

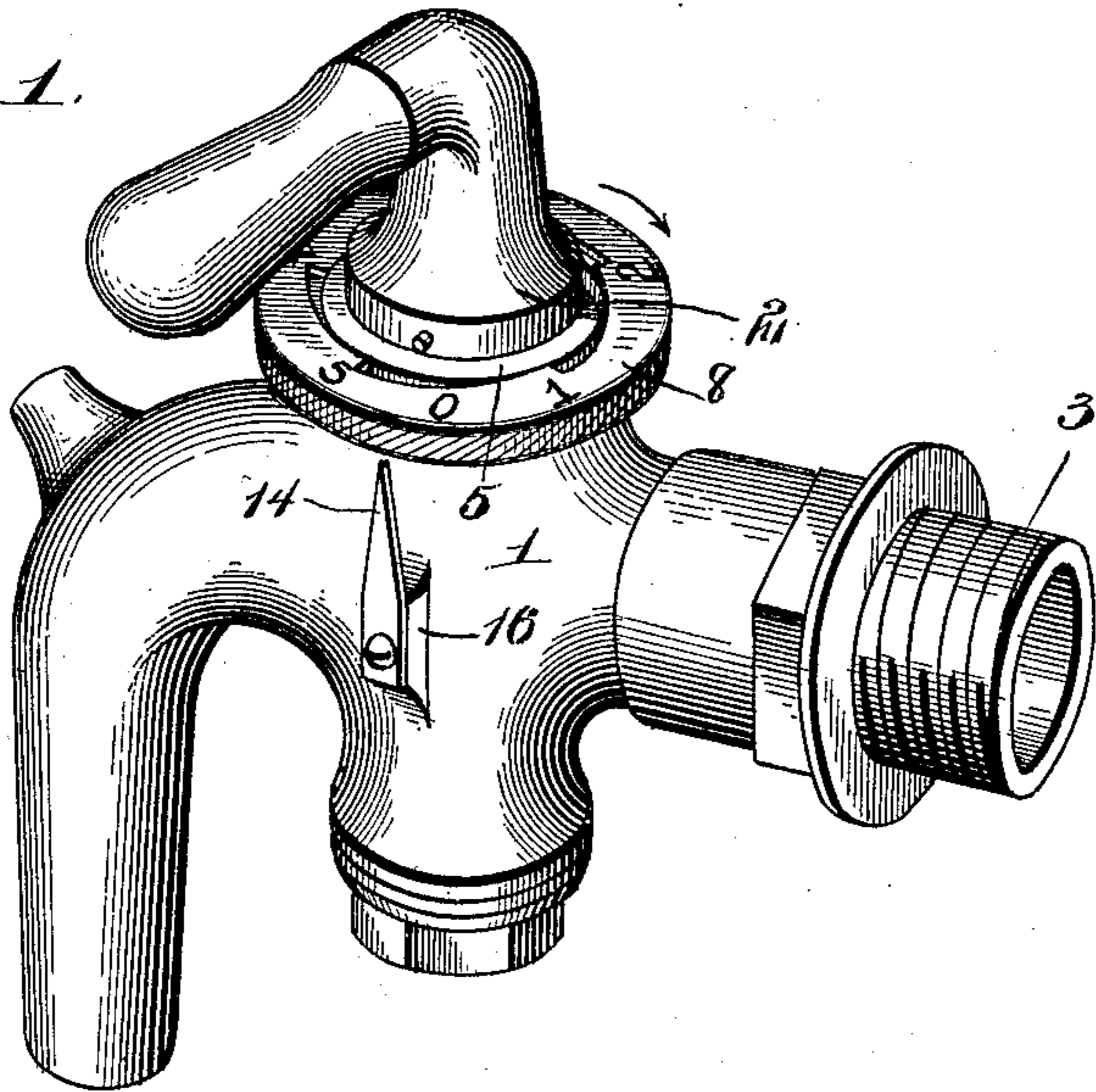
No. 757,072.

PATENTED APR. 12, 1904.

