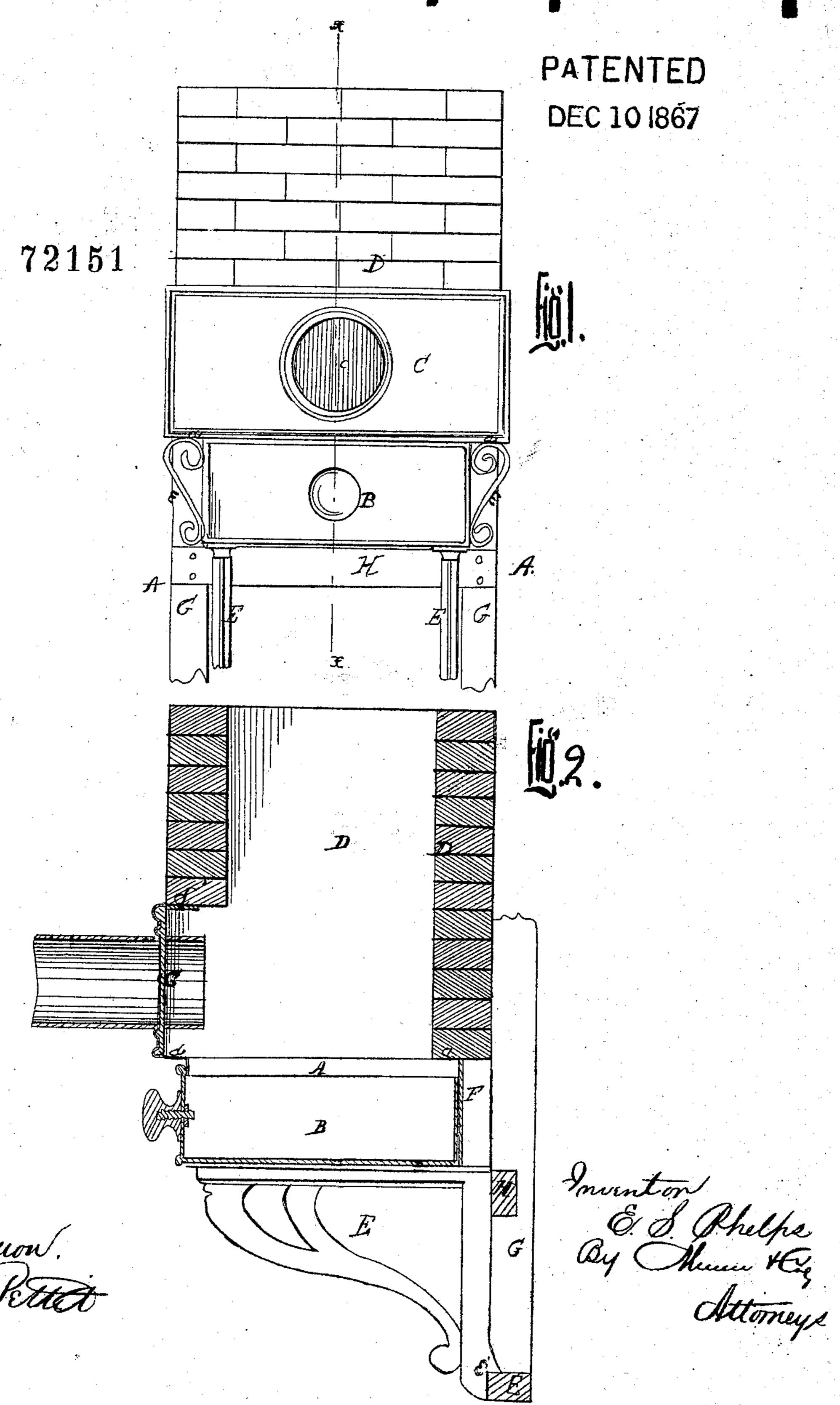
Ebenezer S. Phelps. Impin Chimneys.



