(No Model.)

J. F. WIREBACK.

FILTER.

No. 601,785. Patented Apr. 5, 1898.

Fig. 1.

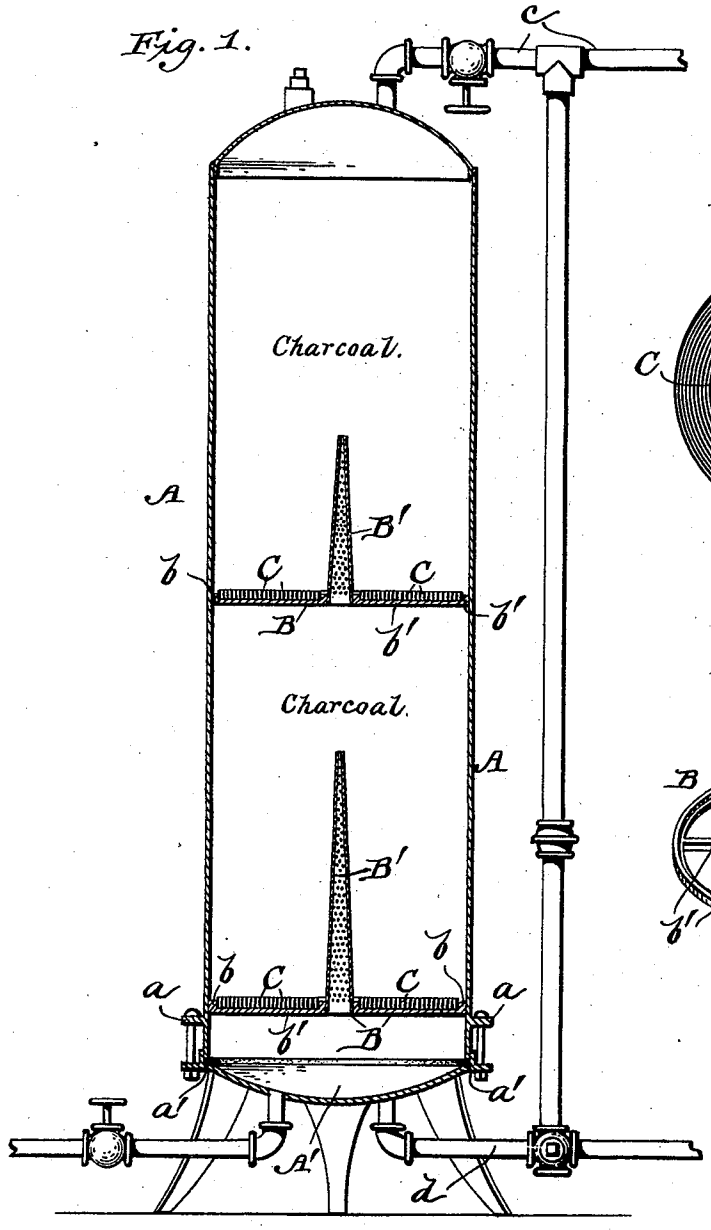


Fig. 2.

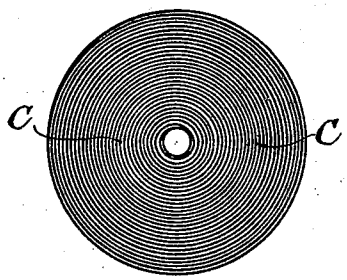
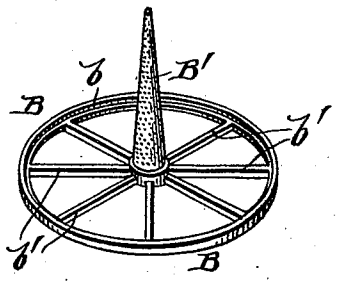


Fig. 3.



WITNESSES

Geo. Geo. Gerance.
F. H. Reland

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN F. WIREBACK, OF SCRANTON, PENNSYLVANIA.

FILTER.

SPECIFICATION forming part of Letters Patent No. 601,785, dated April 5, 1898.

Application filed July 31, 1897. Serial No. 646,661. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. WIREBACK, a citizen of the United States, residing at Scranton, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Filters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in water-filters more especially adapted for house or domestic use, and it is designed to provide for effectively purifying the water and prevent clogging, as would otherwise occur from accumulating sediment, and also to provide for readily cleansing the filter; and to these ends the invention consists in the detailed construction and combinations of parts, which will be more fully disclosed hereinafter, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a central vertical section through my improved filter. Fig. 2 is a top plan view of the coil, and Fig. 3 is a perspective view of the grate or spider.

In carrying out my invention I employ the usual cylindric receptacle or tank A, preferably dividing it into two compartments or chambers, one arranged above the other. The tank or receptacle A has its casing provided with a flange *a* near its lower end, with said end resting in a packed flange *a'* of a base A', said flanges being suitably bolted together. In each compartment I arrange a grate or spider B, consisting of a central cone B', having a series of "needle" perforations, a circular rim or ring *b*, and a series of radial arms or bars *b'* having their inner ends touching said cone B at its base and their outer ends touching said rim. Though minutely described herein, this precise construction need not be strictly adhered to in the practice of this part of my invention.

C is a coil of sheet metal, preferably of brass, being free from corrosion for the purpose it is here appropriated, which is arranged upon and edgewise to the "spider" or "grate" B to combine therewith, its numerous coils crossing the series of radial bars of the latter to form substantially a foraminous or perforated surface or partition in the receptacle or tank A, thus serving as a filter after the fashion of the filtering or perforated partitions usually employed for like purpose, but, as is obvious, free from the great tendency to clog, so desirable to avoid or overcome in filters.

The valved house or service pipe *c* connects with the tank or receptacle at the top, while the valved feed-pipe *d* connects with the bottom of said tank, as shown, said tank also having a valved flushing or waste-water pipe, whereby the filter, as needed, can be flushed or cleaned out.

It will be understood that the tank or receptacle is filled with charcoal or some other purifying material, and that by opening the required valves (those in the feed and service pipes) the water can be turned on and filtered ready for use throughout the house, being drawn off at the service-pipe faucets, as well understood.

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

1. In a filter the combination with the tank, of the "spider" or "grate" having the central perforated or foraminous cone and the coil of sheet metal arranged edgewise to, and upon, said "grate" or "spider," substantially as specified.

2. In a filter, the combination of a suitable tank or receptacle designed to contain charcoal or other suitable filtering agent, a spider or grate arranged in said tank, a coil of sheet metal arranged edgewise to and upon said spider, a valved service-pipe arranged outside of said tank and connecting therewith at or near its top, a valved feed-pipe connecting with said pipe at or near its bottom, and a valved waste-water pipe located near or at the bottom of the tank, substantially as described.

3. In a filter, the combination of a suitable tank designed to contain charcoal or other suitable filtering agent, a spider or grate arranged in said tank having a foraminous cone,

a coil of metal ribbon arranged edgewise to and upon the spider, a valved feed-pipe connecting with the tank at or near its bottom, a valved service-pipe connected to said tank at or near its top, and a valved waste-water pipe connected to the tank at or near its bottom, substantially as described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

JOHN F. WIREBACK.

Witnesses:
THOS. T. FRAZIER,
W. W. BAYLOR.