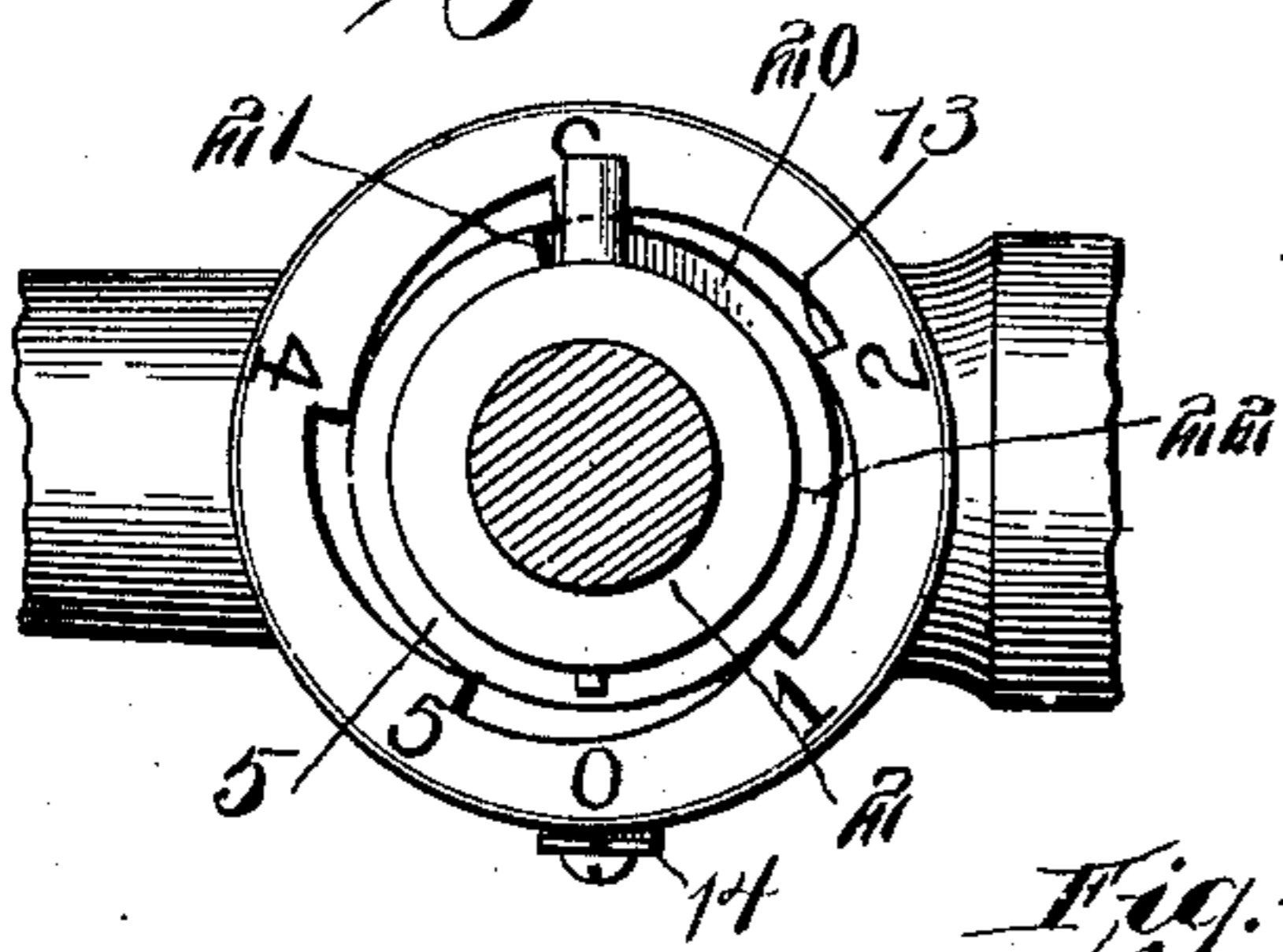
J. J. TOKHEIM.  
FAUCET ATTACHMENT.  
APPLICATION FILED AUG. 10, 1903.

NO MODEL.

