

(No Model.)

J. H. IRWIN.
VENTILATOR OR CHIMNEY CAP.

No. 265,814.

Patented Oct. 10, 1882.

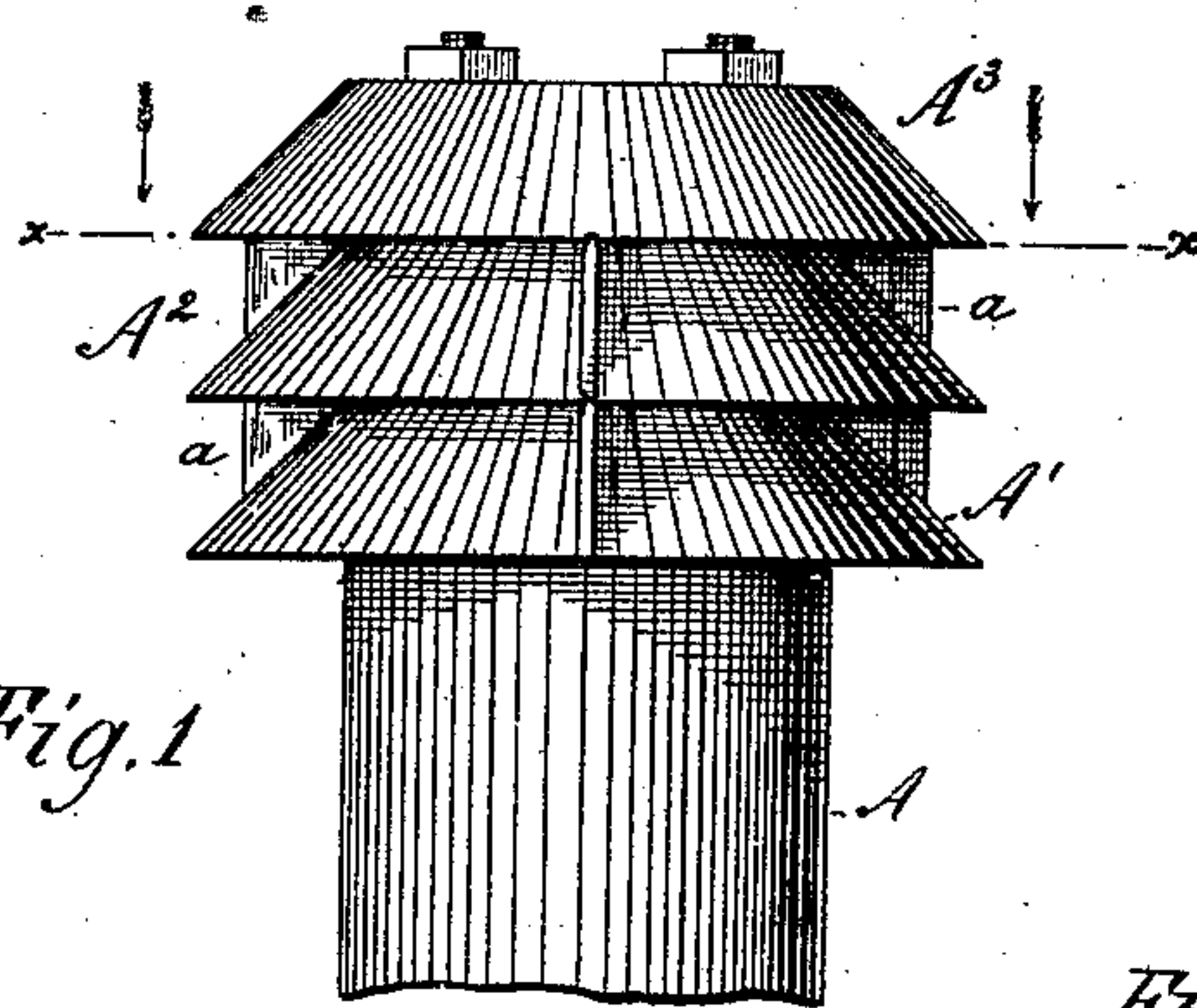


Fig. 1

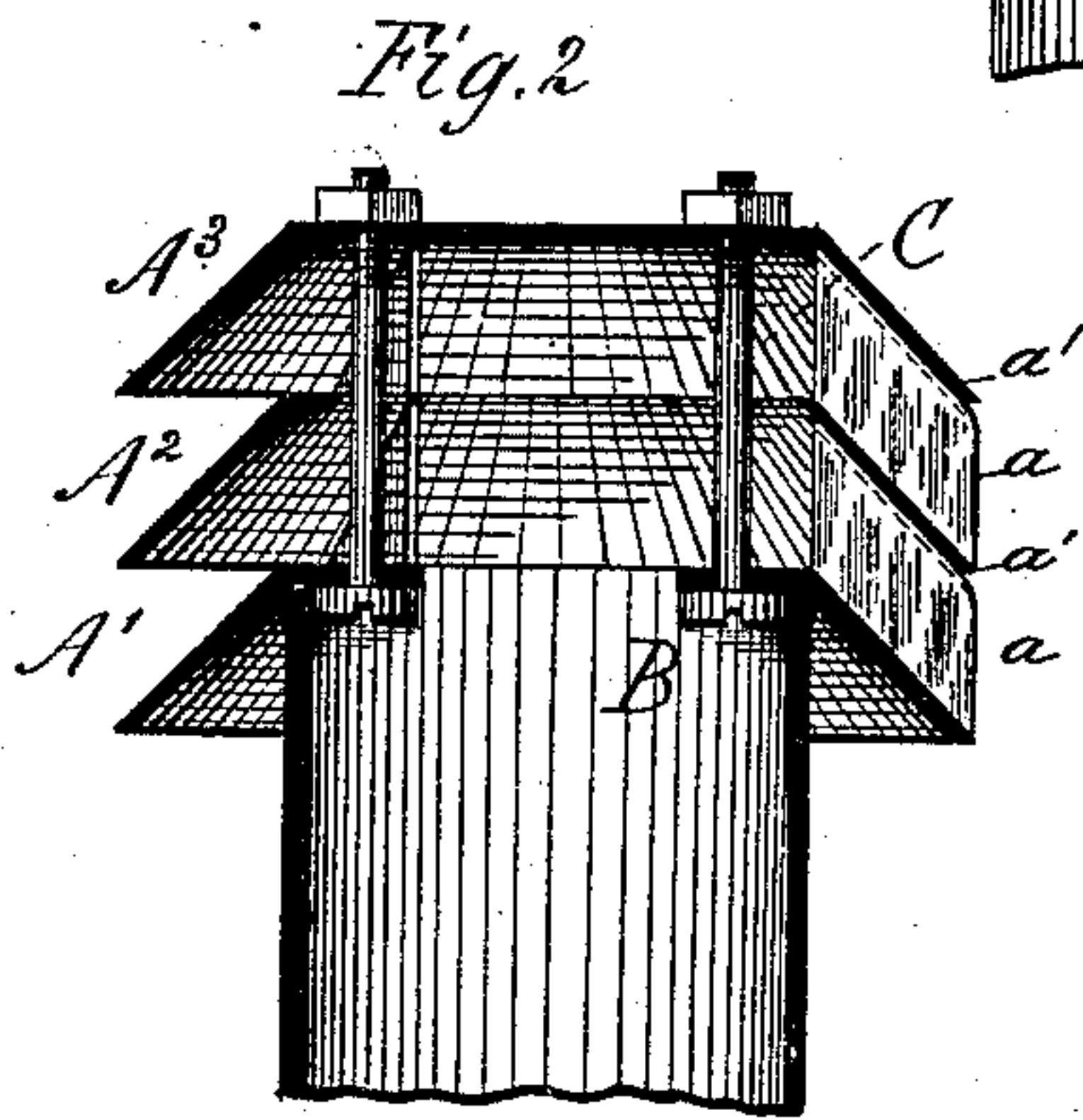


