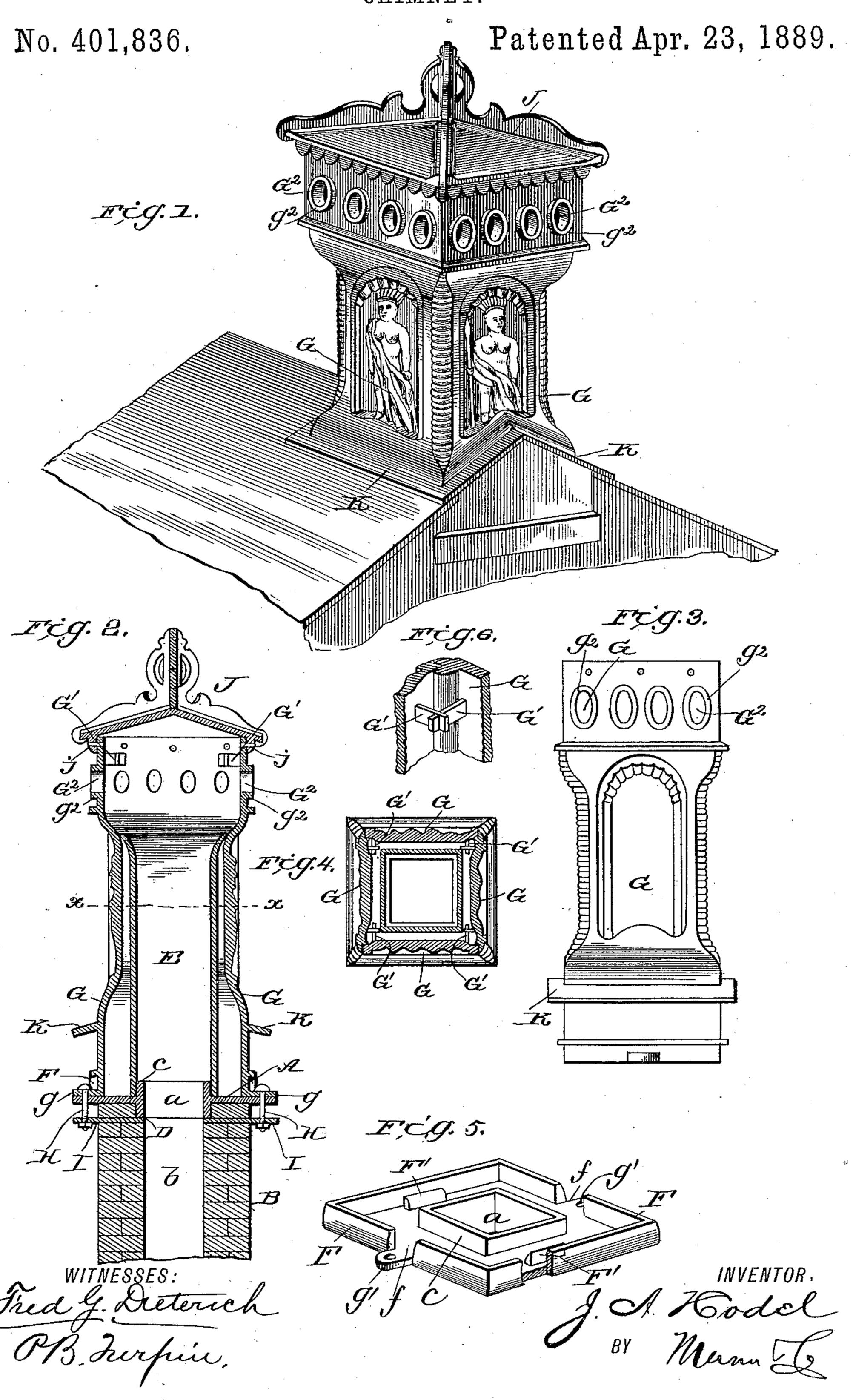
## J. A. HODEL. CHIMNEY.



## United States Patent Office.

JOSEPH A. HODEL, OF CUMBERLAND, MARYLAND.

## CHIMNEY.

SPECIFICATION forming part of Letters Patent No. 401,836, dated April 23, 1889.

Application filed August 13, 1888. Serial No. 282,757. (No model.)

To all whom it may concern:

Be it known that I, Joseph A. Hodel, of Cumberland, in the county of Alleghany and State of Maryland, have invented a new and useful Improvement in Chimneys, of which

the following is a specification.

My invention is an improvement in chimneys of the class well illustrated in my former patent, No. 363,236, dated May 17, 1887; on the present invention seeks to provide novel constructions and combinations of parts, whereby the chimney may be simplified, rendered easy of connection with the chimneywall, firm in position, and efficient in use.

