

No. 613,781.

Patented Nov. 8, 1898.

J. A. SCHNEIDER.  
SHEET IRON STOVE.

(Application filed Feb. 14, 1898.)

(No Model.)

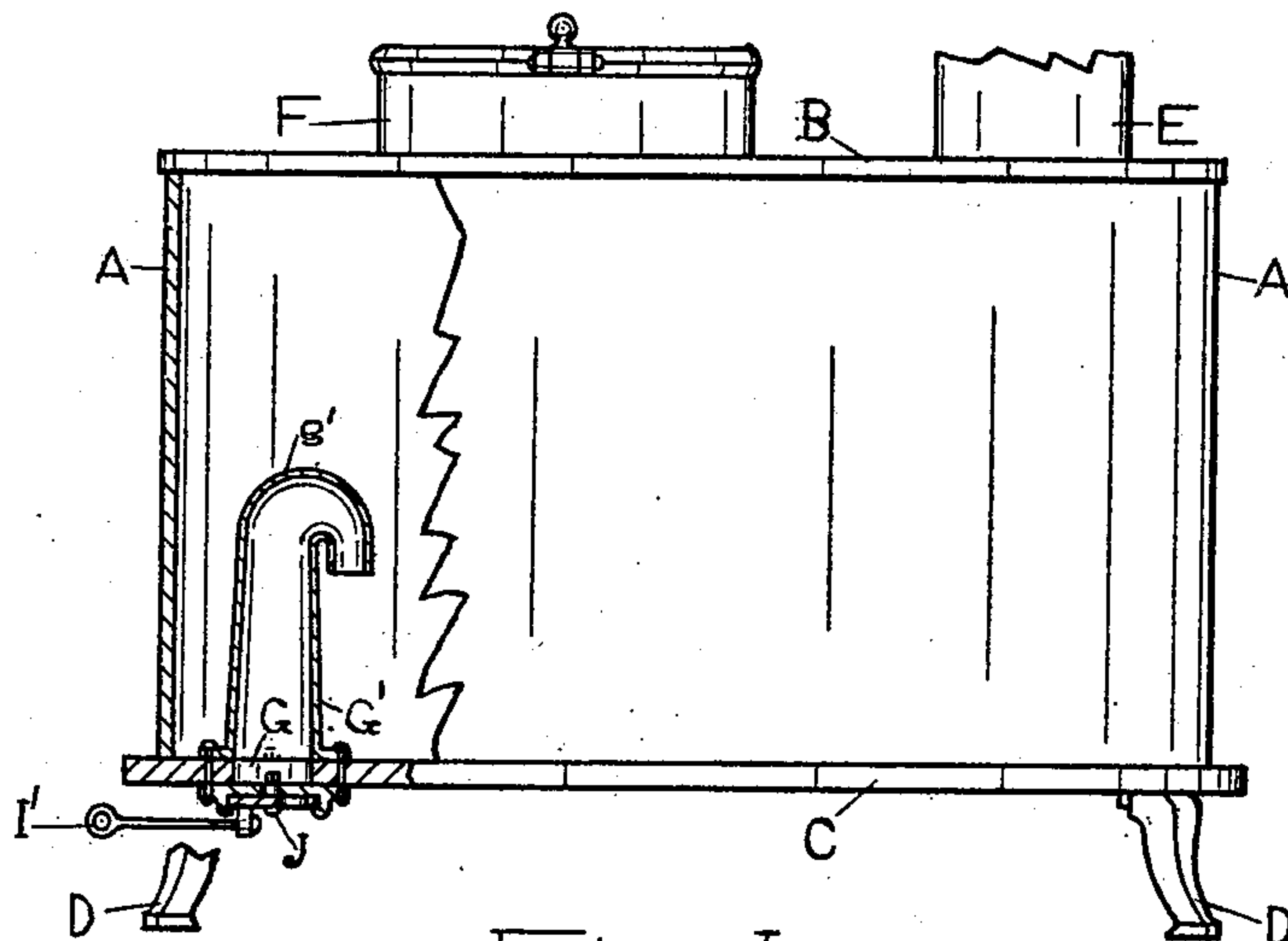
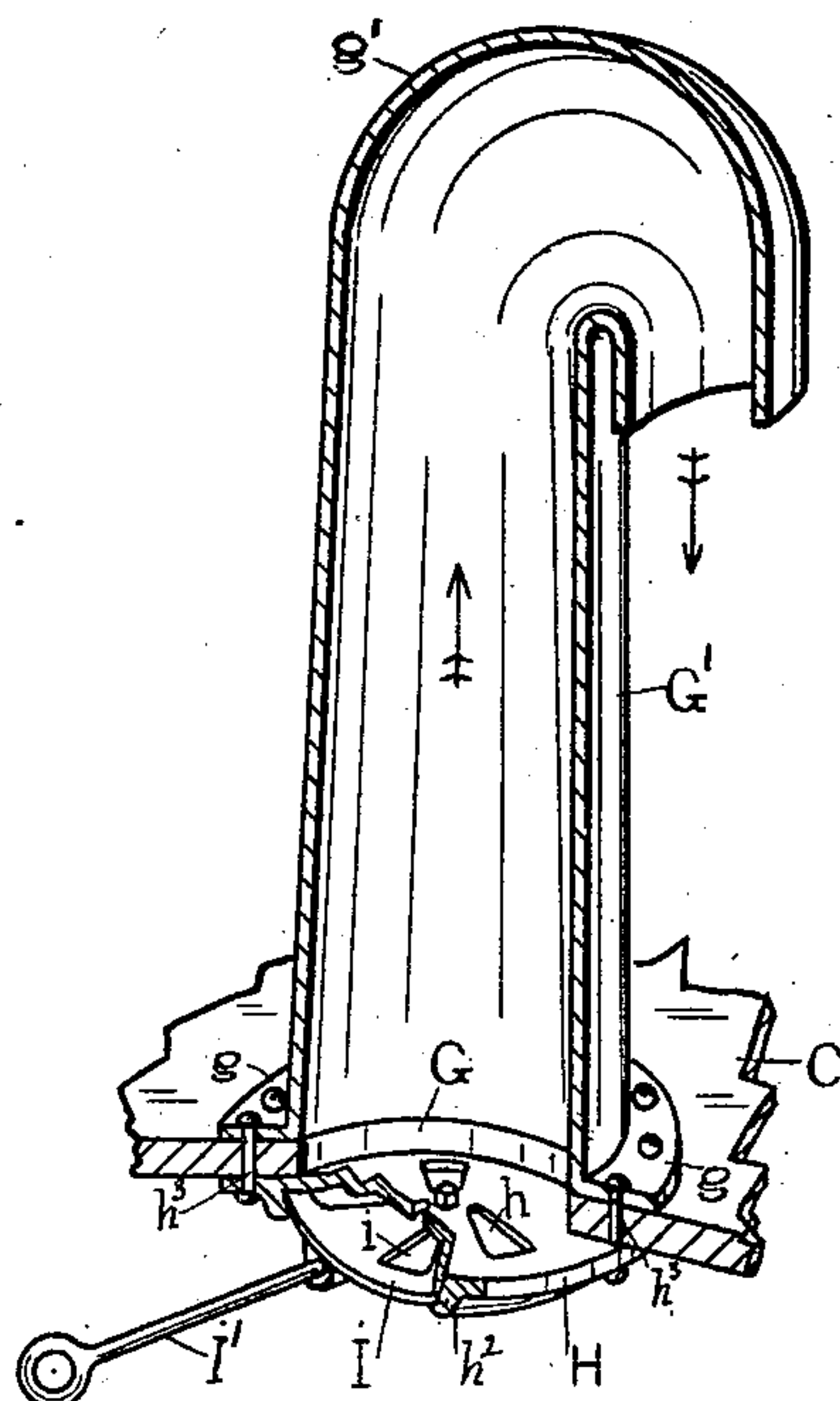


