S. HINTON.

CHIMNEY.

No. 182,440. Patented Sept. 19, 1876.

fig. 1.

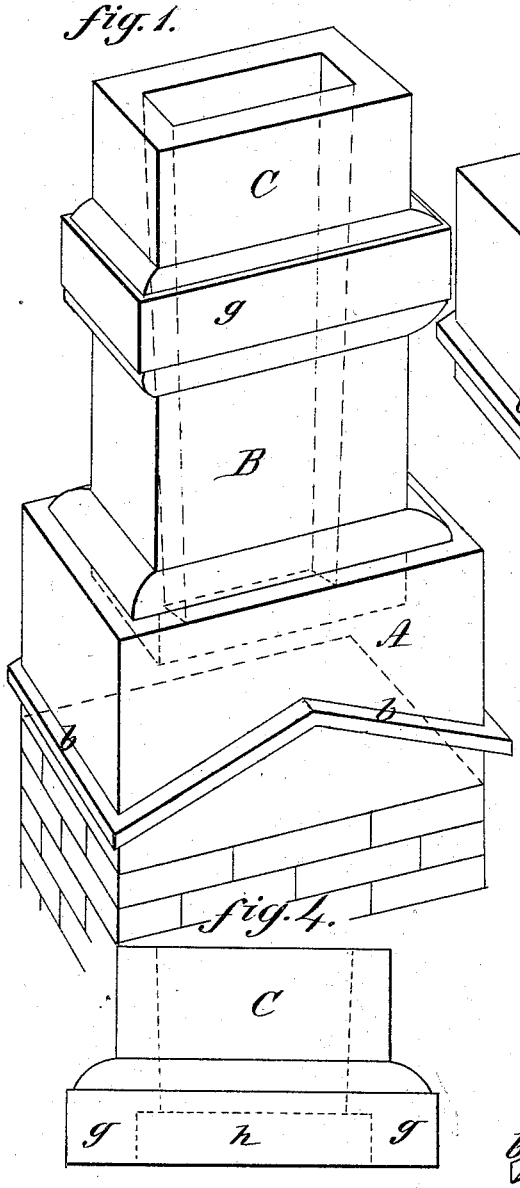

fig. 2.

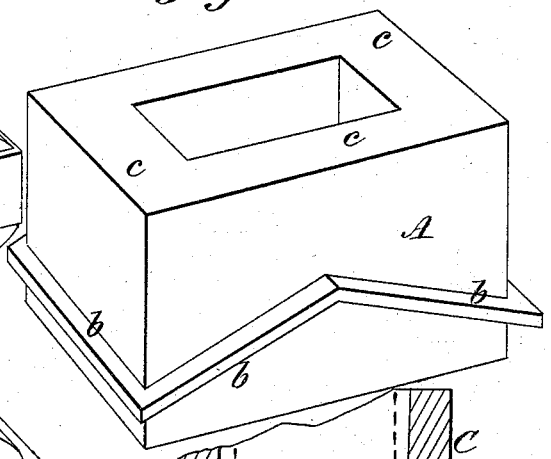

fig. 3.

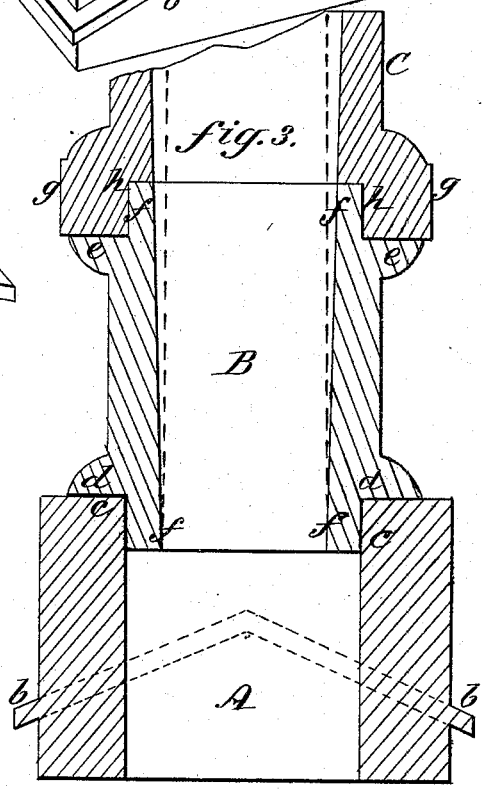

fig. 4.

