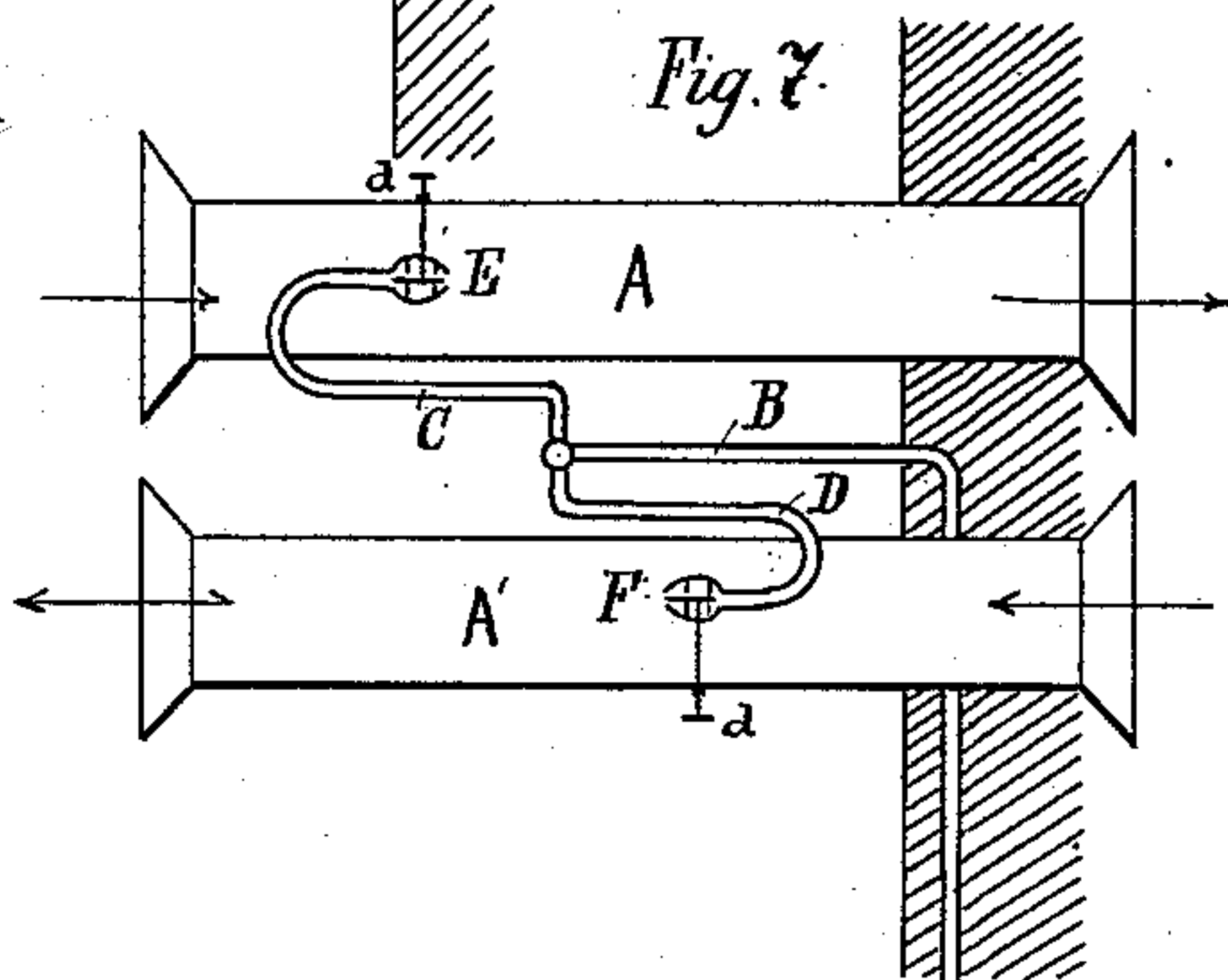
