

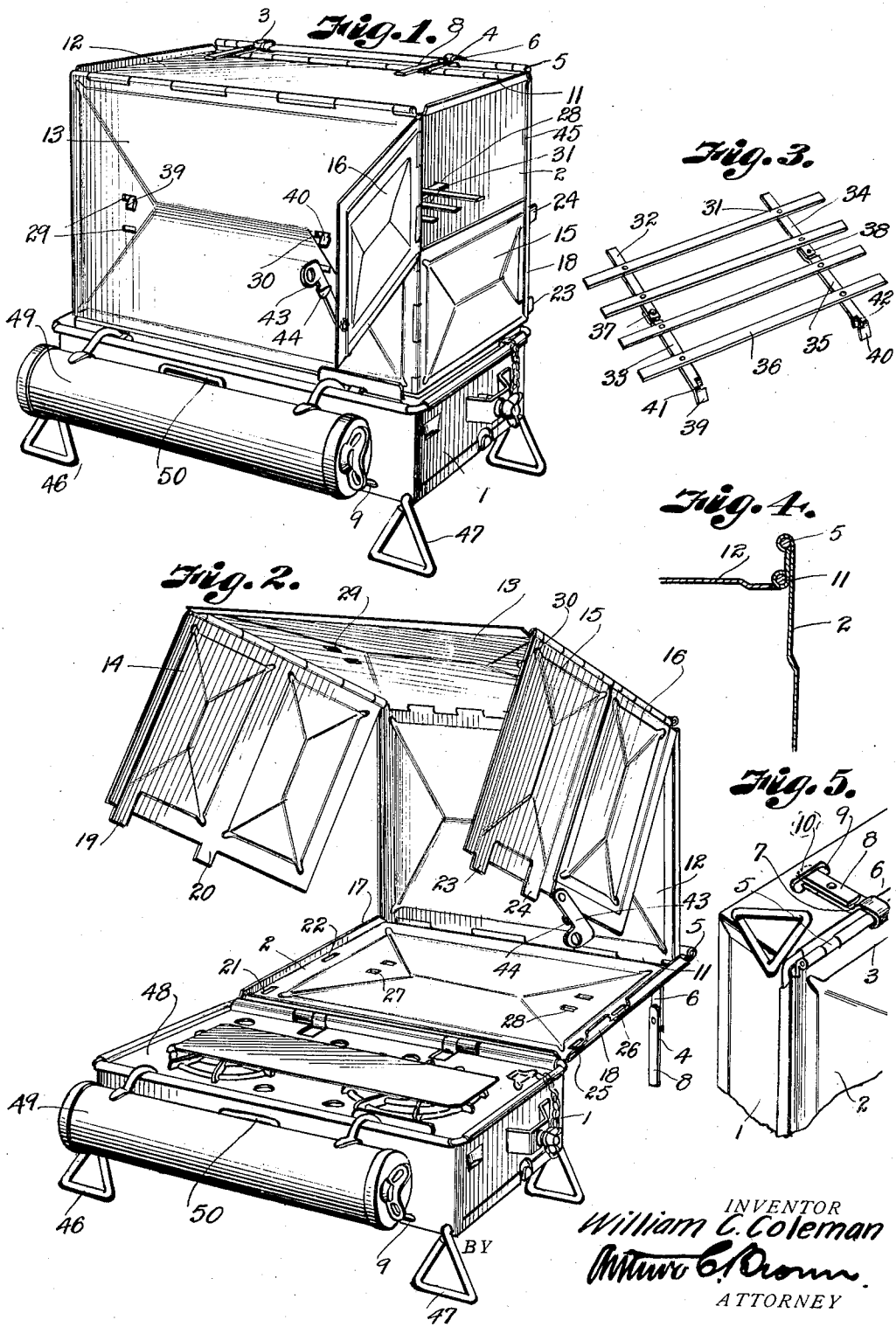
Dec. 1, 1925.

1,563,895

W. C. COLEMAN

OVEN

Filed June 14, 1924



INVENTOR  
William C. Coleman  
Attorney  
ATTORNEY

# UNITED STATES PATENT OFFICE.

WILLIAM C. COLEMAN, OF WICHITA, KANSAS, ASSIGNOR TO COLEMAN LAMP COMPANY, OF WICHITA, KANSAS, A CORPORATION OF KANSAS.

