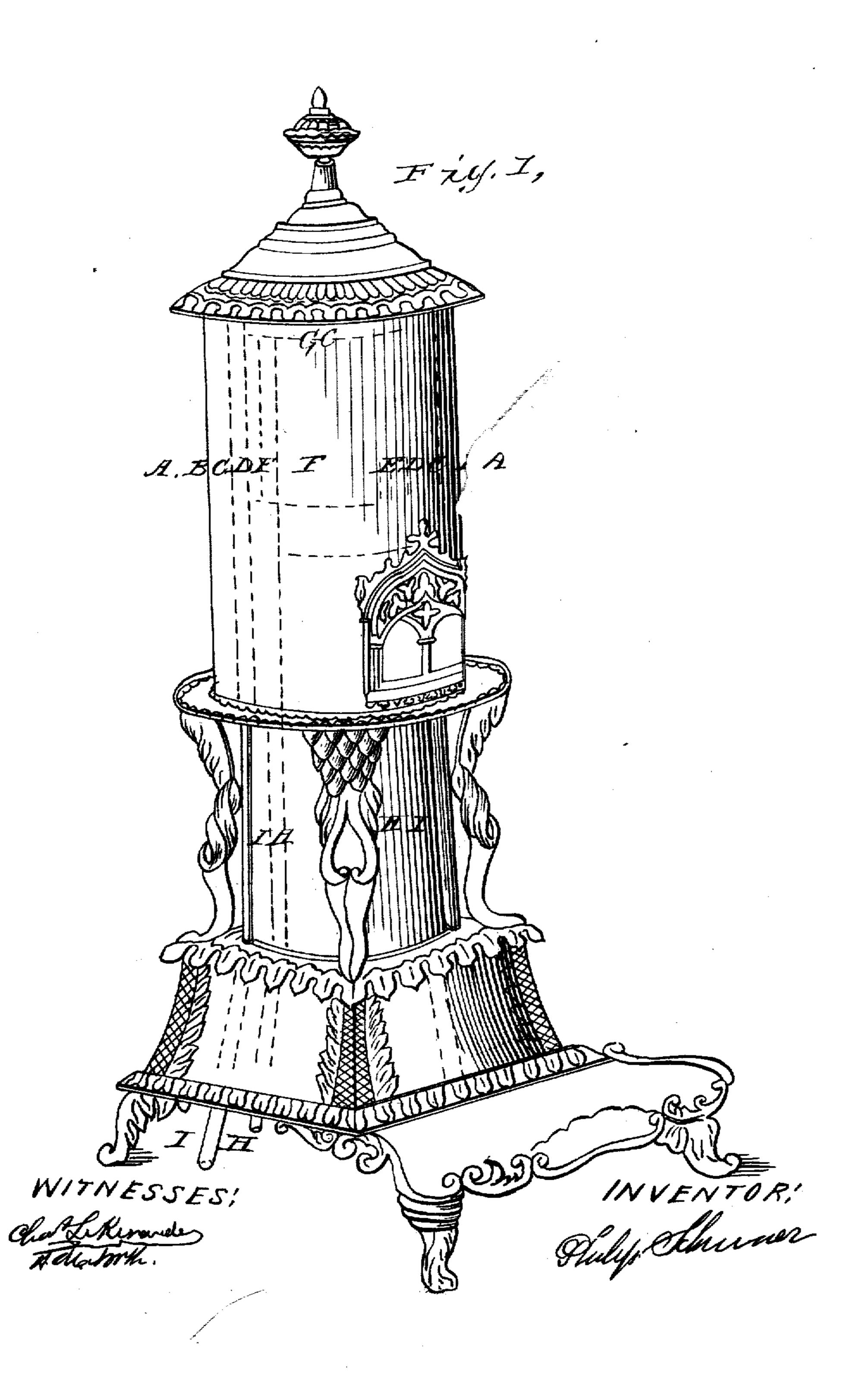
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Stove.

No. 22,754.

Patented Jan'y 25, 1859.

