

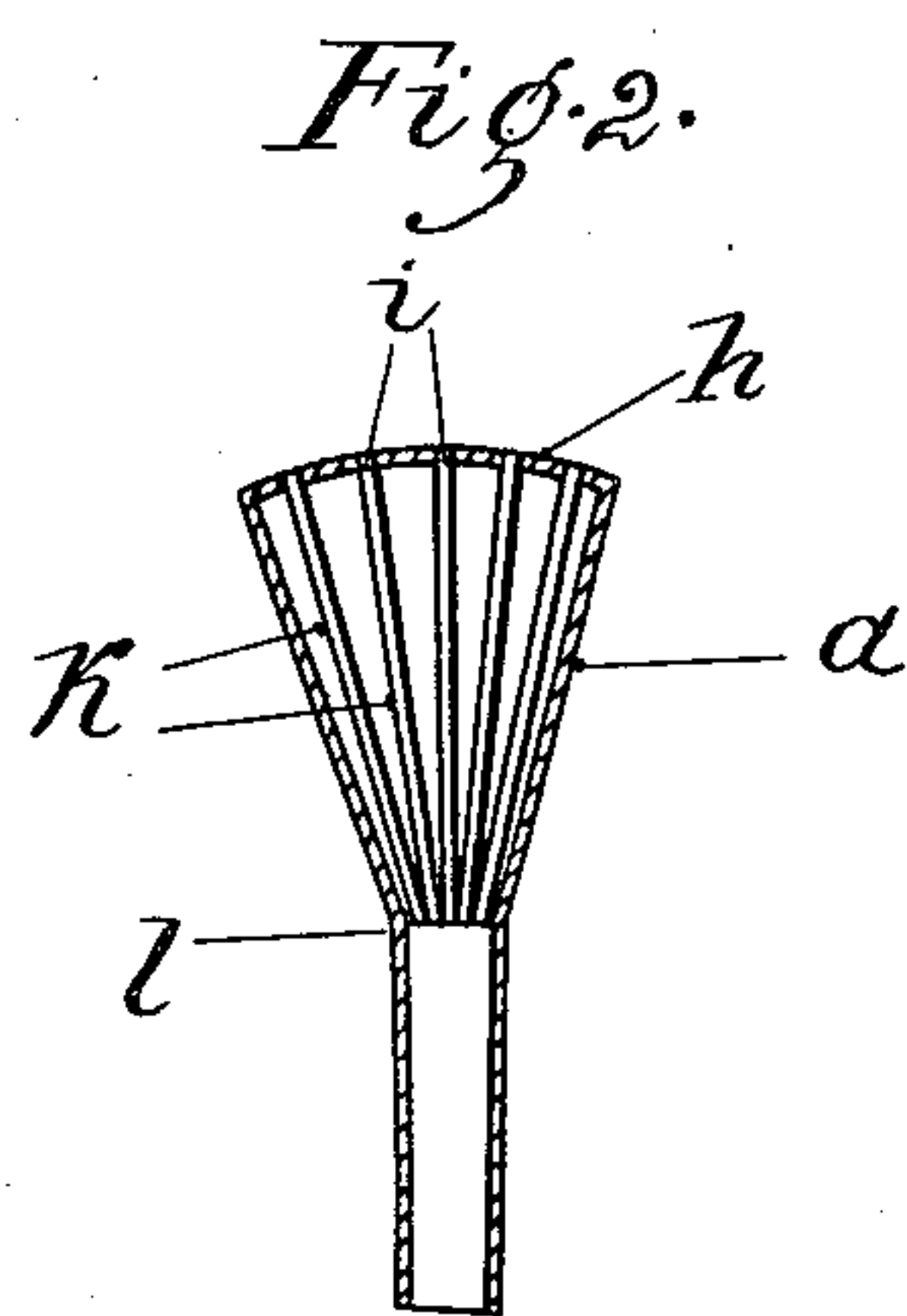
