

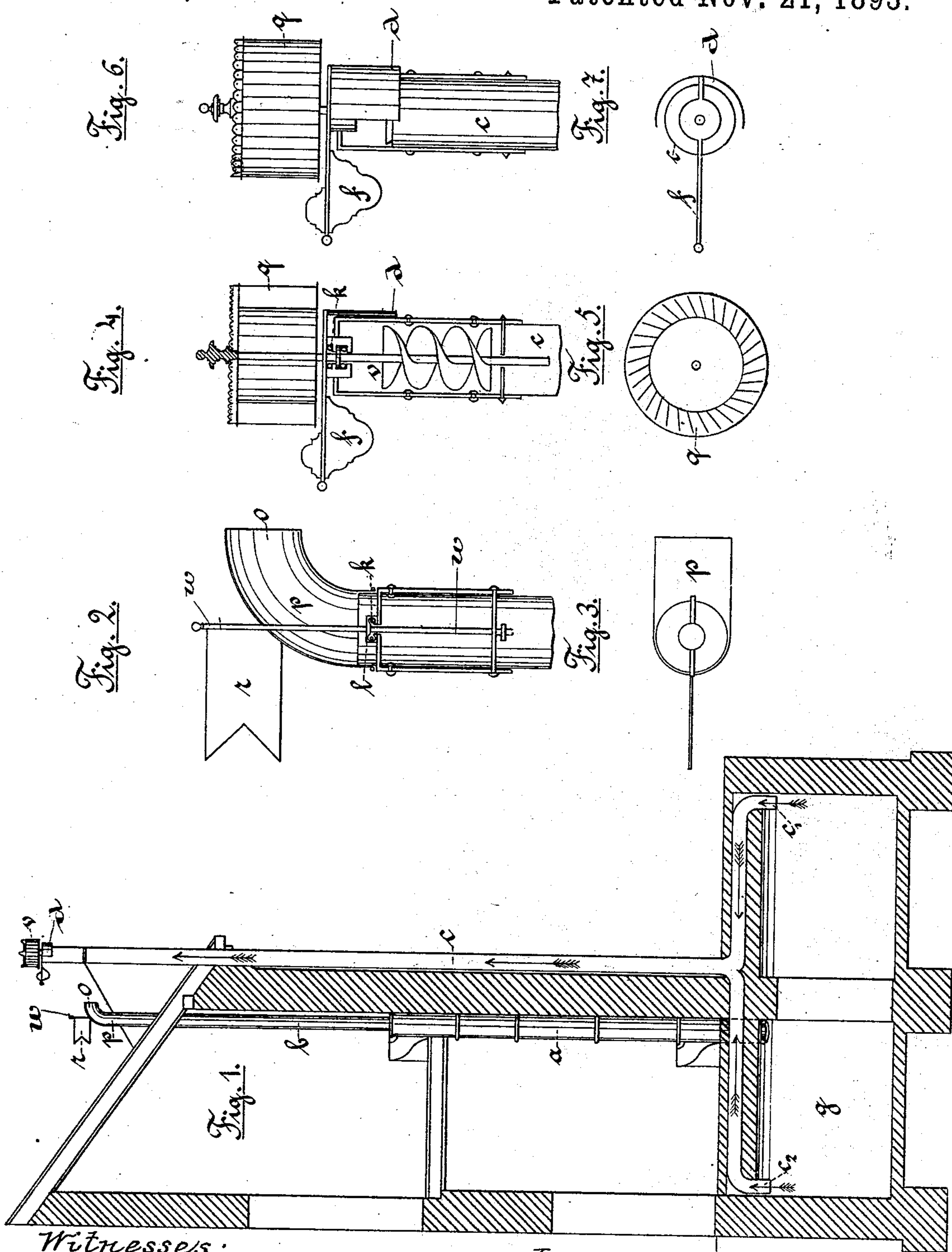
(No Model.)

H. G. SIEGERT.

APPARATUS FOR THE VENTILATION OF CLOSED ROOMS, &c.

No. 509,141.

Patented Nov. 21, 1893.



Witnesses:
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UNITED STATES PATENT OFFICE.

HUGO GUSTAV SIEGERT, OF CHEMNITZ, GERMANY.

APPARATUS FOR THE VENTILATION OF CLOSED ROOMS, &c.

SPECIFICATION forming part of Letters Patent No. 509,141, dated November 21, 1893.

Application filed November 10, 1892. Serial No. 451,566. (No model.)

To all whom it may concern:

Be it known that I, HUGO GUSTAV SIEGERT, of the city of Chemnitz, Kingdom of Saxony, Empire of Germany, have invented certain
5 new and useful Improvements in Apparatus for the Ventilation of Closed Rooms; 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
10 to which it appertains to make and use the same.

The object of the present invention is to provide means by which the gases from sewers, wells and privies are effectually led away
15 so that they cannot pass over into dwellings or rooms.

Figure 1 of the accompanying drawings shows the device in vertical section. Figs. 2 and 3 are an elevation and a view from below of the pressure-producing-apparatus.
20 Fig. 4 is a vertical section through the ventilator. Fig. 5 is a horizontal section through the driving wind wheel. Fig. 6 represents the ventilator in side elevation. Fig. 7 is a
25 view from below of the same.

Many trials have been made to attain the object of this invention, but all have failed. I have succeeded in obtaining a good result, by employing the motion of the outer atmospheric air, and by forcing the same to produce a pressure and an aspiration simultaneously on the foul air in the places to be ventilated. I provide the ordinary waste-pipe *a*
30 *b*, which is connected with the sewer, and led up to the top of the house, with a movable curved section *p* having a vane *r* so that its opening *o* is always placed against the wind, in order to force it to enter through the pipe to produce an increase of pressure in the
35 sewer or well *g*. The curved section *p* rigidly connected with the vane *r* is supported by a vertical shaft *w*, which is guided in suitable cross ties. An offset *l* of the shaft is made to run on balls *k*, which carry the whole

weight of the top, and allow the same to turn
45 freely under the impulse of the slightest breeze. A second pipe *c*, also led up above the roof, is in communication with the sewer or well by means of two channels *c' c''*. The top of the pipe is provided with a ventilator
50 of any shape adapted to aspirate the gases from the sewer.

The form of the ventilator, I employ by preference, consists in a screw *v* connected with a horizontal windwheel *q* producing the
55 motion, and of a protecting plate *d*, rigidly connected with a vane *f* and arranged near the top of the pipe *c*. This protecting plate is of semicircular form and being always in position against the wind, moved by the vane,
60 prevents the air from passing down the pipe *c* while it readily allows the foul air to escape, when aspirated by the screw *v* being simultaneously pushed by the increase of pressure, produced by the downward current in the
65 pipe *a b*. The top part of pipe *c*, i. e., the ventilator or screw and the vane with protecting plate are also carried on ball bearings *k* to insure easy motion.

Having thus described my invention, I
70 claim—

In a ventilating apparatus, the combination with a pipe having a central bearing, of a shaft vertically journaled in said bearing, the upper end of said shaft extending above
75 the mouth of said pipe and having a wind wheel on its upper end, a rotary protecting plate, journaled on said shaft, said plate being provided with a vane at its rear end, and being adapted to cover the mouth of said
80 pipe from the windward side thereof, substantially as set forth.

In testimony whereof I have affixed my signature in presence of two witnesses.

HUGO GUSTAV SIEGERT.

Witnesses:

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