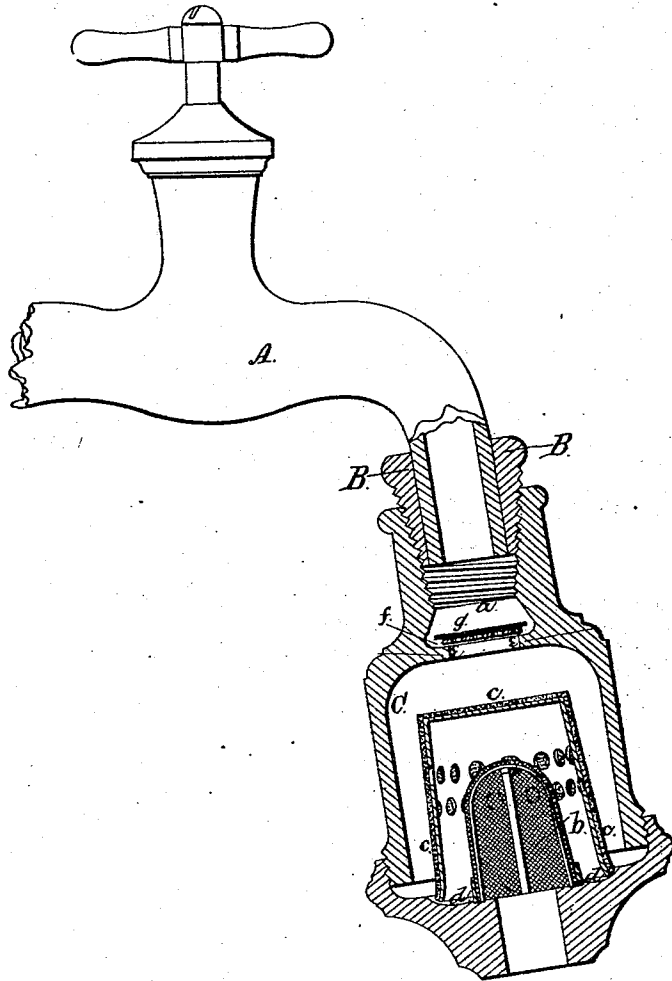


North & Thompson

Water Cock.

Nº 90,015.

Patented May 11, 1869.



Witnesses.

Harry King
Leopold Overb

Inventor.

Henry S. North
Thomas Thompson
per Alexander Mason
Att'y

United States Patent Office.

HENRY S. NORTH AND THOMAS THOMPSON, OF MIDDLETOWN, CONNECTICUT,
ASSIGNORS TO THEMSELVES AND DANIEL R. BENHAM.

Letters Patent No. 90,015, dated May 11, 1869.

IMPROVEMENT IN WATER-COCKS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, HENRY S. NORTH and THOMAS THOMPSON, of Middletown, in the county of Middlesex, and in the State of Connecticut, have invented certain new and useful Improvements in Filters and Attachment for Water-Cocks; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of our invention consists in the mode of attaching a filter or hose to a smooth-bib cock, by means of an India-rubber sleeve, which, at the same time, serves as a self-packing; also, in the construction and general arrangement of a filter, all of which will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains, to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawings, which form a part of this specification, and which represent a side view, part in section, of our invention.

A represents a water-cock, made in any of the known and usual ways, with a smooth bib, that is, one on which there are no screw-threads made to fasten a hose or filter.

It is well known that a large majority of the water-cocks made and in use have no screw-threads upon the bib for a hose or filter-attachment, and our invention is expressly designed for these kinds of water-cocks.

An India-rubber sleeve or nut, B, is placed on or around the bib of the water-cock, said sleeve being provided with screw-threads on the outside.

The chamber *a* of the filter C, where it is attached to the cock, is made tapering, and provided, on its inside, with screw-threads, of size corresponding with the threads on the rubber sleeve.

The sleeve B, being made of rubber, is, consequently, flexible, and can be attached to cocks of various sizes, and, as we make them tapering, it will admit of a filter being attached when the bibs of the cocks vary considerably in size.

The chamber of the filter also being tapering, the further it is screwed up, the more firmly it will bind the rubber sleeve to the bib of the cock.

This mode of coupling is also self-packing. As the sleeve is made of rubber, it packs itself around the smooth bib of the cock and the screw of the filter, so that not a drop of water can leak around either. In like manner, a hose can be attached to the smooth bib of a water-cock.

The filter C consists of two strainers, as follows:

The lower strainer, *b*, is made in the shape of a dome, and placed over the lower opening in the filter. By making the lower strainer of this shape, we obtain a greater number of meshes for the water to pass through than by the common flat strainers.

Over the lower strainer, *b*, we place a cap, *c*, made of sheet-brass, tin-plate, or other suitable material, perforated on the sides with a number of holes, and covered with cloth or its equivalent. This keeps the sand from washing into the meshes, and clogging the lower strainer, and also serves to protect and keep it from being crushed down by the pressure of water and sand upon it when in use.

There is an annular groove or recess, *d*, around the discharge-hole, at the lower part of the filter C, in which the strainer is placed, and firmly secured by filling it with water-proof cement, or other suitable means.

In the upper part of the filter, below the chamber *a*, is a shoulder or circular flange, *e*, on which the upper strainer rests.

This strainer consists of a circular perforated plate, *f*, and a circular piece of wire cloth, *g*, which can be easily removed.

To charge the filter with sand or other filtering-material, remove the rubber sleeve B, which we make a part of the filter, by unscrewing and taking it out of the chamber *a*. Then, with the point of a knife or other suitable instrument, the upper strainer can be taken out, and the filtering-material poured in, after which the upper strainer must be put back to its place.

To clean the filter out, remove, in the same way, the upper strainer, and loosen the sand, &c. Then reverse the filter, and hold the discharge-hole to the water-cock; and, by letting the water run in that way, it will loosen the sand from the cap or shield *c*; and, by blowing through the discharge-hole, and thoroughly washing and rinsing it, all the old filtering-material may be entirely cleaned out of it.

Having thus fully described our invention,

What we claim as new, and desire to secure by Letters Patent, is—

1. An India-rubber sleeve or nut, with a hole through its centre, and screw-threads on the outside, for the purpose of attaching a water-cock filter, or coupling a hose to a water-cock with a smooth bib, substantially as herein set forth.

2. The filter C, constructed, as described, with the tapering chamber *a* at the upper end, and an annular groove, *d*, around the discharge-hole at the lower end, in combination with the rubber sleeve or nut B, for the purpose of attaching the filter to a water-cock with smooth bib, substantially as herein set forth.

In testimony that we claim the foregoing, we have hereunto set our hands, this 20th day of August, 1868.

HENRY S. NORTH.
THOMAS THOMPSON.

Witnesses:

WM. T. ELMER,
JOHN L. S. ROBERTS.