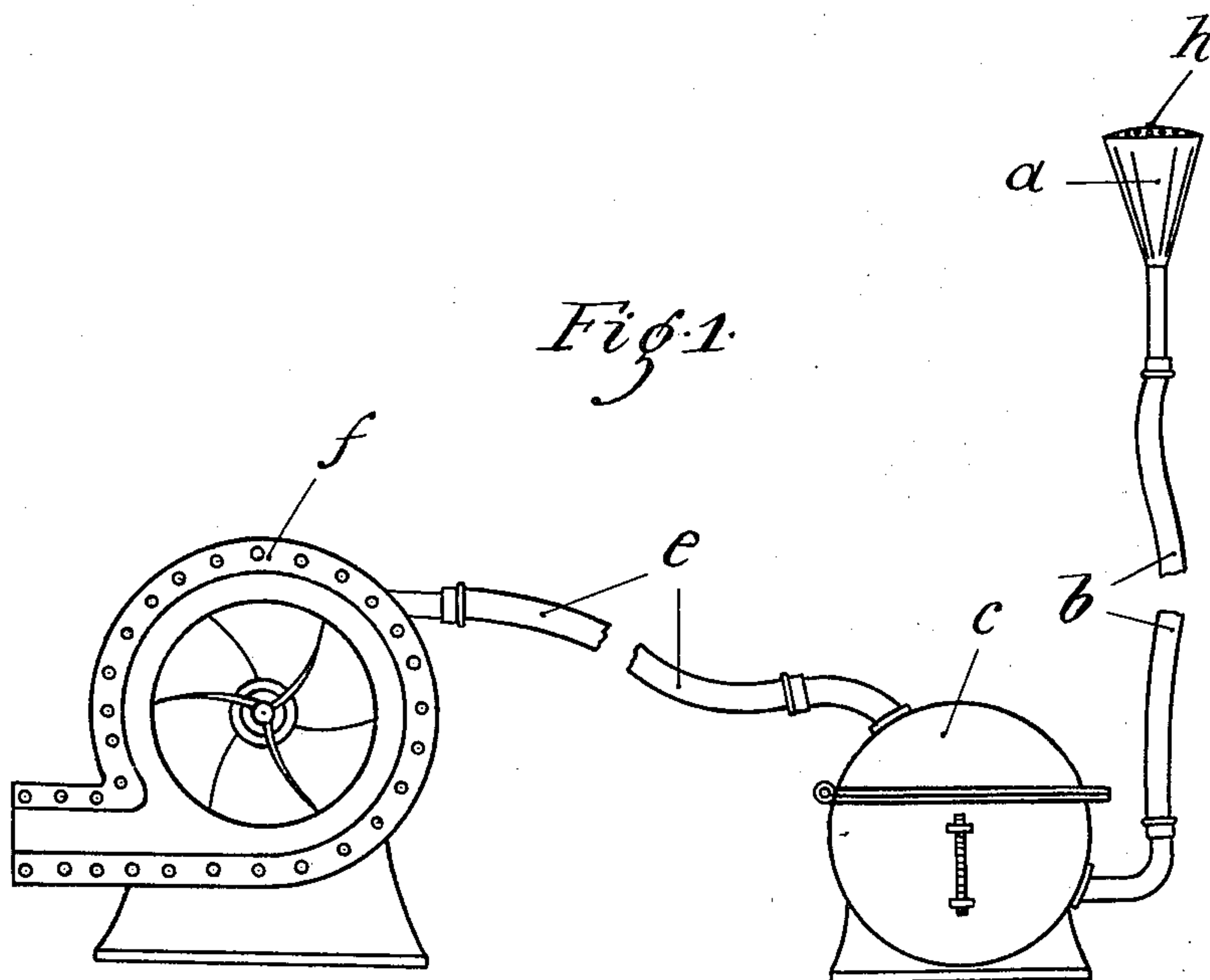
No. 855,888.

