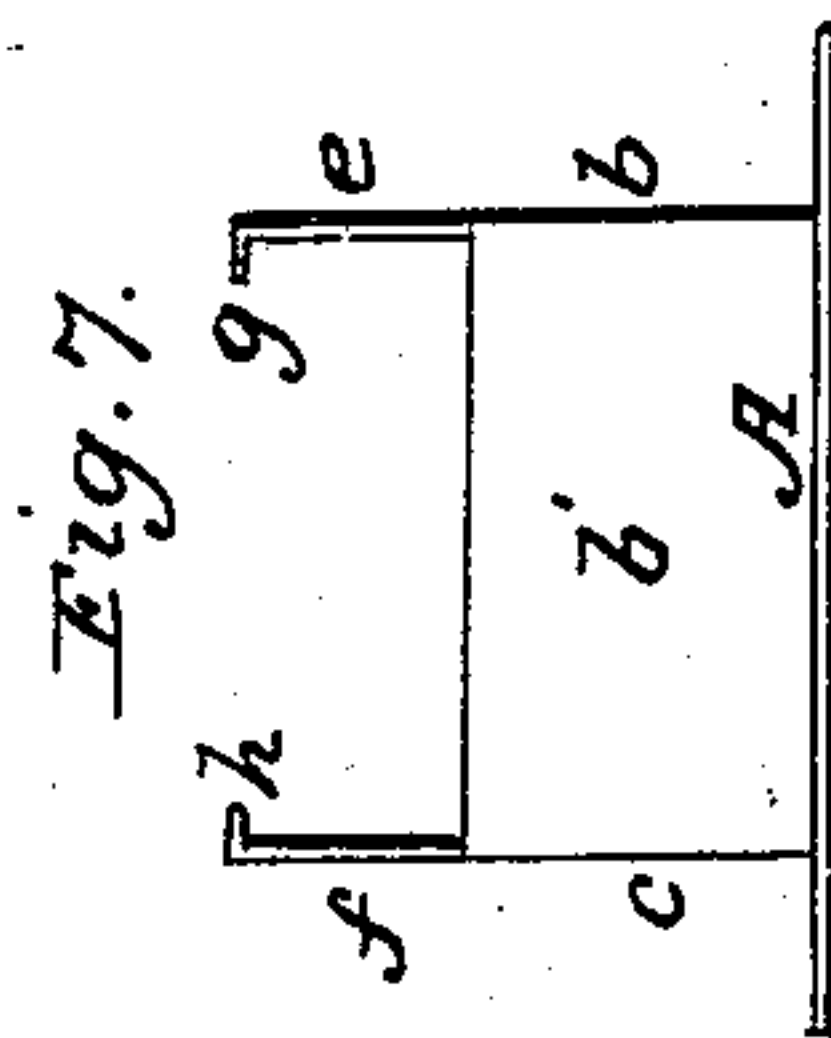
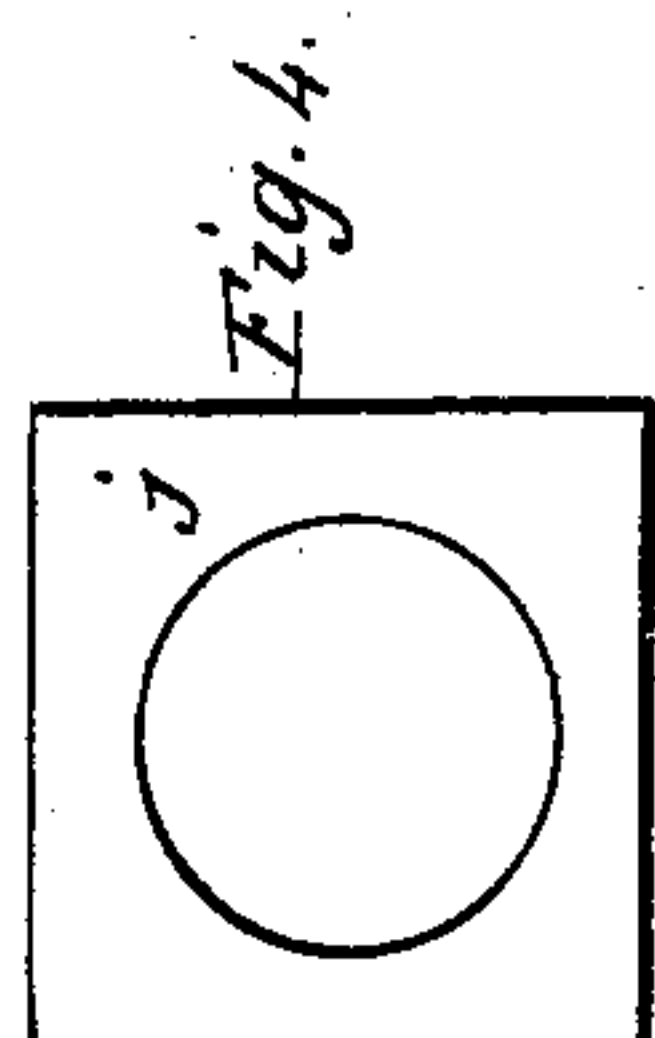
