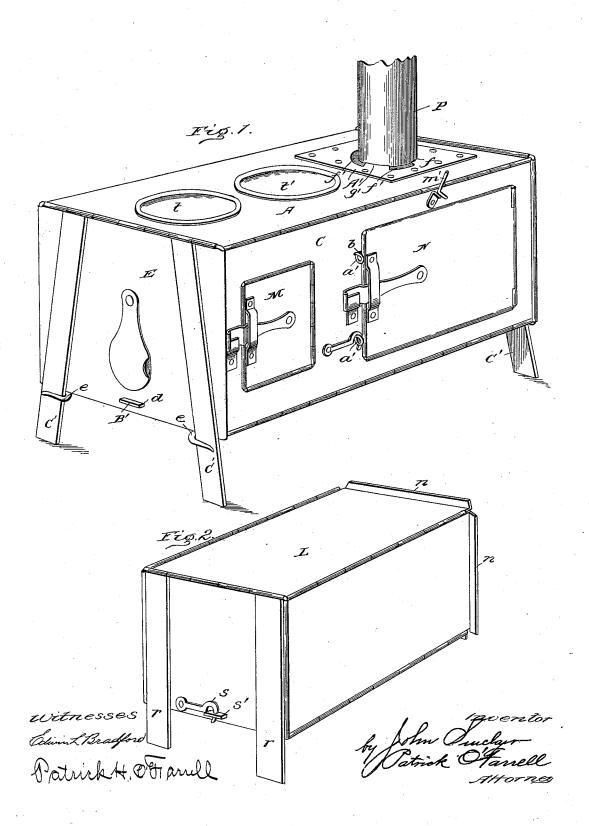
(No Model.)

J. SINCLAIR. PORTABLE STOVE.

No. 523,920.

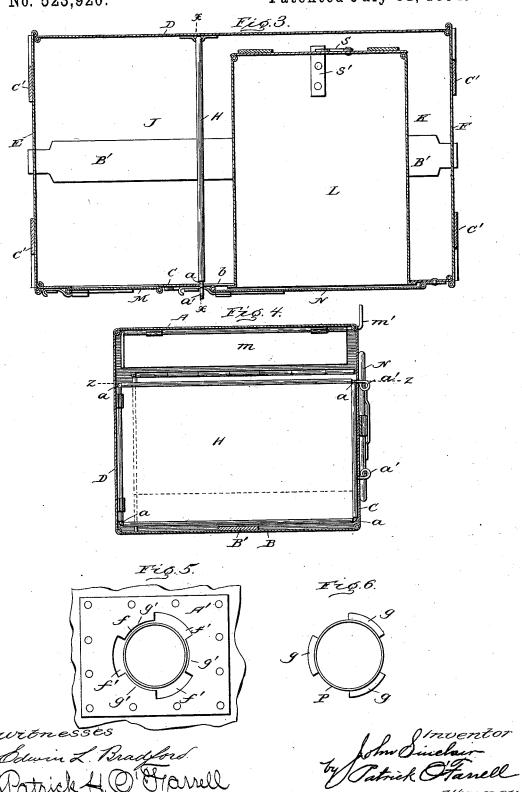
Patented July 31, 1894.



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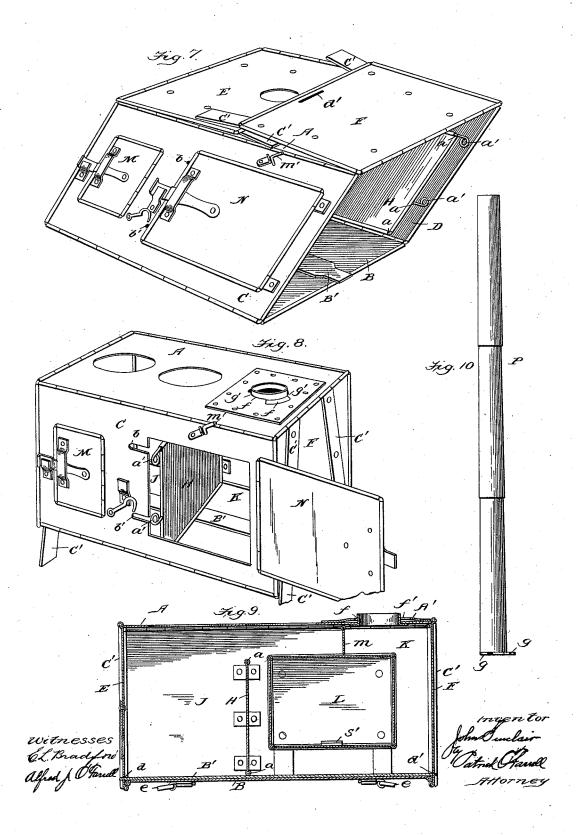
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## J. SINCLAIR. PORTABLE STOVE.

No. 523,920.

Patented July 31, 1894.



## UNITED STATES PATENT OFFICE.

JOHN SINCLAIR, OF GREAT FALLS, MONTANA.

## PORTABLE STOVE.

SPECIFICATION forming part of Letters Patent No. 523,920, dated July 31, 1894.

Application filed October 14, 1893. Serial No. 488,161, (No model.)

To all whom it may concern:

Be it known that I, JOHN SINCLAIR, having declared my intention to become a citizen of the United States of America, residing at Great Falls, in the county of Cascade and State of Montana, have invented certain new and useful Improvements in Portable Stoves, of which the following is a specification, reference being had therein to the accompany-10 ing drawings.

My invention relates to stoves, and belongs to the class known as folding or portable stoves, and it consists in the novel arrangement shown in the illustrations, and pointed

15 out in the specification and claims.

