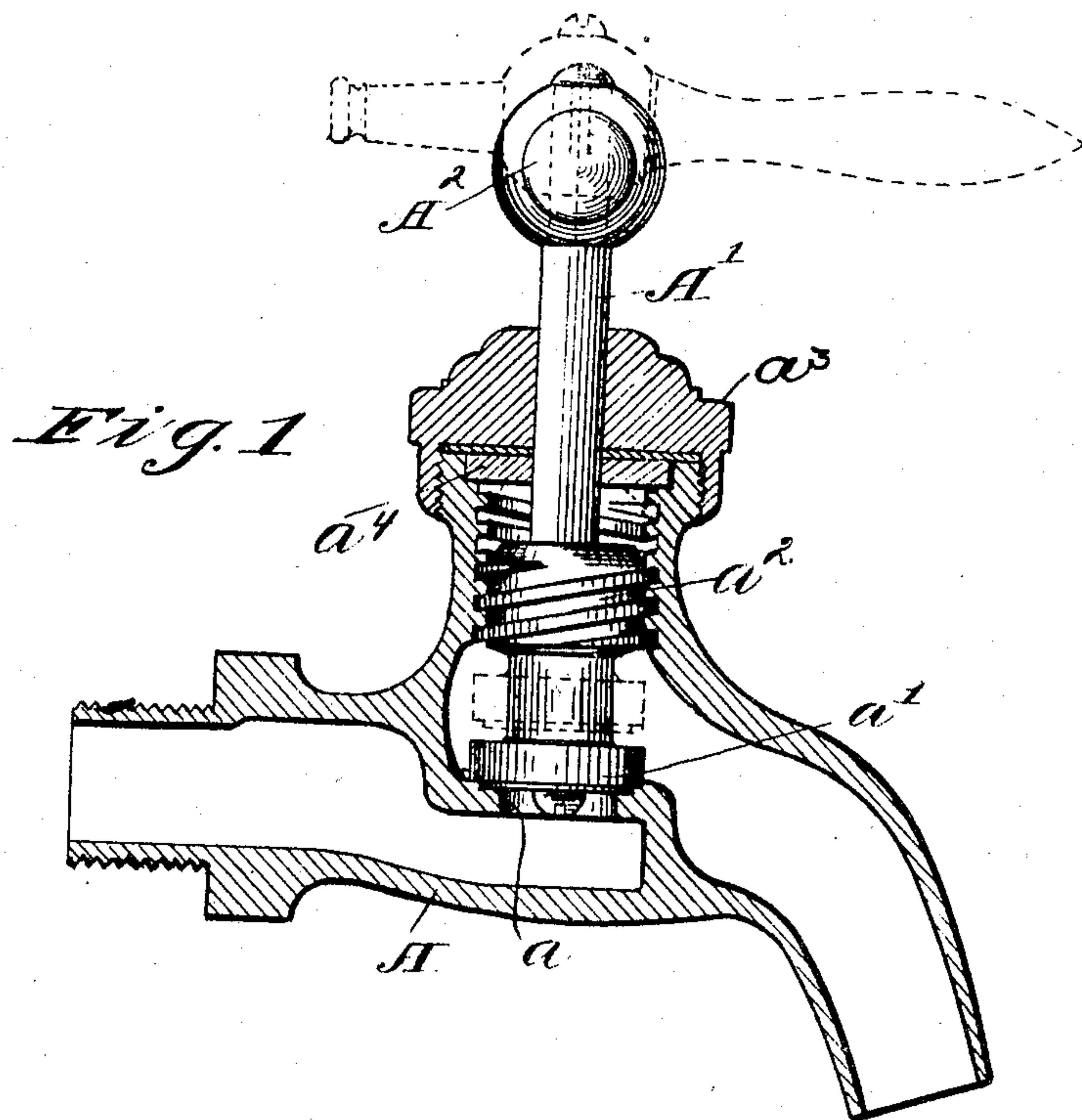


J. N. MORTIMER & E. L. STRAUSS.  
COMPRESSION BIB.

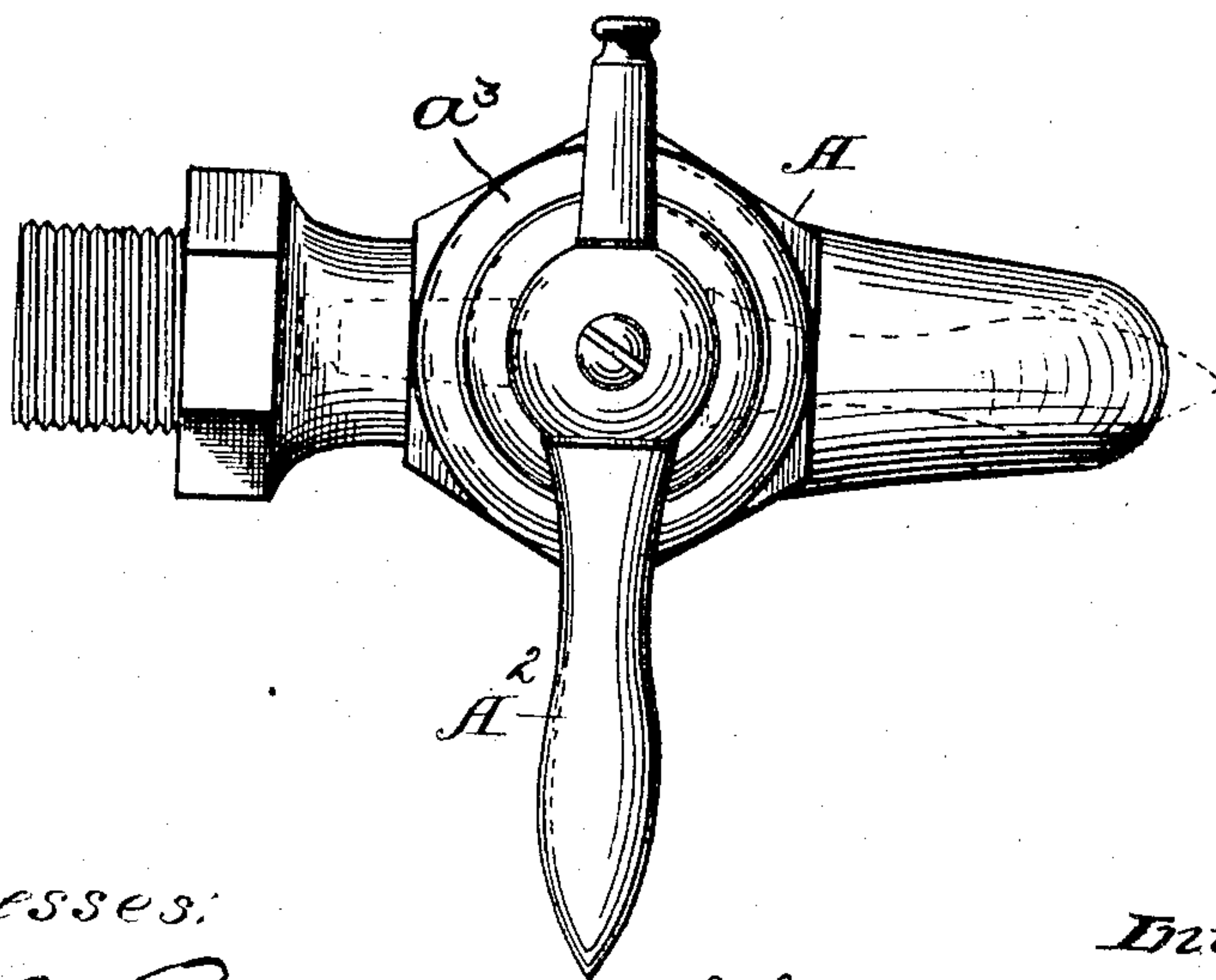
APPLICATION FILED JAN. 11, 1909.

944,457.

Patented Dec. 28, 1909.



*Fig. 2*



Witnesses:

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# UNITED STATES PATENT OFFICE.

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## COMPRESSION-BIB.

944,457.

Specification of Letters Patent.

