G. J. CARPENTER.

Filters.

No. 150,525. Patented May 5, 1874.

Fig. 1.

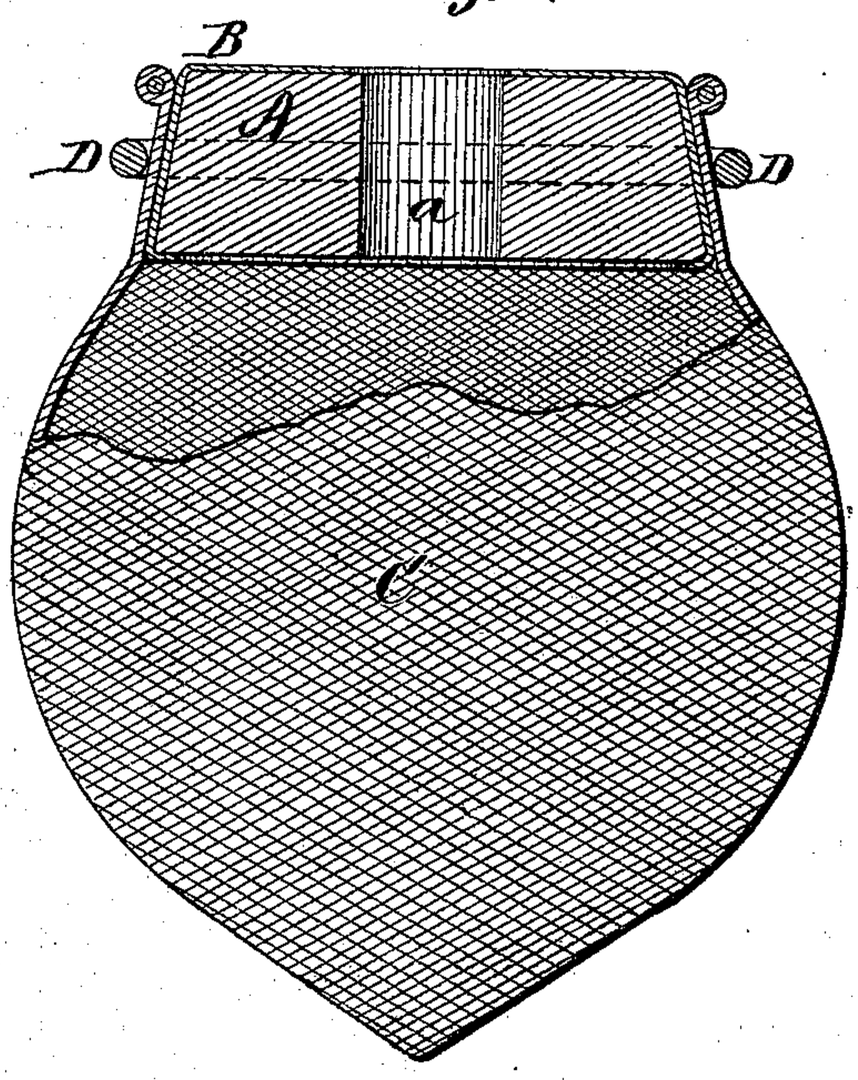


Fig 2

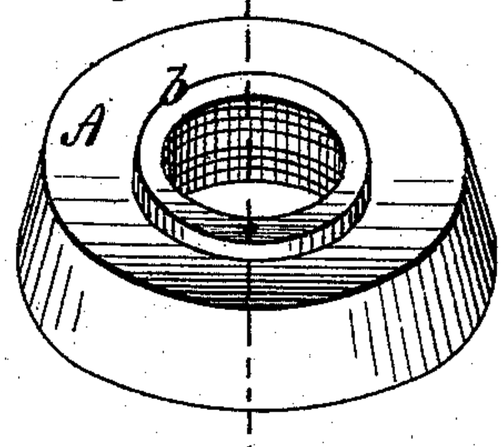


Fig. 4.

