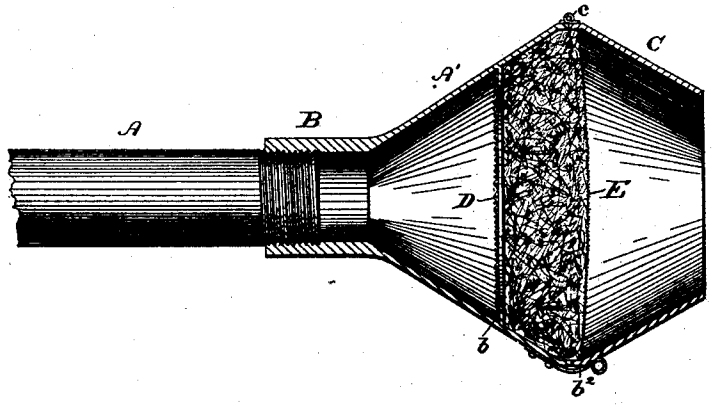
(No Model.)

A. VON WEISENFLUE.

FILTER.

No. 310,157. Patented Dec. 30, 1884.



WITNESSES

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UNITED STATES PATENT OFFICE.

ANDREW VON WEISENFLUE, OF SCRANTON, PENNSYLVANIA.

FILTER.

SPECIFICATION forming part of Letters Patent No. 310,157, dated December 30, 1884.

Application filed July 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, ANDREW VON WEISENFLUE, of Scranton, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Strainers for Air-Pumps; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, and to the figures and letters of reference marked thereon.

In air-brake systems the valves of the air-pump are oftentimes clogged and cut by reason of the dust, cinders, &c., drawn in by the operation of the pump through the suction-pipe; and to remedy this it has been heretofore proposed to place a piece of wire-gauze over the nozzle of the suction-pipe; but the fine dust will pass through the gauze and enter the cylinder and cut the valves, as stated. My invention therefore has for its object to provide a filter for the air that will effectually remedy the evils above referred to, and one in which the filtering material can be readily removed and cleansed or replaced; and it consists in certain novelties of construction, which I will now proceed to describe.

The drawing represents a sectional view of an air-filter constructed in accordance with my invention.

A represents the suction-pipe of the air-pump, and to this pipe is secured the sectional filter A'. The section B, secured to the pipe A, is made conical, as shown, and is provided near its outer or larger end with an internal rib, *b*, to retain in place the piece of wire-netting D. Hinged to the outer end of this section B by means of hinge *c* is a correspondingly-shaped portion, C, and near the larger end of this section is secured a piece of wire-gauze, E, as shown. The opening in the outer end of the section C is relatively smaller than the remainder of the attachment, whereby the area of the filter is increased. The space between the netting D and gauze E is filled with either sponge or wool, or sponge and horsehair, or any other suitable substance, to arrest the passage of the dust through the filter. From this construction it will be seen that all air drawn in through the pipe A will have to pass through the filtering material and the dust will be arrested thereby, and whenever it is necessary or desirable the filtering material can be removed and cleaned or renewed by swinging the sections apart, they being normally held together by the spring-catch b^2.

Although I have described my invention as applied to the air-pump of an air-brake system for railway-cars, it is evident that it can be applied to any apparatus in which quantities of air are drawn in.

Having thus described my invention, I claim as new—

1. In an air-filter, the combination, with the two sections, hinged together as shown, of a suitable filtering material placed within said sections, and adapted to be removed or inserted by swinging the two sections apart, substantially as described.

2. In an air-filter, the combination, with two sections hinged together, and each provided with suitable netting or wire-gauze, of a filtering material, such as described, placed between them, and a catch or lock for holding the sections together.

3. In an air-filter, the combination, with two sections hinged together, of the filtering material and the netting or gauze for holding the latter in place, substantially as described.

ANDREW VON WEISENFLUE.

Witnesses:
E. N. WILLARD,
J. M. POORE.