Anited States Patent Pffice.

EBENEZER S. PHELPS, JR., OF WYANET, ILLINOIS.

Letters Patent No. 72,151, dated December 10, 1867.

IMPROVEMENT IN CHIMNEYS.

The Schedule referred to in these Aetters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, EBENEZER S. PHELPS, Jr., of Wyanet, in the county of Bureau, and State of Illinois, have invented a new and useful Improvement in Chimneys; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a front elevation of my invention.

Figure 2 is a transverse section of the same, through the line x x of fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to chimneys used in connection with stoves or furnaces, and consists in providing a new support and means of cleaning such chimneys. The means for supporting and cleaning the chimney are combined in a metallic bottom, upon which the chimney rests. The soot falls into a drawer provided for the purpose, which can be removed whenever it becomes necessary to clean the chimney.

In order that others skilled in the art to which my invention appertains may be enabled to make and use the same, I will proceed to describe it in detail.

In the drawings, D represents the chimney resting upon the metallic bottom A C. In this bottom slides an iron drawer, B, of such width and length as to fill the inside of the flue, of whatever size the latter may be, and about six inches in height. The whole drawer may be of cast iron, or the front may be of cast and the sides and bottom of sheet iron. The lower part, A, of the cast-iron bottom encloses the drawer B, and is just of sufficient dimensions to permit the drawer to slide freely in and out, extending to within about two inches on each side of the outside of the brick-work of the chimney; thence siding up the height of the drawer, six inches; thence projecting out on each side about three inches, (two inches of this for the brick to rest upon,) and projecting beyond the bricks from three-fourths of an inch to an inch, to support the plaster and form a small bead or moulding projecting beyond the plaster. Four courses of brick are left out at the bottom of the chimney, on the front side, in building it, and over this is placed a face-plate, C, having a thimble or stove-pipe hole, c. Perpendicular and horizontal bead or mouldings may be made along the edges of the face-plate to correspond with those on the sides of the chimney above described. In the bottom thus constructed, the lower part A will be of smaller dimensions than the upper part. Its sides are intended to come directly under the centre of the brick walls of the chimney, the upper part at a a projecting over the lower part three inches in each direction, except on the front, where the whole is flush. Suitable mouldings or brackets e e may be placed under the projections on the sides. Two inches from the back edge of the chimney is an upright partition, corresponding with the sides on which the chimney sits, and forming an air-space, F, preventing the heat from affecting the wood-work behind the chimney, and forming the back wall of the lower part of the iron bottom, against which the drawer B slides. Under the whole are cast-iron brackets E E, having a shoulder, e', on the lower end, that sits on the cross-stud F let into the upright studs G G, and spiked firmly to them. To another cross-stud, H, at the top, let in and spiked to the upright studs G G, the brackets are to be bolted firmly with a three-eighth or half-inch bolt in each bracket. On the top of the bracket a dowel-pin may be provided, entering a hole or slot in the bottom, A, to hold the cast-iron bottom from the brackets. There should be a ledge on the edge of the drawer-front, that will shut tightly all around outside of the drawer against the bottom, A, and a knob or handle to take out the drawer when it is desired to empty it.

When constructed as above described, so that the upright walls of the lower part A of the bottom will come directly under the middle of the brick-work of the chimney-walls, the chimney will project inward over the edges of the drawer from one to one and one-half inch, thus emptying all soot, ashes, &c., directly into the drawer. The face-plate C being flush with the front of the chimney, the stove-pipe should not be allowed to project in through it more than an inch. In this way it may be so situated that water cannot drop upon it and be conducted outside of the chimney-front.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—
The device above described, consisting of the iron box A and drawer B, constructed and arranged as shown, when used in combination with the chimney D, substantially in the manner and for the purposes specified.

To the above specification of my improvement, I have signed my hand, this 27th day of May 1867.

E. S. PHELPS, JR.

Witnesses:

ALLEN MORSE, JACOB CRITZMAN.