

(No Model.)

J. L. CHARVAT.
CHIMNEY OR FLUE COWL.

No. 489,459.

Patented Jan. 10, 1893.

Fig. 1.

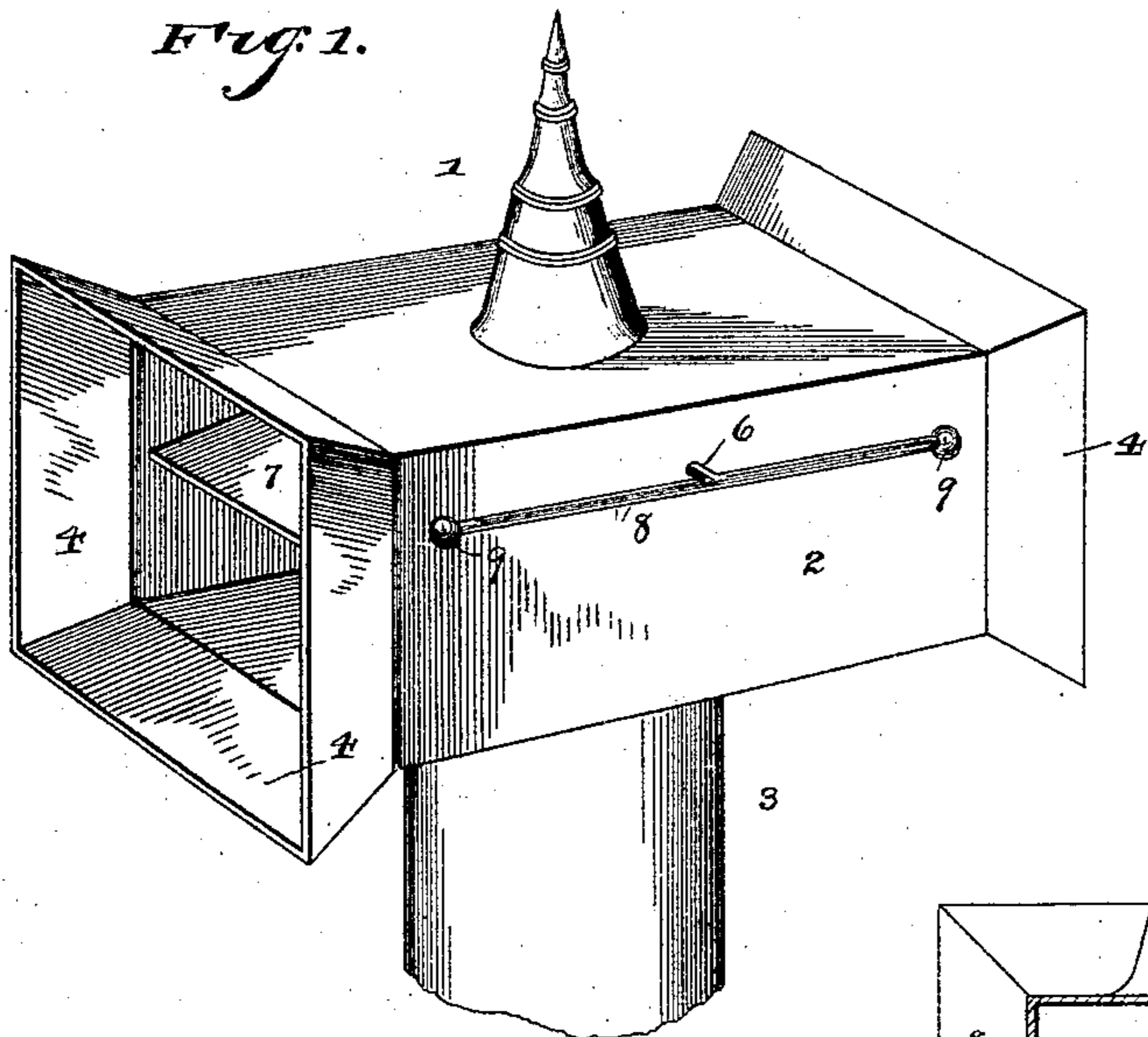


Fig. 2.