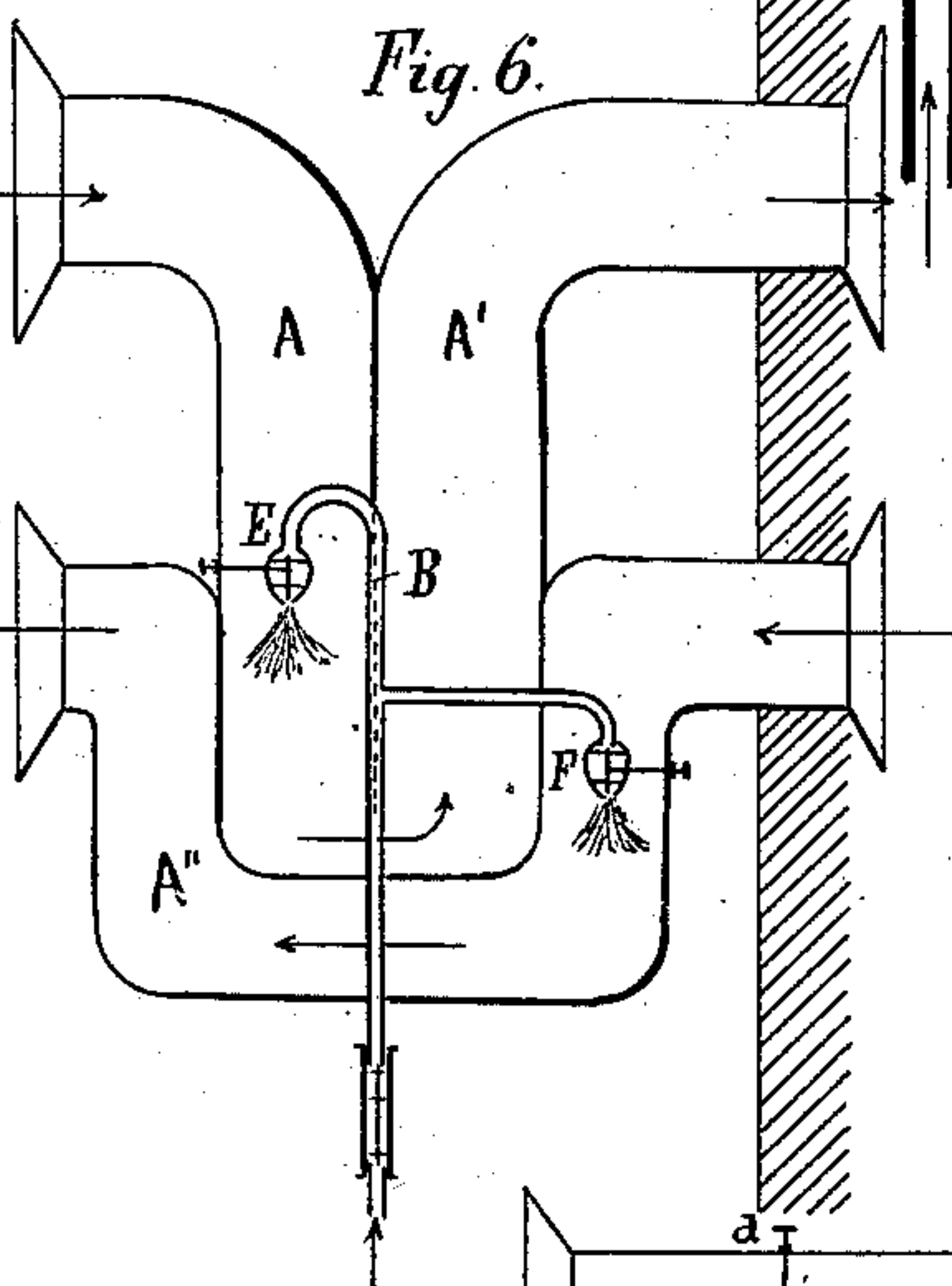