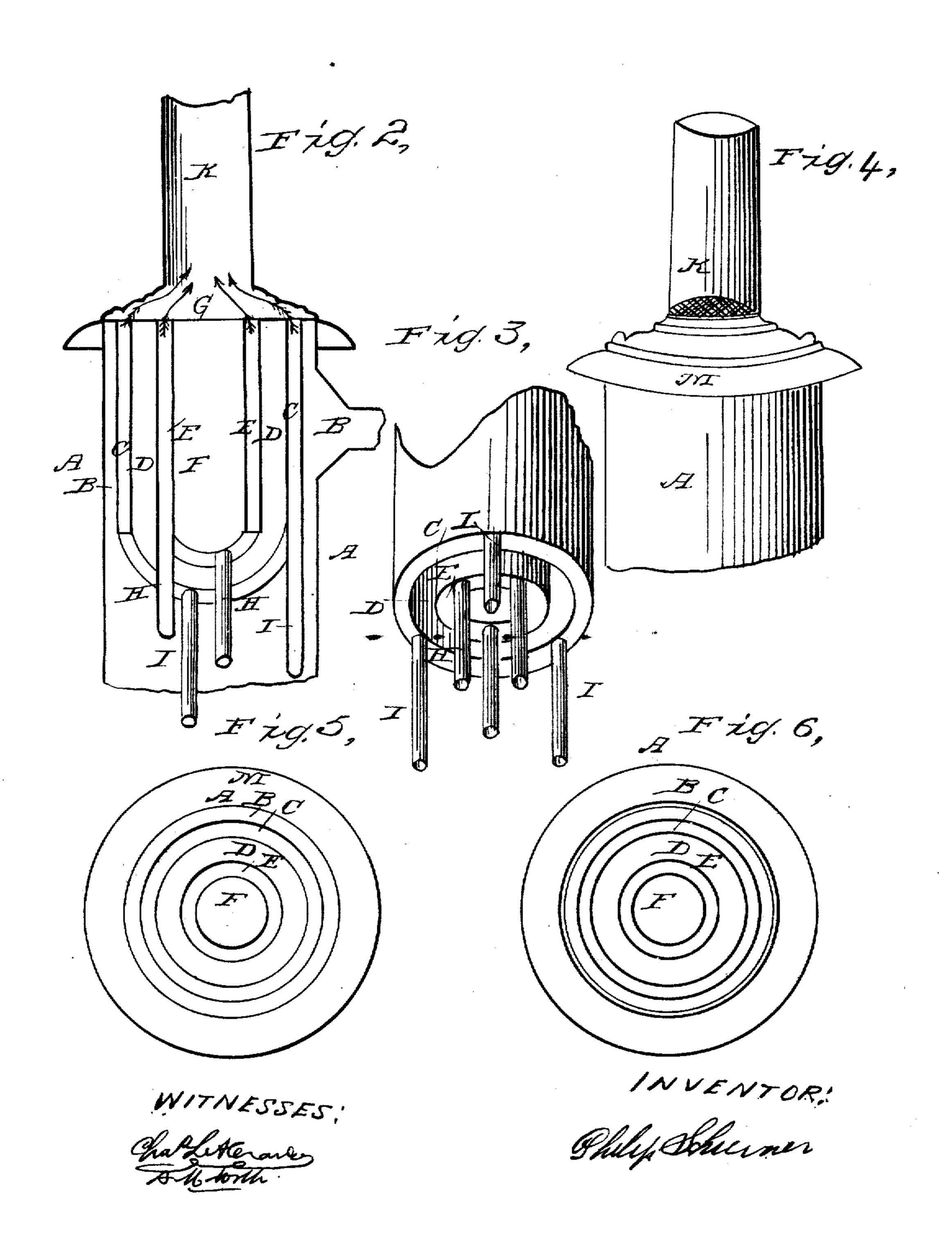


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N. PETERS, Physical thographer, Washington, U. C.

UNITED STATES PATENT OFFICE.

PHILIP SHREINER, OF COLUMBIA, PENNSYLVANIA.

STOVE.

Specification of Letters Patent No. 22,754, dated January 25, 1859.

To all whom it may concern:

Be it known that I, Philip Shreiner, of the borough of Columbia, in the county of Lancaster, in the State of Pennsylvania, 5 have invented a new and Improved Mode of Increasing the Heat Thrown Out From Stoves and Saving and Using the Waste Heat From Stoves; and I do hereby declare that the following is a full and exact dethe accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists in placing in the upper part of a stove and 15 over the fire one or more cylinders or drums or vertical or horizontal curved tubes, with air-pipes or tubes extending through or outside of the stove to the floor or cast in the stove itself. They may, if desired, be ex-20 tended to the cellar or outside of the building. Cold air is conveyed from the floor or cellar or street through these tubes or pipes to the drums or cylinders and while passing is heated and may be carried to 25 another room, adjoining or upper, without diminishing the heat of the room in which the stove is placed, or may be let into the room from the top of the stove and thereby largely increase the heat. The heat in the 30 stove, which in all known forms of stoves passes through the pipe to the chimney and is wasted, is here made to heat the air in the drums or cylinders. The heat of the stove not being obstructed by outside casings, is at 35 the same time increased, the space for its operation being diminished by the drums. The advantage of a second or third drum is that the heat can act on more surface of cold.air.

The draft or drawings, which are made a 40 part of this application, may be described as follows:

No. 1 represents an ordinary stove with the proposed improvements; No. 2 a vertical section of the upper part of a stove and 45 improvements; No. 3 a lower end view of the two double cylinders with their respective tubes attached.

The letters describing the foregoing are as follows: A, the outside of the stove; B, 50 the draft to the smoke pipe; C. inside view of the first double cylinder or drum; D, the space intervening between C and E; E, the second cylinder or drum, or outside portion; F, the inside portion of the double 55 cylinder E; G, the heated air-chamber; H H, inside cylinder air-tubes; I I, outside cylinder air-tubes.

Fig. 4, an upper end view of the stove; K. the heated air-pipe; L, the register; M, 60 the top of the stove.

Fig. 5, a top view of the cylinders and air-chambers: Fig. 6, a transverse view of the cylinders and air-chambers.

What I claim as my invention and de- 65 sire to secure by Letters Patent, are—

The air-supplying tubes and air-heating cylinders when combined with a stove the heat of which is unobstructed by outside casings.

PHILIP SHREINER.

Witnesses:

H. M. North, C. B. North,

R. W. FERGUSON.