

(No Model.)

H. EBERT.  
FILTERING COCK.

No. 456,242.

Patented July 21, 1891.

Fig. 1.

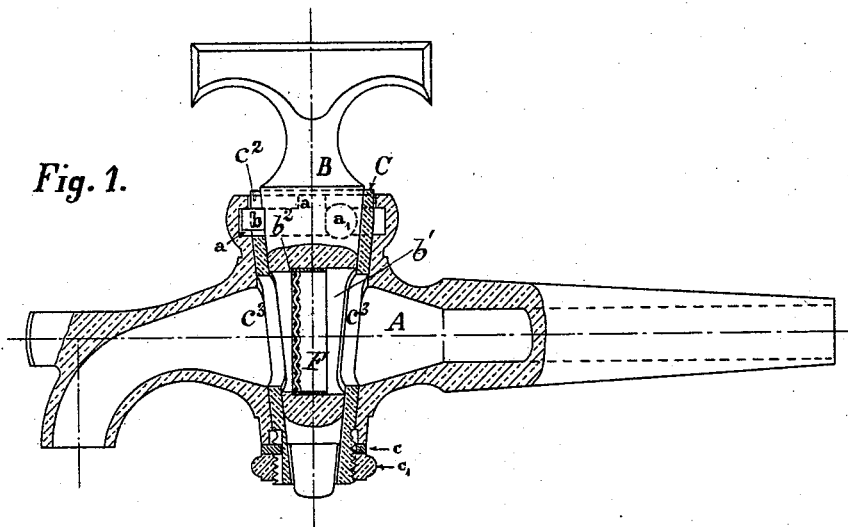


Fig. 2.

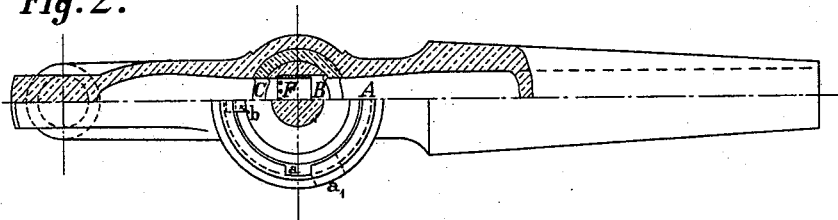


Fig. 3.

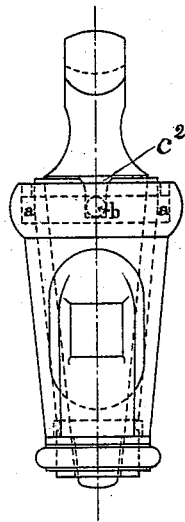
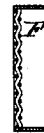
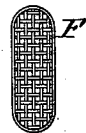


Fig. 4. Fig. 5.



Witnesses:

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Edw. A. Muir

Inventor:  
Hermann Ebert

by *Max Engle*  
his Attorney.

# UNITED STATES PATENT OFFICE.

HERMANN EBERT, OF STUTTGART, GERMANY.

## FILTERING-COCK.

SPECIFICATION forming part of Letters Patent No. 456,242, dated July 21, 1891.

Application filed July 18, 1890. Serial No. 359,162. (No model.)

### *To all whom it may concern:*

Be it known that I, HERMANN EBERT, a subject of the King of Württemberg, residing at Stuttgart, Germany, have invented a new and useful Improvement in Filtering-Cocks, of which the following is a specification.

The object of the present invention is to free liquids in passing through a cock or faucet from any impurities which they may contain, such as particles of pitch, wood, cork, or sand or earthy admixtures, &c. For this purpose I arrange in the passage-way of the faucet-plug an easily-removable filter, and which may be made of wire-cloth, gauze, linen, charcoal, or the like, according to the liquid it is desired to filter. The liquid passing through the cock is thereby forced to pass through the filter and the impurities are retained by the same. I also arrange the faucet-plug in such a way that it may be easily removed to clean the filter, and, moreover, I provide means whereby the plug can only be removed from the faucet or cock when a sheath or sleeve in which it is seated has been turned to close or shut off the faucet.

To enable my invention to be fully understood, I will now give a detailed description thereof, reference being had to the accompanying drawings, in which—

Figure 1 represents a side elevation of a filtering-cock embodying my improvements, partly in vertical longitudinal section, on the line 1 1, Fig. 2; Fig. 2, a plan of the same, partly in horizontal section, on the line 2 2, Fig. 1; Fig. 3, a front elevation of the same; and Figs. 4 and 5, a front elevation and vertical section, respectively, of the removable filter.

My filtering-cock is preferably constructed as follows: The conical plug B is seated in a sheath C, which in turn is seated in the shell A of the cock. The plug B and sheath C are both adapted to turn and are so arranged that the passages in both register with each other, and every rotation of the plug B is shared by the sheath C. For this purpose plug B is pro-

vided with a pin or stud *b*, which, when the said plug is inserted into the sheath C, engages with a vertical slot or notch *c*<sup>2</sup> in the same.

The sheath C may be either inserted loosely into the shell A or, as shown in the drawings, securely held therein by means of washer *c* and nut *c'*. The plug B is to be conceived as loosely seated in the sheath C, but may also, when required, (*e. g.*, under great pressure,) be secured to the sheath by means of a washer-nut.

To insure the closing of the faucet by the sheath C before the plug B can be removed for cleaning the filter, I provide the upper rim of the shell A with a groove or slot *a a*, whose course is first vertical and then horizontal and annular, preferably extending entirely around the interior of the shell, thus forming a bayonet-joint. The stud *b*, which engages this slot under this arrangement, permits the plug B to be withdrawn from the sheath C only when it is brought directly under the vertical part of slot *a a*, in which position the faucet is closed by the said sheath C.

It will be noted that the transverse passage *b'* in the plug B is provided with an internal shoulder *b*<sup>2</sup>, against which the removable filter F abuts to prevent its displacement, while at the same time the same may be easily removed by pushing it out away from the shoulder. The filter is placed into position by simply pushing it into the transverse passage, to which it conforms in shape, until it abuts against the shoulder *b*<sup>2</sup>, when it is ready for use. That portion of the transverse passage *b'* in which the filter F is located is, moreover, smaller in size than the passages *c*<sup>3</sup> in the sheath C, so that the latter and the shoulder *b*<sup>2</sup> serve to hold the filter against displacement when the plug is in position within the sheath. In other words, while the shoulder holds the filter in the position of the parts shown in Fig. 1, when the plug is turned one hundred and eighty degrees to reverse and rinse the filter, the edges of the passage *c*<sup>3</sup> in

the forward portion of the sheath will serve to retain the said filter and prevent its displacement.

5 What I claim, and desire to secure by Letters Patent, is—

10 In a cock or faucet, the combination, with a plug having a transverse passage provided with an internal shoulder, of a removable filter adapted to fit in the passage, and a sheath having passages smaller in size than

the transverse passage in the plug, substantially as set forth.

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

HERMANN EBERT.

Witnesses:

AUGUST DRAUTZ,  
GUSTAV GROSS.