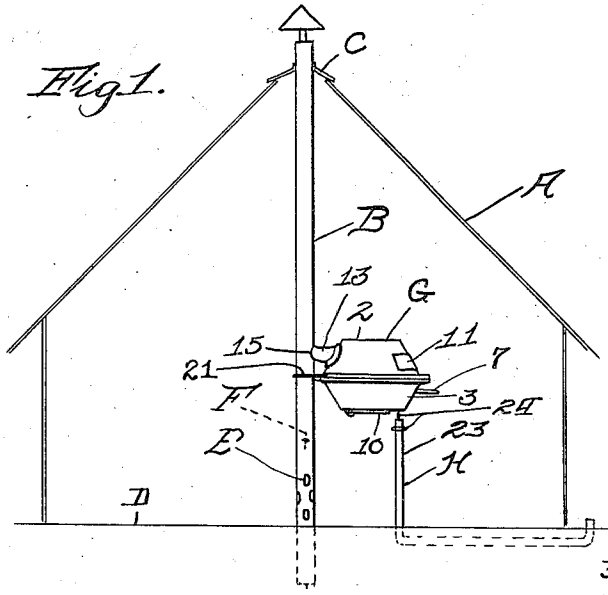
Sept. 18, 1923. 1,468,165

C. A. MOORE

CAMP STOVE

Filed Sept. 19, 1918

Fig. 1.



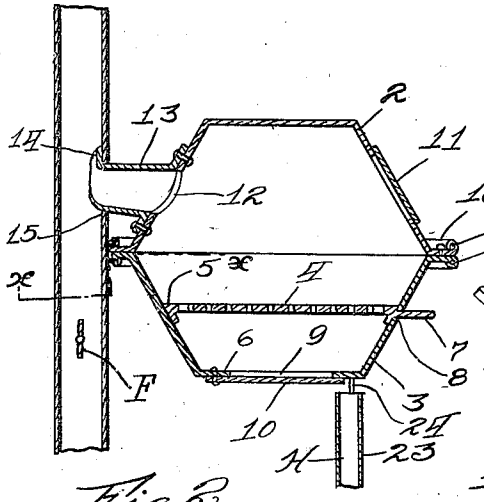


Fig. 2.

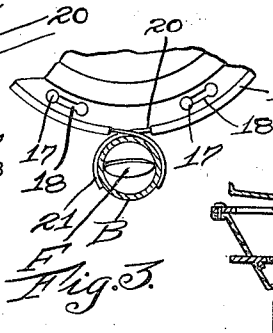


Fig. 3.

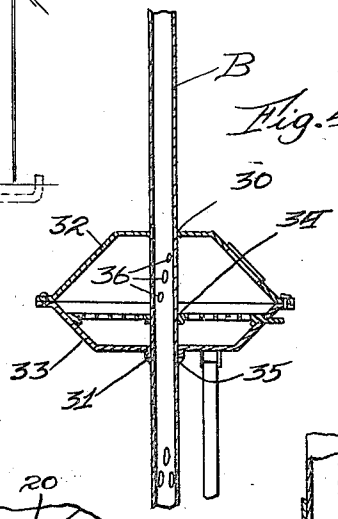


Fig. 4.

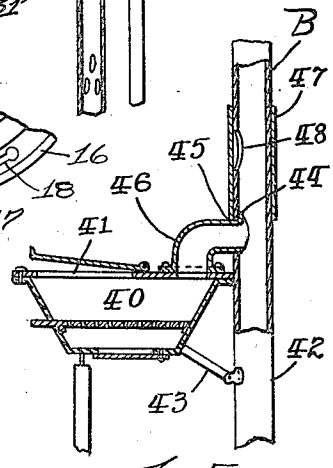


Fig. 5.

Inventor:
Charles A. Moore.
by: F. S. Bradbury
Attorney.

Patented Sept. 18, 1923. 1,468,165

UNITED STATES PATENT OFFICE.

CHARLES A. MOORE, OF ST. PAUL, MINNESOTA.

CAMP STOVE.

Application filed September 19, 1918. Serial No. 254,870.

To all whom it may concern:

Be it known that I, CHARLES A. MOORE, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented new and useful Improvements in Camp Stoves, of which the following is a specification.

This invention relates to combined camp stoves and ventilators, which are particularly adapted for heating and ventilating tents. The primary object of this invention is to provide efficient means for the purpose stated, which can also be easily taken apart and assembled, and which reduces to a minimum the number of parts constituting the device.

With these and other objects in view, my invention comprises the features of construction and combination of parts hereinafter described and claimed.

In the accompanying drawing, Fig. 1 is a typical diagrammatic view of a tent showing my improved heater and ventilator therein; Fig. 2 is an enlarged vertical section of the heater, a portion only of the vent flue being illustrated; Fig. 3 is a section of a detail taken on the line X—X of Fig. 2; Fig. 4 is a vertical section of a detail of an alternative construction of my invention, and Fig. 5 is a vertical section of another alternative construction.