Fig. I.

Fig. II.



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# UNITED STATES PATENT OFFICE.

JOHN ADAM SCHNEIDER, OF TORONTO, CANADA, ASSIGNOR OF TWO-THIRDS TO PETER FREDERIC SCHNEIDER, OF SAME PLACE, AND THOMAS GEORGE RAKESTRAW, OF HAMILTON, CANADA.

## SHEET-IRON STOVE

SPECIFICATION forming part of Letters Patent No. 613,781, dated November 8, 1898.

Application filed February 14, 1898. Serial No. 670,208. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN ADAM SCHNEIDER, a citizen of Canada, residing at Toronto, in the county of York and Province of Ontario, Canada, have invented certain new and useful Improvements in Sheet-Iron Stoves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in sheet-iron wood-stoves; and the object of the invention is to make a stove by which the cold air will be removed from the floor of the room and of such a form that it will be very economical in the consumption of fuel and whereby the draft will be much improved as compared with stoves of this class at present in use; and it consists, essentially, in making the stove of any suitable shape of what is commonly known as "Russia iron," with an imperforate band, the bottom having extending upwardly from it near one end a pipe provided with a suitable damper at the bottom front end of the stove, such pipe being arranged a sufficient distance above or about on a level with the wood which is to be placed in the stove, the upper end of the pipe being bent downwardly, so as to direct the draft toward the bottom of the stove, the top being provided with a suitable opening to insert the wood, and a stovepipe extending upwardly therefrom from the opposite end of the stove, the parts being constructed and arranged as hereinafter more particularly explained.

Figure 1 is a side view of a stove, a portion being broken away and in section to exhibit the parts particularly involved in my invention. Fig. 2 is an enlarged perspective detail of such parts.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the imperforate band of the stove, which is made of sheet Russia iron or other suitable material.

B is the top, C is the bottom, and D are the legs.

E is the stovepipe, which leads upwardly from a suitable thimble and opening in the top B.

F is the flanged opening through which the wood is placed in the stove and which is provided with a suitable cap of any ordinary ornamental design desired.

G is the opening made in the bottom of the stove, in close proximity to one end, and that end the opposite end to that from which the stovepipe is situated and connected to the top.

G' is a pipe made, preferably, of cast-iron and having a downwardly-turned bend or elbow *g*. The pipe G' is provided at the bottom with a flange *g'*.

H is a plate provided with the usual sectoral openings *h*. The plate H has a downwardly-extending flange *h'* and is secured by bolts *h''* to the bottom of the stove and to the flange *g'*, so as to secure the parts rigidly together.

I is a circular plate-damper provided with sectorial openings *i*, corresponding in size to the openings *h*. The damper I has also a central hole through which extends the bolt J, securing it within the flange *h'* and underneath the plate H.

I' is an operating-handle for the damper I. The damper I is an ordinary form of damper, and by turning it the size of the sectoral openings may be determined, so as to regulate the amount of draft.

The utility of my invention resides in the following fact: The cold air from the bottom of the room when the fire is lighted is drawn up through the pipe G', in which it becomes heated before it enters into the stove, and is directed by the downwardly-turned elbow *g* toward the bottom of the stove, which it passes along, as indicated by arrow, through the wood and up at the opposite end to the stovepipe.

By having the pipe G' arranged and constructed as described it will be readily seen what an excellent draft will be created and one which by the damper I may be regulated to a nicety. In fact the stove may be shut



up and kept lighted for many hours at a time without adding new fuel when but little heat is required.

5 It will also be noticed that it is not possible for any ashes to get on the floor. The cold air is removed from the floor, thus making the room more comfortable, and a decided saving in the consumption of fuel is effected.

10 By such a stove, constructed as described, the room will of course be more readily and quickly heated and kept heated, as by the continual drawing of the cold air from the floor the warm air is caused to circulate toward the floor and around the bottom of the room.

15 What I claim as my invention is—

20 1. In a sheet-iron wood-stove, in combination an imperforate band, a top provided with a stovepipe and wood-supply opening and a bottom having a pipe extending upwardly from a hole in the same at the opposite end to

which the stovepipe is situated and provided with a downwardly-bent end or elbow as and for the purpose specified.

2. In combination an imperforate band, a top provided with a stovepipe and wood-supply opening, a bottom provided with a suitable hole at the opposite end to which the stovepipe is situated, a cast-iron pipe provided with a lower flange and a bent downwardly-projecting upper end or elbow, a plate provided with sectoral openings and bolts extending through the bottom of the stove and bottom flange of the pipe, circular damper pivoted on the plate with sectoral openings and provided with handle for manipulation as and for the purpose specified. 35

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Witnesses:

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