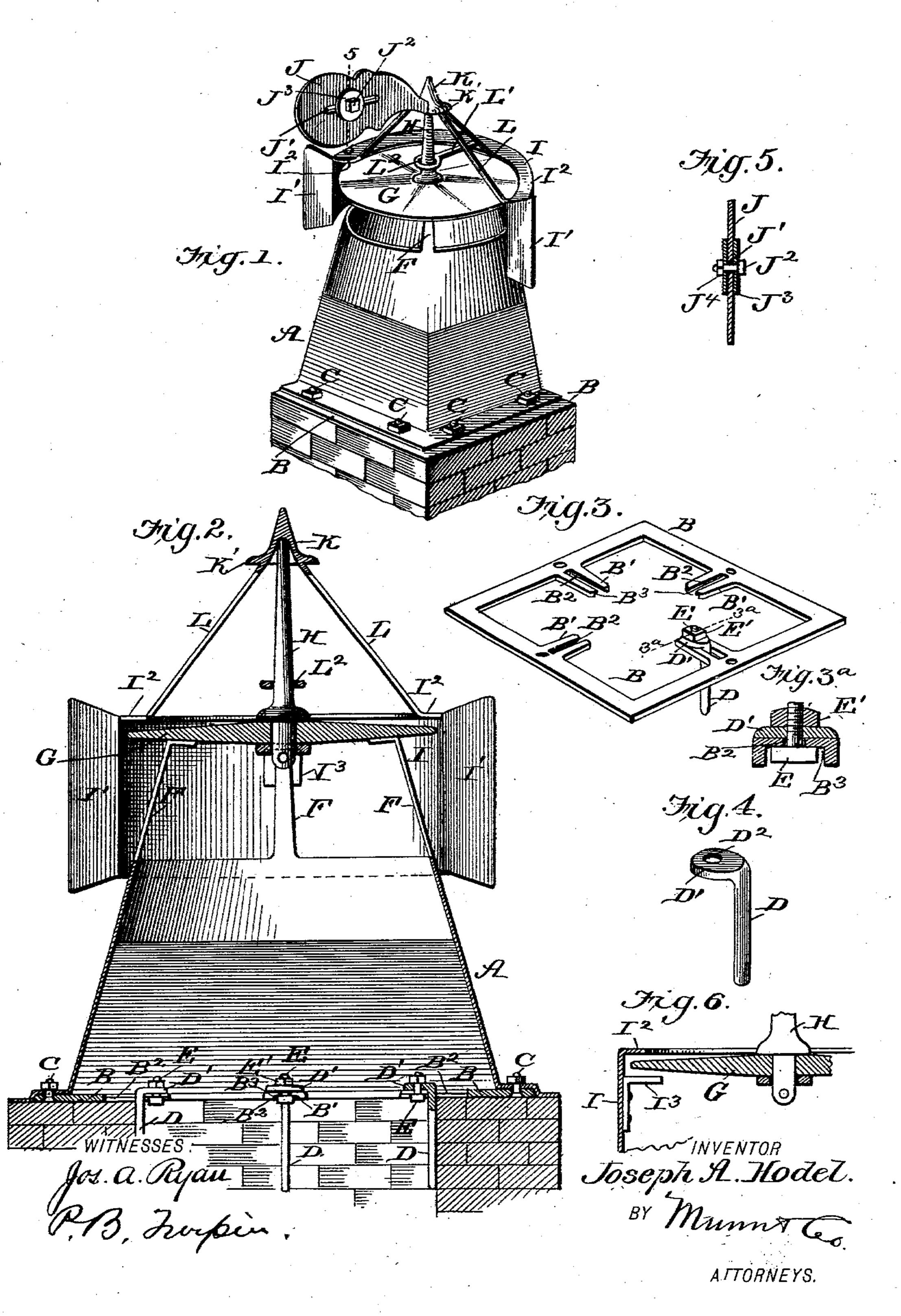
J. A. HODEL.

CHIMNEY TOP OR VENTILATOR.

(Application filed Oct. 28, 1898.)

(No Model.)



United States Patent Office.

JOSEPH A. HODEL, OF BALTIMORE, MARYLAND.

CHIMNEY TOP OR VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 629,253, dated July 18, 1899.

Application filed October 28, 1898. Serial No. 694,838. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH A. HODEL, residing in the city of Baltimore and State of Maryland, have invented certain new and useful 5 Improvements in Chimney Tops or Ventilators, of which the following is a specification.

My invention is an improvement in chimney tops or ventilators, and has for an object to provide a simple construction involving to but few parts, which will offer no obstruction to the free outlet of the smoke, will efficiently prevent downdraft, and in which the moving parts are counterbalanced and may be adjusted.

The invention has for a further object a novel means by which to secure the flue-pipe to the chimney.

The invention has for further objects other improvements; and it consists in certain novel 20 constructions and combinations of parts, as will be hereinaster described, and pointed

out in the claims.