In the accompanying drawings, Figure 1, is a perspective view of my improved stove as it will appear when set up ready for use, the pipe being broken for convenience in 20 drawing. Fig. 2, is a similar view of an oven adapted to be positioned on the inside of the stove. Fig. 3, is a horizontal section on the line z z Fig. 4. Fig. 4, is a vertical cross section, taken on the line xx Fig. 3. Fig. 5, is a 25 fragmentary section of the top of the stove showing a plate super-imposed and riveted. Fig. 6, is an end view of the lower section of the pipe showing radial flanges for connecting it to the stove. Fig. 7, is a perspective view showing the ends folded upon the top and the body partly collapsed. Fig. 8, is a perspective view with the door of the oven chamber partly open, and the hinged division in the act of being closed. Fig. 9, is a verti-35 cal longitudinal section taken through the center. Fig. 10, is an elevation of the pipe shown detached.

Referring to the several parts by letters of reference, ABC and D indicate the top, bot-40 tom, front, and back respectively, and E and F the ends. The top, bottom, front, and back are connected by forming a hinge joint of their coinciding edges and inserting a rod upon which the parts articulate, the ends be-45 ing united to the top in like manner. Upon the inside and nearer the end E; is hinged a plate H which when swung transversely across the body, separates it into two compartments, a fire place J and an open cham-50 ber K.

The plate H is strengthened by a wire frame

bent, and upon which the hinges articulate: the free ends of this wire protrude in front and are bent at a' to form fastenings for se- 55curing the plate in position when the stove is set up. When the parts are to be folded, the plate H is swung round against the back D. It will be observed that this plate does not extend to the top of the stove, but room enough 60 is left to allow the heat and products of combustion to pass over the plate and around the oven L, a damper m being located over the oven as shown in Figs. 4, 8, and 9; this damper is provided with a handle m' (see Figs. 1 and 65 4) by which the damper is positioned to throw the heat below the oven, by turning the handle up, or to regulate the heat between the bottom and top by positioning the damper accordingly. When the stove is folded the 70 damper is turned up as shown in Fig. 9.

The front of the stove is provided with two openings, one for supplying fuel to the fire and one for placing the oven L in position; these openings are closed by the doors M and 75 N respectively. The front is provided with two slots b b' extending inwardly from the opening through which the oven is placed, into these slots the shanks of the catches a a enter, when the plate H is brought into posi- 80 tion on setting up the stove, and when the door N is closed it locks them in position.

The bottom of the stove is strengthened by a bar B' which extends the full length of the plate and projects far enough beyond to enter 85 the openings d d' in the ends E, F, when the stove is set up. The ends are also provided with parts C' the lower ends of which form legs for the structure to stand upon, and the bottom is provided with hooks e e for closing 90 on the legs and holding the ends in position.

Upon the top plate A there is secured a plate A' which has an opening f surrounding the annular flange for the reception of the pipe, said opening being recessed at f' to accommodate flanges g of the pipe P which after being placed, is turned until the flange gpasses under the projections g' of the plate  $\check{\mathbf{A}}$ thereby holding the pipe firmly in position. The pipe P is made in section as shown in 100

Fig. 10, and so constructed that the parts may be telescoped when taken down for packing.

The oven is constructed the same as the a, around which the edges of the plate are I body of the stove except that one end is left open, and provided with flanges n which prevents it from passing entirely through the opening into the chamber K, the legs r r holds it up at the back and the front rests on the front plate below the door N. The back of the oven is held in place by a hook s engaging with a projecting plate s' attached to the bottom.

To take the stove down and pack it, the to oven and pipe are first removed, the pipe is telescoped, and the hook s on the back of the oven is removed from engagement with the plate s'; the end is then turned back on the top of the oven and by pressing on one side 15 the structure will collapse, the top and one side falling on the bottom, and the opposite in the manner of the body of the stove. After removing the oven and before closing the door, the plate H is swung round against the back as shown in Fig. 9, the hooks e are then disengaged from the legs and the ends folded back on the top, the damper m is turned up as shown in Fig. 9, and a pressure on the side will collapse the body as indicated by Fig. 7. The plates tt' are made to serve as covers or

cooking utensils, and are cupped or hollowed upon their faces, and may be left in place or removed, when the stove is packed at the pleasure of the user.

Having thus described my invention, what I claim as new, and desire to secure by Letters

I. A stove composed of plates secured together by articulated joints which will admit.

35 of their folding into a compact form the front plate having an opening through which an oven is inserted, and having notches extending from the front edge of the opening, a division plate hinged to the back stove plate 40 and adapted to swing across the space be-

tween the said front and back plates and having projections which are adapted to enter the said notches, and a door to close the oven and engage with the said projections to retain the division in position, substantially as 45 set forth.

2. The combination with a stove composed of plates which are connected together by articulated joints, one of the plates having an opening, of an oven removably inserted 50 through the said opening and having feet to support the inner or rear end, the front end being supported in the plate, said oven being composed of plates connected together by articulated joints and adapted to fold upon 55 each other, substantially as described.

3. The herein shown and described stove composed of plates secured together by articulated joints and adapted to fold upon each other, the front plate having two doors clos- 60 ing openings therein, one opening having notches leading from the edge thereof, a division plate hinged to the back plate and adapted to swing across the space between the front and the rear plates and having pro- 65 jections to enter the said notches, an oven removably inserted through one of the said openings and formed of plates secured together by articulated joints and adapted to fall upon each other, and a damper hinged to 70 the top plate and adapted to be operated from without the stove to cause the heat to circulate around or over the oven, substantially as described.

In testimony whereof I affix my signature in 75 presence of two witnesses.

JOHN SINCLAIR.

Witnesses:
JOHN VALENTINE,
GARRIE J. WHYTE.