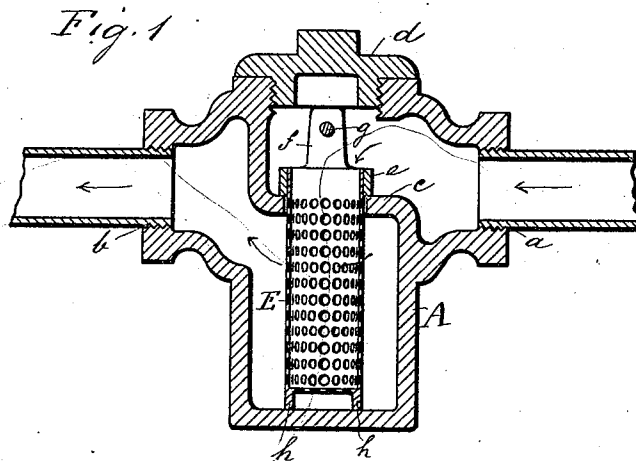
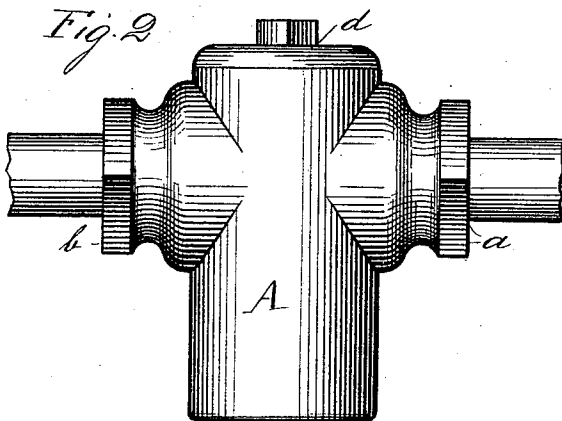
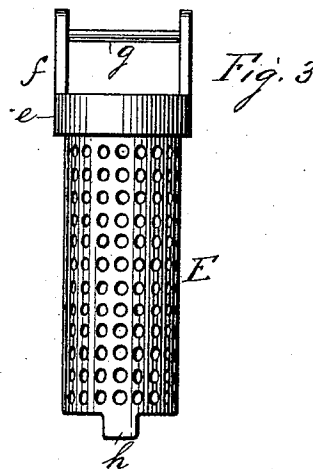


(No Model.)

O. H. & W. M. JEWELL.
STRAINER.

No. 441,667.

Patented Dec. 2, 1890.



Witnesses:
Oscar V. Stoney
Otto Luebke

Inventors:
Omar H. Jewell
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By Wm H. Lotz
their Attorney

UNITED STATES PATENT OFFICE.

OMAR H. JEWELL AND WILLIAM M. JEWELL, OF CHICAGO, ILLINOIS.

STRAINER.

SPECIFICATION forming part of Letters Patent No. 441,667, dated December 2, 1890.

Application filed August 25, 1890. Serial No. 382,964. (No model.)

To all whom it may concern:

Be it known that we, OMAR H. JEWELL and WILLIAM M. JEWELL, citizens of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Strainers, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This our invention relates to strainers applied to water feeding or distributing pipes for separating and collecting therein all more bulky impurities contained in the water; and it has for its object to provide a chamber-piece that may be coupled between two pipe-
15 sections or anywhere to or between the water-course, the same to have inserted a basket-strainer, through which all the water must pass, for detaining therein all such impurities, and which can be readily removed for
20 emptying and cleaning it from time to time of all impurities collected therein; and with these objects in view our invention consists of the novel devices and combinations of devices hereinafter described and specifically
25 claimed.

In the accompanying drawings, Figure 1 represents a longitudinal vertical section through the center of the strainer; Fig. 2, an
30 exterior view of the same, and Fig. 3 an elevation of the basket-strainer detached.

Corresponding letters of reference in the several figures of the drawings designate like parts.

35 A denotes the casing, being a cylindrical chamber provided on diametrically-opposite sides with screw-nozzles *a* and *b* for connecting the pipe-sections, the one *a* for water to enter and the one *b* for water to escape.
40 These screw-nozzles *a* and *b* being near one end of the cylindrical chamber A, said chamber is divided interiorly by a diaphragm *c*, the nozzle *a* communicating with the chamber above such diaphragm *c* and the nozzle
45 *b* communicating with the chamber below such diaphragm *c*. This diaphragm *c* is centrally bored and faced, and the top end of the chamber-piece is bored out to provide an opening somewhat larger than the bore of
50 diaphragm *c* and is screw-tapped for closing it by a screw-plug *d*. A cylindrical basket

E, made of thin finely-perforated metal, with a perforated bottom, is of a diameter to enter the bore of diaphragm *c*, and has a collar or flange *e* to its upper end, that will provide
55 a seat or shoulder to the upper face of diaphragm *c*. This collar or flange *e* has to its diametrically-opposite upper edges two ears *f*, connected by a cross-rod *g*, that forms a handle on which to lift the strainer-basket
60 out of the casing A after removing the screw-plug *d*. When the strainer-basket E is inserted into the casing A and the screw-plug *d* has been secured, the upper ends of ears *f* will butt against the lower rim of the screw-
65 plug, thereby holding the collar or flange *e* rigidly to bear upon the upper face of the diaphragm *c*. The strainer-basket E is also provided at its lower end with two or more foot-lugs *h*, that will rest upon the bottom of
70 the chamber of casing A for providing an additional support to such strainer-basket E and release the collar or flange *e* of part of the strain caused by the resistance to the water
75 with passing through the perforations in such strainer-basket, particularly after impurities have accumulated therein.

It will be readily seen that the water entering through nozzle *a* will first enter the strainer-basket E and must pass through the perfora-
80 tions thereof before it can escape through nozzle *b*, whereby all impurities larger than the perforations will be detained in such strainer-basket E, which from time to time can be removed by unscrewing the screw-
85 plug *d* and then lifting out the strainer-basket, to be readily replaced after cleaning it. This removal and cleaning must of course be attended to during the time the flow of
90 water has been stopped.

The casing A may be made of any desired length for the desired length of strainer-basket E. It is generally calculated that the total area of all the perforations therein is six times the area of the water inlet or outlet
95 through nozzles *a* and *b*, so that such strainer-basket will not readily be choked, but that even with being nearly filled with impurities still sufficient openings will be left for the volume of water to pass through the same
100 without perceptible obstruction.

This strainer may be connected either to

the suction-pipe or to the discharge-pipe of a pump or anywhere to a distributing-pipe in a position where it can be readily reached for frequent removal and cleaning of the strainer-basket.

What I claim is—

1. The combination, with a cylindrical casing having on diametrically-opposite sides a water inlet and an outlet nozzle separated by a diaphragm and a screw-plug to one end, of a strainer-basket removably inserted through the screw-plug opening and through the bore of the diaphragm and having a flange or collar *e*, with ears *f*, providing bearing-shoulders against the diaphragm and under the screw-plug, substantially as set forth.

2. The combination, with casing A, having

nozzles *a* and *b*, diaphragm *c*, and screw-plug *d*, of strainer-basket E, having flange or collar *e* and ears *f*, with cross-rod *g*, all substantially as set forth.

3. The combination, with casing A, having nozzles *a* and *b*, diaphragm *c*, and screw-plug *d*, of strainer-basket E, having flange or collar *e*, ears *f*, with cross-rod *g*, and feed-lugs *h*, all substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

OMAR H. JEWELL.

WILLIAM M. JEWELL.

Witnesses:

WM. H. LOTZ,

OTTO LUEBKERT.