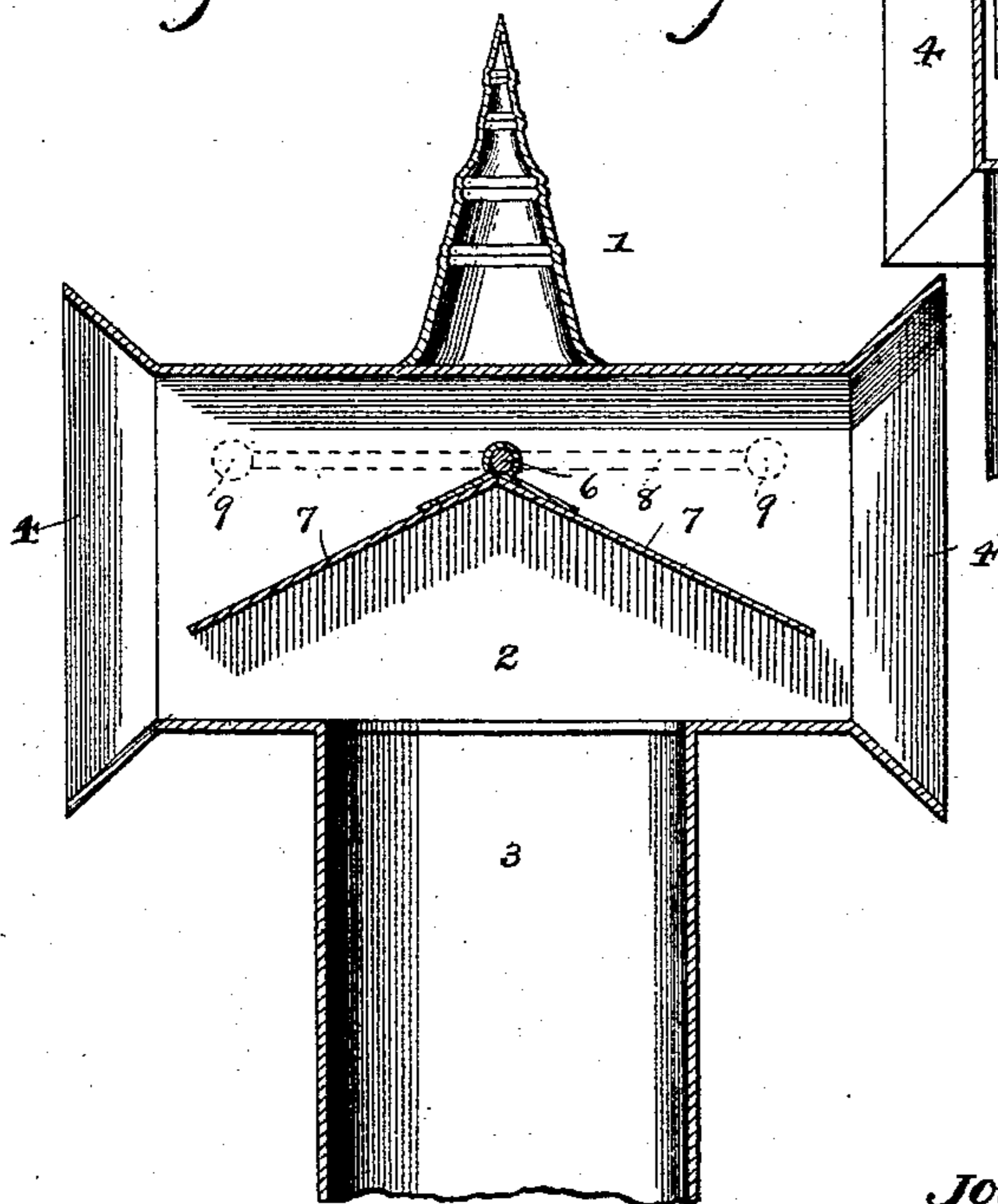