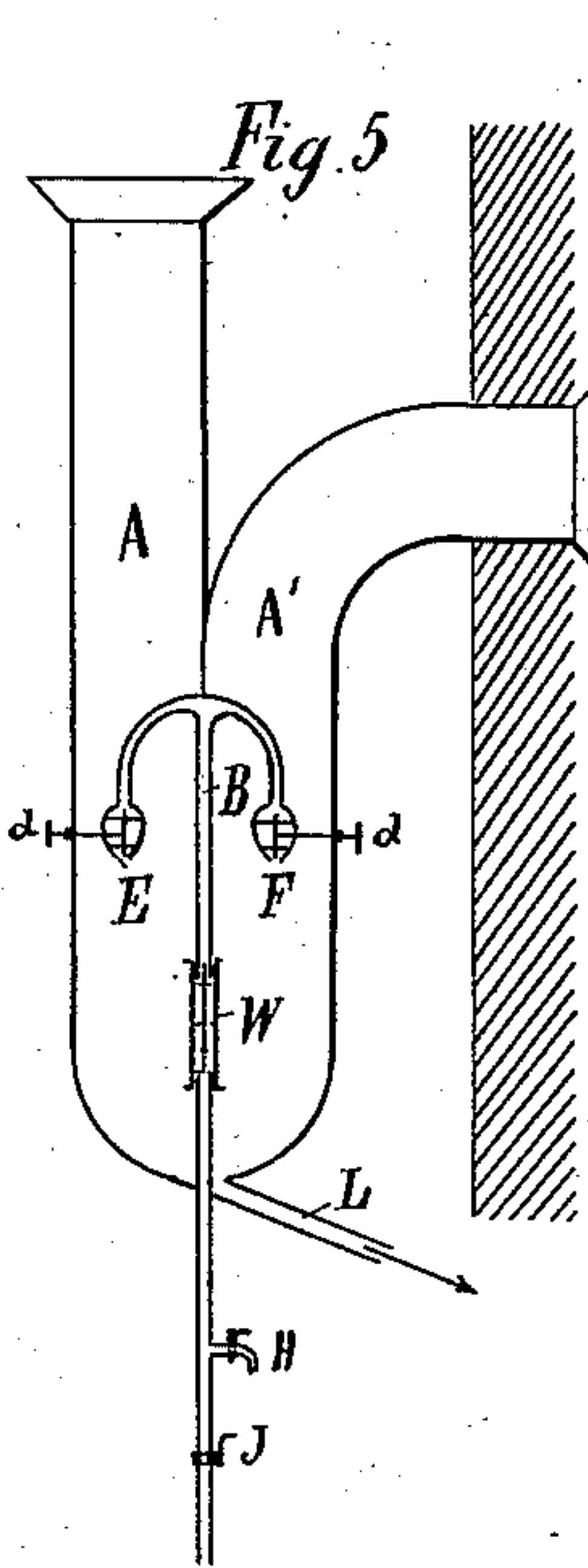
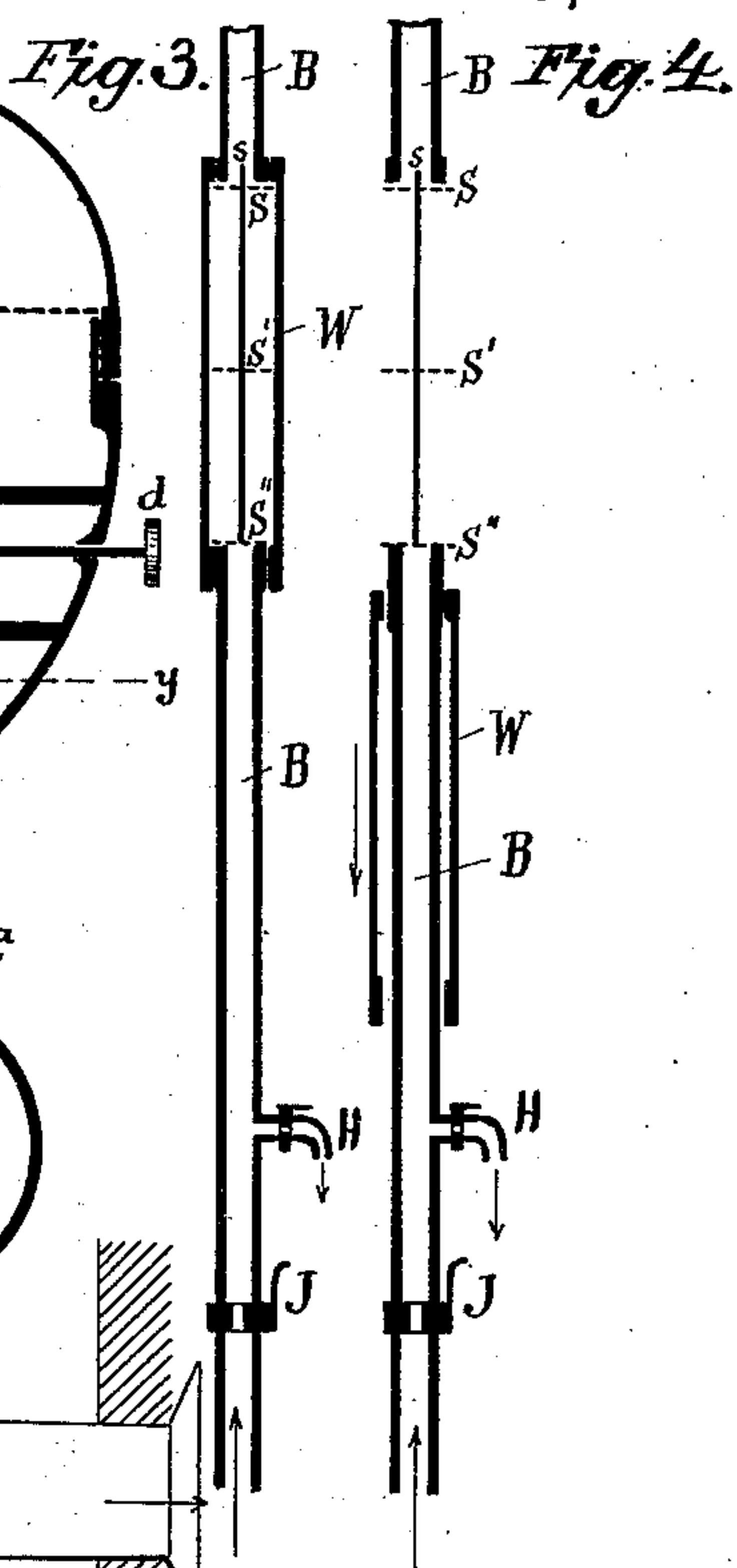
