Oct. 30, 1923. 1,472,178

M. KLEIN

STOVE

Filed Feb. 21. 1922

Fig. 1.

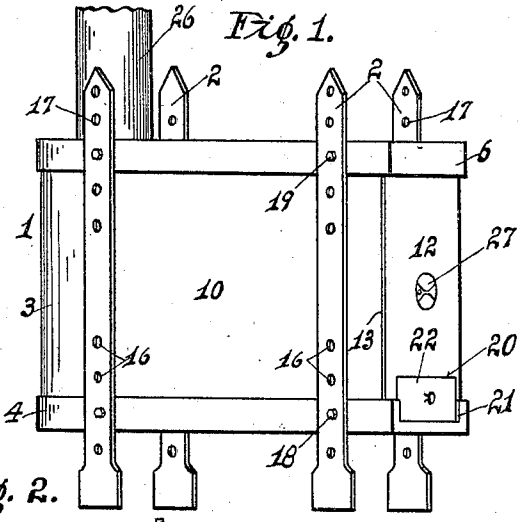


Fig. 5.

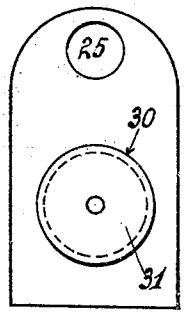


Fig. 2.

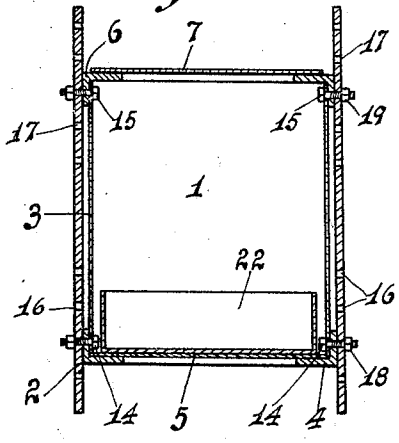


Fig. 3.

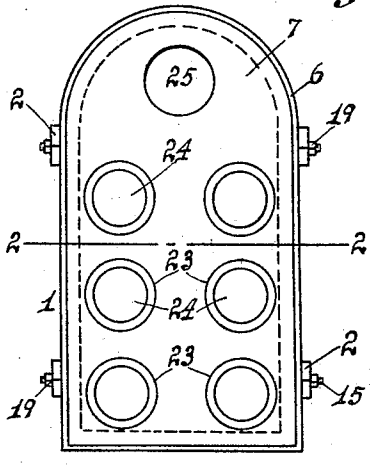
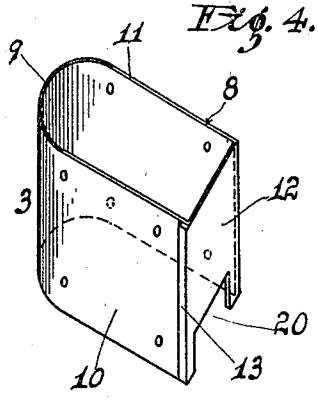


Fig. 4.



Inventor

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UNITED STATES PATENT OFFICE.

MORRIS KLEIN, OF OAKLAND, CALIFORNIA.

STOVE.

Application filed February 21, 1922. Serial No. 538,230.

To all whom it may concern:

Be it known that I, MORRIS KLEIN, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Stoves, of which the following is a specification.

My invention is a cheap, portable wood stove, particularly useful for camping purposes, the combustion chamber of which may be adjusted to different heights on its legs, as desired.

Referring to the annexed drawing in which my invention is illustrated and which forms a part of this specification:

Figure 1 is a perspective view of my stove.

Figure 2 is a transverse vertical section of my stove taken on line 2—2 of Figure 3.

Figure 3 is a plan view of my stove.

Figure 4 is a perspective view of the vertical wall member of the combustion chamber.

Figure 5 is a modified form of combustion chamber used for heating purposes.