PATENTED JUNE 4, 1907.

F. HECKER.

SUCTION MOUTHPIECE FOR EXHAUST DEVICES.

APPLICATION FILED NOV. 19, 1906.



Witnesses:  
E. M. Midebrands  
N. Reynolds

Inventor:  
Friedrich Hecker,  
by Georgii & Massie  
Attorneys.

# UNITED STATES PATENT OFFICE.

FRIEDRICH HECKER, OF MUNICH, GERMANY.

## SUCTION-MOUTHPIECE FOR EXHAUST DEVICES.

No. 855,888.

Specification of Letters Patent.

Patented June 4, 1907.

Application filed November 19, 1906. Serial No. 344,124.

*To all whom it may concern:*

Be it known that I, FRIEDRICH HECKER, a citizen of Germany, residing at Munich, Bavaria, Germany, have invented certain new and useful Improvements in a Suction-Mouthpiece for Exhaust Devices; 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.

For cleaning, cooling or warming the air of closed rooms devices are known, in which the air is sucked in through a tube or pipe and then passed through a cleansing receptacle or filter.

The present invention relates to a mouthpiece for such devices, which will make them more especially adapted for use in hospitals and at the bedside of patients, for instance, in order to suck away the air in the vicinity of wounds or to rarify the air in cases of asthma. Such a sucking away of the air becomes often necessary, since on the one hand, a current of air causes a renewal of the air more especially only in the path of the current itself, the air on either side being left more or less undisturbed, and because on the other hand a current or draft of air is injurious to many persons. This last fact must also be taken into consideration in the above-mentioned special application of the herein described mouthpiece. On this account the mouthpiece is so constructed, that the current of sucked in air is uniformly distributed over a comparatively large area by means of small directing tubes, so that even in the case of a powerful suctional current, and when the mouthpiece is spaced in immediate vicinity of the body of the patient, the suctional current is not felt by the person under treatment, or at least, not in an unpleasant or injurious manner.

It is apparent that this mouthpiece, in consequence of its sphere of action being distributed over a comparatively large area, is also adapted for many other uses, for instance, for cleaning old and valuable pictures, since a strong air current limited to a small area would here injure the paint or surface of the picture.

In the drawing, Figure 1 shows a side elevation of this mouthpiece, and Fig. 2 an enlarged longitudinal section. Fig. 1 at the same time shows one of the already mentioned devices in conjunction with which this mouthpiece is intended to be used.

The mouthpiece consists of an outer case *a* increasing in size toward the top, and closed at its upper end by a perforated plate *h*; inside the case the above-mentioned tubes *k* of small diameter, which serve to distribute the air-current, are secured. These tubes connect the holes *i* of the plate *h* with the narrow end of the case *a*, where they unite at *l*.

The mouthpiece is joined to an advisably flexible pipe *b* leading to the receptacle *c*, which is adapted to cleanse, cool or warm the air, and which is itself connected with the suction-pump *f* by means of the pipe *e*.

What I claim as my invention and desire to secure by Letters Patent is:

1. In an exhaust device, the combination, with a pipe, of a mouthpiece comprising a plurality of tubes having their inner ends converging to form a connection with the pipe, and means for producing suction upon said pipe.

2. In an exhaust device, the combination, with a pipe, and a funnel-shaped casing connecting therewith at its smaller end, of a plurality of converging tubes within said casing having their ends grouped at the smaller ends thereof, and means for producing an air current through the pipe by way of the tubes.

3. In an exhaust device, the combination, with a pipe, and a funnel-shaped casing capped at its larger end and connecting at its smaller end with the pipe, of a plurality of tubes arranged within said casing with their inner ends grouped at the smaller end thereof and with their outer ends tapped through the cap, and an exhaust device coupled to said pipe.

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

FRIEDRICH HECKER.

Witnesses:

CARL JOUMER,  
JOSEF ZIGELSBERGER.