

(No Model.)

A. S. TOMKINS.
SLOW COMBUSTION STOVE.

No. 452,532.

Patented May 19, 1891.

Fig. 2.

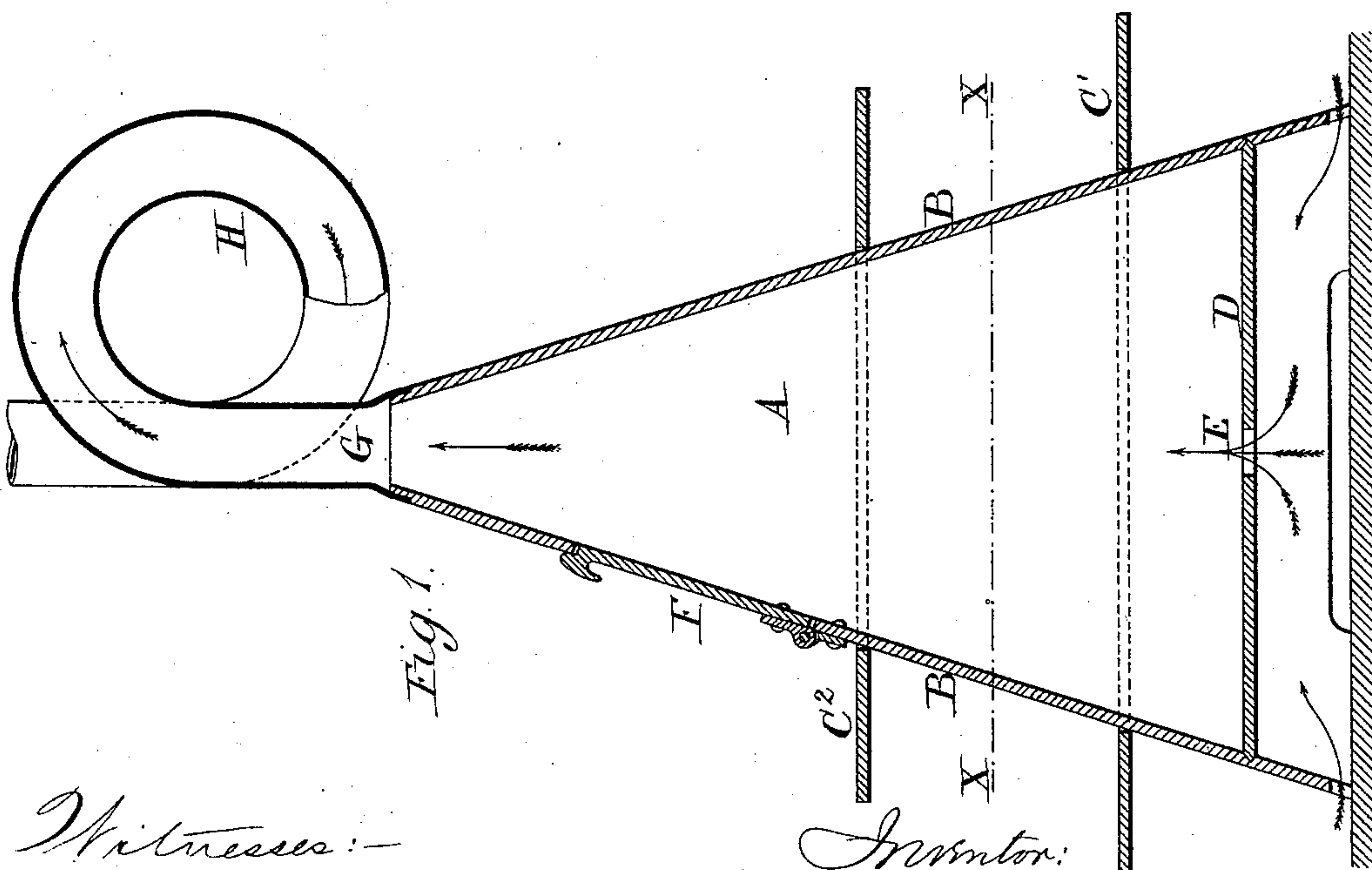
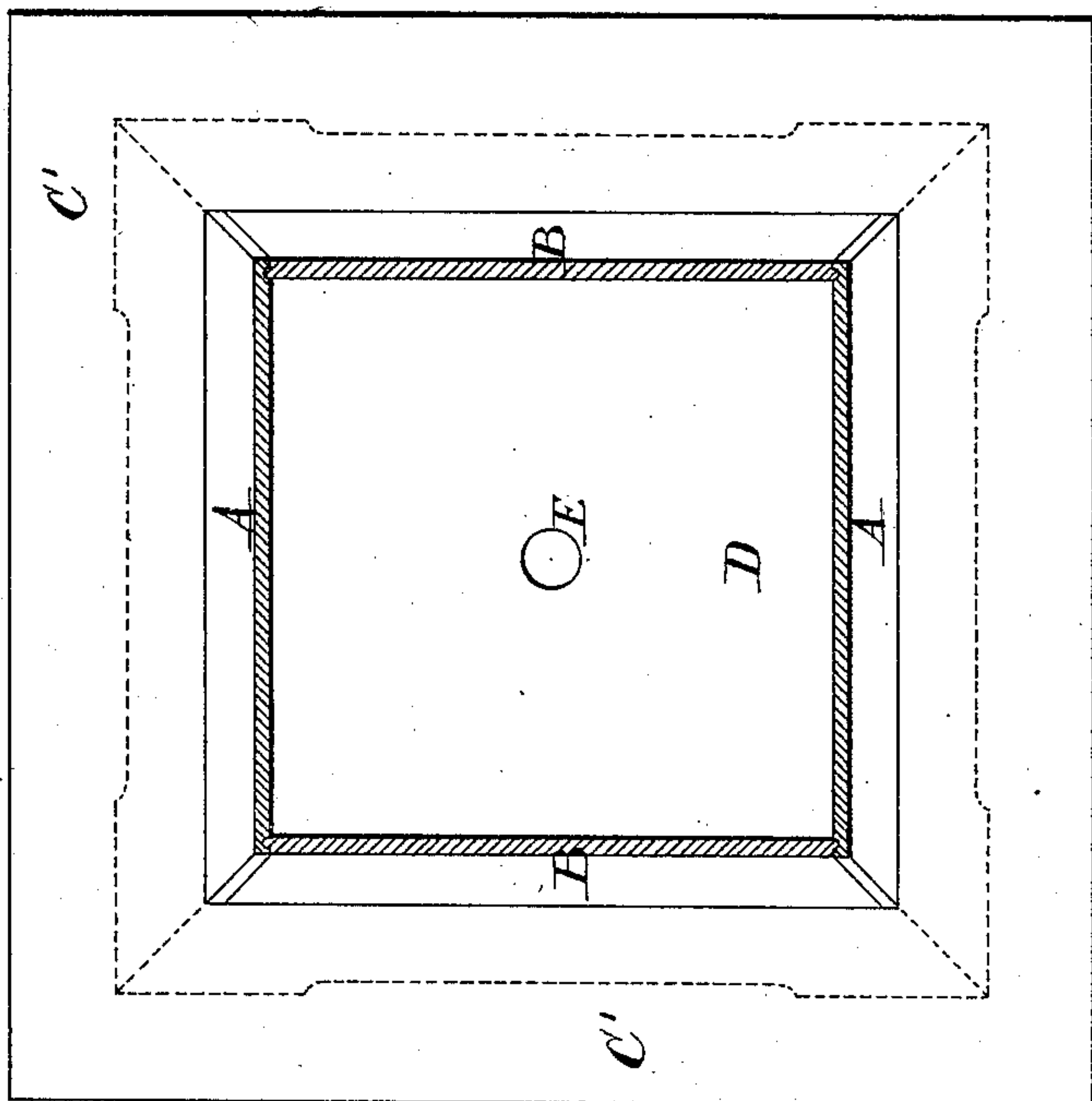