Fig. 2

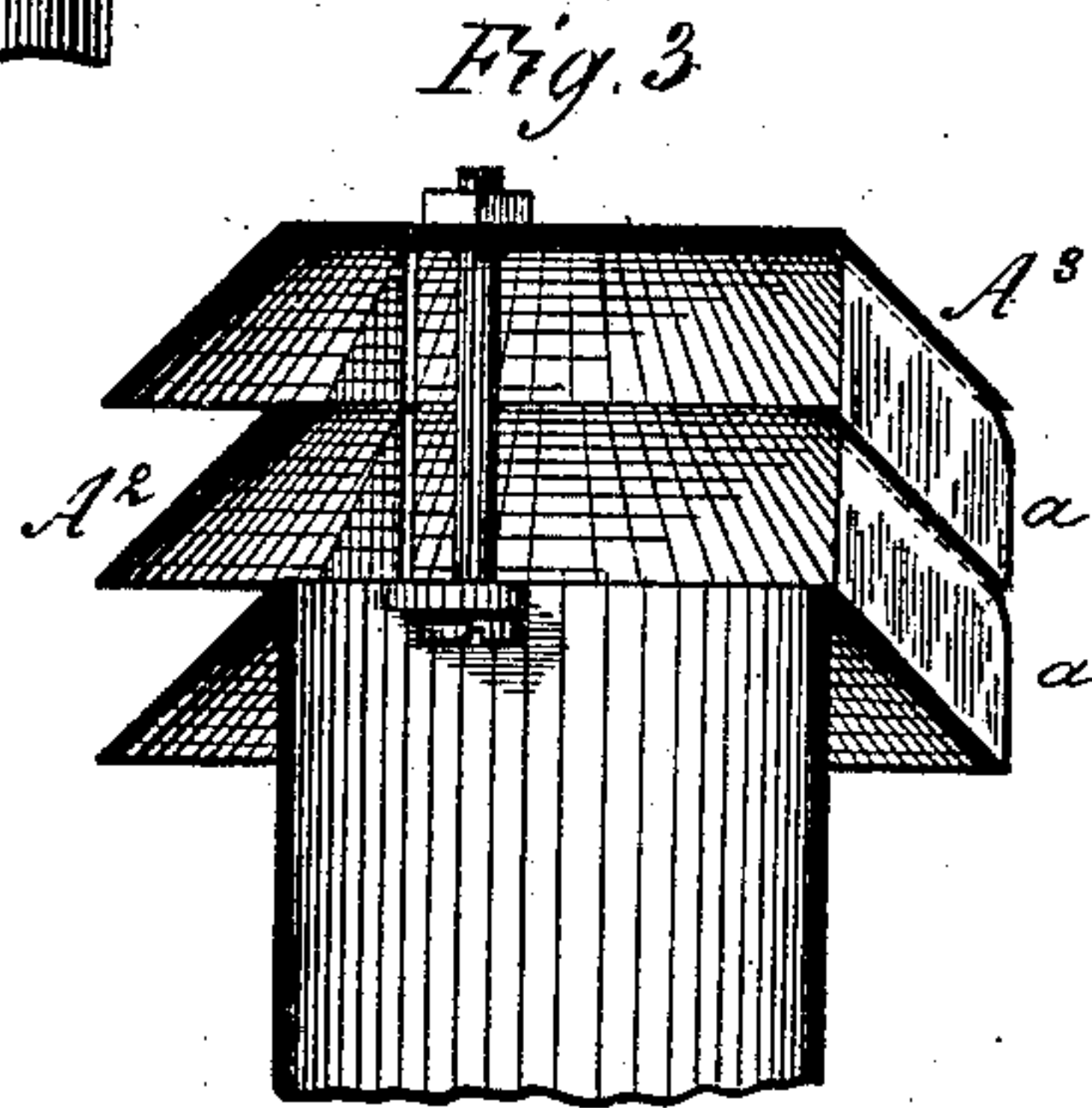


Fig. 3

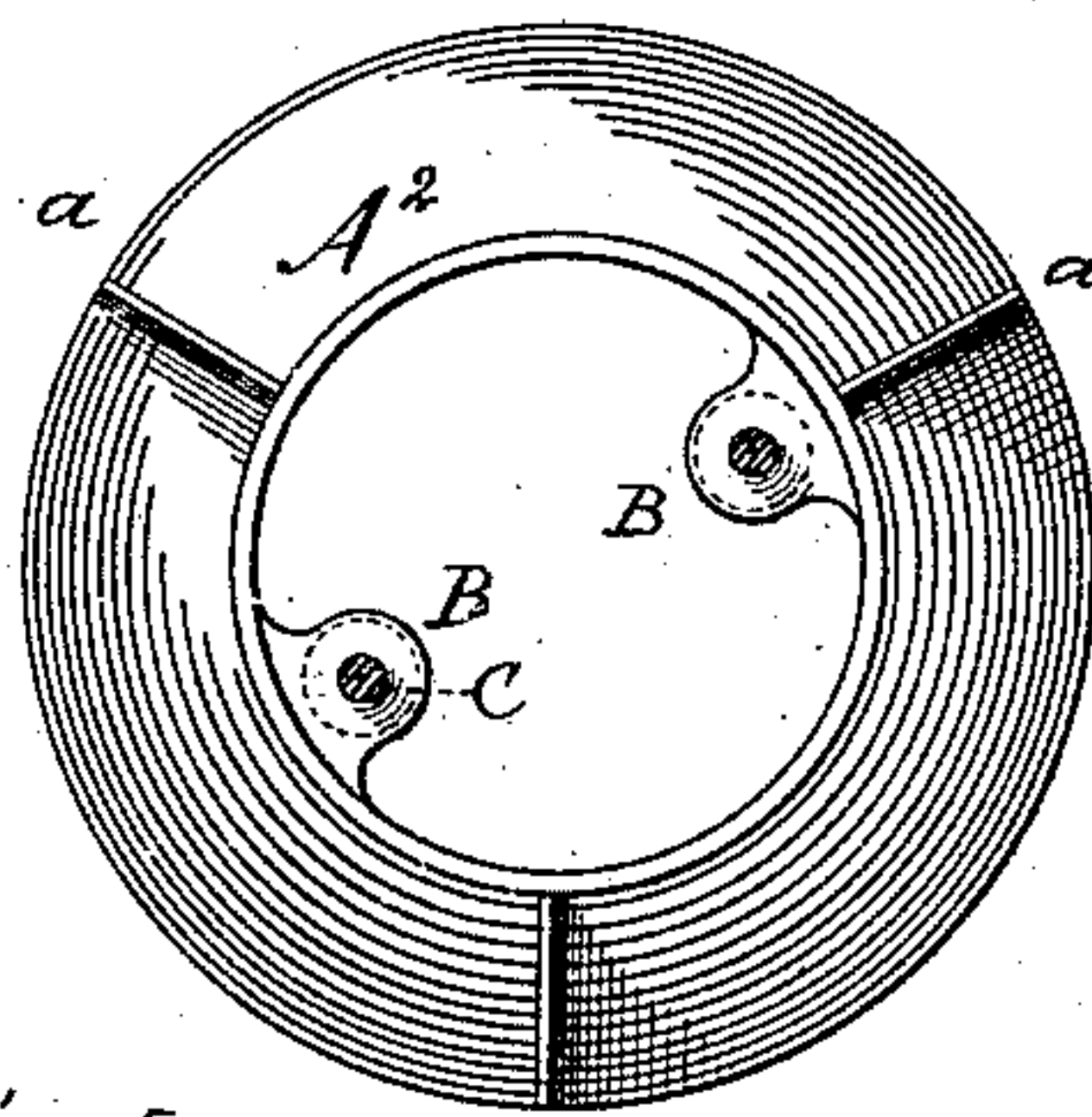


