

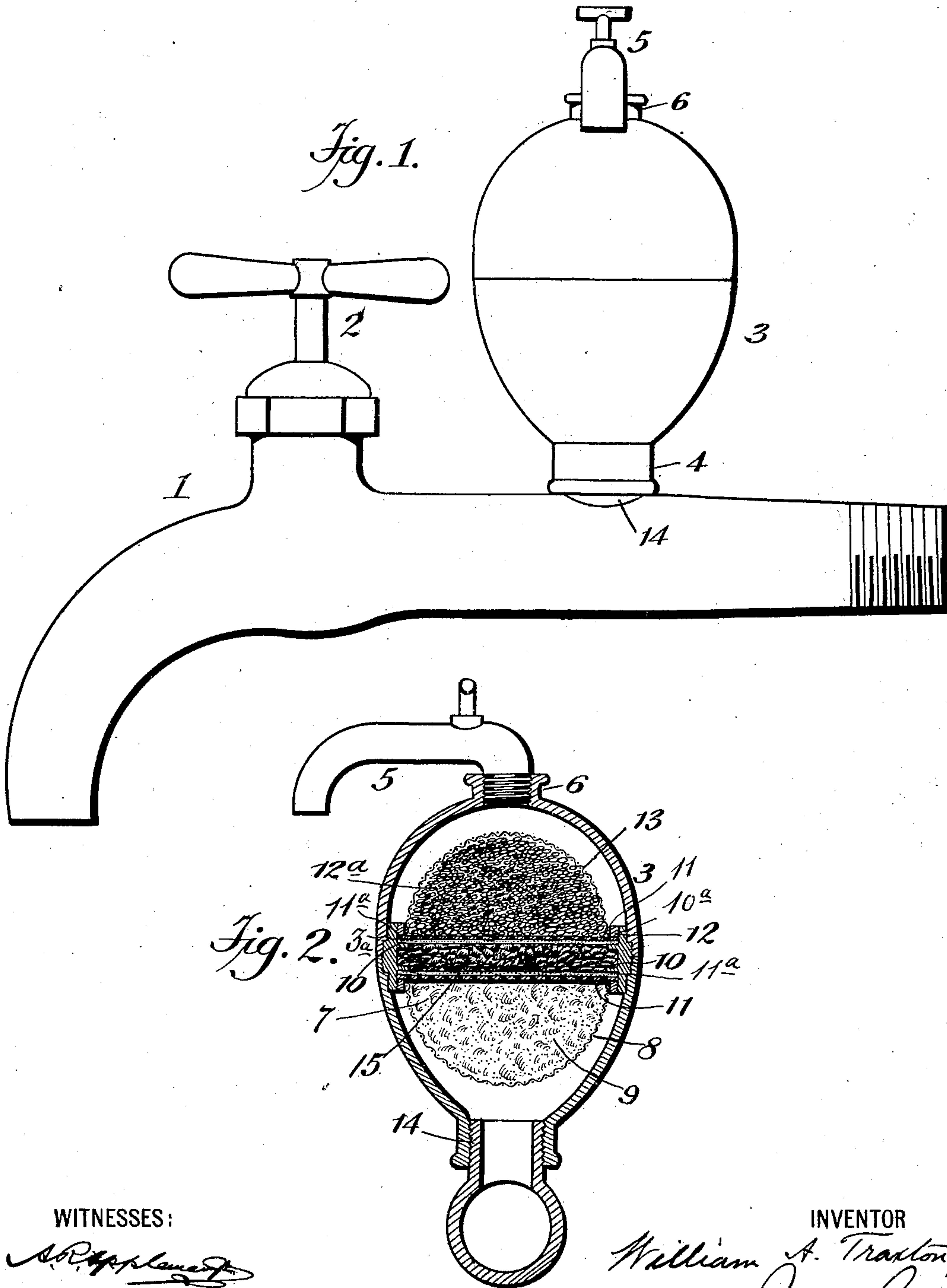
No. 712,868.

Patented Nov. 4, 1902.

W. A. TRAXTON.
FILTERING FAUCET.

(Application filed May 9, 1902.)

(No Model.)



WITNESSES:

W. A. Traxton
Hartwell P. Heath

INVENTOR

William A. Traxton,

BY

J. R. Little
his ⁿ ATTORNEY.

UNITED STATES PATENT OFFICE.

WILLIAM A. TRAXTON, OF NEW YORK, N. Y.

FILTERING-FAUCET.

SPECIFICATION forming part of Letters Patent No. 712,868, dated November 4, 1902.

Application filed May 9, 1902. Serial No. 106,558. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. TRAXTON, a subject of the King of Great Britain, residing at New York, in the county and State of New York, have invented certain new and useful Improvements in Filtering-Faucets, of which the following is a specification.

This invention relates to filtering-faucets, and has for its object to provide a device of the class described which will possess points of advantage in convenience, simplicity, inexpensiveness, effectiveness, and general efficiency.

Another object of the invention is to provide a device of the class described which can be attached to a faucet without interference with the normal operation of said faucet and will be brought into operation only when desired.

Another object of the invention is to provide a device of the class described, through which when in operative position the water will flow upward, whereby there will be, except when water is being drawn through the filtering-faucet, a constant drain from said filtering-faucet, so that no stale matter, impurities, or other objectionable objects can remain in the filtering-faucet.

In the drawings, Figure 1 is a side elevation of a faucet embodying my invention. Fig. 2 is a central vertical section of the filter attachment.

Corresponding parts in both figures are denoted by the same reference characters.