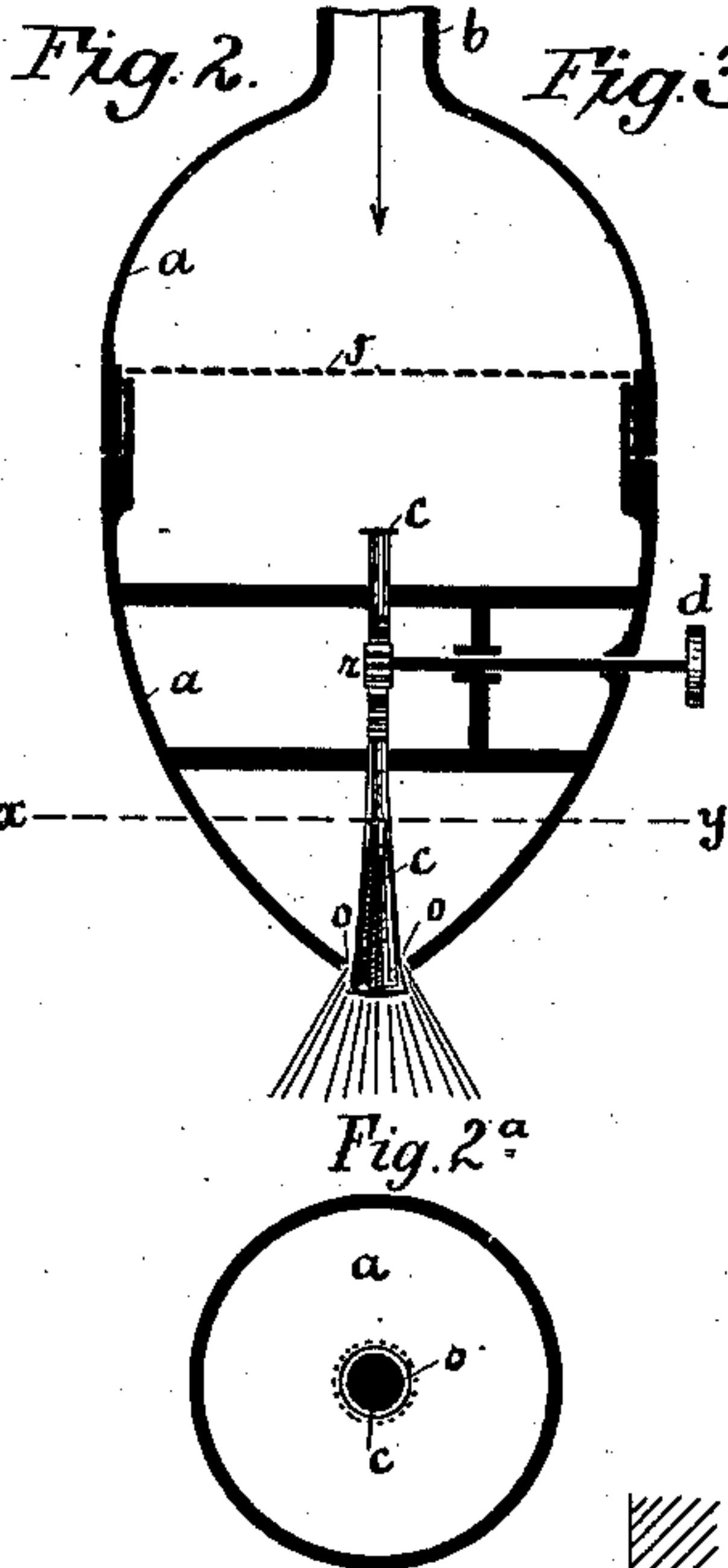