Witnesses:

J. Wrst Wagner.

D. A. Rutherford

Inventor:

Spencer Hinton,

By Johnson & Johnson

Att'ys.

UNITED STATES PATENT OFFICE.

SPENCER HINTON, OF ORLEANS, NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO GEORGE A. SNOOK, OF SAME PLACE.

IMPROVEMENT IN CHIMNEYS.

Specification forming part of Letters Patent No. **182,440**, dated September 19, 1876; application filed July 25, 1876.

To all whom it may concern:

Be it known that I, SPENCER HINTON, of Orleans, in the county of Ontario and State of New York, have invented a new and useful Improvement in Composition Chimneys, of which the following is a specification:

My object is to produce a sectional composition chimney-top that can be put together and rendered secure without bolts or fastenings, and also to increase the draft. The ends of the middle section are peculiarly adapted to render the fastenings secure, being made with a broad bottom and top ledge, from which deep holding ends extend. The cap-section has a heavy base projection with an interior recess, so as to obtain a broad ledge-support with the interior wall-hold for the cap. The base-section has also a broad support and interior hold for the lower end of the middle section, so that when the joints of the broad ledges are connected the middle section and cap become firmly united and locked together and to the base, which is supported upon the chimney proper just below the roof. This base-section is much larger than the middle and cap sections, and forms a strong foundation. The middle and cap sections have inner upwardly-inclining walls, forming a flaring flue, with its smaller end opening into a larger flue end in the base, said flaring flue forming a continuation of the chimney-flue; but the middle and cap sections have normal outer vertical walls, and, therefore, while the flue increases in area toward the top, the walls of the sections increase in thickness toward the base, and the top-heaviness of the chimney is overcome, while obtaining the advantage of increased draft afforded by the flaring flue. A flaring flue is not, however, claimed by me, *per se*, it having been proposed in a sectional metallic chimney, in which the flare extended the entire length of the flue, with both inner and outer walls corresponding in inclination, and forming a top-heavy chimney; but I find that by starting the flaring top from a larger flue-space in the base I obtain a much better effect in the draft of the chimney.

In the accompanying drawings, Figure 1 represents a view in perspective of my improved chimney-top; Fig. 2, a similar view of the base-section detached; Fig. 3, a vertical section of my chimney-top, and Fig. 4 a view of the cap-section.

In making my improved sectional chimney I use a material made of plaster-of-paris and brick-clay, described in a separate application.

The base-section A, which, in the example, is contemplated to rest upon an old chimney just below the roof, is provided with pitched integral water-capes *b*, corresponding to the pitch of the roof, and designed as a better means of warding off the water than the usual tin flashing. This base-section has a broad support, *c*, and interior hold for the lower end of the middle section, as will be presently fully described. The ends of the middle section B are made with a broad bottom and top ledge, *d* and *e*, from which extend deep holding ends *f f*. The cap-section C is provided with a heavy base-projection, *g*, with an interior recess, *h*, forming an interior hold for the cap. The sections thus jointed are cemented, and become very firmly united.

The sections B and C have their inner walls inclining upwardly to form a flaring-mouthed chimney, as heretofore described, their outer walls remaining vertical, as clearly shown in Fig. 3.

Referring to said Fig. 3, it will be seen that the base-section A has a flue of greater diameter than the sections B and C—that is, the least diameter of the flaring portion has its commencement at the junction of sections A and B. By this means I increase the draft of the chimney by suction from the enlarged flue of the base-section.

The sections may be square, round, octagonal, or of any preferred shape in cross-section. The chimney of sections may be built as shown in the drawings, or from a ledge or table in any story of the building.

I claim—

1. A composition chimney of united sections, in which the top sections B C have inner upwardly-inclining walls and outer vertical walls, in combination with the base-section A, having a flue of larger area than the top sections, as shown, and for the purpose specified.

2. In a composition chimney of united sections A B C, the middle section B, provided with broad bottom and top ledges *d* and *e* and deep holding ends *f f*, in combination with the broad base-section A *c* and the cap C, having the heavy base-projection *g*, as shown, and for the purpose specified.

In testimony whereof I have affixed my signature in the presence of two witnesses.

SPENCER HINTON.

Witnesses:
GEO. L. PRICE,
JOSEPH BLYTHE.