(No Model.)

W. D. SOUTHARD.

STOVE.

No. 516,233. Patented Mar. 13, 1894.

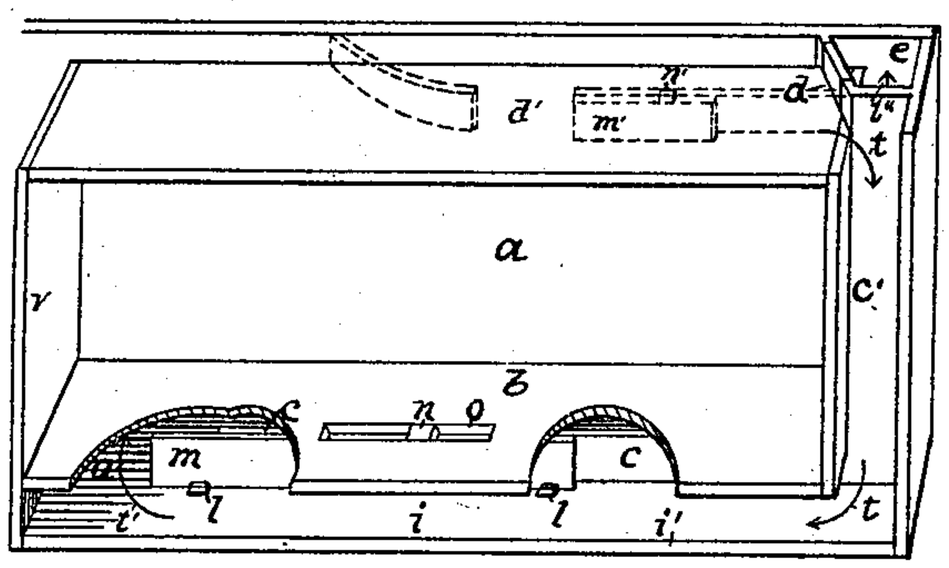

Fig. I

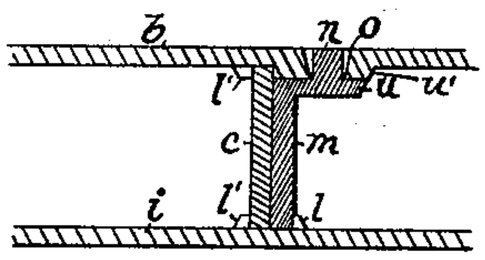

Fig. II

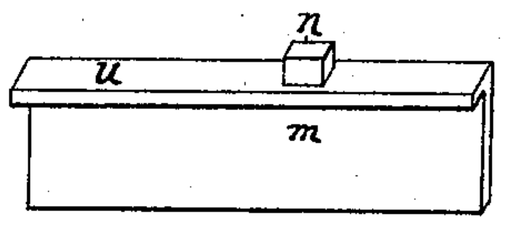

Fig. III

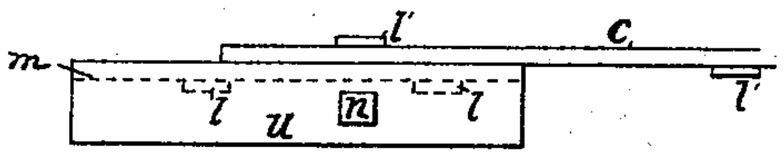

Fig. IV

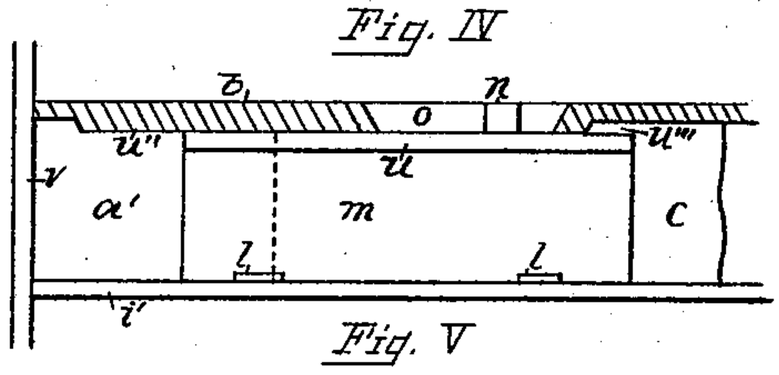

Fig. V

WITNESSES:

R. E. Briggs.

H. Allan Anderson.

INVENTOR

W. D. Southard

BY

H. Anderson

ATTORNEY.

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM D. SOUTHARD, OF PEEKSKILL, NEW YORK, ASSIGNOR TO SOUTHARD, ROBERTSON & CO., OF SAME PLACE.

