(No Model.)

H. MOELLER.

CAP FOR CHIMNEYS, FLUES, &c.

No. 491,848. Patented Feb. 14, 1893.

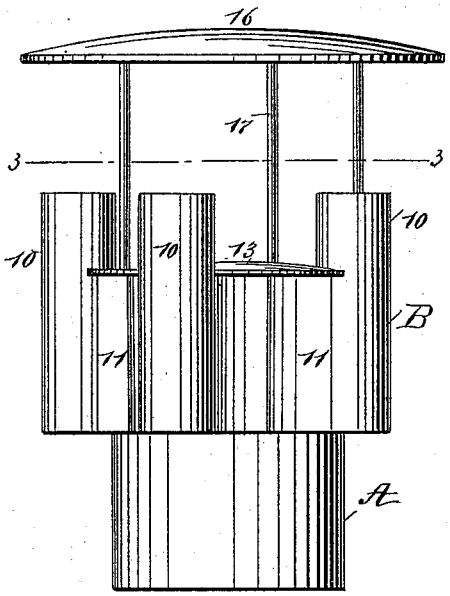

Fig: 1

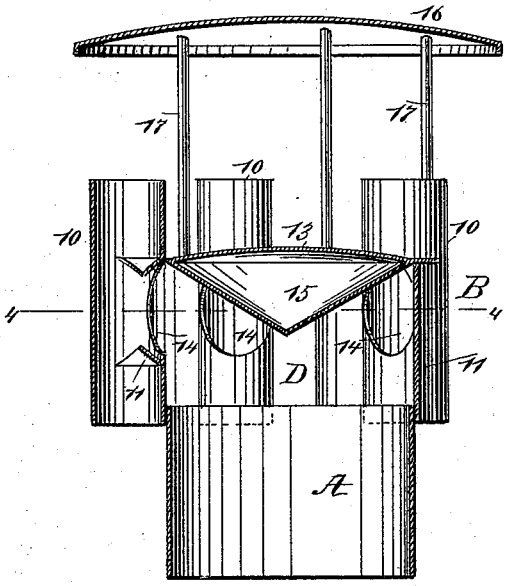

Fig: 2.

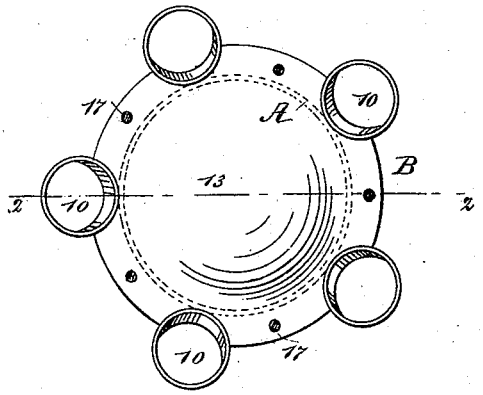

Fig: 3.

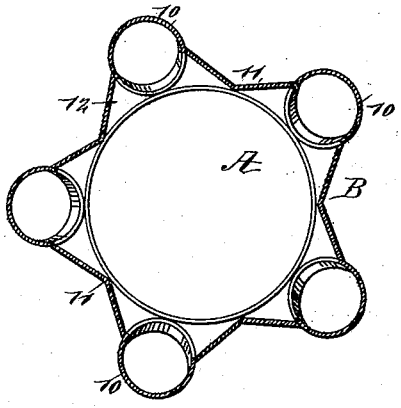

Fig: 4.

WITNESSES:

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HERMAN MOELLER, OF BROOKLYN, NEW YORK.

CAP FOR CHIMNEYS, FLUES, &c.

SPECIFICATION forming part of Letters Patent No. 491,848, dated February 14, 1893.

Application filed December 13, 1892. Serial No. 455,007. (No model.)

To all whom it may concern:

Be it known that I, HERMAN MOELLER, of Brooklyn, Kings county, and State of New York, have invented a new and useful Improvement in Caps for Chimneys, Flues, &c., of which the following is a full, clear, and exact description.

My invention relates to an improvement in caps for chimneys, flues, &c., and it has for its object to provide a device of exceedingly simple yet durable construction, in which, no matter where the flue or chimney capped may be located, a perfect draft will be afforded.

Another object of the invention is to provide a device which will be exceedingly economic, and in which should one conduit fail to act an auxiliary conduit will perform the proper functions.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth and pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the device; Fig. 2 is a vertical section taken practically on the line 2--2 of Fig. 3; Fig. 3 is a horizontal section taken essentially on the line 3—3 of Fig. 1; and Fig. 4 is a horizontal section taken essentially on the line 4—4 of Fig. 2.

