

No. 618,014.

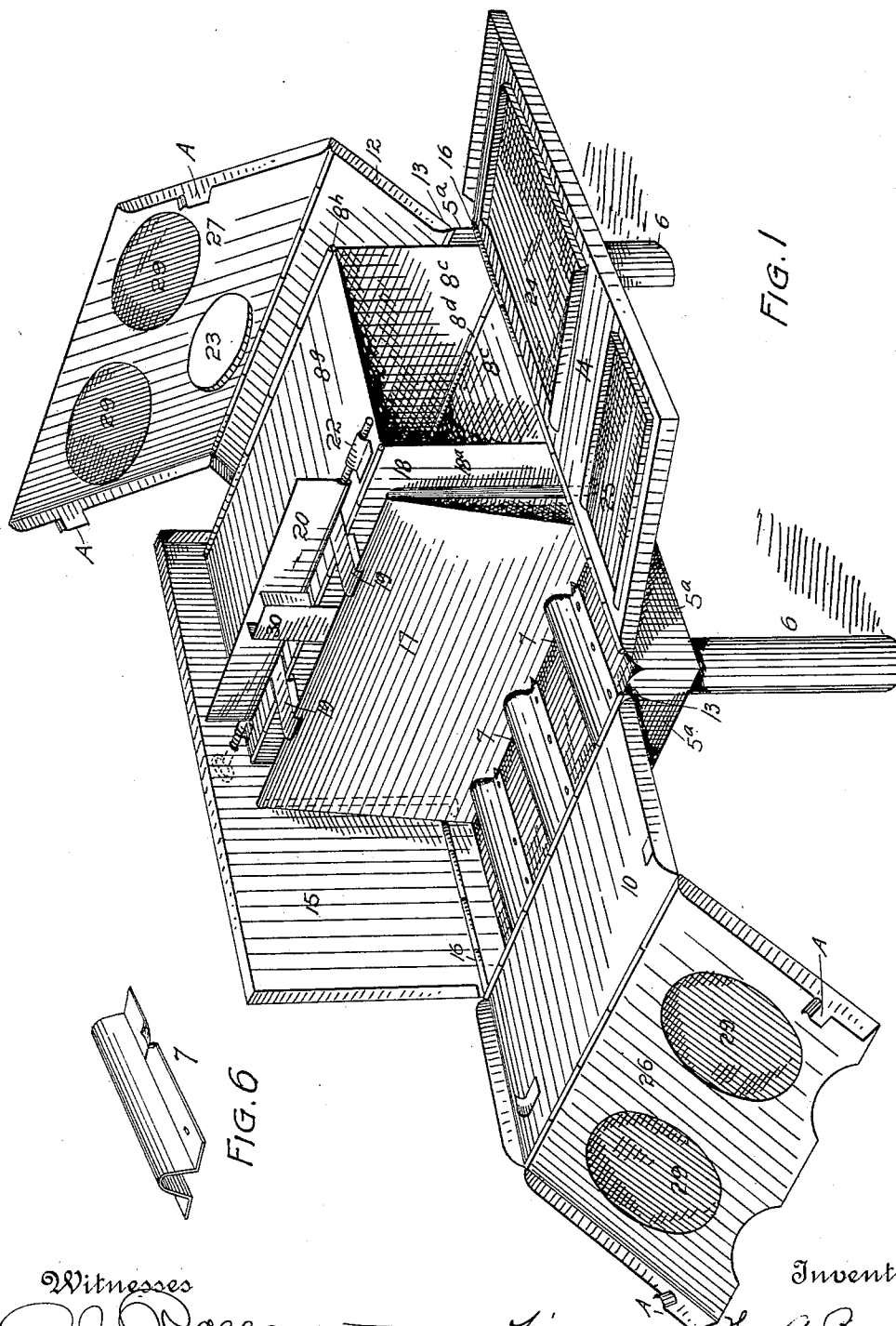
Patented Jan. 17, 1899.

W. G. ROGERS.
FOLDING STOVE.

(Application filed Mar. 15, 1898.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses
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2 Sheets—Sheet 2.

FIG. 2.