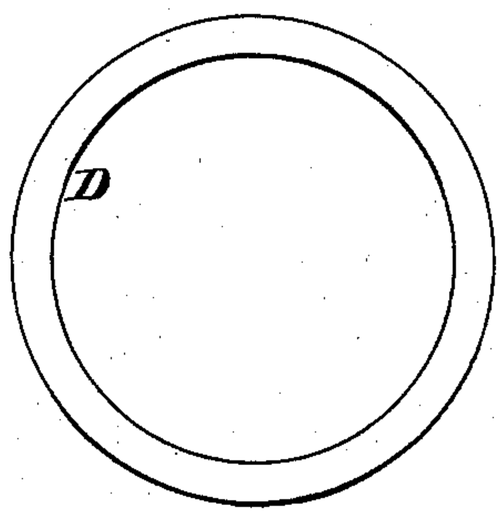
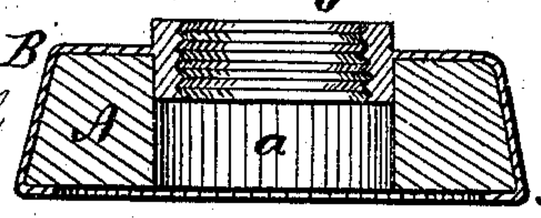


Fig 3½



WITNESSES.
Franck L. Ousand
C. L. Everts

INVENTOR.
Geo. J. Carpenter.

By Alexander Mason
Attorneys.

UNITED STATES PATENT OFFICE.

GEORGE J. CARPENTER, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO JOHN W. PARROTT, OF SAME PLACE.

IMPROVEMENT IN FILTERS.

Specification forming part of Letters Patent No. **150,525**, dated May 5, 1874; application filed February 5, 1874.

To all whom it may concern:

Be it known that I, GEORGE J. CARPENTER, of Bridgeport, in the county of Fairfield and in the State of Connecticut, have invented certain new and useful Improvements in Water-Filters; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

My invention relates to filters to be used on hydrants and faucets; and it consists in a wooden disk having beveled sides and a central orifice to fit upon the end of the faucet, and a filtering-bag held upon said disk by means of an exterior ring. It also consists in providing said wooden disk with an exterior metal shield or casing, all of which will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a longitudinal section of my filter. Fig. 2 is a perspective view, and Fig. 3 a longitudinal section, of the wooden disk with metal casing. Fig. 4 is a view of the ring for holding the bag on the disk.

A represents a round wooden disk, of suitable diameter and thickness, provided with a central orifice, *a*, and having its edges beveled, as shown. This disk may be inclosed within a sheet-metal shield or casing, B, made in the form of an inverted cup, covering the top and sides of the disk, and having its edges turned under the lower edge of the disk, as shown in Figs. 1 and 3. The object of the metal casing B is simply to strengthen the wooden disk A, and prevent the same from splitting. C represents a bag, made of any suitable filtering-cloth, the mouth of which should fit around the disk A; and said bag is held on the disk by means of a ring, D, passed over it, as shown. Any downward pressure on the bag pulls the ring downward, and the sides of the disk being beveled, the greater the pressure the tighter the bag and ring become.

When this filter is to be used on a faucet having a smooth exterior, the central orifice *a* in the disk is bored or reamed out of such size as to fit around the faucet; but when the filter is to be used on faucets having screw-threads on its ends, a thimble, *b*, is inserted and secured in the upper end of the orifice *a*. When the metal casing B is used, the thimble may be attached thereto or form a part of the same. The thimble is provided with interior screw-threads to fit on the threads on the faucet. In either case, when the filter is placed upon the end of the faucet, and the water turned on, the water will act upon the wooden disk and cause it to swell sufficiently to make a tight joint between the faucet and the disk, and between the disk and the exterior ring. When the filter is first put on, if it should not fit tightly, the wood will soon swell to make perfect water-tight joints and prevent leakage.

The bag C may be made of any suitable form and material, though I prefer to make it substantially in the form shown in the drawing, coming to a point of the bottom. The water being let on, the water is forced through all parts of the bag, the entire bag forming the filtering surface, and the dirt adhering to the inside of the bag. The bag may be turned inside out and put on the disk again, when all the dirt adhering to the former inside (now outside) will clear itself as the water passes through it.

When placing vessels under the faucet this filter is not in the way, as the bag, being made of cloth, can be held up flat for that purpose.

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

1. The wooden disk A, having its sides beveled and provided with a central orifice, *a*, in combination with the bag C and exterior

ring D, substantially as and for the purposes herein set forth.

2. The wooden disk A, provided with beveled sides and central orifice *a*, and surrounded by the inverted cup or casing B, substantially as and for the purposes herein set forth.

3. The combination of the bevel-edged wooden disk A, having central orifice *a*, the metal casing B, bag C, and ring D, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of February, 1874.

GEORGE J. CARPENTER.

Witnesses:

THOMAS BOUDREN,

FREDRICK EGGE.