Fig. 4

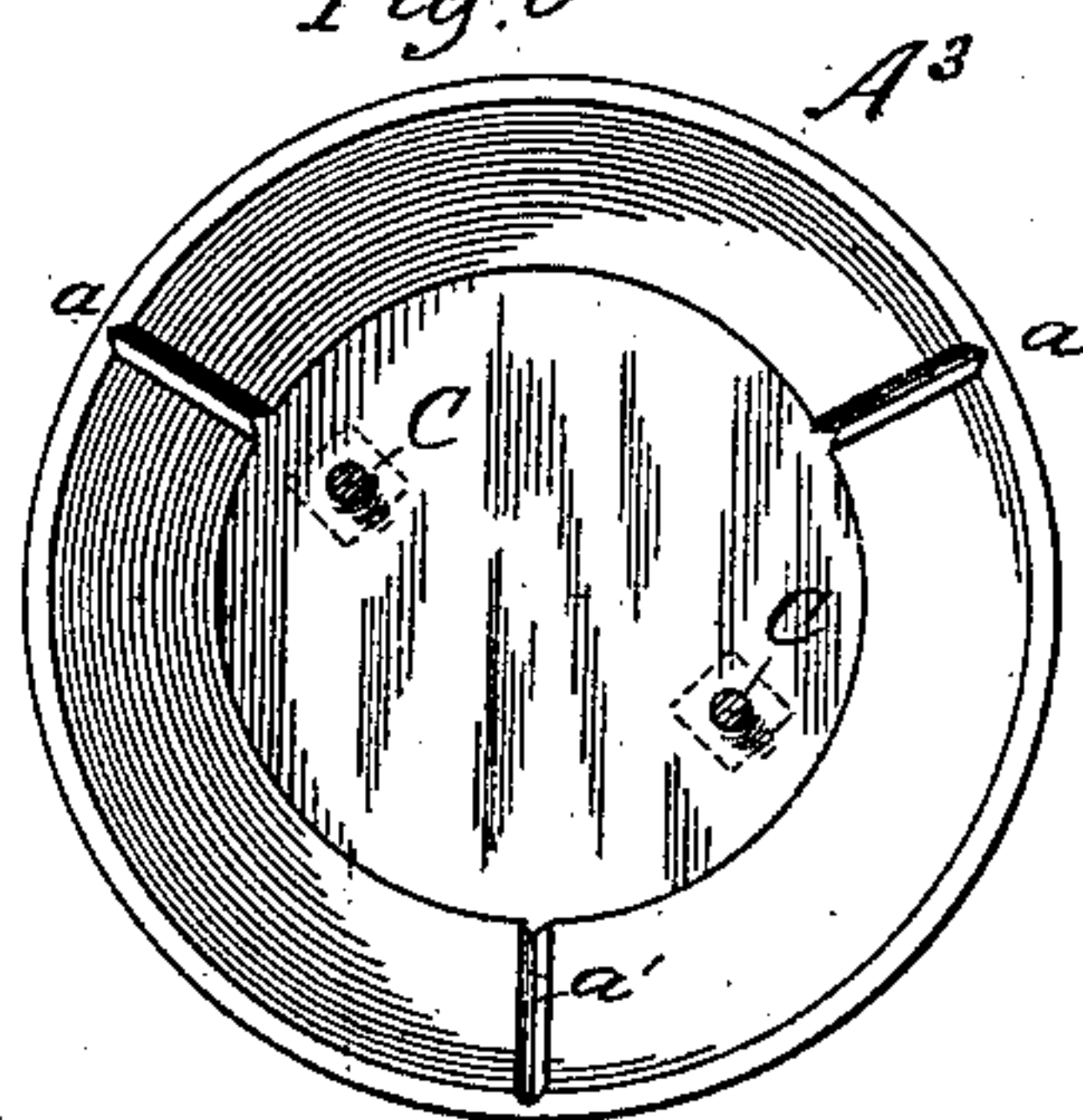


Fig. 5

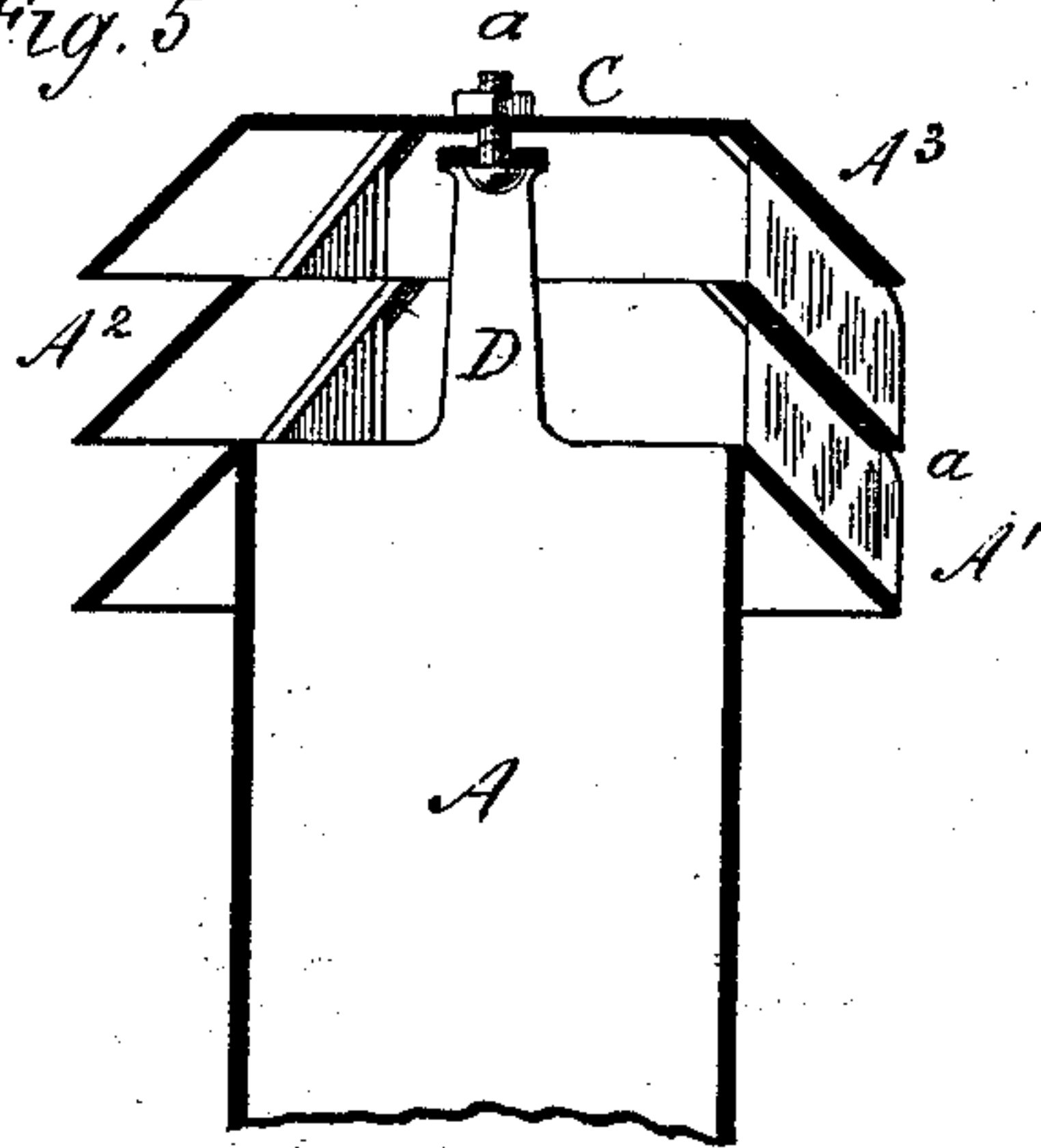


Fig. 6

Witnesses—
Charles R. Searle,
Wm. A. Lowe

Inventor—
John H. Irwin,
By A. M. Pierce,
Atty.

UNITED STATES PATENT OFFICE.

JOHN H. IRWIN, OF MORTON, PENNSYLVANIA.