The invention consists in the novel construction and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of my improvement as in use. Fig. 2 is 20 a vertical section thereof. Fig. 3 is a detail view of one of the side plates. Fig. 4 is a cross-section on about line x x, Fig. 2. Fig. 5 is a detail view of the base-plate, and Fig. 6 is a detail view showing the interlocking lugs or hooks on two of the sections or side plates.

The base-plate A has a central opening, a, corresponding to the flue-opening b in the brick flue or chimney-wall B. On this plate I provide short tubes C and D, surrounding 30 the opening a and projecting the former up and the latter down, the latter tube, D, being formed to fit snugly in the upper end of the opening b in the brick chimney B, so that when the chimney has been bricked or built 35 up to the desired height the base-plate A can be dropped thereon in proper position, the tube D entering the opening b, as shown, the plate A thus resting on top of the brick chimney. The flue-tube E fits at its lower end 40 over the short upwardly-extended tube C, and has its upper end preferably flared, as shown.

At the outer edge of the base-plate I provide an upwardly-projected flange, F, forming a retaining means for the lower end of the casing. This casing is formed of upright plates G, having their lower ends formed to fit close to the inner sides of flange F, and the plates G at the opposite sides having at their lower ends laterally-projected lugs g, which project through recesses or notches f in the flange F and rest directly over lugs g', projecting from the base-plate, such lugs g g' be-

ing perforated for the passage of the anchorrods H, passed down through lugs g g, extended at their lower ends through plates I, 55
built in the brick wall and secured by nuts,
as shown, or by keys or other suitable expedients. It will be seen that these rods H
serve to secure both the base-plates and the
casing in position. The plates G are proovided at or near their upper ends with inwardly-projected hook-like lugs G, which
interlocks and serve to unite the plates G at
such ends. Through the plates G, near their
upper ends and above the upper end of tube GE, I form the outlet-openings  $G^2$ , out through
which smoke and the like pass.

The top or cap J fits on and over the upper ends of plates G, and serves as a further means of uniting such parts. Ordinarily the 70 weight of the top or cap will serve to secure such part in position; but where desired keys or bolts may be used to secure the top to plates G, as will be seen at j in the drawings.

In order to effect a close joint between the 75 edges of plates G, I prefer to rabbet the edges of one pair of plates to receive the edges of the others, thus insuring a close fit and avoiding the exit of sparks, &c., as will be understood.

Laterally-projected ledges K are formed on the plates G of the casing, lapping over the roof and serving to prevent any water from passing down alongside the chimney into the house. On the plates G, surrounding the open- 85ings  $G^2$ , I form tubes  $g^2$ , thus extending said openings, and so increasing the draft as desired without necessitating any increase in the thickness of metal employed in the casing.

As stated, two of plates G have lugs g. The 90 other two of such plates G fit at their lower ends between the flange F and short ribs F', mounted on the base-plate.

An important advantage results from the arrangement of the lower end of the tube E 95 over the upwardly-projected short tube C, in that by reason of such construction I avoid the rabbeting of either the tubes C or E, resulting in a cheaper and stronger construction of such parts, and also enable the bore of tube E to be made larger than that of tube C to improve the draft.

Having thus described my invention, what I claim as new is—

1. In a chimney, the combination of the baseplate having flanges F, short ribs F', and lateral lugs g', and having the flange F recessed at f in line with lugs g', the side plates, G, two 5 of which have lugs g fitted to rest in recesses f and over lugs g', and the other two side plates being fitted at their lower ends between the flange F and the short ribs F', the cap or top and fastenings, substantially as set 10 forth.

2. The base-plate and the casing seated thereon, and having two of its side plates provided at their lower ends with laterallyprojected lugs, combined with the anchor-15 rods, whereby to connect said lugs with plates anchored in the chimney-wall, and the said anchored plates, all substantially as and for | ing witnesses. the purposes specified.

3. The combination, in a chimney-top, of 20 the base-plate having lateral perforated lugs: g', and an edge flange, F, formed in line with lugs g', with openings or recesses f, the casing

having lateral lugs g, extended through openings f and over the lugs g', and the anchorrods passed through lugs g g' and secured, 25 substantially as and for the purposes specified.

4. The improved chimney-top consisting of the base-plate A, having openings a, tubes C D, lugs g', and flange F, recessed at f, the 30 tube E, fitted at its lower end on tube C, the casing having plates G, provided with lugs q, extended through recesses f, and also having interlocking hook-like lugs G', the cap or top, and the anchor-rods, all substantially as and 35 for the purposes specified.

The above specification of my invention signed by me in the presence of two subscrib-

JOSEPH A. HODEL.

Witnesses:

P. B. Turpin, GEO. S. BROCK.