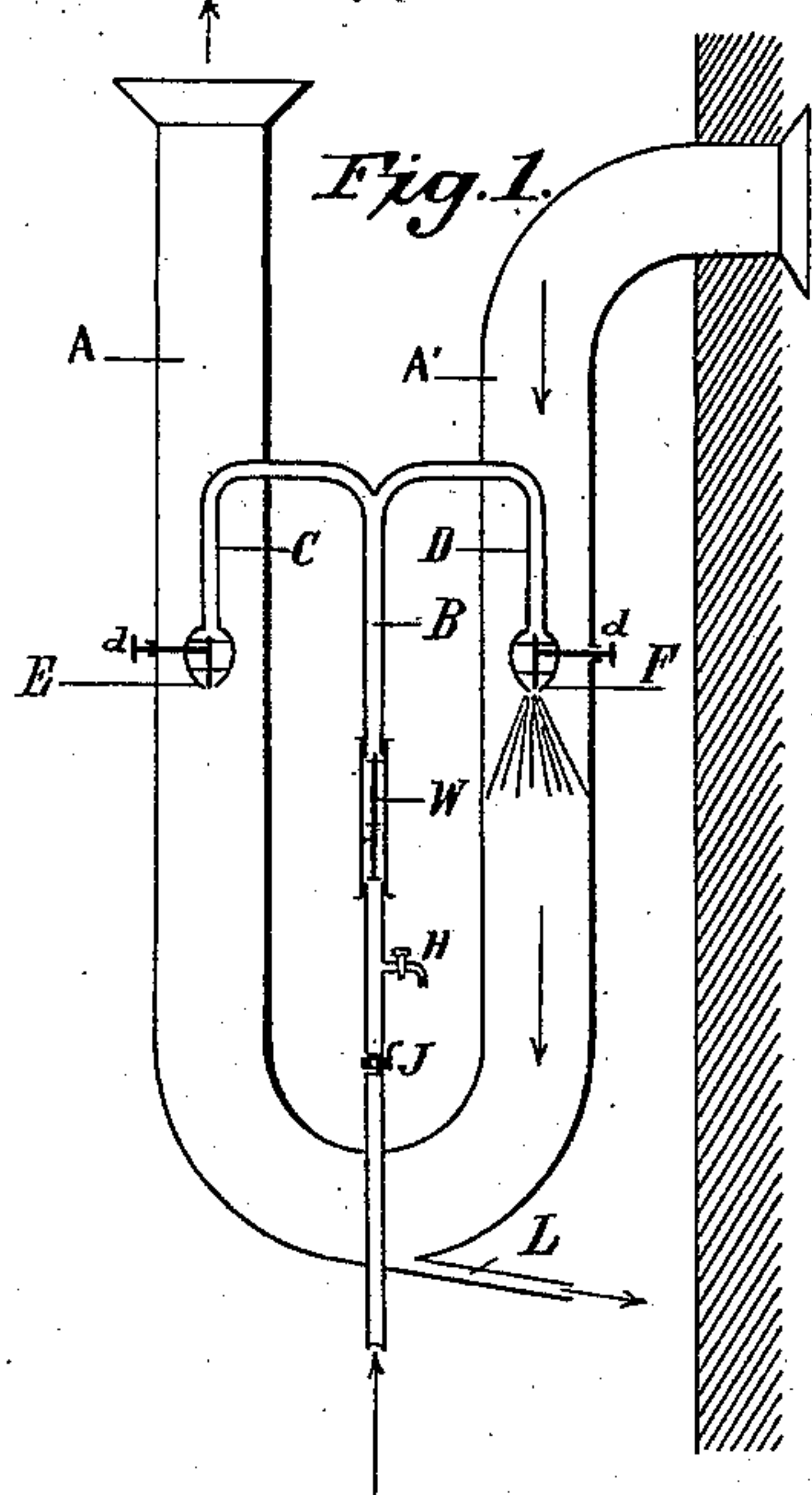