STOVE.

SPECIFICATION forming part of Letters Patent No. 516,233, dated March 13, 1894.

Application filed October 7, 1893. Serial No. 487,539. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM D. SOUTHARD, a citizen of the United States, and a resident of Peekskill, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Stoves, of which the following is a specification.

My invention relates to the flues of stoves and ranges, and has for its object means for regulating the flue openings and adapting them to the chimneys with which they are connected. The object is attained by the means set forth in the accompanying drawings and the specification, which I declare to be an exact and full description of my invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Referring to the drawings: Figure I is a view in perspective of a section of a stove, representing the oven and the arrangement of flues around it. Fig. II is a cross sectional view of the flue strip dividing the flue under the oven. Fig. III is a view of the flue strip extension piece. Fig. IV is a top view of the flue strip and extension piece. Fig. V is an elevation showing the top plate in cross section, and also the end plate.

In Fig. I *a* represents a stove oven, the top plate and also the front plate of the stove being removed, showing how an outlet by way of the damper *d* would allow the products of combustion to pass into the stove pipe which would be just over the flue *c*. But the damper being closed the passage way is as indicated by the arrows *t*, *t*, *t'*, *t''*, which is down through the flue *c'*, under the oven by way of flue *i*, back behind the partition *m*, *c*, and upward out through flue *e*. The open space, *a'*, at the end of the flue strip *m*, *c*, is usually adapted in size to the average construction of chimneys, with the result that it is often either too large or too small to give the requisite draft. To remedy this defect, and to afford ready means for adjusting it to necessities, I make the end of the flue strip adjustable. The strip *c* I make short enough to give an excess of opening. Then a strip *m* is placed by the side of the strip *c*, and by means of the knob *n* on the former projecting through a recess *o* in the oven bottom, the strip *m* is moved by means of the knob *n*. The said knob is made flush with the oven floor so that it will not interfere with cooking or baking utensils.

In Fig. I the strip *m* is shown to travel between the fixed strip *c* on one side, and lugs *l*, *l*, on the bottom *i*, on the outside. The knob *n* keeps it in place at the top. This arrangement is clearly shown in Fig. II.

Fig. II also represents a plan for obtaining a recess of some size for the accommodation of a fair sized knob, and its convenient manipulation. Stove plates ordinarily are quite thin, and a mere slot, as *o*, Fig. I, would afford space for only a small knob. In Figs. II and III the strip *m* is represented as made with a flange *u* at the top.

In Fig. II the covering plate *b*, which contains the slot *o* is shown to have a thickened surface *u'* around the slot. This gives additional depth of metal in which to make a roomy recess. The flange *u* affords room for a fair sized knob, and it also securely closes the opening *o* against the entrance to the oven of dust or the products of combustion in case of a poor draft. It will be necessary, however, to extend the thickened surface *u'* to the extent of the movement of the strip *m*, where it moves beyond the end of the plate *c*, as shown at *u'*, Fig. V, to avoid an opening above the slide similar to that of *u'''*. In this figure *b* represents the bottom oven plate, *v* the end plate, *i'* the bottom plate, and *a'* the flue opening, which may be enlarged or reduced in size by moving the flue strip *m*, by means of the knob *n*.

It is apparent that it is immaterial on which side of the strip *c* the strip *m* may be placed. It is here shown on the front side. Also, that the construction may be reversed from that shown, and the slot *o* may be made in the bottom plate so that the knob *n* may be operated from the outside of the stove. It will also be obvious that ordinary stove dampers may be constructed and operated in the same manner as my flue strip. In Fig. I *d* represents an ordinary form of damper, without the hinge or damper rod being shown. The broken lines indicate another form of partition in which the direct flue opening is shown at *d'*. *m'*, *n'*, indicate a damper similar to the flue strip described. By providing a slot in the

stove top to accommodate the knob *n* this damper may be manipulated from the top of the stove, and the position of the knob in the slot would always indicate the exact position of the damper, whether partially or wholly closed or open.

Although the device is shown as applied to a cook stove or range it is plainly applicable wherever conditions make it available and desirable.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

In combination with the flue strip *c*, top plate *b* and bottom plate *i*, a movable strip *m* held in place against the strip *c* by means of a knob *n* lying within the slot *o* in the top plate and guides on the bottom plate, the strip *m* being movable by means of the knob *n*, substantially as herein shown and described.

Signed at Peekskill, in the county of Westchester and State of New York, this 9th day of September, A. D. 1893.

WM. D. SOUTHARD.

Witnesses:
STEPHEN LENT,
D. S. HERRICK.