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*To all whom it may concern:*

Be it known that we, JOHN N. MORTIMER and EMILE L. STRAUSS, citizens of the United States, and residents of Cleveland, county of Cuyahoga, and State of Ohio, have jointly invented a new and useful Improvement in Compression-Bibs, of which the following is a specification, the principle of the invention being herein explained and the best mode in which we have contemplated applying that principle, so as to distinguish it from other inventions.

The present invention, while relating specifically to a compression bib, involves features of construction that are generally applicable to devices of the same character.

The object of the invention is the provision of a bib or like device, wherein the valve will be thrown full open or full shut with a fractional turn of the stem (approximately a quarter turn) such as is required to operate a Fuller cock.

To the accomplishment of the foregoing and related objects, said invention consists of the means hereinafter fully described, and particularly pointed out in claims.

The annexed drawing and the following description set forth in detail certain mechanism embodying the invention, such disclosed means constituting, however, but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawing:—Figure 1 is a vertical sectional view of a bib, wherein our improvement has been incorporated, and Fig. 2 is a plan view of the same.

The specific device chosen for illustrative purposes is a sink bib of the compression type, as will be obvious from an inspection of the drawing just referred to, but it will be understood that it is immaterial so far as the inventive feature of the device is concerned, whether such device be in form a sink bib, a basin cock, bath cock or other like fixture. Referring, then, to Fig. 1, such bib will be seen to comprise a casing A of usual form provided with a transversely located valve seat  $a$ , to which in turn is fitted a valve  $a'$  borne by a valve stem  $A'$  that is threaded in the upper portion of the casing. The intermediate threaded portion  $a^2$  of the stem is enlarged so as to form in effect a cylindrical barrel and the thread thereon is made double and of such a pitch that a fractional turn of the stem, as has been in-

dictated, will suffice to throw the valve from its full open to its full shut position, and vice versa. All the advantages of Fuller work are thus secured without using the cumbersome cam or eccentric that forms a feature of the Fuller cock, which by reason of the increased number of parts, is subject to excessive wear. The "water hammer" of the latter is likewise obviated.

Located in the upper portion of the casing between the enlarged stem portion  $a^2$  and the cap  $a^3$  that closes the casing, is a plate  $a^4$ , the thickness of which is gaged to exactly limit or stop the rotation of the stem  $A'$  when the valve has been raised to its full open position. An exact quarter turn effect is thus secured; indeed, in the manufacture of the device, the stem is fitted in the casing, and then secured in place before its upper end is squared off to receive the actuating handle  $A^2$ . The sides of the portion thus squared off will thus be seen to properly aline in both the open and closed positions in question.

In Figs. 1 and 2, the handle is shown (in full lines) as lying transversely of the casing when the valve is closed, and as alined therewith (in dotted lines) when the valve is open. The operation of the device will hence be quite analogous to that of Fuller work, as has been already indicated without, however, embodying any of the detracting features of the latter, which are tolerated merely because of the desirability of having a valve that will open with a very small rotative movement of the handle.

Other modes of applying the principle of our invention may be employed instead of the one explained, change being made as regards the mechanism herein disclosed, provided the means stated by any one of the following claims or the equivalent of such stated means be employed.

We therefore particularly point out and distinctly claim as our invention:—

1. In a device of the character described, the combination of a casing provided with a valve seat, a valve-stem, said valve-stem having an intermediate enlarged portion threaded in said casing and bearing a valve fitted to such seat, the pitch of the thread on said stem being such as to throw said valve full open, or full shut, upon approximately a quarter turn thereof, and a member disposed to engage the upper face of such en-



larged portion, said member being of a thickness to stop further rotation of said stem when the valve is in its full open position.

2. In a device of the character described, 5 the combination of a casing provided with a valve seat, a valve-stem, said valve-stem having an intermediate enlarged portion threaded in said casing and bearing a valve fitted to such seat, the pitch of the thread on said 10 stem being such as to throw said valve full open, or full shut, upon approximately a quarter turn thereof, and a plate disposed

between the upper face of such enlarged portion of said stem and the casing, such plate being of a thickness to stop further rotation of said stem when such valve is in its full open position. 15

Signed by us this 23rd day of December, 1908.

JOHN N. MORTIMER.  
EMILE L. STRAUSS.

Attested by—

CHRISTINE E. ARNS,  
JNO. F. OBERLIN.