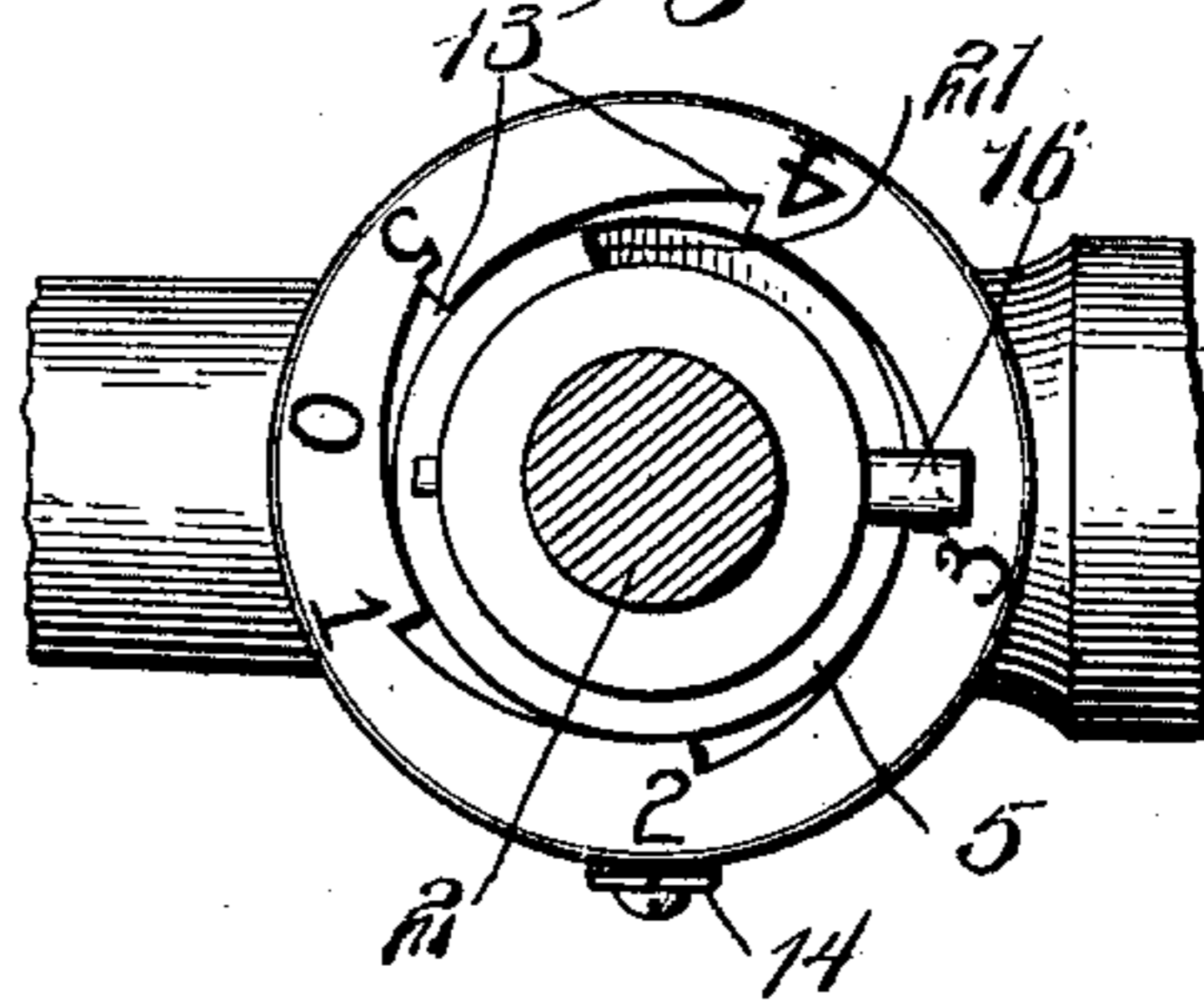
*Fig. 1.*



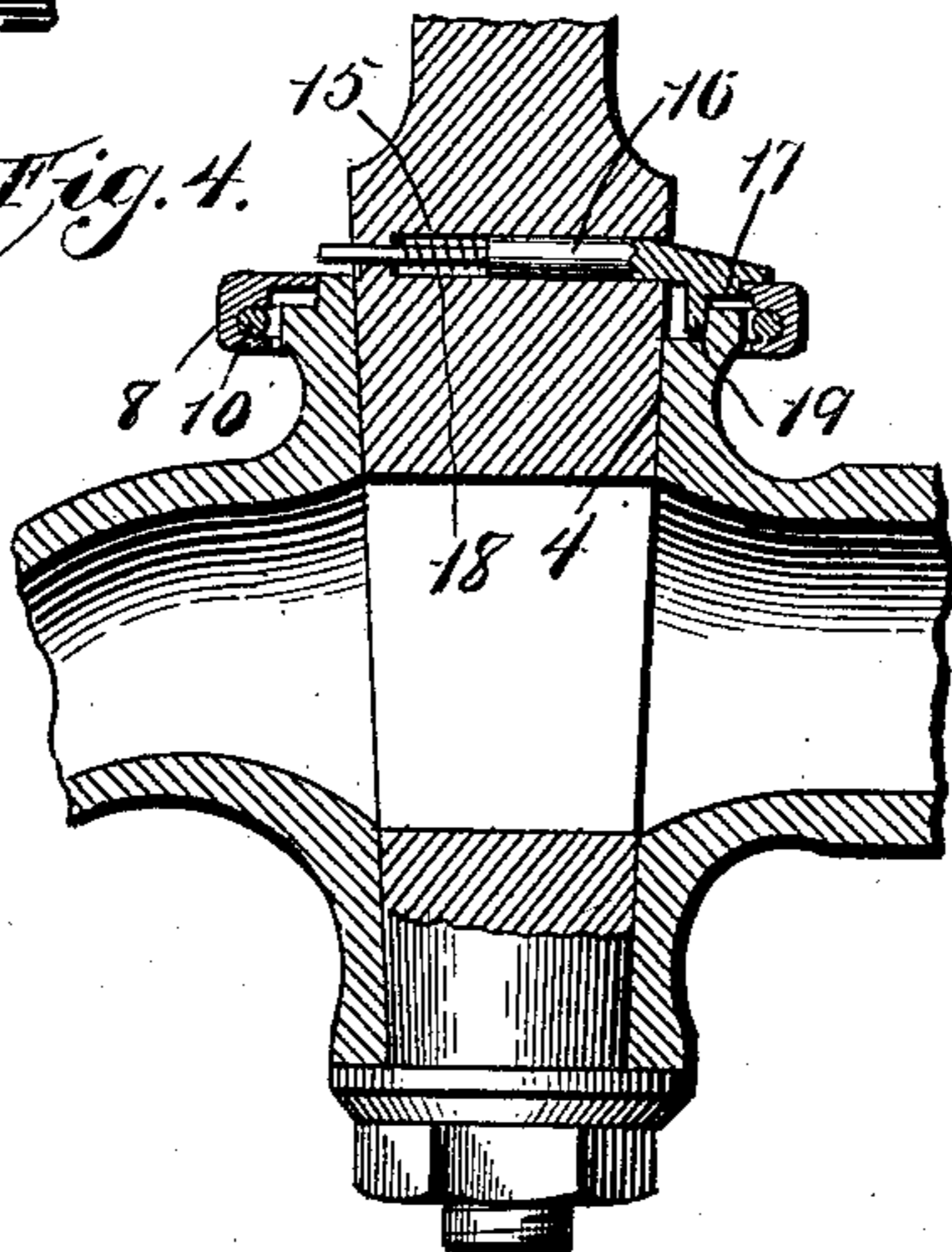
*Fig. 2.*



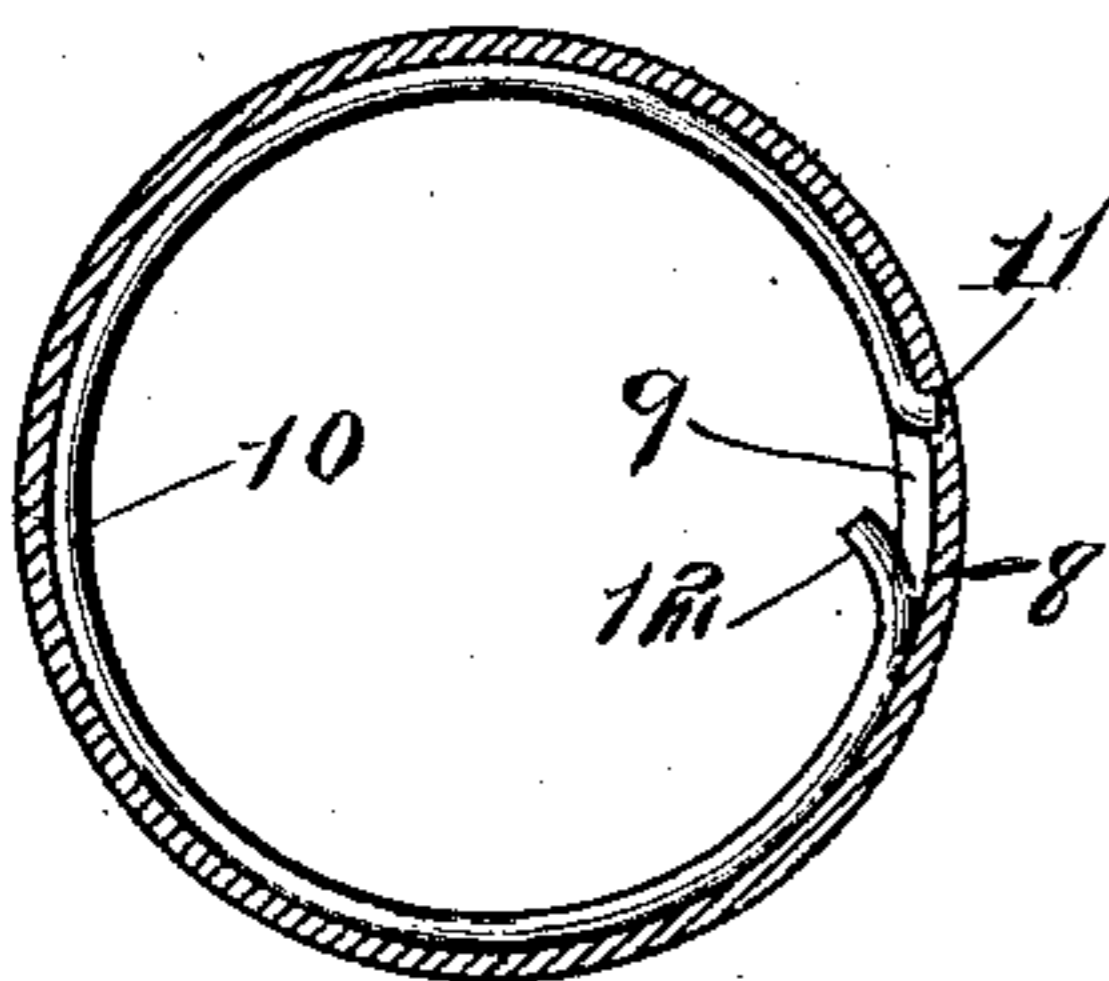
*Fig. 3.*



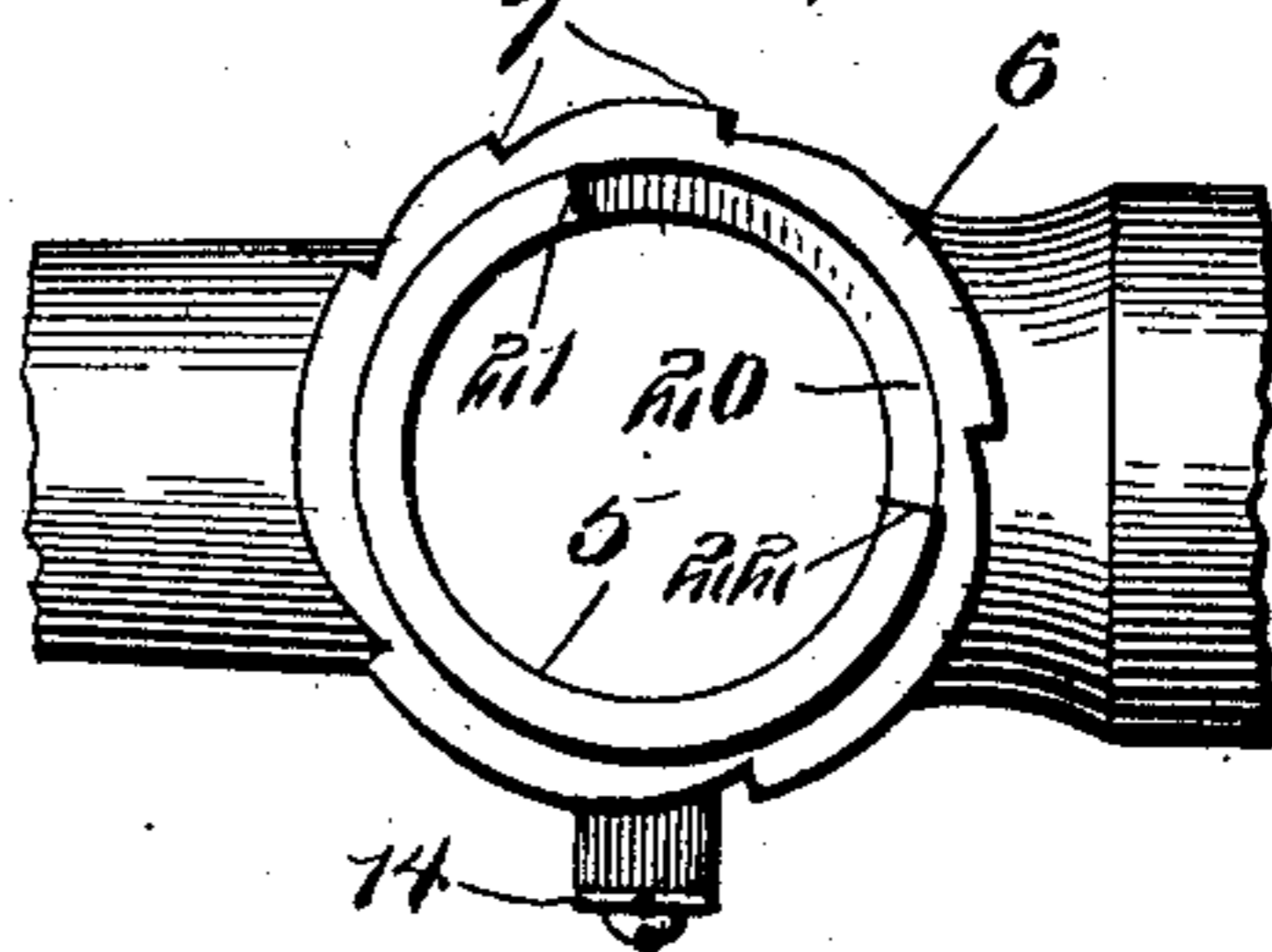
*Fig. 4.*



*Fig. 5.*



*Fig. 6.*



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHN J. TOKHEIM, OF CEDAR RAPIDS, IOWA.

## FAUCET ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 757,072, dated April 12, 1904.

Application filed August 10, 1903. Serial No. 169,013. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN J. TOKHEIM, a citizen of the United States, residing at Cedar Rapids, in the county of Linn and