(No Model.)

J. JANKA.
VENTILATOR.

No. 351,603.

Patented Oct. 26, 1886.



Witnesses:

Wm. J. Pannet
Leo Duff

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UNITED STATES PATENT OFFICE.

JOHANN JANKA, OF PRAGUE, BOHEMIA.

VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 351,603, dated October 26, 1886.

Application filed June 23, 1886. Serial No. 205,988. (No model.)

To all whom it may concern:

Be it known that I, JOHANN JANKA, a citizen of the Empire of Austria, and a resident of Prague, in the Kingdom of Bohemia, have invented certain new and useful Improvements in Ventilators, of which the following is a specification.

This invention relates to improvements in ventilators for living and other rooms, which differ from the others hitherto in use through their simple construction and easy operation. They can be regulated, and the water enters the spray-producer already filtered, so that the atomizer is not stopped up by any matter suspended in the water.

Figure 1 of the accompanying drawings represents a vertical section of a ventilator provided with my improvements. It consists, essentially, in a U-shaped tube, A A', of any desired section. The part A of the tube is in the room to be ventilated and the part A' is in communication with the outer air. A single pipe, B, supplies the atomizers E and F with the necessary water, the pipe B branching off shortly before reaching the atomizers in the branches C D. If the spray-producer F is set to work, as represented in the drawings, fresh air is introduced into the room through A, and if the spray-producer F be shut and E opened the air would be sucked out of room to be ventilated.