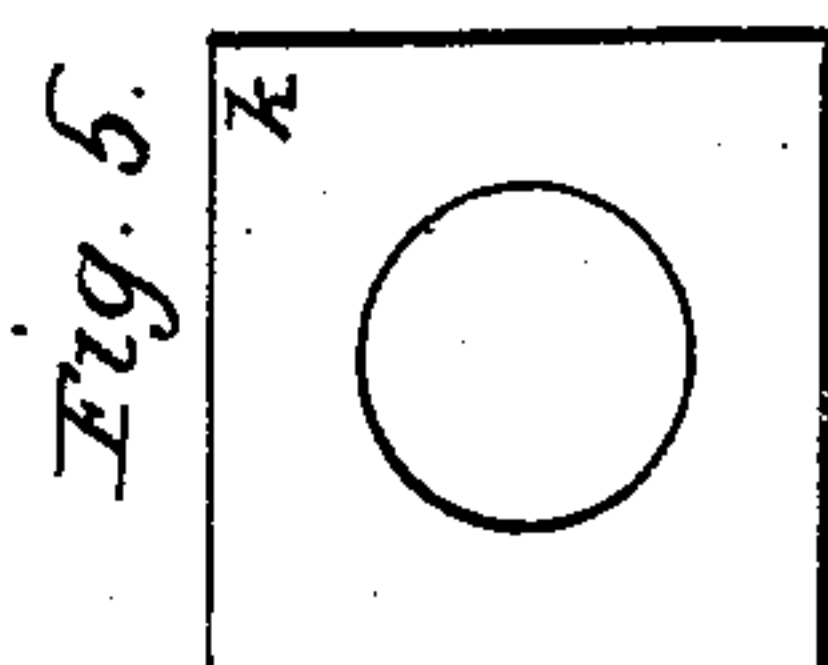
