

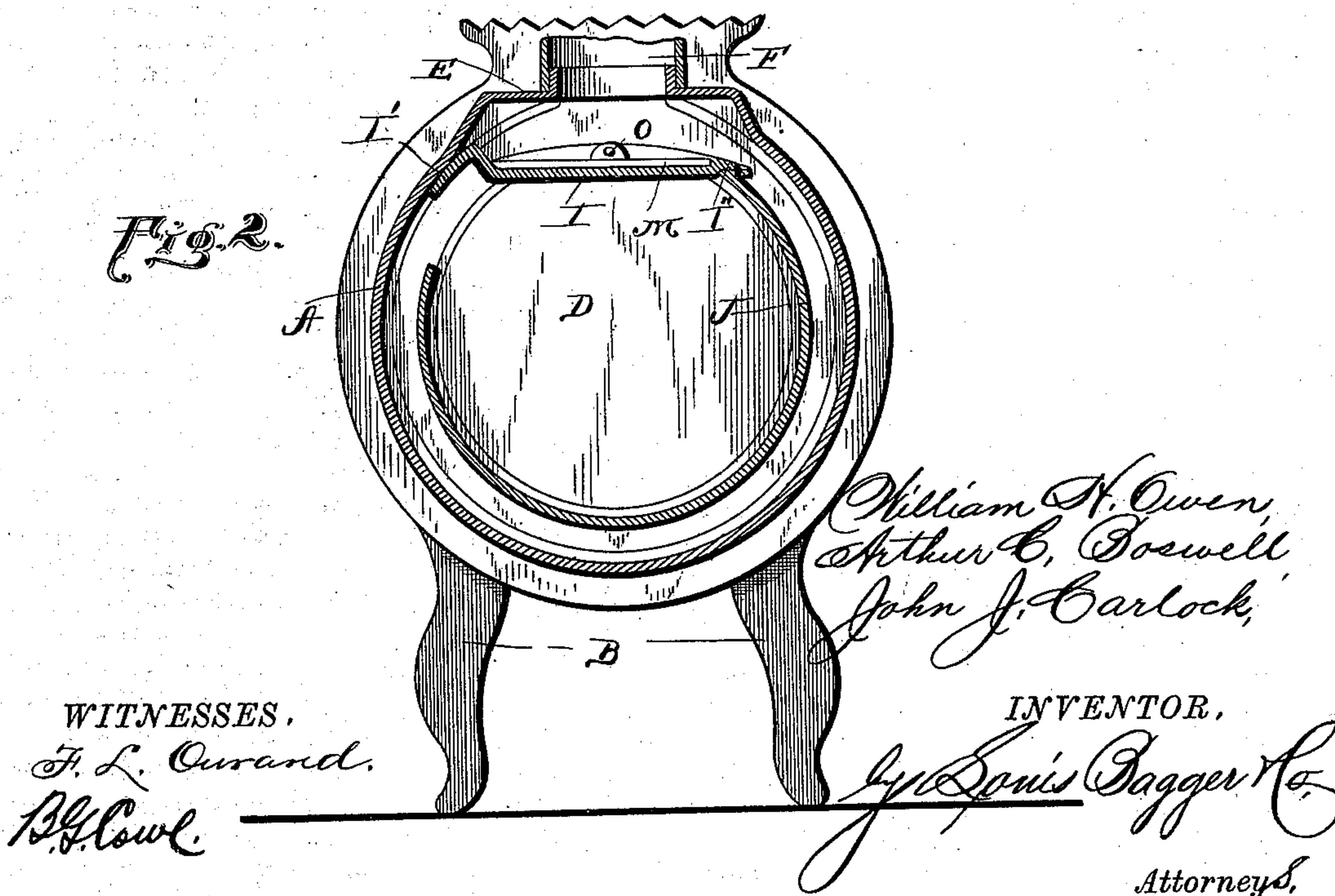