The construction of my new atomizer or spray-producer is as follows:

Fig. 2 represents a spray-producer in vertical section. It consists, essentially, in a hollow pear-shaped vessel, *a*, fixed to the water-pipes C or D by the short tube-like projection *b*. On the lowest point the vessel *a* is provided with a round hole, *o*, in which works a conical pin, *c*, which when in its highest position completely fills the hole *o*, so that no water can escape. If the pin *c* be lowered a little by a rack-and-pinion arrangement, *d* and *r*, the rack being on the pin itself and the pinion on a spindle reaching through the side of the vessel and provided with a button, *d*, a small annular opening will be produced round the conical pin *c*, through which the water will be forced in a conical ring of spray. (Shown in Fig. 2^a, representing a horizontal section on the line *x y* of Fig. 2.) The more the pin *c* is lowered the wider the ring will become through

which the water is forced, and the more water will be emitted. The force of the water, and in consequence the draft produced, can therefore be regulated or entirely shut off by the button *d*.

A further improvement is the cleansing or filtering of the water before it reaches the atomizer, to prevent the atomizer from being stopped up. This arrangement is constructed as follows: At a convenient place the water-supply pipe B is cut and a piece of tubing, W, Fig. 3, of an inner diameter equal to the outer diameter of B, and having at one end a left-handed, at the other a right-hand, female screw-thread, is screwed onto the ends of B. Into this tube W is placed a wire, *s*, onto which are fixed two or more fine-meshed wire sieves, S S' S'', of the same diameter as the tube W, the lowest one resting on the edge of the tube B and having the widest meshes, while the others are gradually finer, the finest meshed being at the top. At a certain distance from and underneath the tube W a little cock, H, is provided, and underneath this the stop-valve J of the supply-pipe B. If the tube W is adjusted and the stop-valve J opened, the water will pass through B and W, through the sieves S S' S'', and will reach the spray-producer almost filtered, the solid matter remaining against the sieves. If the sieves are to be cleaned, the stop-valve J is shut and the cock H opened, when the water standing above H will run out and carry the dirt accumulated against the sieves down and out with it. If it be desired to take the sieves out and clean them thoroughly the tube W is screwed down, as in Fig. 4, and passed over the nether tube B, when the sieves can be removed. If desired, an extra sieve, *f*, can be arranged inside the pear-shaped vessel *a* of the spray-producer. Through the cock H, also, water may be drawn off at any time for domestic or other purposes. The water from the spray-producers is run off through the tube L.

Figs. 5, 6, and 7 are modifications of the ventilator. Fig. 5 represents a ventilator, the tubes A A' of which are close together to economize space. Fig. 6 represents a double ventilator with a spray-producer arranged in each, so that if the spray-producer E only is playing the air is sucked from the room; if F only is playing, fresh air is introduced, and when both are

playing at the same time the air is sucked from the room and fresh air introduced. Both spray-producers are in this case also supplied by one water-supply pipe, B, only. Fig. 7 represents a double ventilator horizontally arranged, either one above the other or next to each other.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. In the water-supply pipe B of a spray-ventilator, the sleeve W, which can be slipped down, in combination with the wire sieves S S', arranged one above the other on a wire, s, inside the tube W, for the purpose of preventing any foreign matter from entering the spray-producer, substantially as specified.

2. In combination, the pear shaped vessel, the conical valve in the bottom thereof, hav-

ing a rack formed on its stem, and a shaft extending through the side of the vessel, having on its inner end a pinion to engage the rack on the valve stem and on its outer end a suitable handle, whereby the valve may be adjusted at will from the outside to increase or decrease the spray, as set forth.

3. In combination, the pipe B, having a cut-out section, a thimble, W, removably covering said section, the sieves in said thimble mounted on stem s, the cut-off valve j, below the sieves, and the cock H, between the sieves and the cut-off valve, for the purpose set forth.

In witness whereof I have hereto set my hand in the presence of the two subscribing witnesses.

JOHANN JANKA.

Witnesses:

HENRY SCHMOLKAF,
ADOLF FISCHER.