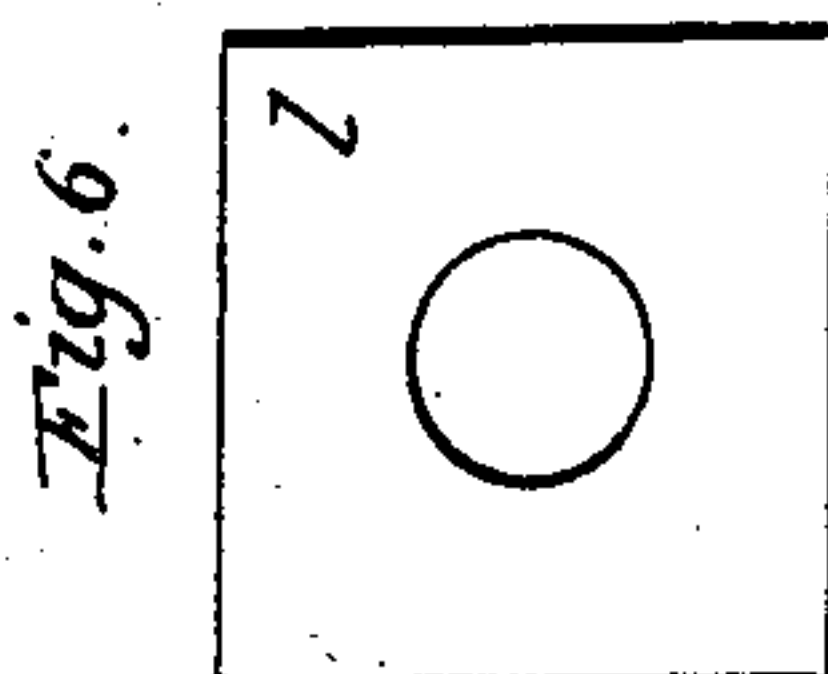
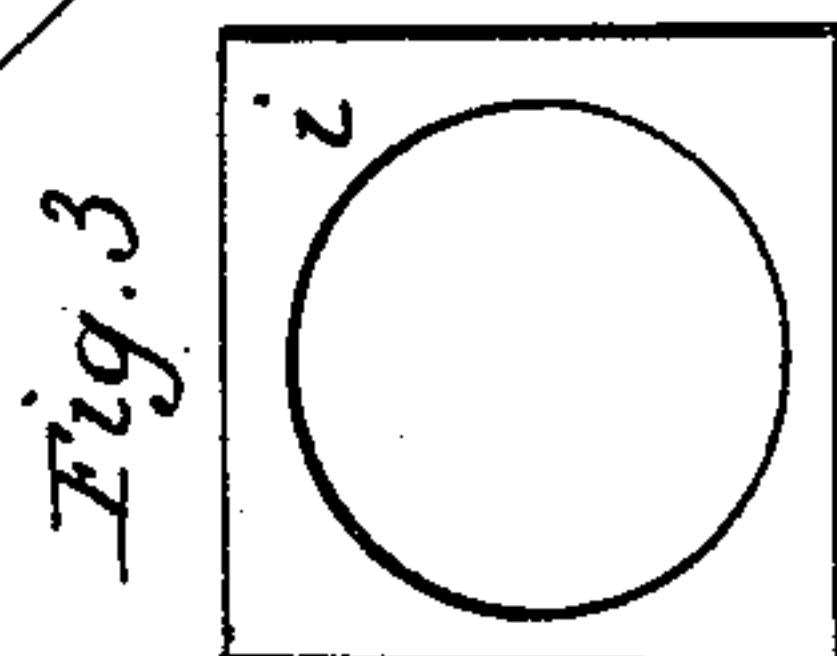
