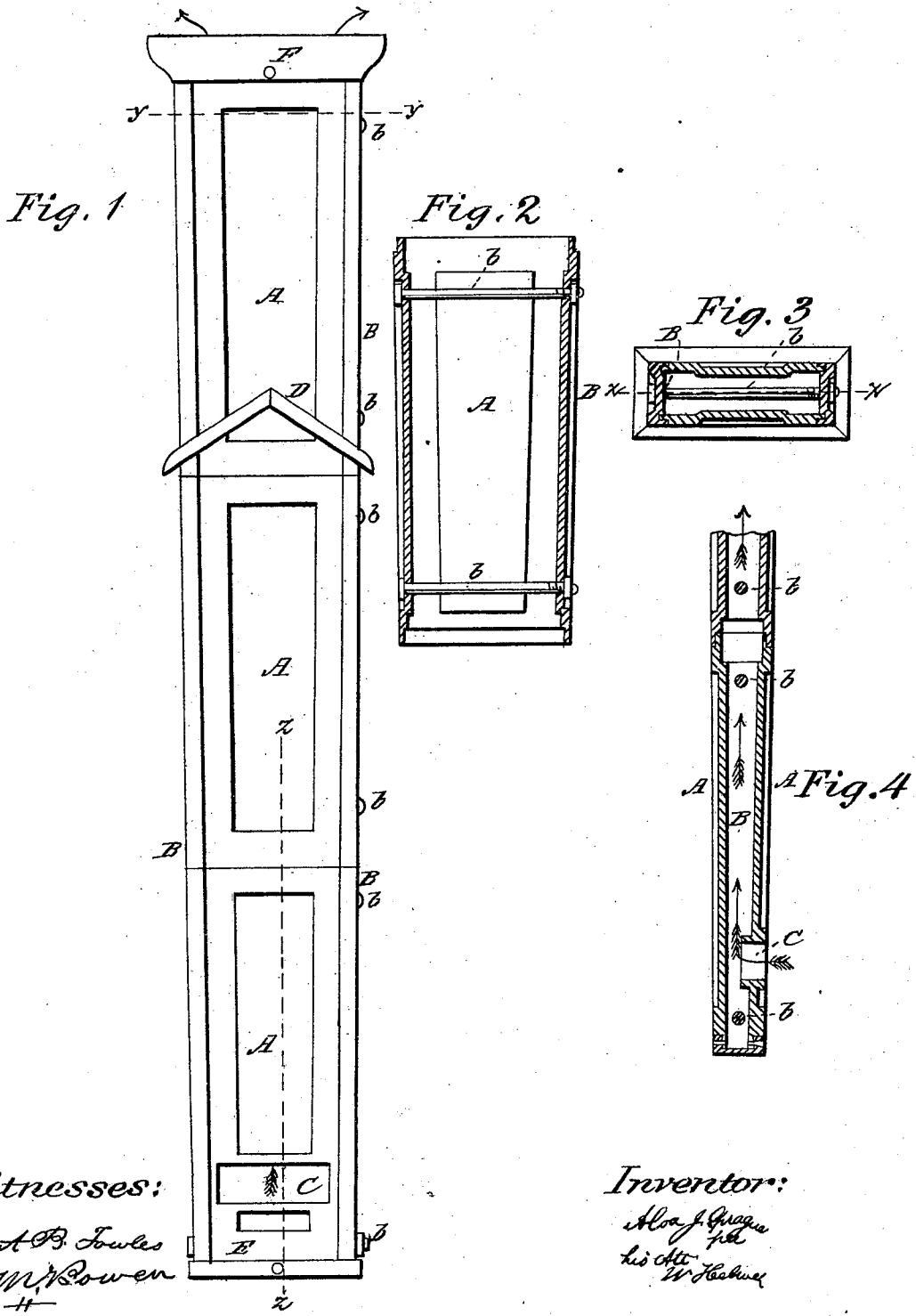


A. J. SPRAGUE.

Chimney.

No. 107,421.

Patented Sept. 13, 1870.



Witnesses:

Gilbert B. Fowles
J. M. Bowen

Inventor:

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United States Patent Office.

ALVAH J. SPRAGUE, OF SPRINGFIELD, MISSOURI.

Letters Patent No. 107,421, dated September 13, 1870.

IMPROVEMENT IN CHIMNEYS.

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

To all whom it may concern :

Be it known that I, ALVAH J. SPRAGUE, of Springfield, in the county of Greene and State of Missouri, have invented a new and useful Improvement in Fire-Flues or Chimneys; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation;

Figure 2 is a central vertical section of one section of the flue, taken in line *x x* of fig. 3;

Figure 3 is a transverse section, taken in line *y y* of fig. 1; and

Figure 4 is a vertical section taken in line *z z* of fig. 1.

Like letters in different figures of the drawings indicate like parts.

My invention consists of a metallic portable fire-flue or chimney, constructed in sections, which are attached together by slide-joints, the front, back, and side plates being attached together by means of proper flanges, tongues, and grooves, so that the entire chimney may be readily put together and taken apart for transportation; and it is so constructed as that the size of the flue increases from the bottom to the top, which increases the draught.

The bottom section is provided with an opening for attaching to the portable fire-place; and the top section is provided with capes, to shed the water from the chimney, and prevent leaking through the roof.

The front and back plates *A A* are made with rabbets and tongues, to fit within the flanges and grooves in the side plates *B B*, as seen in fig. 2, and all the plates are made with panels, as shown in the drawings, or they may be otherwise ornamented, as required.

Braces *b b* are placed at each end of the sections for holding the plates together.

The sections are joined together by the slide-joints, as seen in fig. 4.

The first section is provided with an opening or throat, *C*, as seen figs. 1 and 4, for fitting on to the neck of the portable fire-place, and the top section is provided with capes or eaves *D*, to shed the rain from the chimney and prevent leaking through the roof.

E is a plate, secured by screws to the lower end of the first section, and forms the bottom of the flue, to catch the soot and ashes which may accumulate therein, and also serves to hold the plates in position; and

F is the cornice or ornamental cap attached to the top of the chimney.

This chimney may be transported in sections or in separate pieces, and is readily put together and attached to a stove or portable fire-place properly arranged for that purpose, and, being so constructed as that the flue increases in size from the bottom to the top, the draught is thereby increased, and the operation of the chimney is improved.

When the space below the throat *C* is filled up with soot and ashes, the bottom plate *E* is readily removed and the flue cleaned out.

Having thus fully described my invention,

What I claim therein as new, and desire to secure by Letters Patent, is—

The chimney *A*, so constructed as to have the size or diameter of the flue increase from the bottom to the top, substantially as shown and described.

As evidence that I claim the foregoing, I have hereunto set my hand in the presence of two witnesses.

ALVAH J. SPRAGUE.

Witnesses:

H. C. PARKER,
C. R. ALLEN.