Fig. 1.

Witnesses:-
J. A. Rutherford
J. H. Daly.

Inventor:
Alfred Saml Tomkins.
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UNITED STATES PATENT OFFICE.

ALFRED SAVILL TOMKINS, OF WORTHING, ENGLAND.

SLOW-COMBUSTION STOVE.

SPECIFICATION forming part of Letters Patent No. 452,532, dated May 19, 1891.

Application filed February 24, 1891. Serial No. 382,604. (No model.) Patented in England February 1, 1890, No. 1,755.

To all whom it may concern:

Be it known that I, ALFRED SAVILL TOMKINS, a citizen of England, residing at 4 Heene Terrace, Worthing, in the county of Sussex,
5 England, have invented a new or Improved Slow-Combustion Stove, (for which I have obtained a patent in Great Britain, dated February 1, 1890, No. 1,755,) of which the following is a specification.

10 My invention relates to a simple and compact slow-combustion stove, particularly adapted for the use of military men or travelers for warming tents, wagons, or huts, and so constructed that it can be taken apart or
15 put together very rapidly, and that when taken apart it can be packed in very compact form for transport, as I shall describe, referring to the accompanying drawings.

20 Figure 1 is a vertical section, and Fig. 2 is a plan on X X of Fig. 1.

The stove is of pyramidal form, made of four triangular sides A A and B B, jointed together at the angles, the two sides A A being made with grooves near their edges to
25 receive beads projecting from the edges of B B. These sides are held firmly together by two square rings C' C², which embrace them and project all round to form a pair of shelves. There might be a greater number of rings,
30 such as C' C²; but practically I find that two are sufficient for strength and convenience. Within the four sides near their lower edges is fixed a plate D, which forms the bottom of the stove and has through it a central hole E
35 for ingress of air from the space below. In the upper part of one of the sides is a hinged door F, which can be opened for feeding fuel into the stove.

40 G is a flue-pipe forming the chimney, which may be carried up any desired height. In order to arrest sparks I prefer to make the chimney with a complete bend H; but in cases where there might be little danger from sparks this curvature of the pipe may be dispensed
45 with. The interior of the stove being filled, it may be nearly to the top, with fuel kindled

at the bottom, this fuel being supplied with only a small quantity of air through the hole E, goes on burning slowly for a long time, heating the walls of the stove and the pro- 50
jecting shelves, so as to warm by radiation the air in a tent, wagon, or hut, and also, if desired, to heat water or food in vessels placed on the shelves in contact with the heated
55 sides of the stove.

Instead of a single air-inlet E through the bottom of the stove, there might be several smaller holes distributed over the bottom; but practically I find a single central hole
60 sufficient for effecting combustion in the desired manner.

On taking off the flue-pipe G and the rings C² and C' the four sides and bottom of the stove can be taken apart and packed flat together along with the rings in very small
65 compass.

Having thus described the nature of my invention, and the best means I know for carrying the same into practical effect, I
70 claim—

A slow-combustion stove consisting of four triangular side plates and a bottom plate, held together by two or more square rings forming shelves, one of the sides having a
75 door for feeding fuel, the bottom having a hole or holes for admitting air, and the top opening into a chimney-pipe, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of
80 two subscribing witnesses, this 11th day of February, A. D. 1891.

ALFRED SAVILL TOMKINS.

Witnesses:

WM. BATES,
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