State of Iowa, have invented a new and useful Faucet Attachment, of which the following is a specification.

This invention relates to an improved registering cock or faucet, particularly designed for use on measuring vessels, tanks, casks, and other receptacles, and has for its object to provide a simple, inexpensive, and efficient device of this character by means of which predetermined quantities of liquid, withdrawn from the tank or other receptacle, may be readily indicated and the amount thereof accurately registered.

A further object of the invention is to provide the cock or faucet with a registering ring or collar adapted to be engaged by a pawl on the turning-plug, so that when said plug is turned a quarter-revolution to permit the passage of liquid the pawl will engage the collar, causing the same to rotate and register the quantity of liquid withdrawn from the receptacle.

A still further object is to provide means whereby the registering-collar may be rotated independently of the turning-plug, so as to permit the same to be set without the necessity of operating the faucet.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

In the accompanying drawings, Figure 1 is a perspective view of a cock or faucet constructed in accordance with my invention. Fig. 2 is a top plan view of the same, showing the registering-ring set to zero. Fig. 3 is a similar view showing the position of the teeth on the ring after registering two gallons. Fig. 4 is a longitudinal sectional view. Fig. 5 is a detail sectional view of the indicating-ring detached, and Fig. 6 is a top plan

view of the faucet with the plug and registering-ring removed.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates the cock or faucet, provided with the usual turning-plug 2, and the threaded portion 3, by means of which the faucet may be coupled to a suitable measuring vessel, tank, or other receptacle.

