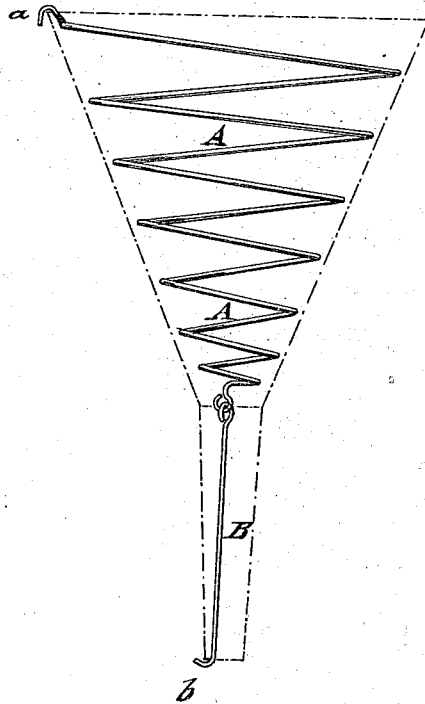


B. FENNER.
FILTER-RACK.

No. 189,929.

Patented April 24, 1877.



WITNESSES:

A. W. Almqvist
J. A. Scarborough

INVENTOR:

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BY *[Signature]*

ATTORNEYS

UNITED STATES PATENT OFFICE.

BYRON FENNER, OF WESTFIELD, NEW YORK.

IMPROVEMENT IN FILTER-RACKS.

Specification forming part of Letters Patent No. **189,929**, dated April 24, 1877; application filed March 12, 1877.

To all whom it may concern:

Be it known that I, BYRON FENNER, of Westfield, in the county of Chautauqua, and State of New York, have invented a new and Improved Filter-Rack, of which the following is a specification:

The accompanying drawing shows a side elevation of my improved filter-rack.

This filter-rack is intended to support the filtering paper in funnels of any angle or height, keeping the paper entirely from the sides of the funnel, and allowing the passage of air at the sides, and a more rapid and perfect filtration. The rack is secured to the top and bottom of funnel, to admit the pouring out of liquids from the same; and, as it is made of only two pieces, may be easily cleaned, is handier in use, and cheaper in manufacture, than the present upright wire-racks.

The invention consists of a filter-rack made of a spirally-coiled wire, attached by top hook and jointed center link with lower hook to the top and bottom of funnel.

In the drawing, A represents the spiral main part of my improved filter-rack, and B a swinging link that is applied to the center of part A.

The main part A is made of a piece of spirally-wound spring-wire, which is attached by a hook or other fastening device, *a*, to the upper edge of the funnel, and by a hook, *b*, at the lower end of the jointed link to the bottom edge of the neck of the funnel, as shown in the drawing.

The spiral wire-rack may be readily applied to funnels having different height, slope of sides, greater or less length of neck, &c., the spiral part adjusting itself readily to any funnel, keeping the paper entirely clear of the funnel, which is not the case in the upright

wire-racks, in which the plaited filter paper slips through the spaces of the rack and bears against the sides of funnel, preventing thereby the passage of air and hindering filtration.

The attachment of the rack to the top and bottom of funnel admits the more convenient handling of the funnel for pouring out part of the liquid or removing the same. The rack may also be left in the funnel while using the same for other purposes. The spiral wire-rack takes up but little room when not in use, as it assumes a flat shape, so as to be readily shipped. The rack, being made of two pieces, offers no projecting parts for the settling of impurities, so as to be kept clean with great facility. The spiral rack extends around the filtering paper, prevents its contact with the funnel, so as to accelerate the filtering process, and is attached to the funnel in a superior manner, and manufactured on account of its simple construction, at a considerable saving in cost as compared with other racks.

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

1. A filter-rack, consisting of a main part of spiral wire, having suitable devices for being attached to top and bottom of funnel, substantially as and for the purpose herein specified.

2. A filter-rack, made of a spirally-coiled wire, having outer hooks, and of a jointed center link with lower hook end, substantially as herein shown and described.

BYRON FENNER.

Witnesses:

JEROME LA DUE,
ICHABOD THAYER.