## OVEN.

Application filed June 14, 1924. Serial No. 720,004.

### *To all whom it may concern:*

Be it known that I, WILLIAM C. COLEMAN, a citizen of the United States, residing at Wichita, in the county of Sedgwick and State of Kansas, have invented certain new and useful Improvements in Ovens; 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.

This invention relates to stoves and particularly to collapsible or knock down ovens therefor. The invention is particularly applicable to camp stoves, the purpose being to provide a camp stove with a collapsible oven so that the oven can be folded in a collapsed condition to permit it to be readily compacted with the case of the stove for the purpose of transportation, the parts of the oven being easily set up.

In my former Patent No. 1,480,598, dated January 15, 1924, I have shown such an oven made up of two separable parts one adapted to be folded within the hood when the oven is knocked down, the two parts being adapted to be connected to complete the oven. The construction illustrated in the patent referred to provides a very efficient camp stove oven but it is objectionable in some respects in that the detachable part requires it to be seated or properly connected to the part fastened to the stove case and in some instances the detachable part is liable to be mislaid or lost.

My present invention contemplates an oven in its generic aspect similar to the oven illustrated and described in my former patent of January 15, 1924, but so constructed that all of the walls and top of the oven are permanently fastened together so that they can be set up to form the oven or folded one upon the other to collapse the oven and the novel construction of the invention will be understood by reference to the following description in connection with the accompanying drawings, in which—

Fig. 1 is a perspective view of a stove equipped with an oven constructed in accordance with my invention, the oven door being shown in open position.

Fig. 2 is a detailed perspective view of the oven applied to the stove with the parts in position to be connected to form a rectangular oven.

Fig. 3 is a perspective view of the oven grate or shelf.

Fig. 4 is a sectional view through part of the top of the oven and the back showing the hinged connection, and

Fig. 5 is a detailed perspective view of one corner of the stove showing the parts in collapsed position.

In so far as the oven is concerned, it is immaterial what the construction of the burner mechanism is or the fuel tank for supplying fuel to the burner mechanism so I have not attempted to illustrate that part of the stove in detail.

1 designates the bottom or case to which is hinged a lid 2 having latches 3 and 4 to engage slots in the case 1 when the parts of the stove are folded or in collapsed position. The latches are swingingly connected to the top edge of the lid 2 through the medium of the rod 5. Each latch is provided with a loop 6 around rod 5 and it has a flat portion 7 to lie against the case. It carries a pivoted latch member 8 so that when the lid 2 is folded over on the base or case 1 the flat portion 7 may lie against the case. The toe 10 of the pivoted member 8 to engage slot 9 may be slipped into the slot as will be clearly seen in Fig. 5. The slot 9 is a plain elongated slot. The latch member 8 is pivoted to the flat portion 7 of the latch 3. The latch member 8 has a toe offset with respect to the flat portion 7. This causes the toe to spring against the wall of the case so that a friction latching effect will be produced. This is sufficient to hold the latch in engagement with the case. In the drawings, I have shown only one slot 9, but there are two slots, one near each lower end of the case 1, one for each of the latch devices 3 and 4.

The upper edge of the cover or top 2 is

bent down parallel with the main portion of the cover and then at a right angle to the cover, the edge being bent or curled to provide an inset hinge 11 spacing inwardly from the upper edge of the cover 2. The hinge 11 supports a top panel 12 substantially co-extensive with the cover 2. Hinged to the panel 12 is a front panel 13. The front panel 13 carries an end panel 14 substantially the width of the panel 13 and it also carries two end panels 15 and 16 hinged thereto, each of which is substantially one-half the width of the panel 13. The cover or panel 2 has flanges 17 and 18 to act as buttons or stays for the panels 14, 15 and 16. The end panel 14 is provided with fingers or projections 19 and 20 adapted to engage the slots 21 and 22 in the panel 2. The panel 15 has projections 23 and 24 which engage the slots 25 and 26 in the opposite end of the panel 2. The panel 2 has slots 27 and 28 to coincide with the slots 29 and 30 in the panel 13, there being as many slots 27, 28, 29 and 30 as may be necessary to afford adjustment for the collapsible grate 31, see Fig. 3.