The upper portion of the faucet, adjacent the plug or valve seat 4, is provided with an annular rib or collar 5, defining an outwardly-projecting flange 6, the edge of which is provided with a series of notches or teeth 7, as shown. Rotatably mounted on the flange 6 is a registering ring or collar 8, provided with an annular groove or channel 9, within which is seated a wire 10, one end of said wire engaging a recess 11 in the channel 9, and the opposite end thereof being bent outwardly to form a spring-pawl 12, adapted to engage the notches or teeth 7 as the ring is rotated and prevent backward movement thereof. The inner top edge of the registering ring or collar 8 bears against the annular rib 5 and is provided with a series of notches or recess-defining teeth 13, preferably five in number, as shown. Stamped or otherwise affixed on the face of the collar opposite each tooth is a corresponding numeral representing a gallon, or other predetermined quantity of liquid to be drawn from a receptacle, or other source of supply, at each quarter-revolution of the turning-plug, said numerals being adapted to register with a suitable hand or pointer 14, secured to a lug 16 on the side of the faucet, and indicate the number of gallons withdrawn from the receptacle. Slidably mounted in a transversely-disposed opening 15 in the plug 2 is a pin or bolt 16, the enlarged head of which is provided with a shoulder 17, adapted to bear against the inner edge of the registering ring or collar and engage the teeth 13, a coiled spring 18, seated in the opening 15, serving to force the shoulder 17 into engagement with said teeth and cause the ring or collar to turn the distance of one tooth at each quarter-revolution of the turning-plug. The bolt 16 is provided with a depending lug 19, which travels in a recess 20 in the annular rib

5, said recess forming shoulders 21 and 22, which extend in the path of said lugs and serve to limit the movement of the turning-plug. The teeth 7 on the flange 6 are spaced  
 5 apart a distance equal to the distance of the teeth on the registering-ring, the flange being provided with an extra tooth, as shown in Fig. 6, to correspond to zero, so that when the registering ring or collar is set to zero  
 10 and the pin or bolt engages the tooth opposite the numeral "2" by turning the plug a relatively small angular movement of said tooth will cause the bolt to engage the shoulder 22 and the numeral "1" to register with the hand  
 15 or pointer, as clearly shown in Fig. 2 of the drawings, while an increased and uniform movement of each of the remaining teeth is necessary to rotate the ring and cause the numerals thereon to successively register with  
 20 the pointer when the plug is operated as illustrated in Fig. 3.

The registering ring or collar being rotatably mounted on the flange 6, said ring or collar may be operated manually independently of the plug 2 for the purpose of setting  
 25 the device by turning said ring or collar in the direction of the arrow, (indicated in Fig. 1 of the drawings,) backward movement of the collar being prevented by engagement of the pawl 12 with the teeth on the flange 6.  
 30

In operation, when it is desired to register a predetermined quantity of liquid drawn from a receptacle, or other source of supply, the device is set by rotating the registering  
 35 ring or collar, manually, until the zero-mark is in alinement with the hand or pointer. The cock or faucet is then opened, by giving the plug a quarter-turn, which causes the head of the spring-bolt to engage the tooth opposite  
 40 the numeral "2" and turn the ring or collar until the numeral "1" registers with the hand or pointer and the depending lug strikes the shoulder 20, preventing further movement of the plug. After the desired quantity of liquid  
 45 has been drawn off through the faucet the plug is given another quarter-turn in the opposite direction, closing the same and causing the pin or bolt to ride over the tooth opposite the numeral "3" and in position to engage the  
 50 same when the plug is again operated.

It will be observed that the spring-actuated pin 16 forms a positive connection between the valve and the registering-ring and also serves to lock said ring in position on the valve-  
 55 casing.

Although I have shown and described the registering device as used in connection with tanks, measuring vessels, and the like, it is obvious the same may be used with equally  
 60 good results on gas-cocks, water-plugs, and for various other purposes.