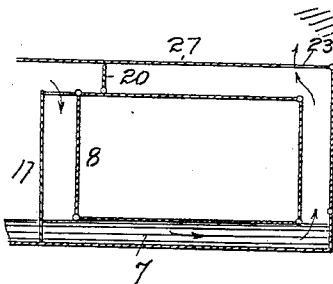
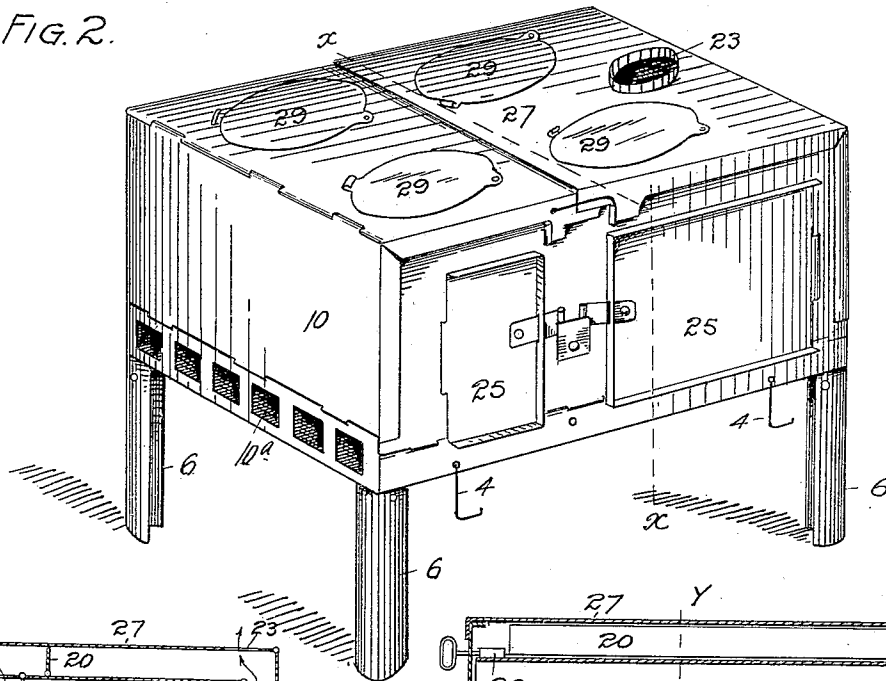


FIG. 5

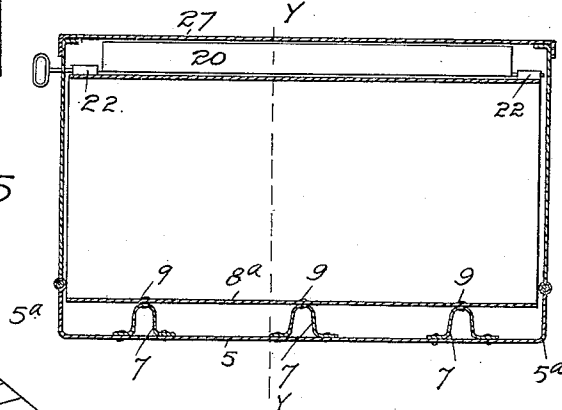


FIG. 4

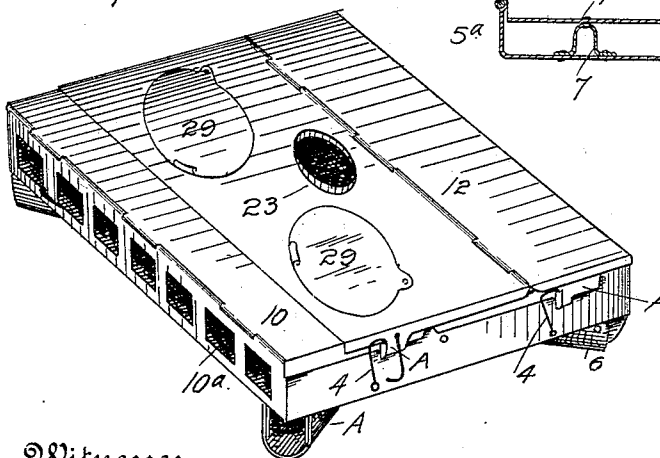


FIG. 3.

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UNITED STATES PATENT OFFICE.