The base of the cap consists of a tube A, which is adapted to be fitted in any suitable or approved manner to a chimney or flue, or the equivalent thereof. The body B of the device is supported by the base tube A, and the body consists of a series of tubes 10, vertically located and circularly arranged, the tubes at their lower ends being soldered, riveted, or otherwise secured to the base tube A, the base tube A, being considerably larger than the tubes 10, the latter being adapted to conduct air as well as smoke. Any number of smoke-conducting tubes 10 may be employed, and between the tubes 10 angular deflecting plates 11, are arranged, the plates being somewhat V-shaped in cross section, as shown in Fig. 4; and a plate 11, is secured to two opposing tubes 10, and the plates are depressed at their central vertical sections, and the depressed portions are secured at their lower ends to the base tube A, whereby a space 12, is made to intervene the base tube and the plates 11 at each side of their centers, affording an upward passage for the air in addition to the passage which is formed by the tubes 10. The tubes 10, are open at both their upper and their lower ends, while the plates 11, at their upper ends are securely attached to a roof plate 13, and the said roof plate is likewise attached to, or made to fit snugly or in engagement with the several body tubes 10, the body tubes extending some distance above the roof plate, and in this manner the upper portion of the base of the device is effectually closed. If the air passes up through the spaces 12 formed by the plates 11 the air will pass into an upper chamber D formed by the roof plate 13, the body tubes 10 and the plates 11, while the air has a free passage through the body tubes 10; but each body tube 10 is in communication with the upper chamber D, and this communication is established by producing in the body tubes near the roof or cover of the chamber D an opening 14; and within the chamber D, at the roof portion thereof, a cone 15, is located; and the body of the cone will act as a deflector and force the smoke passing up through the base tube A, to pass out through the openings 14 in the body tubes 10, and out through said tubes, while the air from the outside of the device, passing up through the spaces 12, will assist in forcing the smoke into the openings 14 of the body tubes, since the plates 11, which may be termed side plates, are inclined from their centers in direction of the openings of the body tubes.

A device constructed as above described will conduct smoke from the flue, no matter in what position the flue or the chimney carrying the device may be placed; but as an ornament, and further in order that the tops of the body tubes 10 may be protected, a cap plate 16, is preferably located above the roof 13 of the body and above the body tubes, the cap plate being supported by means of rods 17, or their equivalents, attached to the plate and secured to the roof between the body tubes in any suitable or approved manner.

In the operation of this device, the smoke passing from the flue or chimney through the base tube A, ascends into the chamber D, from whence it is guided into the openings 14 in the body tubes 10 and escapes through the upper portion of said tubes, as currents of air are constantly passing through the body tubes and currents of air are also constantly passing upward through the spaces 12, located between the body tubes, and these currents of air force the smoke upward in the first instance through the tubes 10 and in the second instance into the openings 14 of the body tubes. Thus it will be observed that a constant siphonage is in operation, and a thorough draft and a perfect disposal of smoke are obtained. The conical top 15, serves to deflect the smoke and guide it to the body tubes 10. Thus it will be observed that there are two guiding devices or deflectors in the apparatus; the cone 15 and angular plates 11.

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

1. In a cap for chimneys, flues, &c., the combination, with the base tube and series of off-take tubes secured to the exterior of the base tube and extending upwardly therefrom, of angular plates depressed at their center and connected at their central portions with the base tube and at their other ends with the off-take tubes, and a roof plate engaging with the upper portions of the off-take tubes and attached to the upper portions of the angular plates intermediate of said tubes, substantially as and for the purpose specified.

2. In a cap for chimneys, flues, &c., the combination, with a base tube, of off-take tubes arranged around the base tube and secured thereto, the off-take tubes extending upward above the base tube, a roof plate attached to the off-take tubes near their upper ends, and angular deflecting plates arranged between the off-take tubes, said angular deflecting plates being depressed inward at their centers and attached at their central portions to the base tubes, at their sides to the off-take tubes, and at their upper ends to the roof plate, as and for the purpose specified.

3. In a cap for chimneys, flues, &c., the combination, with a base tube, and off-take tubes secured to the base tube and projecting upwardly therefrom, the off-take tubes being arranged in a circular series, each of the tubes being provided at its inner side near the top with an opening, of a roof plate secured to the off-take tubes near their upper ends, a cone projected downward from the roof plate, and angular deflecting plates depressed at their central portions and attached at their centers to the base plate, at their sides to the off-take tubes, and at their upper ends to the roof plate, substantially as and for the purpose set forth.

HERMAN MOELLER.

Witnesses:
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