The grate 31 consists of members 32, 33, 34 and 35 and the bars 36. The member 33 is hinged to the member 32 at 37. The member 34 is hinged to the member 35 at 38. The bars 36 are pivoted to the members 32, 33, 34 and 35 so that the grate can be folded or collapsed by swinging the members 32, 33, 34 and 35 on their hinged connection, thus the grate or shelf may be folded to be confined in the case. The ends of the bars 33 and 35 are bent over at 39 and 40 and are notched at 41 and 42 so that they may latch in the openings 29 and 30 to prevent accidental disengagement of the grate when the ends of the bars 32, 33, 34 and 35 engage the openings 27, 28, 29 and 30. The panel 15 is made rigid with the panel 2 by inserting the fingers 23 and 24 into the openings 25 and 26. The panel 14 is made rigid with the panel 2 by inserting the fingers 19 and 20 in the openings 21 and 22. The panel 16 constitutes a door hinged to the panel 13 and it is provided with a latch 43 with a finger 44 which may engage a slit 45 in the panel 2 to hold the door closed.

The case may be supported on swinging loop shaped legs 46 and 47 which may fold over the ends of the case when the stove is to be transported. There is suitable burner mechanism in the case but the specific construction of the burner mechanism constitutes no part of my invention, this invention residing more particularly in the foldable oven than in the construction of the burner per se.

The latches 3 and 4 serve a dual purpose, they not only hold the panel 2 (which is the lid) fast to the case 1 but they can be

swung back to the position shown in Fig. 2 to constitute supporting legs for the oven when the oven is tilted back to expose the burners of the stove and to assume a position where it can be utilized as a warming oven or as a wind brake.

The lid or panel 2 should preferably be made of slightly heavier materials than the panels 13, 14, 15 and 16 since it is the enclosing panel and since it receives the panels 13, 14, 15 and 16.

If the parts are in the position shown in Fig. 1 and it is desired to collapse the stove, the grate should be removed, the fingers 19 and 20, 23 and 24 should be disengaged from their slots, then the panel 12 should be folded into the space confined by the flanges 17 and 18. The panel 13 should then be folded back on to the panel 12, then the panels 14, 15 and 16 can be folded down on to the panel 13, the grate having been previously collapsed and stored under the hinged burner carrying frame 48 with the tank 49 folded in under the top 48, the legs 46 and 47 may now be swung to the position shown in Fig. 5, the latches can be caused to engage the slots 9 as shown in Fig. 5, whereupon the stove will be contracted in a relatively small space.

On the side edge of the case 1 and partially covered by the tank 49 is a handle of approved construction so that the stove can be carried conveniently.

What I claim and desire to secure by Letters-Patent is:

1. A stove comprising a burner carrying case, a vertical wall hinged to said case, a top wall hinged to one longitudinal edge of the vertical wall, a vertical wall hinged to the top wall, and walls hinged to the ends of the second mentioned vertical wall and means on the end walls for engagement with the first mentioned vertical wall to form an oven, the connected end walls, vertical walls and top wall being adapted to be folded so that the top wall, second mentioned vertical wall and end walls lie parallel with the first mentioned vertical wall and means on the first mentioned vertical wall for fastening it to the burner carrying case.

2. A stove comprising a burner carrying case, a cover hinged to the case, an oven top panel hinged to the cover, a vertical wall member hinged to the top, end wall members hinged to the vertical wall member at the respective ends thereof, one end wall comprising a plurality of members so that one may serve as a door and means for securing the hinged members together to provide an oven.

3. In a stove, a base, a cover for the base, hinged thereto and movable into a vertical plane to provide an oven back; an oven front wall and end walls all operatively carried by the cover and having means of connec-

tion to form a hollow rectangular oven, the oven elements being foldable one upon the other adjacent to the cover and means for fastening the cover to the stove base.

<sup>5</sup> 4. In a stove, a base, a flanged cover hinged to the base, a top panel, a vertical panel and end panels operatively connected

to the cover and foldable one upon the other to be received in the space between the flanges of the cover and means for fastening 10 the cover to the base.

In testimony whereof I affix my signature.

WILLIAM C. COLEMAN.