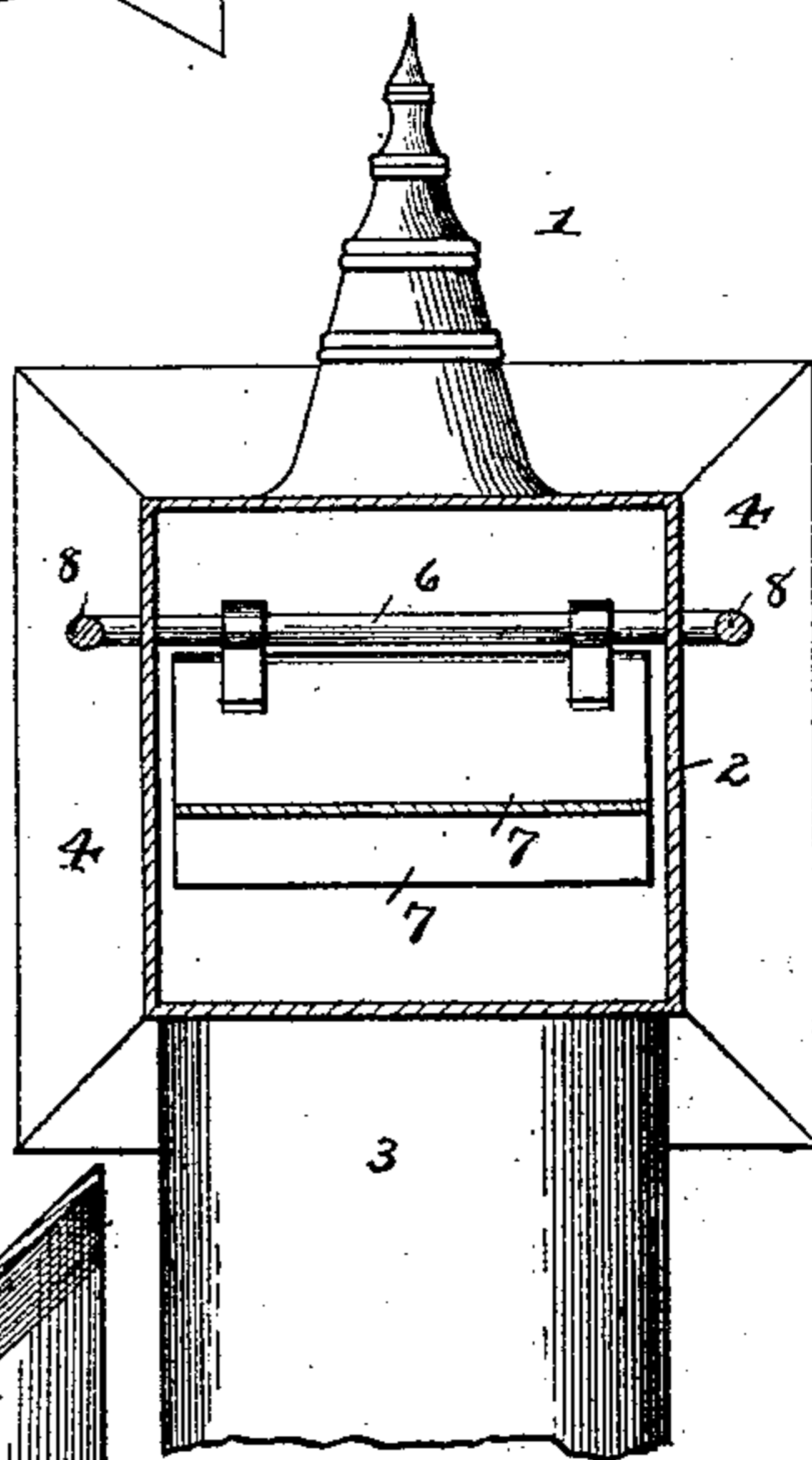