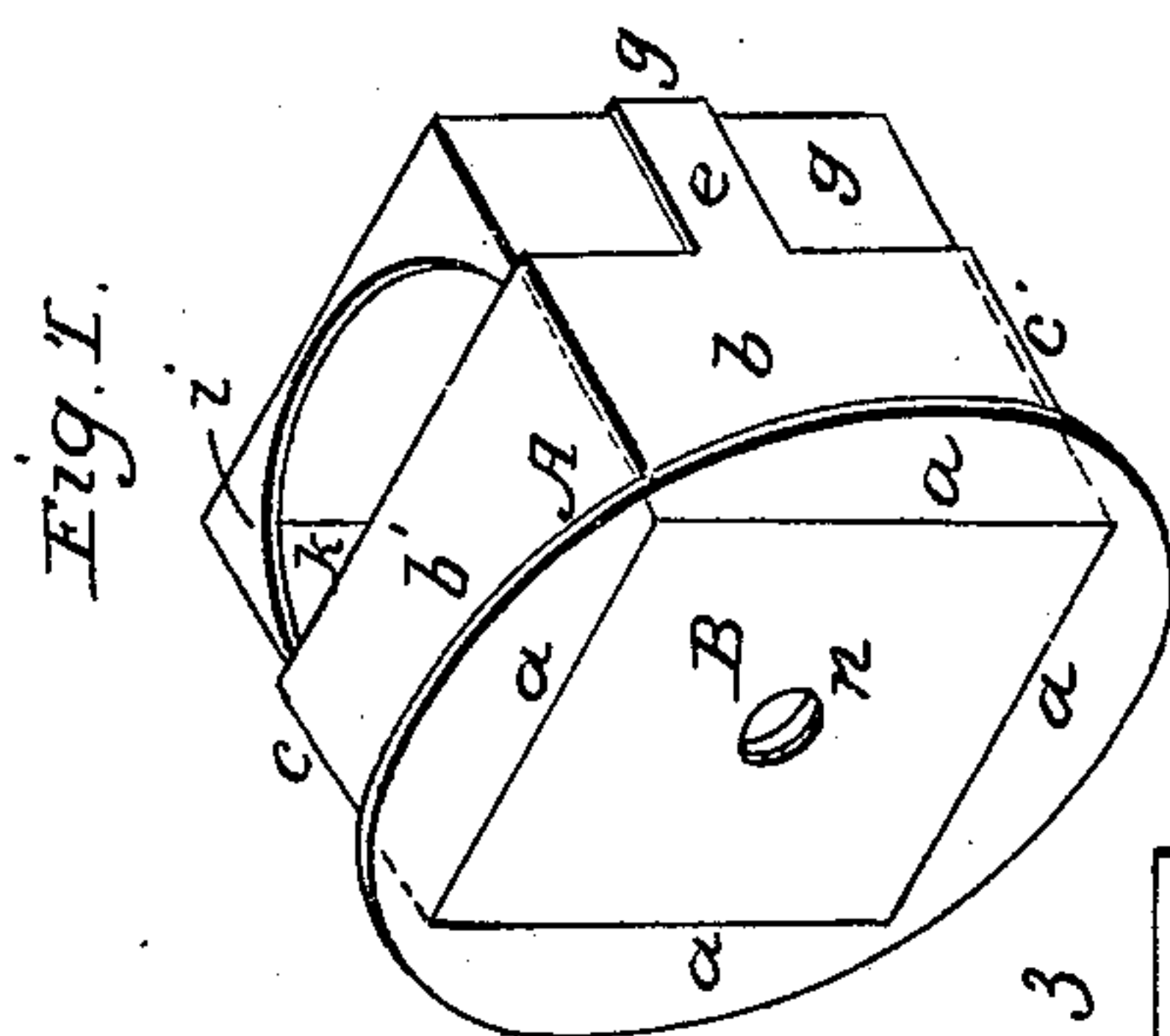