VENTILATOR OR CHIMNEY-CAP.

SPECIFICATION forming part of Letters Patent No. 265,814, dated October 10, 1882.

Application filed April 24, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. IRWIN, of Morton, county of Delaware, and State of Pennsylvania, have invented certain new and useful Improvements in Ventilators or Chimney-Caps, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates especially to the construction of ejector-caps employed upon ventilator-shafts and chimneys for the purpose of insuring a flow of air, gases, products of combustion, &c., therefrom, and has for its object the production of a device cheap and simple to construct and effective in operation.

It consists essentially in forming the device of cast-metal plates bearing wings or arms upon their upper surfaces, the edges of said wings being adapted and arranged to fit within grooves formed for their reception upon the under side of each plate, the whole being secured together, and to a section of pipe or the chimney-top by means of screws or bolts; and my invention involves certain novel and useful combinations or arrangements of parts and peculiarities of construction, all of which will be hereinafter first fully described, and then pointed out in the claims.

In the drawings, Figure 1 is a view in elevation of my improved cap. Figs. 2 and 3 are vertical sectional views thereof. Fig. 4 is a plan view at line *xx* of Fig. 1, and Fig. 5 is a vertical sectional view of a modified form of construction; and Fig. 6 is a plan view of the upper plate of the cap, (inverted,) showing the location and arrangement of the grooves formed therein.

Like letters of reference, wherever they occur, indicate corresponding parts in all the figures.

A is a length of pipe, cast of any suitable material, surmounted by an annular plate, A', cast therewith or attached thereto, said plate extending outward from pipe A at an angle of about forty-five degrees to the surface thereof. Cast upon the upper side of plate A' are wings or arms *a*, extending upward in a vertical position, their upper edges having a slope corresponding to the surface of plate A'. In the drawings I have shown three wings, but it is obvious that any number might be employed.

Upon the interior of pipe A are located eyes B for the reception of bolts or screws C.

A² is an annular plate, corresponding in form to plate A', and having grooves *a'*, or projecting studs, upon its under surface, below wings *a*, for the reception of the upper extremities of the wings upon plate A'.

A³ is a top plate, formed in like manner to plates A' and A², but closed at top, as plainly shown. Grooves or projections are formed upon its lower surface, as described in plate A², and the top of the plate is perforated with bolt-holes corresponding to eyes B.

When the parts are constructed as above described the plates are placed one above the other, the wings upon the first plate fitting into the grooves, or between the studs upon the under side of the plate above, and the whole surmounted by plate A³. Bolts C are passed through eyes B and the perforations in the top plate, firmly securing all the parts in place.

If desired, wings *a* might extend downward from the lower side of each plate, engaging with grooves in the one below, and any number of plates might be employed.

In Fig. 5 the plates are of the same form and construction as above described, but pipe A is surmounted by a rib, D, extending thereabove and from side to side, said rib being perforated at top for the reception of a bolt, screw, or rivet, C, for securing the parts in place. In this form but a single bolt is employed, instead of two, as above described.

Having now fully described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

1. A ventilator or chimney-cap formed of cast-metal plates, as set forth, bearing wings or arms upon their upper surfaces, the upper edges whereof adapted and arranged to fit within grooves formed in the under side of the plate above, said plates being held in place and secured to a section of pipe or the chimney-top, substantially as shown and described.

2. In a ventilator or chimney-cap, pipe A, wherein are located eyes B, said pipe bearing annular plate A', having wings or arms *a*, plate A², having grooves therein or projecting studs thereon, as specified, and being provided with wings or arms *a*, plate A³, and bolts or screws

C, the whole combined and arranged substantially as shown and described.

3. In a ventilator or chimney-cap, pipe A, whereon is formed a rib, D, extending there-
5 above and from side to side, substantially as shown and described.

In testimony that I claim the foregoing I

have hereunto set my hand in the presence of two witnesses.

JOHN H. IRWIN.

Witnesses:

A. M. PIERCE,
JOHN BUCKLER.