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH L. CHARVAT, OF CHICAGO, ILLINOIS.

CHIMNEY OR FLUE COWL.

SPECIFICATION forming part of Letters Patent No. 489,459, dated January 10, 1893.

Application filed December 24, 1891. Serial No. 416,058. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH L. CHARVAT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Chimney or Flue Cowl, of which the following is a specification.

The invention relates to improvements in cowls.

10 The object of the present invention is to simplify and improve the construction of cowls and ventilators, and to provide a device which will allow smoke from a chimney or flue to escape on the side which is not dis-
15 turbed by the wind.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed
20 out in the claim hereto appended.

In the drawings—Figure 1 is a perspective view of a cowl constructed in accordance with this invention. Fig. 2 is a vertical sectional view. Fig. 3 is a similar view taken at right
25 angles to Fig. 2.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a cowl designed to be mounted
30 on a chimney or flue, and adapted to be employed as a ventilator and comprising a rectangular casing 2, and a centrally depending pipe 3 communicating with the casing. The casing 2 is rectangular in section and is
35 provided with flaring ends 4; and arranged within the casing is a V-shaped damper which is secured to a rod or shaft 6 journaled in the sides of the casing. The V-shaped damper 5 is composed of inclined sections 7, which have
40 their upper ends secured together, and are arranged to close the mouth of the pipe 3 at one side, which is disturbed by the wind, and to leave the opposite side which is not disturbed by the wind, open. The wind in blow-
45 ing through the casing strikes one of the damper sections and closes the pipe at that side by forcing the said damper section down against the bottom of the casing. This raises the other damper section and leaves the other
50 side of the pipe open. The damper is ar-

ranged a short distance below the top of the casing to provide a space to cause sufficient draft, to carry off smoke when the device is attached to a chimney, and to carry off foul gases when employed as a ventilator. 55

In order to prevent the damper sections striking violently against the bottom of the casing, counterbalancing rods 8 are secured intermediate their ends to the rod or shaft 6. The counterbalancing rods are arranged on
60 the outside of the casing, and are provided at their ends with weights 9 which prevent the damper moving too quickly.

It will be seen that the damper is located directly above the pipe 3 and is of a length
65 exceeding the diameter of said pipe.

In the accompanying drawings the casing is shown rectangular in cross-section but it may be of any other shape, and I desire it to be understood that I do not limit myself to
70 the exact details of construction as I may without departing from the spirit of the invention make minor changes therein.

The device is especially adapted for ventilation and kindred purposes, and it may be
75 employed in cars or other vehicles to draw the dust out of them owing to its peculiar construction of damper, the movement of the vehicle producing sufficient draft to cause this result. 80

The opening or mouth of the casing by being flaring or funnel shaped draws in much more air than it would were it straight and of the same diameter as the rest of the casing; and the air drawn in is compressed thereby
85 producing a forcible draft.

What I claim is—

The combination with a pipe or flue, of a casing rectangular in cross-section mounted on the pipe or flue and having an opening in
90 its bottom communicating with the pipe or flue, said casing being provided with flaring ends, a transverse shaft journaled in the sides of the casing and having its ends extended beyond the same, a V-shaped damper
95 secured at its apex to the shaft and depending therefrom and arranged within the casing above the opening in the bottom thereof, said damper being of a length exceeding the di-
100 ameter of the pipe or flue, and the counter-

balancing rods arranged at each side of the casing on the outside thereof and extending longitudinally of the same and being centrally secured to the extended end of the
5 shaft, the ends of the counterbalancing rods being weighted, substantially as described.

In testimony that I claim the foregoing as

my own I have hereto affixed my signature in the presence of two witnesses.

JOSEPH L. CHARVAT.

Witnesses:

J. J. KILBRIDGE,

A. T. VAN SICKLE.