

P. NUSSER.
QUICK ACTION FAUCET OR BIB COCK.
APPLICATION FILED JUNE 13, 1910.

1,036,312.

Patented Aug. 20, 1912.

Fig I

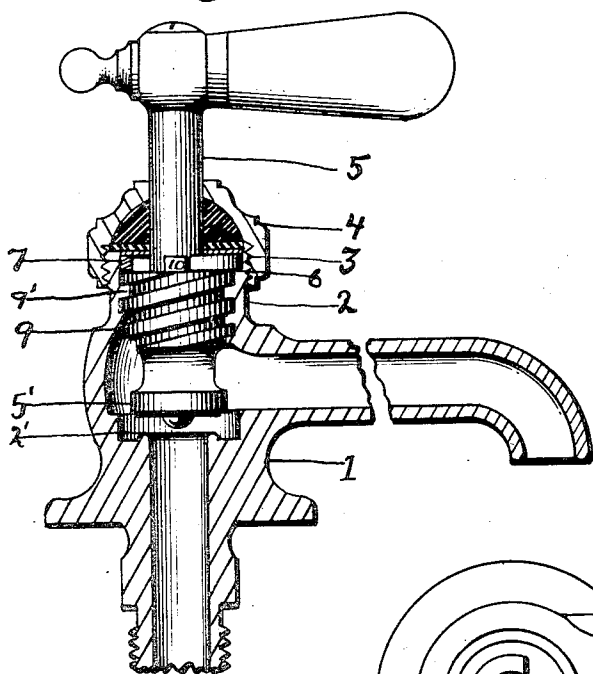


Fig III

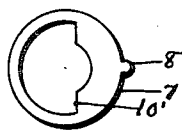
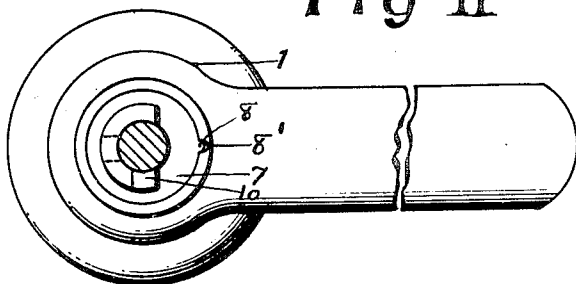


Fig II



WITNESSES

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UNITED STATES PATENT OFFICE.

PETER NUSSER, OF CLEVELAND, OHIO, ASSIGNOR TO THE RICKERSBERG BRASS COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

QUICK-ACTION FAUCET OR BIB-COCK.

1,036,312.

Specification of Letters Patent.

Patented Aug. 20, 1912.

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To all whom it may concern:

Be it known that I, PETER NUSSER, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Quick-Action Faucets or Bib-Cocks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

This invention relates to compression bib-cocks, but involves a construction that is adapted and applicable to other cocks, and has for its object the construction of a compression bib cock or a stop cock of like nature, which has all the advantages of what is known as a fractional turn or quarter turn valve action, whereby the valve of the bib or stop cock is turned full open or full closed upon a quarter turn of the valve stem.

Another object of this invention is to obviate expense in constructing, and also to prevent any sticking or cramping when the valve is full open, and to allow full closure of the valve regardless of the wear of the same or its seat.

The invention consists in the peculiar construction, all of which will be hereinafter fully set forth and claimed.

In the accompanying drawings I have illustrated this invention as applied to a compression bib cock although it is obvious that the invention is applicable to other types of cut-offs for water distribution, and in the accompanying description I have set forth the invention as it is illustrated in the drawings.

Figure I, illustrates a compression bib cock embodying my invention, showing the same in a vertical section, and illustrating the valve in opened condition. Fig. II, is a top plan view of the bib cock, taking a section through the stem with the cap and handle removed, showing the means employed for regulating the extent of movement in the opening of the valve. Fig. III, illustrates a removable washer, which is placed in the upper portion of the bib or stop cock, and which is engaged by a lug upon the valve stem.

The device as illustrated is a bib cock of the compression type, adapted for use in connection with wash basins or sinks, but it

is immaterial so far as the features of the invention are concerned as to the identical construction or use to which this invention is put.

1, represents the casing which is provided with the usual outlet and inlet, valve chamber and valve seat. The valve chamber 2, is threaded at its upper portion as at 3, whereby the cap 4, which surrounds and packs the stem 5, may be adjusted. At the upper end of the valve chamber it is counter-bored or shouldered as at 6, for the reception of a removable and reversible washer 7. This washer 7, is preferably formed as illustrated in Fig. III, and is so located in the upper portion of the valve chamber as not to rotate, being held in position in any suitable manner, such for instance as the offset 8 on the washer which engages with the recess 8' at the upper portion of the chamber. This method of constructing is most economical and hence is employed, other means, however, for retaining the washer, such as irregularity of shape, or pins or screws or other devices may be employed, which is obvious to those skilled in the art.

The valve stem 5 has the usual valve 5', and valve seat 2' is provided on which said valve seats itself for the purpose of closing the valve. For the purpose of operating the valve I provide a quick acting screw 9, operating in the thread portion 9', in the valve chamber, so that a quarter turn of the stem will throw the valve fully open as is illustrated in Fig. I, and hence the quarter turn in reverse direction will fully close the valve.

In order to determine the full open position of the valve and to check or stop the throw of the valve stem and handle, I provide the washer 7, which is provided with a shoulder or stop 10' adapted to be engaged by a lug 10 secured to the stem 5. This regulates the full open position. The full closed position is determined by the seat of the valve. By providing a washer 7, in connection with the lug 10, I obtain a positive stop which does not depend upon the cramping of the threaded portion against an upper washer, and I also obtain an action which is positive in opening and in closing, all that is necessary being to firmly throw the handle and press it in either direction without any danger of cramping. It will also be seen

that the objection to the Fuller bib, as far as pounding and leakage are concerned is obviated by this construction, and that the assembling of the parts is such that any ordinary workman or person can easily take the same apart and again adjust the parts in proper relation. The washer 7, is constructed or provided with two shoulders 10', but only one shoulder being in use; this construction being made to allow the washer 7, to be placed in position without chance of mistake as would be the case if the washer had but one shoulder.

In illustrating and describing this invention I have shown one means of carrying forth my invention, but I do not wish to be limited to this mode of applying, inasmuch as changes may be made regarding the details of mechanism, and the same would be embodied in this invention.

What I claim is:

1. In a device of the character described, in combination with a casing provided with a valve seat, a valve stem, said valve stem having a threaded portion threaded in said casing, and having a valve adapted to cooperate with the seat, the pitch of the thread on the valve stem being such as to throw the valve full open or full shut upon approximately a quarter turn of the valve stem; a

washer in a predetermined location at the upper portion of the casing, said washer having a projection on its outer periphery and two inner shoulders 10' adapted to engage with the valve stem to stop the further rotation of said stem when the valve is in the predetermined full open position, substantially as and for the purpose set forth.

2. In a faucet or bib cock, the combination of a casing provided with a valve seat, a valve stem having a threaded portion threaded in said casing and having a valve adapted to cooperate with the seat, a washer in a predetermined location at the upper portion of the casing having on its outer periphery means for preventing its rotation in relation to the casing and having an inner shoulder 10', adapted to engage with the valve stem to stop the further rotation of said stem when the valve is in the predetermined full open position.

Signed at Cleveland in the county of Cuyahoga and State of Ohio this 1st day June 1910.

PETER NUSSER.

Witnesses:

JOHN J. DONNELLY,
FRANK C. GREGG.