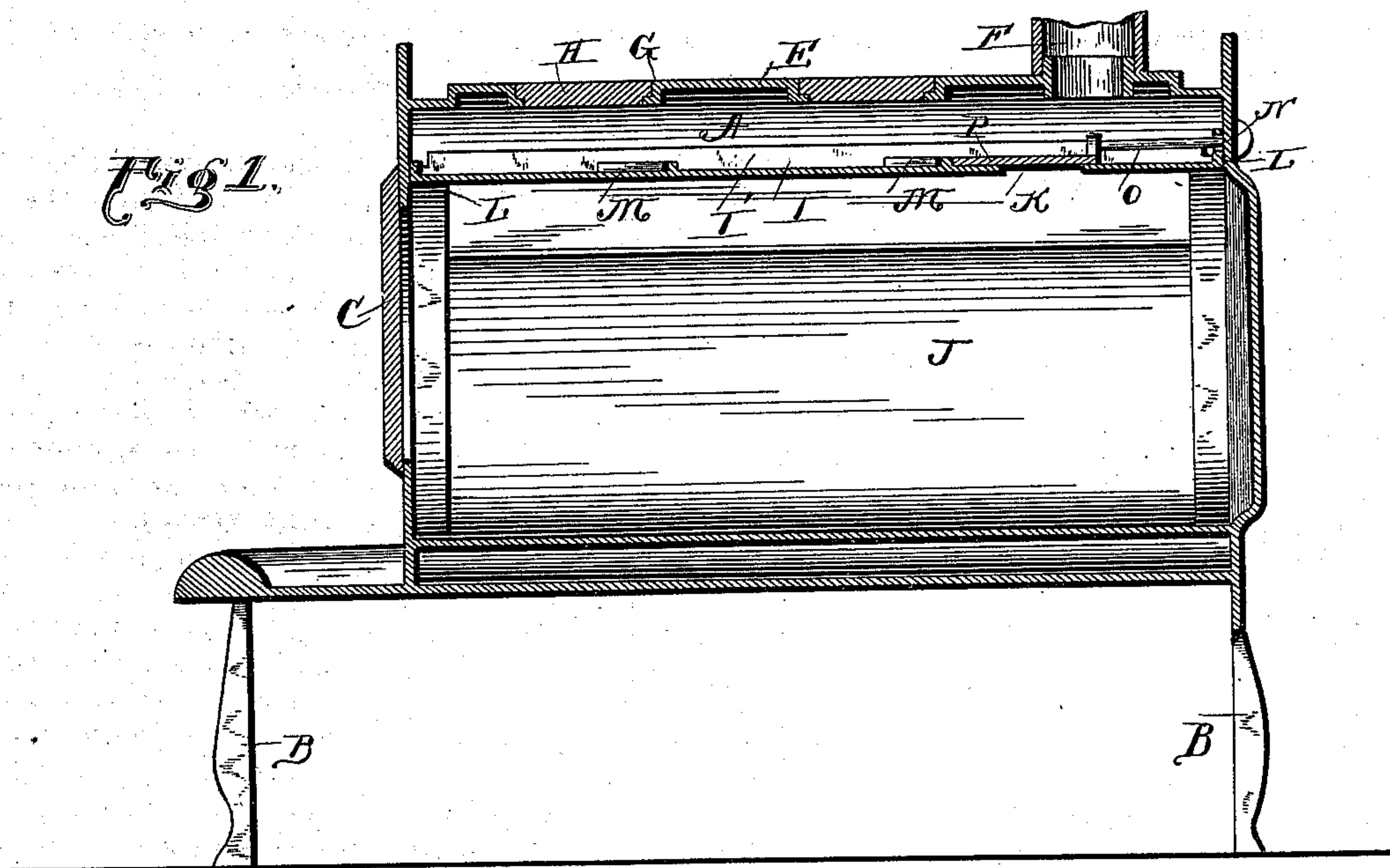
(No Model.)

