No. 711,836. Patented Oct. 21, 1902.

W. T. ERICKSON.

FILTER ATTACHMENT.

(Application filed Oct. 3, 1901. Renewed Aug. 7, 1902.)

(No Model.)

Fig. 1.

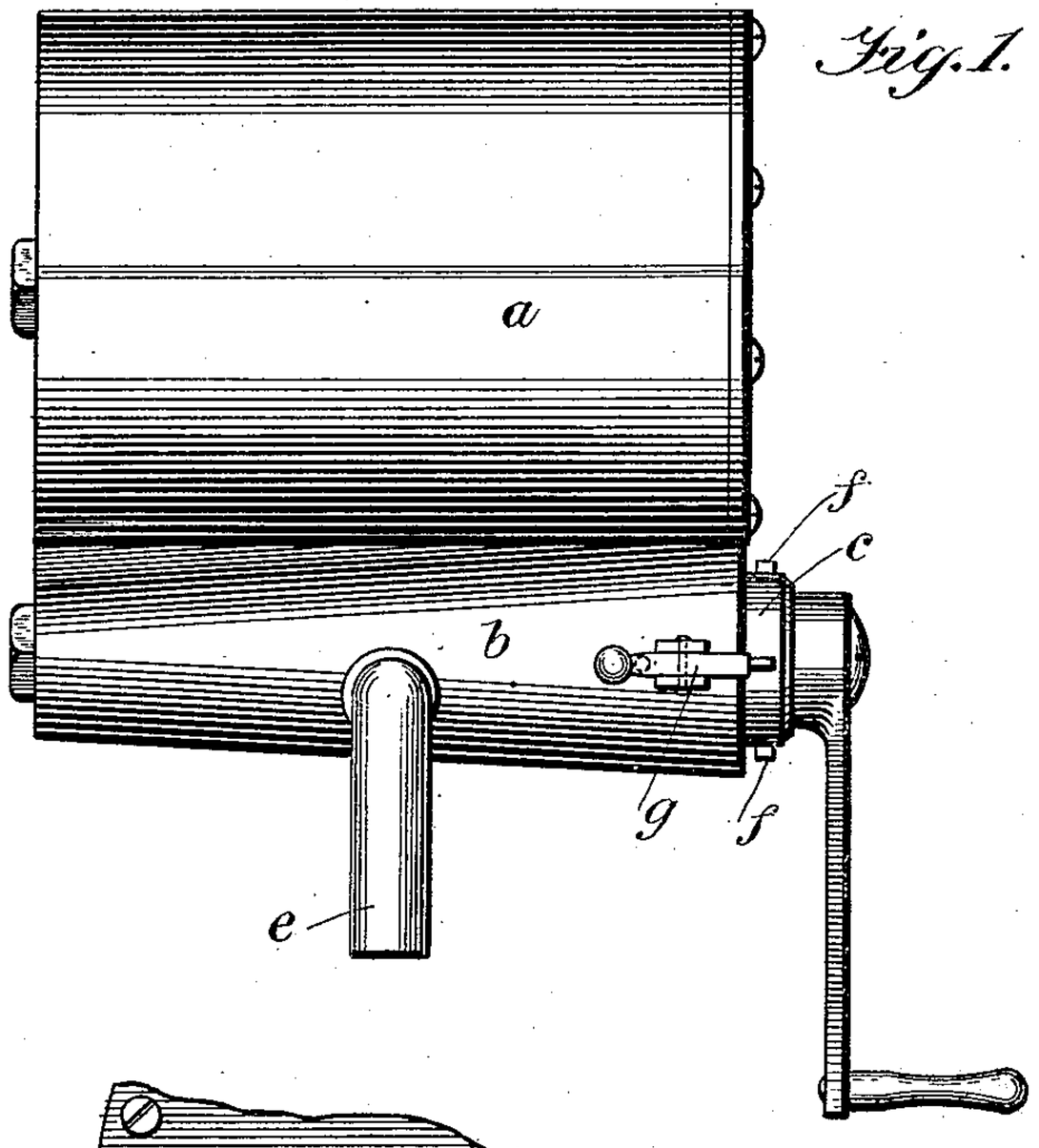
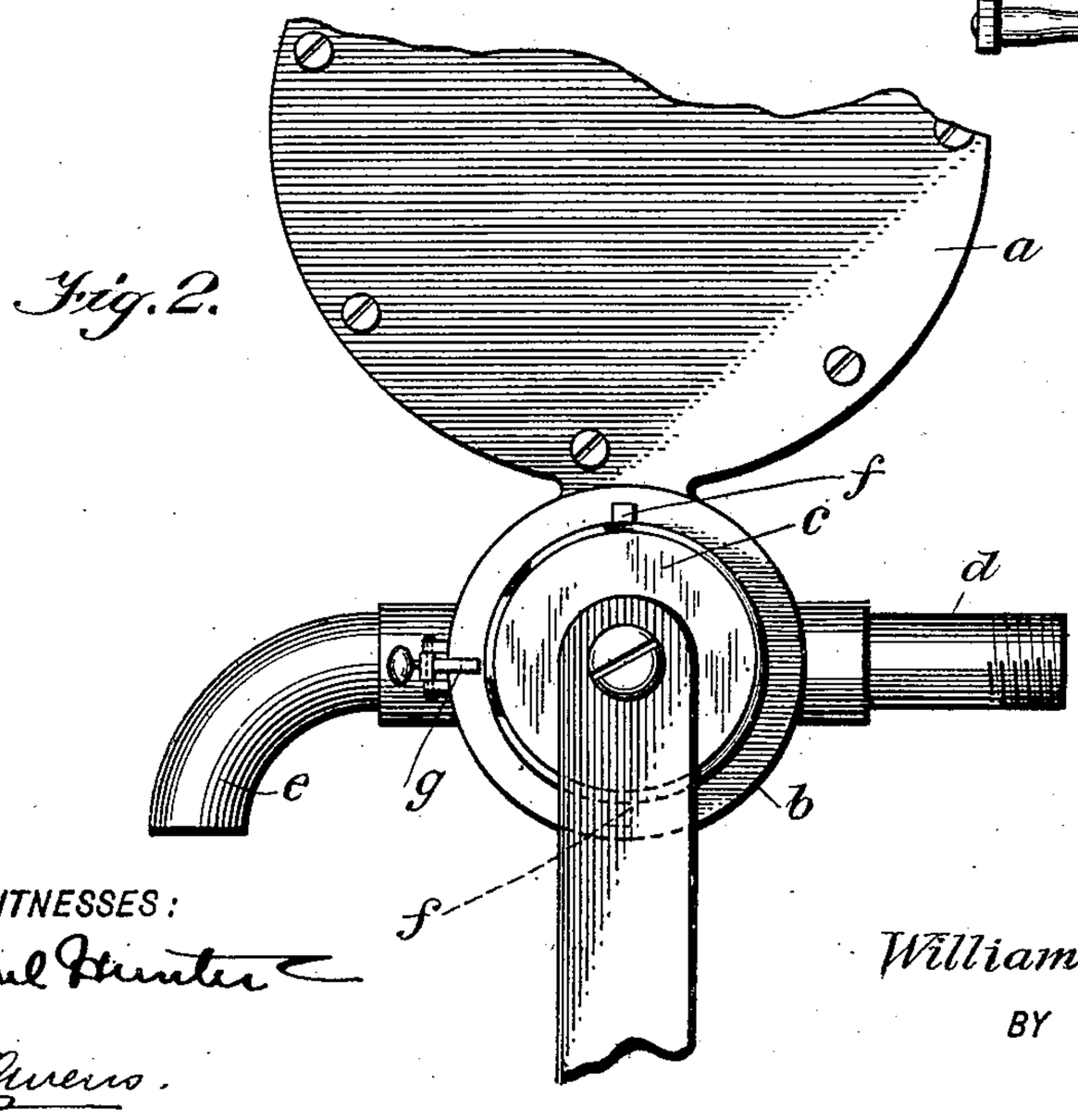


Fig. 2.