In the drawing 1 indicates the combustion chamber of my stove and 2 the legs upon which the combustion chamber is mounted to be adjusted vertically. Said combustion chamber includes a vertical wall member 3, a lower angle iron frame 4, a lower wall 5 resting in said frame, an upper angle iron frame 6 and an upper wall 7 resting upon said upper frame. The vertical wall member 3 consists of a single sheet of metal 8 bent to form a round end wall 9, two side walls 10 and 11 and a straight end wall 12 extending from the end of the side wall 11 to cover the end of the side wall 10 and forming a lap seam 13 with said end of said side wall. The lower end of the member 3 rests within the frame 4 upon its inturned horizontal flanges and against its vertical flanges. The upper frame 6 rests upon the upper ends of the member 3, the vertical flange of said frame fitting over the upper part of said member and the inturned horizontal flange of said frame resting upon the upper edge of said member. Bolts 14 extend through the lower part of the walls of the member 3 through the vertical flange of the frame 4 and bolts 15 extend through the upper part of the wall of said member and through the vertical flange of frame 6. The legs 2 are provided with a plurality of superimposed apertures 16 in the lower portion thereof through one of which project the bolts 14 and with a plurality of superimposed apertures 17 in the upper portion thereof through which extend the bolts 15. Nuts 18 and 19 screw on the outer ends of the bolts 14 and 15 respectively against the legs 2 whereby the vertical wall member 3 is secured to the frames 4 and 6 and the combustion chamber is adjustably mounted on said legs. By placing the bolts 14 and 15 through different holes 16 and 17 the height of the combustion chamber 1 may be varied to suit conditions. In the lower part of the end wall 12 of the combustion chamber is an opening 20 and in the corresponding end of the vertical flange of the lower frame 4 is a recess 21 through which opening and recess a fire drawer 22 slides into and out of the bottom of the combustion chamber 1 on the lower wall 5 thereof. The drawer 22 may be used as a draft opening for when the drawer is pulled slightly out, inrushing air will pass between the outer wall of the drawer and the wall 12 of the stove. When the drawer is pushed all the way in this draft opening will be closed. Cooking holes 23 are provided in the top wall 7 of the combustion chamber which holes are covered with lids 24. An outlet 25 is provided in the upper wall 7 of the combustion chamber near the rounded end 9 thereof to which outlet is connected a stove pipe 26. A damper controlled air inlet 27 is provided in the end wall 12 of the combustion chamber 1 above the fire drawer.

In the modified form of my stove shown in Figure 5 which is used as a heating stove there are no cooking holes 23, but a hole 30 is substituted for the holes 23, through which hole 30 wood is inserted, and said hole is covered with a lid 31.

Having described my invention, I claim:

1. In a stove, a combustion chamber formed of a vertical sheet of metal bent into a U shape, a flat end wall closing the ends of the U, said flat end wall having an opening near its bottom, a fire drawer adapted to be inserted through said opening, said fire drawer serving as a combined fire receptacle, ash receptacle and as a draft means.

2. In a stove, a combustion chamber formed of a vertical sheet of metal bent into a U shape and a flat end wall closing the ends of the U, legs on which said combustion chamber is mounted, and a combined ash tray and fire drawer in the bottom of said chamber.

3. In a stove, a combustion chamber comprising a vertical wall member, a lower angle iron frame, an upper angle iron frame, a lower wall resting in said lower angle iron frame, an upper wall resting upon said upper angle iron frame, said vertical wall member being made of a single sheet of metal and resting within the lower frame upon the inturned horizontal flange and against the vertical flange of said frame, the vertical flange of said upper frame fitting over the upper edge of said vertical wall member and the inturned horizontal flange of said upper frame resting upon the upper edge of said vertical wall member, bolts extending through the lower and upper parts of said vertical wall member and through the vertical flanges of said lower and upper frames respectively, legs provided with a plurality of superimposed apertures through certain of which extend said bolts, and nuts screwing on the outer ends of said bolts against said legs.

4. In a stove, a combustion chamber formed of a vertical sheet of metal bent into a U shape, a flat end wall having a lap seam closing the ends of the U, said flat end wall having a rectangular opening near its bottom, a fire drawer adapted to be inserted in said opening and serving as a means to completely or partially close said opening so as to regulate the draft.

5. In a stove, a combustion chamber formed of a vertical sheet of metal bent into a U shape and a flat end wall closing the ends of the U, said chamber being connected by angle frame members to the supports for the chamber, said flat end wall having a rectangular opening near its bottom, a fire drawer adapted to be inserted in said opening and serving as a means to completely or partially close said opening so as to regulate the draft.

6. In a stove, a combustion chamber formed of a vertical sheet of metal bent into a U shape and a flat end wall closing the ends of the U, said chamber being connected by angle frame members to the supports for the chamber, said frame having an opening in the flat end wall and a combined ash tray and fire drawer adapted to be inserted in the chamber through the said opening.

In testimony whereof I affix my signature.

MORRIS KLEIN.