WILLIAM G. ROGERS, OF DENVER, COLORADO, ASSIGNOR OF ONE-HALF TO
DANIEL W. BRADFORD, OF SAME PLACE.

FOLDING STOVE.

SPECIFICATION forming part of Letters Patent No. 618,014, dated January 17, 1899.

Application filed March 15, 1898. Serial No. 673,992. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. ROGERS, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Folding Stoves; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in folding stoves especially intended for outdoor use by camping parties, prospectors, and others needing a portable stove, my object being to provide an article of this class which may be reduced to small compass when not in use, whereby it may be easily carried from place to place, and which may be quickly set up or put in shape for cooking purposes when desired; and to these ends the invention consists of the features, arrangements, and combinations hereinafter described and claimed, all of which will be fully understood by reference to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a perspective view of my improved stove, the sides and top being turned outwardly to disclose the interior construction. Fig. 2 is a perspective view showing the stove set up in position for use. Fig. 3 is a perspective view showing it folded into small compass for transportation. Fig. 4 is a vertical cross-section taken on the line $x x$, Fig. 2. Fig. 5 is a section taken through the stove on the line $y y$, Fig. 4, shown on a reduced scale.

Similar reference characters indicating corresponding parts in the views, let the numeral 5 designate the bottom of the stove, to which are attached the legs 6, hinged to fold diagonally inwardly from the corners. The stove bottom 5 is bent upwardly at its outer edges, forming flanges 5^a at the sides and ends, whereby the hinge-joints are brought considerably above the bottom of the fire-box, thus preventing them from becoming filled up with

ashes, which would interfere with the proper working of the joints. These flanges also inclose a space for the folded oven and fireback.

To the bottom of the stove are attached arch-shaped ribs 7, which extend from the front to the rear—that is to say, crosswise of the fire-box and under the oven 8, whose bottom 8^c is riveted to said ribs, as shown at 9. The vertical walls 8^e of the oven are hinged to the bottom, as shown at 8^d, while the top 8^f is hinged to the sides, as shown at 8^h. The front and rear ends 10 and 12 are hinged to the end flanges 5^a, as shown at 13, while the sides 14 and 15 are hinged to the side flanges 5^a, as shown at 16. The fireback 17 is hinged to the horizontal or top bar of an inverted-U-shaped yoke 18, whose vertical arms terminate in horizontal projections or trunnions 18^c, which are journaled in the side flanges 5^a of the stove-bottom at points a short distance in front of the oven, leaving a space for the heat to pass downwardly between the fireback and the oven. The lower edges of the fireback are scalloped or notched to fit the ribs 7 of the bottom. These ribs are in turn notched to prevent the fireback, when adjusted, from slipping in either direction. To the top of the yoke are also hinged two braces 19, adapted to support the fireback from the rear and the oven in front, the braces being provided with shoulders which engage the front wall of the oven, while the free extremities of the braces engage the top thereof and project under the damper-rod, which holds them in place. The fireback is so constructed that when in position its lower edge is located forward of the upper edge, whereby it is inclined sufficiently to form a brace in front or in the direction opposite the braces 19. By reason of this construction the oven and fireback mutually support each other.

The damper 20 is made fast to a rod 21, which is hinged to the top of the oven, as shown at 22. One extremity of the damper-rod 21 protrudes through the side 15 of the stove and is formed into an eye, whereby the damper may be manipulated from the outside. When the damper is in the position shown in Fig. 1, the heat is directed down-

wardly between the oven and the fireback, and thence underneath the oven and upward between the oven and the rear end wall 12, and thence out through the opening 23 in the top of the stove.

The side 14 is provided with a door 24, leading to the oven, and a door 25, leading to the fire-box. The front end 10 is provided with suitable draft-openings 10^a. The top of the stove consists of two parts 26 and 27, hinged to the ends 10 and 12, respectively. The top of the stove is provided with holes adapted to be closed by pivoted griddles or covers 20.