W. H. OWEN, A. C. BOSWELL & J. J. CARLOCK.

STOVE.

No. 402,539.

Patented Apr. 30, 1889.





# UNITED STATES PATENT OFFICE.

WILLIAM H. OWEN, OF ONARGA, ILLINOIS, ARTHUR C. BOSWELL, OF FOWLER,  
INDIANA, AND JOHN J. CARLOCK, OF WATSEKA, ILLINOIS.

## STOVE.

SPECIFICATION forming part of Letters Patent No. 402,539, dated April 30, 1889.

Application filed September 24, 1888. Serial No. 286,226. (No model.)

*To all whom it may concern:*

Be it known that we, WILLIAM H. OWEN, of Onarga, in the county of Iroquois and State of Illinois, ARTHUR C. BOSWELL, of Fowler, in the county of Benton and State of Indiana, and JOHN J. CARLOCK, of Watseka, in the county of Iroquois and State of Illinois, have invented certain new and useful Improvements in Stoves; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a wood-burning stove.

The object is to improve a stove for which Letters Patent of the United States were granted February 24, 1888, and numbered 312,651, by constructing the trough in such a manner that a direct draft may be obtained; furthermore, to render the stove capable of burning either dry or damp wood; furthermore, to strengthen the said trough, and, finally, to produce a stove which shall be simple of construction, efficient and durable in use, and exceedingly inexpensive of production.

With these objects in view the invention consists, broadly, in a trough adapted to be secured with one edge to the interior side of the outer casing of the stove, and with its other edge to the edge of an inner casing or wall, and formed with a rear draft-opening; furthermore, in the trough formed with strengthening-ribs and with a draft-opening, and further formed with side extensions, by means of which it is adapted to be secured in operative position, in combination with a sliding damper working over the said draft-opening, and, finally, in the various novel details of construction whereby its objects are attained.

In the accompanying drawings, forming part of this specification, and in which like letters of reference indicate corresponding parts in both the figures, Figure 1 is a longitudinal vertical sectional view of the improved wood-stove, and Fig. 2 is a cross-section of the same.

Referring to the drawings, A indicates the outer cylindrical casing of the stove, sup-

ported upon legs B, and having a door, C, for feeding the fuel and for emptying the ashes at one of the heads D, which heads may be ornamented in any desired manner. The upper side of the casing forms a longitudinal bulge, E, in the rear of which the stove-pipe F opens, and which has, if desired, two or more or less apertures, G, in which cooking-vessels may be placed, and which are provided with lids or covers H. Under the longitudinal bulge is a longitudinal trough, I, upon the inside of the casing, having one of its extensions, I', which is curved, fastened to the inside of the casing, the curved portion conforming with the same. To the other edge or extension (indicated by the letter I'') is riveted an inner wall or casing, J, which extends around the inside of the outer casing, running parallel with the same, forming a flat flue and opening into the interior of the stove at the upper side of the same at the point where the curved edge or extension of the trough is fastened to the outer casing. The trough has formed in its rear portion, beneath the stove-pipe opening, a draft-opening, K, and the ends of the said trough are formed with walls L, by means of which it is fastened to the heads of the outer cylindrical casing. Ribs M are also formed upon the trough and serve to strengthen it. The rear one of the walls L is formed with a transverse aperture, N, through which projects the outer end of a damper-rod, O, which further projects through the head of the outer cylindrical casing, from where it is operated. The inner end of this damper-rod is provided with a damper, P, which slides over the draft-opening of the trough for the purpose of establishing and cutting off the draft. When the draft-opening is closed, the damper abuts against one of the strengthening-ribs, which acts as a stop to prevent the damper being slid past the desired point. After the damper has been adjusted the desired extent over the draft-opening, it will be seen that the smoke from the ignited fuel in the fire-place of the stove will pass into the flat flue at its opening in the top of the stove, pass around the same, and pass into the stove-pipe at the top of the stove, the drippings from the soot, which always accompany the smoke of burned



wood, being collected in the trough at the top of the stove. It will also be seen that a large amount of heat will be utilized by passing the products of combustion around the stove, 5 allowing them time to give off some of their heat to the air surrounding the stove, and that, if desired, the heat of the same may be used for cooking purposes at the same time it heats the room, and that the cooking utensils will not be subjected to the immediate 10 flame of the fire, but will be touched only by the heated air and gases on their way to the stove-pipe.

It is a well-known fact that nearly all wood-burning stoves smoke more or less when feeding 15 them with fuel while the door is open; but by having the damper arranged as herein set forth, and which is slid back to make a draft when the door is opened for feeding 20 fuel, this great difficulty is obviated, as the draft will draw all the smoke and products of combustion through the smoke-pipe.

Having thus described our invention, we claim and desire to secure by Letters Patent 25 of the United States—

The combination, in a horizontal stove, of an outer cylindrical casing formed with a lon-

gitudinal bulge at its top, having apertures for cooking utensils and for the stove-pipe, 30 with an inner casing opening at the top of the stove into the fire-place, passing around the inside of the outer casing parallel to the same, and a longitudinal soot and drip receptacle or trough secured with one of its edges 35 to the outer cylindrical casing at its top in the interior thereof, and secured with its opposite edge to the upper edge of the inner casing, the said trough or receptacle being formed at one end with a draft-opening and a damper 40 sliding over the same, substantially as set forth.

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

WILLIAM H. OWEN.  
ARTHUR C. BOSWELL.  
JOHN J. CARLOCK.

Witnesses to Boswell:

GEO. W. JONES,  
E. F. JONES.

Witnesses to Carlock and Owen:

W. R. ALTER,  
ASA B. ROFF.