

J. H. FLAGG.
Soapstone Stove.

No. 54,319.

Patented May 1, 1866.

Fig. 1,

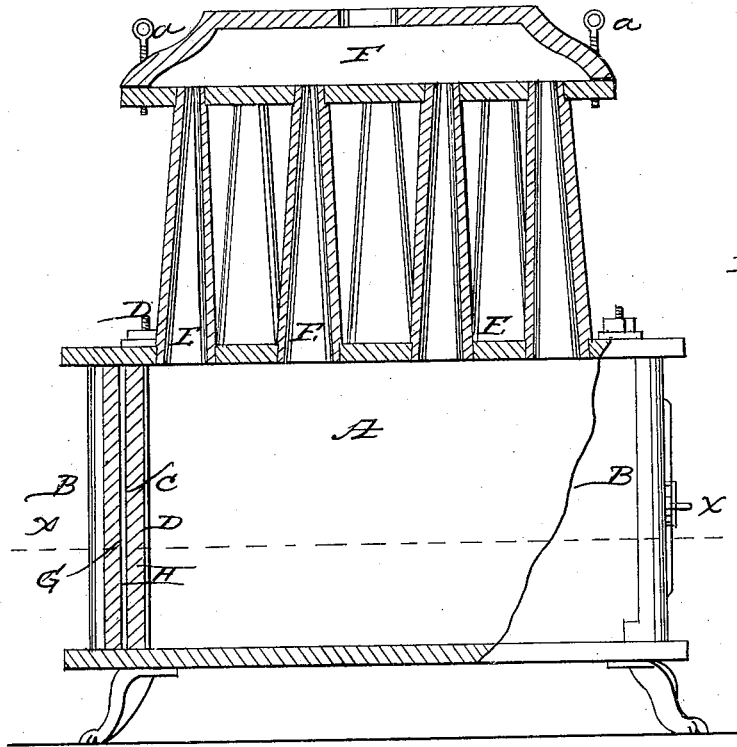


Fig. 3,

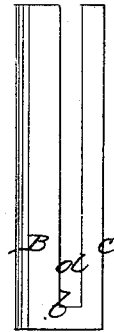


Fig. 2,

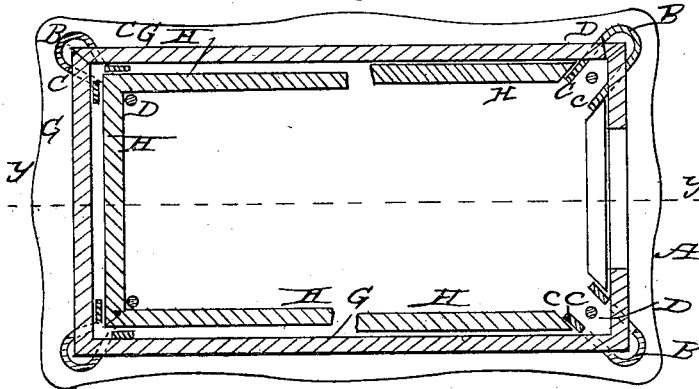


Fig. 4,

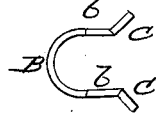
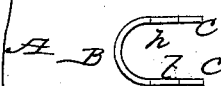


Fig. 5,



INVENTOR:

J. H. Flagg
By *[Signature]*

WITNESSES:
W. C. Crewdson,
Thos. Litch

UNITED STATES PATENT OFFICE.

JAMES H. FLAGG, OF PERKINSVILLE, VERMONT.

SOAPSTONE STOVE.

Specification forming part of Letters Patent No. 54,319, dated May 1, 1866.

To all whom it may concern:

Be it known that I, JAMES H. FLAGG, of Perkinsville, in the county of Windsor and State of Vermont, have invented a new and useful Improvement in Stoves; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an elevation of a vertical section of a stove which contains my invention, the section being taken on the line *x* of Fig. 2. Fig. 2 is a horizontal section taken on the line *x* of Fig. 1. Fig. 3 is an elevation of one of the angle-irons by which the vertical joints of the stove are made secure. Fig. 4 is a plan or top view of one of the angle-irons. Fig. 5 is a like view of an angle-iron of a modified form.