In order to fold the stove into small compass, whereby it becomes readily portable, as shown in Fig. 3, assuming that it is set up in position for use, as shown in Fig. 2, it is first opened to a condition similar to that shown in Fig. 1. The braces 19 are then disengaged from the oven and the fireback pressed toward the oven and then folded with its yoke until it rests flat upon the ribs of the fire-box. The oven being then relieved from the sustaining pressure of the braces 19 readily collapses when forward pressure is applied to its rear upper corner. The sides 14 and 15 are folded inwardly above the oven and fireback, which occupy the space inclosed by the flanges 5^a. The ends 10 and the top parts 26 and 27 are then folded inwardly upon the side pieces, one of the top parts overlapping the other, as shown in Fig. 3. When the parts are in this position, they are fastened or locked by means of hooks 4, attached to the side flanges 5^a, and the engaging lugs A formed on the top parts 26 and 27 of the stove. The legs of the stove are also folded inwardly, as heretofore explained. In setting up the stove for use the operation just described is reversed, as will be readily understood.

The oven is provided with a projection 30, centrally located and forming a support for the top parts 26 and 27 of the stove, whereby they are prevented from sagging or bending downwardly.

It will be observed that all the parts of my improved stove are connected together, thus preventing the possibility of losing any part while traveling from place to place.

Having thus described my invention, what I claim is—

1. A folding stove provided with a bottom having upwardly-projecting flanges on all sides, an oven attached to the bottom of the stove and adapted to fold therewith without removal, and two side and two end walls hinged to the upper edges of the flanges which form a receptacle above the bottom to receive the folding parts.

2. A folding stove provided with a bottom having upwardly-projecting flanges, two side and two end walls hinged to the upper edges

of the flanges, top pieces hinged to two of the said walls, a series of parallel ribs made fast to the bottom of the stove and extending from front to rear, a folding partition or fireback separating the space inclosed by the walls into two compartments, one of which forms a fire-box, and a folding oven extending crosswise of the ribs and whose bottom is made fast thereto, a space being left between the oven and the rear wall of the stove, whereby the heat from the fire-box is allowed to pass under the oven, and thence upwardly behind the same.

3. A folding stove comprising a bottom having ribs extending from front to rear, and vertical flanges projecting above the ribs, side and end walls hinged to the upper edges of the flanges, a yoke having vertical arms whose lower extremities are pivoted in the side flanges of the bottom, a fireback hinged to the top of the yoke and notched to engage the ribs of the stove-bottom, a folding oven whose bottom is made fast to the ribs in the rear of the fireback, and braces hinged to the fireback-yoke and adapted to engage the oven.

4. A folding stove having a bottom provided with upwardly-projecting flanges, vertical walls hinged to the upper edges of the said flanges, arch-shaped ribs or corrugations attached to the bottom of the stove and extending from the front to the rear, an inverted-U-shaped yoke whose vertical arms are pivoted to the side flanges of the stove-bottom, a partition hinged to the top of the yoke, its free lower edge being notched to fit the ribs of the stove-bottom, a folding oven whose bottom is made fast to the tops of the stove-bottom ribs, the arrangement being such that a space is left between the oven and the fireback, and also between the oven and the rear wall of the stove, braces hinged to the fireback and engaging the oven, and a damper hinged to the top of the oven adjacent the fireback.

5. A folding stove comprising a bottom having ribs extending from front to rear and provided with notches, a yoke having vertical arms whose lower extremities are pivoted in the side flanges of the bottom, a fireback hinged to the top of the yoke and notched to engage the ribs of the stove-bottom, the said fireback also engaging the notches of the ribs, a folding oven whose bottom is made fast to the ribs in the rear of the fireback, and braces hinged to the fireback-yoke and adapted to engage the oven.

6. A folding stove provided with a bottom having upwardly-projecting flanges formed on its four edges, two side and two end walls hinged to the upper edges of the flanges, a series of parallel ribs attached to the bottom of the stove and extending from front to rear, and a folding oven extending crosswise of the

ribs and whose bottom is made fast thereto, whereby the oven is adapted to fold with the body part of the stove.

5 7. In a folding stove, the combination with the folding body, of a cooperating folding oven inclosed by the body part and adapted to fold therewith without removal, the bottom of the stove being provided with upwardly-projecting flanges to which the fold-

ing walls are hinged, the said flanges projecting above the bottom of the stove to receive the folding parts. 10

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

WILLIAM G. ROGERS.

Witnesses:

DANIEL W. BRADFORD,
EDITH HIMSWORTH.