Referring to the drawings, 1 designates a faucet of the ordinary form, such as is usually used for drawing water from a suitable source of supply. My invention comprises filtering means connected with the faucet 1, intermediate its point of attachment with the water-supply pipe, (not shown,) and the valve 2, controlling the flow of water through the faucet 1, and is preferably positioned so that the flow of water through such filtering means will be upward. In the preferred form such filtering means consists of a casing 3, provided at its lower end with suitable means of attachment to the faucet 1, which means are herein shown as an interiorly-screw-threaded neck 4 and at its upper end with means for the attachment of a suitable faucet 5, which means are shown as an interiorly-screw-

threaded neck 6. Within the casing 3 I place suitable filtering material. In the preferred form the casing 3 is substantially egg-shaped and composed of an upper and lower portion screw-threaded interiorly at their upper and lower ends, respectively. An annular ring 3^a is provided interiorly with spaced annular flanges 10, projecting at right angles to the interior surface of said ring 3^a, and with screw-threads 10^a, intermediate the sides of said ring 3^a, and the flanges 10. The ring 3^a is exteriorly screw-threaded complementary to the screw-threads in the upper and lower portions of the casing 3. Disks 11^a, preferably of silk, rest upon the flanges 10 and are retained in place by perforated disks 11, preferably of metal. Cages 8 and 13, composed of suitable foraminous material, preferably wire-gauze, and containing a suitable filtering material, such as cellulose 9 in the lower and gravel 12^a in the upper, are secured in annular rings 12, exteriorly screw-threaded complementary to the interior of the ring 3^a and adapted to be screwed into the ring 3^a against the disks 11. The faucet 1 is provided on its upper surface, intermediate the end adapted for connection with the water-supply pipe (not shown) and the valve 2, with a nipple 14, exteriorly screw-threaded complementary to the screw-threaded neck 4.

In assembling the parts the cellulose 9 is first placed in the cage 8, and a disk 11^a, of silk, having been placed on one of the flanges 10 and a perforated metallic disk 11 over the silk disk 10^a the ring 12, carrying the cage 8, is screwed in the ring 3^a and down on the disk 11. The ring 3^a is now turned over and the space between the flanges 10, filled with charcoal 15. Another silk disk 11^a is then placed on the other flange 10, over the charcoal 15, and another perforated metallic disk 11 having been placed on such silk disk 11^a the ring 12, carrying the cage 13, which has previously been filled with gravel 12^a, is screwed into the ring 3^a and down on the last-mentioned disk 11. The upper and lower portions of the casing 3 are now screwed onto the rings 3^a and the neck 4 screwed upon the nipple 14. The faucet 5 is now screwed into the neck 6, its spout turned at right angles to the faucet 1, and the device is ready for use.

It is evident that owing to its position the filtering-faucet will not in any way interfere with the ordinary use of the faucet 1; that the pressure of the water in the filtering-faucet being upward will not be so great as if the filtering-faucet were placed at the mouth of the faucet 1; that the filtering-faucet will only be used to filter the water for drinking purposes and not to filter all the water which passes through the faucet 1, whereby the filtering-faucet will last longer and keep cleaner; that the filtering-faucet will not require to be removed and reversed in order to clean it, but will practically keep itself clean, there being a constant drain therefrom when it is not in use, by means of which drain stale matter or refuse is prevented from accumulating in the filtering-faucet, and that such a filtering-faucet may be provided with larger area of filtering material and applied to any faucet—those for hot and cold water or water-coolers or other devices.

The operation and advantages of my invention will be readily appreciated and understood. The parts being in the position illustrated in Fig. 1 form a composite whole, which can be manufactured and sold as a separate article of manufacture, and when the faucet 1 is attached to the water-supply pipe form together an ordinary faucet for controlling the flow of water and a filtering-faucet operable only when filtered water is required. Such a filtering-faucet will be a great convenience to persons whose living accommodations are limited and who are forced to condense into the smallest compass household appliances.

I do not desire to be understood as limiting myself to the details of construction and arrangement as herein described and illustrated, as it is manifest that variations and modifications may be made in the features of construction and arrangement in the adaptation of the device to various conditions of use without departing from the spirit and scope of my invention and improvements. I therefore reserve the right to all such varia-

tion and modification as properly fall within the scope of my invention and the terms of the following claims.

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

1. The combination with a water-faucet, of a filter attachment comprising a casing consisting of two parts threaded interiorly adjacent to their point of connection, an exteriorly-threaded ring connecting the parts of the casing and provided with parallel annular flanges, disks supported on said flanges, filtering material between said disks, and cages secured to the ring above and below said disks.

2. The combination with a water-faucet, of a filter attachment comprising a casing consisting of two parts threaded interiorly adjacent to their point of connection, a ring threaded both interiorly and exteriorly and provided with parallel annular flanges on its inner face, disks supported on said flanges, filtering material between said disks, cages containing filtering material above and below said disks, and threaded rings for securing said cages within the ring which connects the two parts of the casing.

3. In a device of the class described, a two-part casing, an annular ring provided interiorly with spaced annular flanges and with means of connecting the two parts of the casing, charcoal between said flanges, silk disks on said flanges, perforated rigid disks on said silk disks, a cage containing cellulose secured in said ring over one of said rigid disks, a cage containing gravel secured in said ring over the other rigid disk, and means for controlling the flow of water through such filter.

In testimony whereof I have signed my name in the presence of the subscribing witnesses.

WILLIAM A. TRAXTON.

Witnesses:

JOHN KEIM, Jr.,
J. J. WHITTLE.