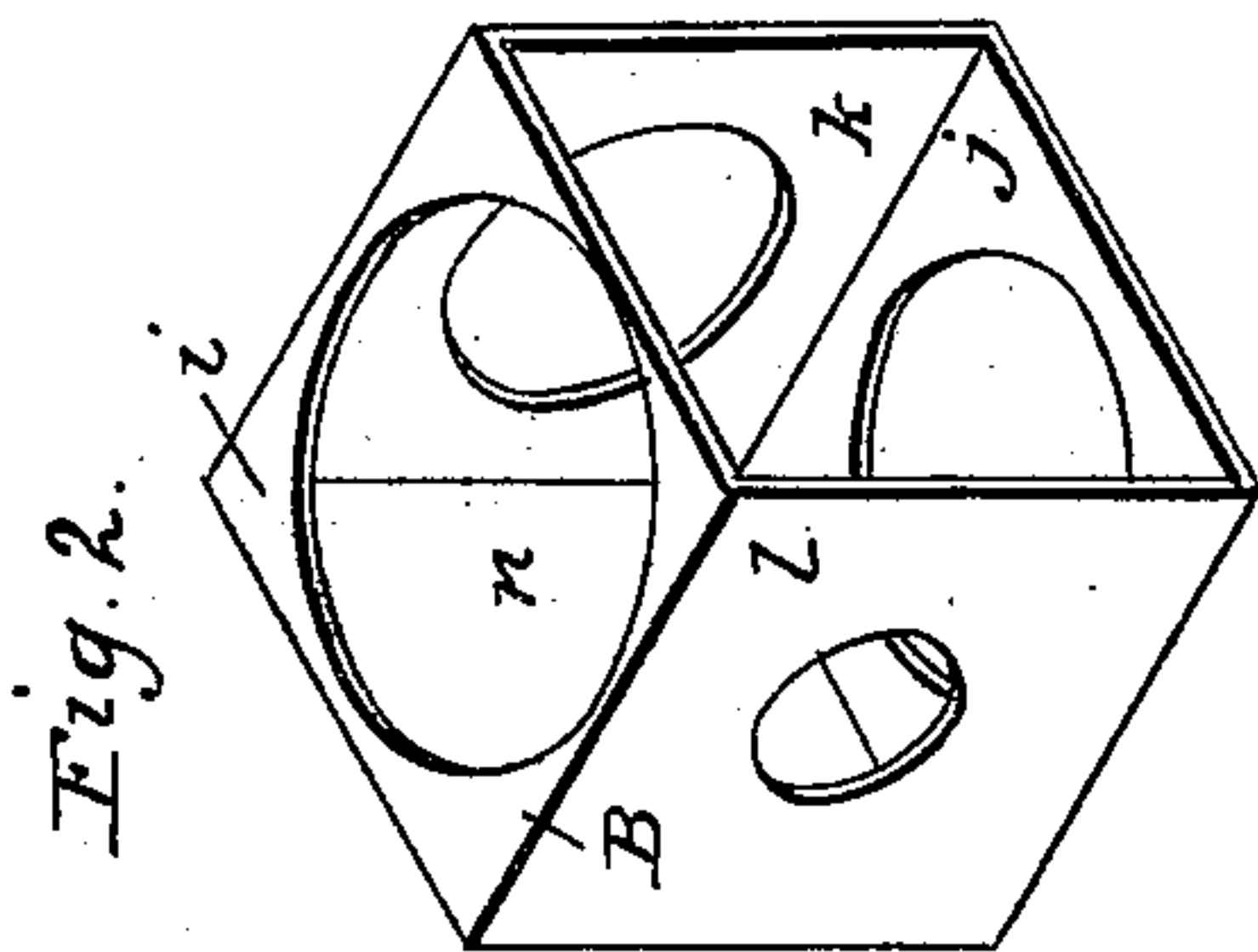
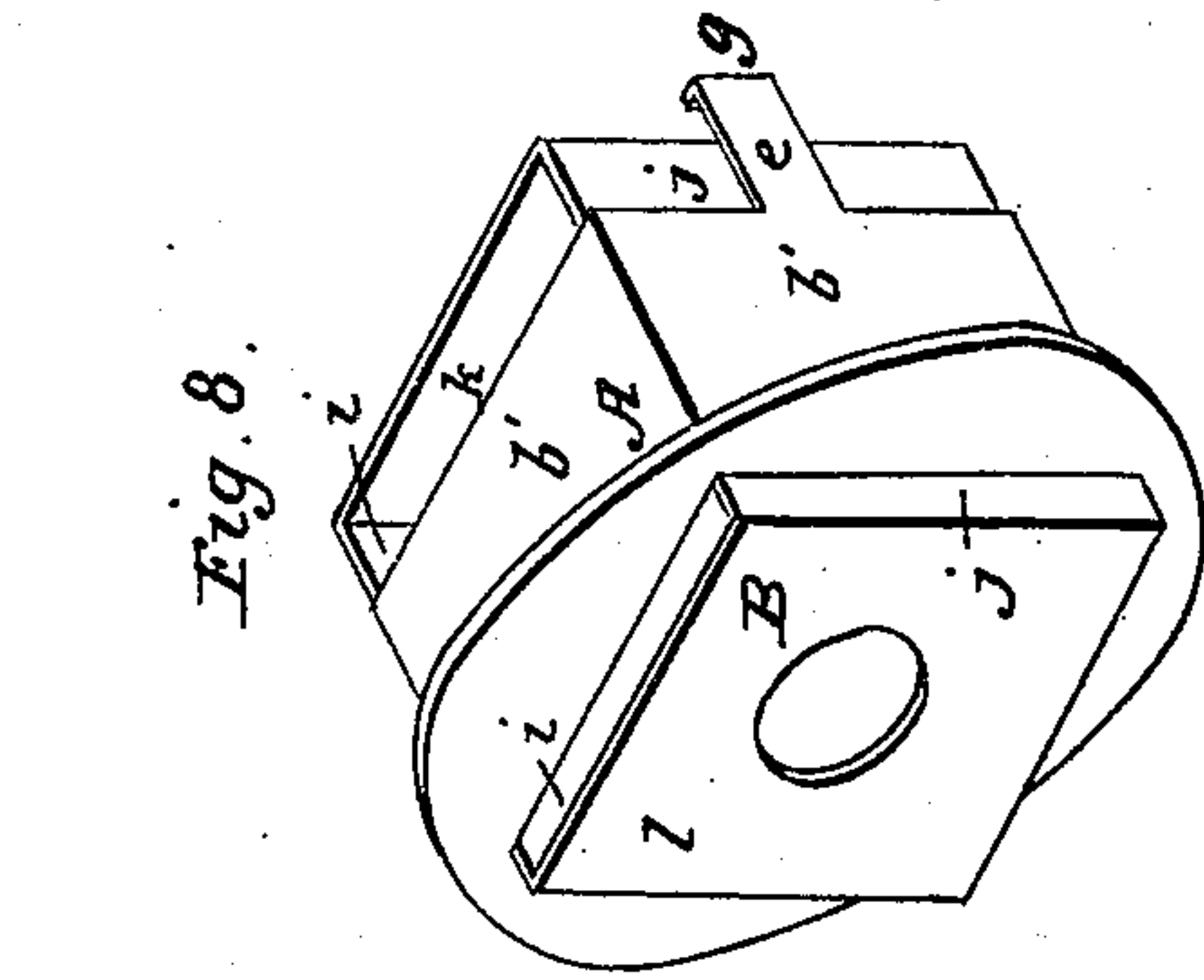


