering-Troughs, of which the following is a specification.

This invention relates to animal watering-troughs and drinking-founts.

The object of the invention is to provide an ornamental drinking-fountain adapted for the accommodation of man and beast of proper construction to avoid freezing in cold weather.

The invention consists in the various novel devices combined and arranged in a manner to be fully set forth in the following specification and claims, and clearly illustrated in the accompanying drawings, forming a part thereof, of which—

Figure 1 is a sectional elevation of the combined watering-troughs and drinking-fountains. Fig. 2 is an enlarged view showing a portion of the supply and waste pipes in plan and a sectional plan of the central column in which they are located. Fig. 3 is an enlarged detailed view, partly in section, of the mouth of the overflow or waste for the animal-trough, with its swiveled cap or cover. Fig. 4 is an enlarged elevation of one of the nipples, through which the supply to the animal-troughs must pass and by means of which the water contained therein is given a continuous circular motion. Fig. 5 is a plan section of one of the nipples and a portion of supply-pipe connected.

Similar letters designate corresponding parts throughout the various views.

The central column may be extended to a proper height above the trough to support a lamp, as seen in Fig. 1, if desired.

The large trough A is supported upon a hollow column or pedestal B, upon which is formed, near its bottom, an annular drinking-trough C, adapted especially for dogs and the smaller animals.

The pedestal B is supported upon a hollow metallic shaft D, its top being about flush with the surface of the ground and its bottom resting upon two or more courses of brick X at a depth of four feet (more or less) below the surface of the ground. This shaft D is seen in Fig. 1 in broken section in lack of the necessary space to show its full length in relation to the pedestal B, and the column supporting the lamp Y is necessarily seen in broken elevation for the same reason.

The shaft D may be connected with a sewer by means of a pipe *d*, which may be formed integral therewith.

A supply-pipe E enters one side of the shaft D at a point far enough below the surface to prevent any liability to freeze, and said pipe is there provided with a stop and waste cock F, having its operating-crank *f* extending to and within the pedestal B, and by aid of an opening provided with a detachable cap *b* the crank of said cock F can be readily reached. Said supply-pipe E extends from said cock F, thence upward through the shaft D and pedestal B to the hollow column B′, where it connects with the branch pipes E′ E², the former of which supplies the trough A through the column B′, at opposite sides thereof, and the latter extending thence horizontally, then vertically through the said trough to a faucet G, located six inches (more or less) above the top of said trough and within a hood H mounted thereon.

The horizontal portion of the pipe E², which supplies water to the faucet for drinking purposes, is provided with a stop and waste cock F′ to shut off the water from said faucet in excessive cold weather to prevent its freezing, and the vertical portion of said pipe is provided with a faucet G′, in order to more rapidly fill the trough A after it has been emptied for cleaning or other causes, and to which a hose may be coupled for washing the apparatus.

The dog-trough C obtains its supply by means of the pipe *e*, connected by a T-coupling with the supply-pipe E.

In order to prevent ice forming in either of the troughs A C, it is essential that the whole body of water should be agitated, and by experiment I have found the point most desirable at which to enter the supply without unnecessarily stirring up the sediment from the bottom is at a point about one-third the depth of the trough from the bottom.

For the purpose of agitation I provide plugs or nipples I, which may be threaded to either of the pipes E′ or *e*, as seen in Fig. 5. These

plugs or nipples have a side orifice *i*, by which means water is made to move in a horizontal course, (indicated by the arrows in Fig. 2,) and striking the sides of the trough moves in a circle therein.

An overflow-pipe J passes centrally from a point near the outlet-pipe *d* of the shaft D, upward through the latter and the pedestal and column, respectively, B B′, where it connects at the proper point with a short pipe K by means of an elbow-joint or quarter-turn coupling L. Said pipe K may have a collar or flange *k*, and may be threaded both to the column B′ and said coupling L, and in order that anything floating on the surface of the water may not enter and stop up the overflow-pipe a hollow detachable cap M (open at its bottom and extending a little below the surface of the water) may be hung by a single screw to the column B′, as seen in the drawings.

An opening *b*′ is formed in the pedestal B at the proper point to carry off the overflow in the smaller trough C, and this is also provided with a cap N, similar to that for the overflow of the larger trough A.

In ordinary mild weather the overflow-pipe E might be dispensed with, but in excessively-cold weather if the pipe were not used the ice might form so rapidly in the parts B′, B, and D as to prevent the passage of the water to the sewer, and thus cause trouble. The overflow for the smaller trough, however, needs no pipe-conductor. A drain *a* is formed in the trough A, for which is provided a hinged cover P.

Having described my improvements, what I claim as new, and desire to patent, is—

1. The combination of an animal watering-trough, a hollow pedestal-support containing the supply and drain pipes and provided with an annular trough near its bottom for smaller animals, the said supply and drain pipes, a branch supply-pipe leading through the upper trough to a faucet located above the same and within a hood mounted upon said trough, and the said hood, all substantially for the purpose set forth.

2. In an animal watering-trough, the combination of an upper and lower trough, their independent supply and drain pipes arranged interiorly, a branch supply-pipe provided with a stop and waste cock, and a faucet for the more rapid filling of the upper trough, said branch pipe leading through said trough to a drinking-faucet located above said trough and within a hood, and the said hood mounted upon said trough, all substantially for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY W. CLAPP.

Witnesses:

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