WITNESSES:

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FILTER ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 711,836, dated October 21, 1902.

Application filed October 3, 1901. Renewed August 7, 1902. Serial No. 118,769. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM T. ERICKSON, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Filter Attachment, of which the following is a full, clear, and exact description.

This invention relates to an improvement in those filters in which means are provided for reversing the flow of the water, so that the impure matter lodged in the filter may from time to time be washed out therefrom. As an example of these devices see the patent to Tait, No. 663,646, granted December 11, 1900.

The object of my invention is to prevent the indiscriminate changing of the direction of the water flow, at the same time providing means for effecting the change at the proper or desired time.

This specification is a specific description of one form of the invention, while the claims are definitions of the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a side view of a filter, showing my invention applied; and Fig. 2 is a front view of the same.

a indicates the filter-barrel; *b* the casing, and *c* the plug, of a two-way cock capable of directing the water flow in either direction through the barrel; *d*, the supply-pipe, and *e* the discharge-pipe. For the sake of convenience it may be assumed that these parts are exactly the same as in the Tait patent; but it should be understood that the application of my invention is not so limited. It may be applied to any filter so long as it is in general characterized as pointed out above, and to clean the same a reversed flow is desirable.

In carrying out my invention I form on or fasten to the plug *c* two diametrically opposite lugs *f*, standing clear of the casing *b*, and I mount on the casing a spring-catch *g*, the bill of which when in operative position lies between the lugs *f* and in the path thereof. This catch *g* is capable of being thrown upward to clear the lugs and allow the unrestrained rotation of the plug *c* in either direction; but when in normal position the catch confines the plug to a half-rotation, as will be obvious. Now let it be assumed that when the plug *c* is in the position shown the water is free to flow through the filter in a certain direction. By throwing the plug either way one-quarter of a revolution, which is the movement allowed by the lugs and catch, the plug may be closed and the water flow cut off; but the plug cannot be turned to change the direction of the flow without releasing the catch. Hence to reverse the direction of the water flow it is necessary to release the catch and turn the plug until it presents the opposite side to the catch, and then the filter may be operated as long as desired, with the water flowing in the opposite direction.

In the use of the invention the catch should be left untouched until it is probable that the filter needs cleaning, and then the plug should be reversed. By allowing the first flow of water after reversal to go to waste the impure accumulations may be disposed of and the water following will have secured the full benefit of the filtering operation.

Various changes in the form, proportions, and minor details of my invention may be resorted to without departing from the spirit and scope of my invention. Hence I consider myself entitled to all such variations as may lie within the scope of my claims.

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

1. The combination with a filter capable of having the water flow through it in either of two directions, for the purpose specified, of a cock capable of being thrown into either of two adjustments whereby to cause the water to flow through the filter in one direction or the other, the cock comprising a casing and a plug, oppositely-set lugs on one of said parts of the cock, and a releasable catch on the other of said parts, the catch normally bearing between the lugs, to confine the plug to one of the aforesaid adjustments, whereby the water is kept flowing in one direction, and whereby upon releasing the catch the plug

may be moved to its other adjustment, thus causing the water to flow oppositely to the direction of its first flow.

2. The combination, with a filter capable of having the water flow through it in either of two directions, for the purpose specified, of a cock capable of being thrown into either of two adjustments, whereby to cause the water to flow through the filter in one direction or the other, the cock comprising a casing and a plug, oppositely-set lugs on the plug of the cock, and a releasable catch on the casing of the cock, the catch normally bearing between the lugs to confine the plug to one of the aforesaid adjustments, whereby the water is kept flowing in one direction, and whereby upon releasing the catch the plug may be moved to its other adjustment, thus causing the water to flow oppositely to the direction of its first flow, and confining the plug to said other adjustment.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM T. ERICKSON.

Witnesses:

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JNO. M. RITTER.