In the drawings, Figure 1 is a perspective view of my improvement as in use. Fig. 2 25 is a vertical longitudinal section thereof. Fig. 3 is a detail view of the base-plate. Fig. 4 is a detail view of one of the anchor-bars. Fig. 5 is a detail cross-section on about line 5 5 of Fig. 1, and Fig. 6 is a detail section on 30 about line 6 6 of Fig. 2.

The cowl and other operating devices are supported at the top of the flue-pipe A, which latter is secured to the base-plate B by the bolts C, and such base-plate is secured to the 35 chimney by means of the anchor bars or

arms D.

The base-plate B is provided with the inwardly-projecting lugs B', which are provided with the radially-extended slots B2 and pre-40 ferably with the rabbets B3. The anchorbars D extend down within the chimney-flue and bear snugly against the walls thereof, as shown in Fig. 2. These arms D fit within the slots B2 and are provided with heads D', which 45 overlie the slotted lugs B' and have openings D² in line with the lugs B², so the bolts E can be passed up through the slots B2 and openings D² and receive the nuts E', as will be understood from Figs. 2 and 3. By this 50 means the base-plate is securely held to the

chimney, and the flue-pipe being bolted to the base-plate is likewise secured firmly in place, as desired.

The top G is arranged above the upper end of the flue-pipe A and is supported therefrom 55 by the slender uprights or standards F. It is manifest that these standards F will offer no obstruction to the free outlet of smoke and the like from the flue-pipe, and as these rods are the only parts intervening the flue- 60 pipe and the top it follows that I secure an unobstructed discharge of the smoke. Upon the top G, I mount the shaft H, which is suitably secured to the top and forms the journal about which the cowl revolves. The cowl 65 includes the guard-plate I and the vane J, both of which parts are connected with the bearing-piece K, which latter rests upon and turns on the upper end of the shaft H. It will be noticed that the vane is secured di- 70 rectly to the bearing-piece, while the guardplate is held thereto by means of the arms L. I also employ an arm L', which is secured at one end to the guard-plate and has near its other end an opening L2, which journals on 75 the shaft H. It will be noticed that the guardplate I and the vane J are on opposite sides of the bearing-piece K and so counterbalance each other. To secure an accurate balancing, I prefer to provide the vane J with a slot J', in 80 which is placed a bolt J², carrying weights J³, and a nut J4, which construction permits the adjustment of the weight back and forth to secure a proper balancing of the parts, as desired.

The guard-plate I is made of a length sufficient to extend about half-way around the top G and has at its ends the outwardly-flared extensions I', which afford a surface for the wind and facilitate the turning of the top, as 90 well as operate to prevent any downdraft at either side of the guard-plate. I also provide the guard-plate at its upper edge with a flange I2, which overlaps the top G and extends for a short distance inwardly over said top. This 95 flange I2 is preferred, because it prevents any downdraft at the top of the guard-plate and also permits the outlet of smoke between the top and flange I2 in calm weather, and so improves the draft.

To prevent any uptilting of the guard-plate, I provide it with a lug or bracket I³, which underlies the top G, extending sufficiently far beneath such top to engage it and stop the guard-plate from upward movement.

As shown in Figs. 1 and 2, the guard-plate extends from the point above the top G to a point slightly below the upper end of the flue-pipe A and in a circular direction for about one-half the circumference of the top G. It thus operates to prevent any downdraft when the wind is blowing, and by the action of the vane and its end wings I' the guard-plate is always kept in position facing the wind, as is desired.

It is preferred to extend the bearing-piece K slightly at K', as shown in Fig. 2, so it will tend to shed rain and the like from the bearing L^2 .

I claim, and desire to secure by Letters Patent, is—

1. The herein-described improvement in chimney tops or ventilators comprising the flue-pipe, the top supported thereon, the guard-plate having a flange overlapping the top and a lug or bracket underlying such top, the shaft supporting said guard-plate and carried entirely by the top, the vane connected with the guard-plate and provided with the longitudinal slot and the weighted bolt adjustable in said slot substantially as set forth.

2. The combination of the flue-pipe, the

uprights, the shaft mounted on the top, the 35 guard-plate having a flange overlying the top whereby to prevent downdraft and a bracket underlying the top whereby to prevent any upward displacement of the guard-plate, a central bearing-piece journaled on the shaft 40 and arms connecting said bearing-piece with the guard-plate, and the vane connected with said bearing-piece substantially as set forth.

3. The combination with the top and the shaft carried by and projecting upward from 45 said top, of the bearing-piece resting and journaled upon the upper end of said shaft, the guard-plate connected with said bearing-piece and having a flange overlapping and a bracket underlying the edge of the top plate and the 50 vane connected with the bearing-piece substantially as set forth.

4. In a chimney top or ventilator the combination of the flue-pipe, the base-plate provided with the radial slots arranged to over-55 lie the chimney-flue, the anchor-rods adjusted to pass through the slots in the base-plate and having a head overlying the slotted portion of the base-plate and provided with an opening in line with said slots, and the connect-60 ing nuts and bolts substantially as set forth.

JOSEPH A. HODEL.

Witnesses:
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