Similar letters of reference indicate like parts.

This invention relates more particularly to stoves made of soapstone or other mineral substances; and it consists principally in devices for making and securing the vertical joints of such stoves, and for securing the panels and linings thereof, and in making flues and pipes out of soapstone.

The stove by means of which my invention is here illustrated is designated by the letter A.

The form or principle of operation of the stove has no relation or connection with my invention, which is applicable to stoves of any form and construction.

B designates the device by means of which the stove-panels which form the sides and linings of the stove are held in place. Its general character is that of a clasp preferably made of metal, which embraces the articulating edges of the outer panels and covers the vertical joint made by their coming together. When applied to a square or right-angled joint, as here shown, its shape may likewise be as here shown. When the joint is obtuse or acute the shape of the angle-iron will be different from the shape here shown; but it is meant that the joint shall, in all cases, be covered and protected by it. Both sides of the iron are cut down, as at *d*, nearly to their bottom, leaving narrow strips *b b*, which pass beneath the outer panels G, whose lower edges

are cut away for a space equal to the depth of the strips, so that the panels fit over the parts *b*.

The letters C designate posts formed on the inner ends of the angle-irons, and which posts may be bent outward, as seen in Fig. 4, and in the left-hand end of the stove, Fig. 2, or they may extend straight in continuation of the direction of the sides of the irons. When they are bent outward—that is, toward the right and left hand, respectively—they come against the inner faces of the panels G and serve to keep them in place. In that case the linings or inside panels come together inside of the posts, with whose flat inner sides they are in contact, the said linings being kept up against the posts by the vertical rods D, which hold the bottom and top plates to the panels. When the posts C are left to extend straight out, as in Fig. 5, their outer sides receive the ends of the linings H, which ends are beveled to fit their sides, and thus the linings are securely locked in place without any other fastening device. The space left between the faces of the posts may be filled with any suitable block or blocks. The upper and lower edges of the angle-irons, including the edges of their posts C, are sunken into recesses or grooves made in the top and bottom plates of the stove, so that they are not liable to lateral displacement.

Another part of my invention relates to the flues and connecting-pipes; and it consists in making them from soapstone, either cylindrical or tapering in shape, or flat, or of any other desired form, and of any required length.

In the example here given the said flues, designated by the letter E, are tapering and are made each from a single block of stone bored out to the size required for the diameter of the flue. The blocks may, however, be shorter, so that two or more will be required to produce a flue or pipe of the length desired. The flue or pipe will then be composed of sections set one above another. In preparing the blocks, whether long or short, they are turned and finished on the outside and bored out in the same manner as in working wood. One of the advantages in the use of flues made of soapstone is that the material is not so liable as metal to become coated with soot and dust, and, therefore, the pipes will not be easily clogged and choked. The soapstone flues will have a smooth and polished surface, which

will not retain such soot and dust thereon. Another advantage is derived from the superior qualities of soapstone as a retainer and radiator of heat, whereby a greater uniformity can be maintained in the temperature of a stove, and consequently a greater degree of comfort secured to a house or room. Another advantage is the cheapness of the flue or pipe.

I claim as new and desire to secure by Letters Patent—

1. The stove-pipe or flue bored out of a solid piece of soapstone, as and for the purposes herein described.

2. In joining the panels and plates of stoves

made of soapstone or other mineral substance, the use of angle-irons B, constructed and applied substantially as described.

3. Securing linings in stoves by means of the irons which secure the outside plates and panels, the posts *a a* of such irons being either flared, as shown in Fig. 4, or left straight, as in Fig. 5, substantially as described.

The above specification of my invention signed by me this 29th day of June, 1865.

JAMES H. FLAGG.

Witnesses:

M. M. LIVINGSTON,

C. L. TOPLIFF.