W. W. DAVIS.
Stovepipe Thimble.

No. 34,743.

Patented March 25, 1862.



Witnesses:
G. A. C. Smith
A. B. Clark

Inventors:
W. W. Davis
By his atty
C. B. Smith

UNITED STATES PATENT OFFICE.

WILLIAM WENTWORTH DAVIS, OF PORTLAND, MAINE.

IMPROVEMENT IN STOVE-PIPE THIMBLES.

Specification forming part of Letters Patent No. 34,743, dated March 25, 1862.

To all whom it may concern:

Be it known that I, WILLIAM WENTWORTH DAVIS, of Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Stove-Pipe Thimbles, which may also be applied to registers and ventilators; and I do hereby declare that the following is a description thereof in terms which I now think sufficiently full, clear, and exact, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the entire apparatus; Fig. 2, a perspective view of the cubical box detached from its case; Figs. 3, 4, 5, and 6, front views of the four perforated sides of the cubical box; Fig. 7, a top view of the exterior case, and Fig. 8 a perspective view with the open side of the cubical box uppermost and slightly withdrawn from its case to act as a draft-promoting thimble.

The nature of my invention consists in so constructing stove-pipe thimbles, registers, and ventilators as to secure openings of various sizes and forms for the purpose of admitting pipes of different diameters and shapes and for varying the extent of the heating and ventilating orifices.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The exterior case A, which is inserted in the wall or floor, is made of any proper material, and is at its face *a* a perfect square, whatever may be its size, having four equal sides and four right angles. From the sides *b* and *c*, which, with the sides *b'* and *c'*, are of a depth equal to the thickness of the wall or floor, extend rearwardly straps *e* and *f*, whose rear ends are turned at right angles therewith toward each other, forming stops *g* and *h*. The distance from the face *a* of this case to the stops *g* and *h* is equal to either side of the square, so that the case A will receive within it at its face *a* and between that and the stops *g* and *h* a body having six equal square sides and equal angles.

B is a cubiform box of the same exterior capacity as the interior capacity of the case A, which is to receive it, having in this instance four of its sides *i j k l* perforated with holes of various sizes and forms, while the fifth side is removed and the sixth *n* remains

entire or unperforated. If preferred, however, the fifth and sixth sides, or either of them, may be perforated with holes differing in size and form from any of the other four.

The operation of this apparatus is as follows: If it is to be used as a stove-pipe thimble or a register, the case A is inserted in the wall or floor, where it acts as a safeguard against the effects of excessive heat if the wall or floor be of wood. If it is inserted in the wall as a thimble, the straps *e* and *f* should lie in vertical planes, as shown in Figs. 1 and 7, so as not to obstruct the upward flow of the smoke and gas. The cubical box B is then inserted within the case A, with that side of the cube flush with the face *a* or flush with the wall or floor, having a hole of the proper size or form to fit the stove-pipe to be used, or of the proper size to admit the required quantity of heated air. When the size or shape of the pipe is to be changed or the flow of heated air modified, the cubical box is withdrawn from its case and inserted with that side outermost which meets the exigency of the occasion. If the stove-pipe is removed and it is desired to stop the flue, or if it be desired to shut off the flow of heated air, or to close the furnace-flue for any other purpose, then the cube is to be inserted with its unperforated side, if it is so constructed, outermost.

If the cube B be made with one side removed, as shown in Fig. 2, then, in case it be used as a stove-pipe thimble, it is to be inserted in its case A with the removed side uppermost, so that, no matter which of the four holes shown in Figs. 2, 3, 4, 5, and 6, is exposed for the reception of the pipe, a current of air may be made to pass into the flue by withdrawing the cube a little from its case A, as shown in Fig. 8, thereby securing in all cases a perfect draft.

Of course, when my invention is to be used as a register and is inserted in the floor, the openings may be protected by the usual open-work or grating.

Having thus described my invention and explained how it is to be used and how it operates, what I claim therein as new, and desire to secure by Letters Patent of the United States, is—

1. The cubical box B, whether constructed, as represented in the drawings, with four of

its sides only perforated with holes of various sizes and forms, the fifth whole, and the sixth removed, or whether all of its sides are so perforated, as and for the purposes specified.

2. In combination with the above, the case or safeguard A, constructed as described, as and for the purposes set forth.

In witness whereof I have hereunto set my hand this 6th day of February, 1862.

WM. WENTWORTH DAVIS.

In presence of—

J. H. WILLIAMS,

J. G. EMERY,

THOS. RICHARDSON.