Having thus described the invention, what I claim, and desire to secure by Letters Patent, is—

65 1. A valve, a valve-casing, a registering

member revolubly mounted on the valve-casing and axially alined with the valve, said registering member being movable with the valve.

2. A valve, a valve-casing, a registering member revolubly mounted on the valve-casing and axially alined with the valve, and means carried by the valve for rotating the registering member and retaining the same in position on the valve-casing. 70 75

3. A valve, a valve-casing, a registering member revolubly mounted on the valve-casing, and means carried by the valve for rotating the registering member and retaining the same in position on the valve-casing. 80

4. A valve, a valve-casing, a registering member revolubly mounted on the valve-casing and axially alined with the valve, means carried by the valve for rotating the registering member and retaining the same in position on the valve-casing, and means for locking said member from return movement. 85

5. A valve, a valve-casing, a registering-ring revolubly mounted on the valve-casing, a spring-pawl carried by the valve for rotating the ring and retaining the latter in position on the valve-casing, said ring being adjustable independently of the valve. 90

6. A valve, a valve-casing, a registering-ring revolubly mounted on the valve-casing and provided with a series of notches or teeth, a spring-pawl adapted to engage the notches or teeth for rotating the ring, said registering-ring being adjustable independently of the valve and retained in position on the valve-casing by the spring-pawl. 95 100

7. A valve, a revolving registering-ring, teeth formed in the ring, a pawl carried by the valve adapted to engage the teeth and rotate the ring, and shoulders or stops on the valve-casing adapted to engage the pawl and limit the movement of the valve. 105

8. A valve, a valve-casing, teeth formed on the valve-casing, a revolving registering-ring provided with a pawl adapted to engage said teeth, and means carried by the valve for engaging the ring and rotating the same. 110

9. A valve, a revolving registering-ring movable therewith, teeth formed in the ring, a spring-pawl carried by the valve adapted to engage the teeth and rotate the ring, and means for limiting the movement of the valve. 115

10. A valve, a valve-casing, teeth formed in the valve-casing, a registering-ring provided with an annular groove or channel revolubly mounted on the valve-casing, a pawl seated within the groove or channel and adapted to engage the teeth on the valve-casing, and means carried by the valve for engaging the ring and rotating the same. 120 125

11. In a registering-valve, a valve-casing provided with an annular flange having teeth formed therein, a registering-ring provided with an annular groove or channel revolubly mounted on the flange, a spring-pawl one end 130

of which is seated in the groove or channel the opposite end thereof being bent outwardly and adapted to engage the teeth on the flange, and means carried by the valve for rotating  
5 the ring.

12. In a registering-valve, a valve-casing provided with a plurality of teeth and having its upper portion recessed to form shoulders or stops, a registering-ring revolubly mounted  
10 on the valve-casing, and a spring-pawl carried by the valve and adapted to engage and rotate the ring, the shoulders or stops being arranged in the path of the pawl to limit the movement of the valve.

13. In a registering-valve, a valve-casing provided with an annular rib having a recess formed therein defining shoulders or stops, a registering-ring provided with pawl-engaging  
15 teeth revolubly mounted on the valve-casing and bearing against the annular rib, a pawl carried by the valve adapted to engage the teeth and rotate the ring, said pawl being adapted to travel in the recessed portion of  
20 the annular rib and engage the stop or shoulders to limit the movement of the valve.

14. In a registering-valve, a valve-casing, a hand or pointer secured to the casing, a graduated ring revolubly mounted on the cas-

ing and adapted to register with the hand or pointer, a spring-pawl carried by the valve  
30 adapted to engage and rotate the ring, and means for locking the ring from return movement.

15. In a registering-valve, a valve-casing, a registering-ring revolubly mounted on the  
35 casing, teeth formed in the ring, a spring-pawl provided with a depending lug and having a shoulder formed in the head thereof carried by the valve, said shoulder being adapted to engage the teeth and rotate the ring, and  
40 means carried by the casing for engaging the lug and limiting the movement of the valve.

16. In a device of the class described, a valve having uniform movement, and a valve-actuated registering member having variable  
45 movement and serving at each movement thereof to register successive and equal amounts.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in  
50 the presence of two witnesses.

JOHN J. TOKHEIM.

Witnesses:

OTTO SIKORA,  
P. W. GIFFORD.