In the drawing let A indicate a tent of usual construction which is provided with a center tent pole B, said pole preferably being a hollow tube or pipe, which will act as the chimney for my improved stove or heater. This pole may be any one of the poles of the tent and is preferably passed upwardly through metal or fireproof member C, which is secured to the top of the tent and serves to prevent the material of the tent catching fire from the heat of the chimney. The lower end of this tent pole immediately above the ground line D is provided with vent openings E through which cold and vitiated air in the tent is free to pass upwardly through the chimney to the outer atmosphere, the egress of said air being regulated by the damper F. Mounted upon said tent pole B is my improved heater G, which is composed of a pair of shell members 2 and 3 resembling hollow frustums of a cone, the lower section being inverted and forming a fire pot in which a grate 4 is rotatably mounted. This grate is circular, and its periphery 5 is enlarged to provide a broad bearing surface resting upon the inner and downwardly converging surface of the fire pot, so that the grate is free to turn or rotate above the floor 6. The grate is provided with a handle 7 projecting outwardly through a slot 8 in the wall of the fire pot for convenience in shaking the grate. The floor of the fire pot has an ash pit opening 9 closed by the door 10 and through which the ashes can be easily removed. This door closes or regulates an opening by which air is admitted for combustion. The upper section of the stove is provided with a fuel supply door 11 through which fuel can be placed in the stove above the fire grate. Said section is also provided with a smoke outlet 12 leading through a duct 13 secured to the side wall of section 2 and formed with a hook 14 on its outer end which engages through and back of the edge of an opening 15 in the side of the tent pole above the damper F for the purpose of assisting in supporting the stove on the side of said pole. The sections are preferably provided with rolled edges or flanges 16, which are detachably secured together by studs 17 passing upwardly through slots 18 in one member. Thus by a short rotary movement of section 2 on section 3, the parts can easily be separated and nested together for packing. Placed in the rolled edge 16 of the lower section 3 is a wire 20, the ends of which project outwardly at the back portion of the stove and are adapted for wrapping over the surface of the tent pole to form a fastening means 21, which cooperates with the hook 14 in holding the stove firmly on the side of the tent pole, thus the stove can easily and quickly be assembled and mounted upon the tent pole or removed and packed in a small space in compact form for shipping. Fresh air is admitted into the tent through a duct in the form of a pipe H embedded in the ground, one end 23 of which projects above the ground outside of the tent and the other end leads upwardly into the tent and terminates a short distance below or from the stove, said inner end being held by the fastener 24 on the stove, thus fresh pure cold air is admitted into the tent and warmed by the stove, and after rising circulates throughout the interior of the tent and cold vitiated air from the floor of the tent and the ground is conducted through the vent openings E and forced outwardly

by the current of smoke and gases egressing through the tent pole to the outer atmosphere. Naturally this operation results beneficially to the occupants of the tent. In the alternative construction shown in Fig. 4 the stove is arranged with the tent pole passing centrally therethrough, suitable openings 30 and 31 in sections 32 and 33 being provided for that purpose and a central opening 34 in the grate also admitting said pole. A shoulder 35 on the tent pole supports the stove and perforations 36 in the pole within the stove above the grate serve as smoke outlets into the pole or chimney. In use the stove can easily be placed over the pole when the tent is erected and when the tent is taken down, the stove can easily be removed from the pole and its parts nested together in compact form for shipping. The stove in both forms of my invention can be used for heating and cooking purposes, and provides an efficient means for keeping the tent warm and providing it with pure, warm air, thereby promoting healthfulness to the occupants.

In Fig. 5 the stove is of single sectional form, the section 40 being provided with a cover 41 and being supported on the pole 42 by a brace 43 and by the shoulder 44 on smoke pipe 46 engaged back of the opening 45 in said pole. A slip collar 47 is also provided over a check draft opening 48 above the stove in the pole for checking the draft in the stove.

In accordance with the patent statutes, I have described the principles of operation of my invention, together with the apparatus which I now consider to represent the best embodiment thereof, but I desire to have it understood that the construction shown is only illustrative, and that the invention can be carried out by other means and applied to uses other than those above set forth within the scope of the following claim.

Having described my invention, what I claim as new and desire to protect by Letters Patent is:

A camp stove and ventilator for tents, comprising, in combination, a tubular tent pole forming a chimney having an opening in its side, a stove detachably mounted upon said pole above the floor of the tent and having a vent for smoke and gases through a pipe leading into said pole, said stove comprising a pair of shell members resembling hollow frustums of a cone secured together, the lower section being inverted and forming a fire pot and a circular grate rotatably mounted in said lower section on the side of its downwardly converging surface distanced above the bottom of said section also said lower section having a slot in its side through which a handle is free to move during the oscillating movement of the grate, and a duct for air from outside said tent leading upwardly and terminating above the floor of the tent and in proximity to said stove, said pole having vent openings near the floor of said tent, whereby a current of pure air is admitted into said tent and heated by said stove and circulated throughout the interior of the tent and cold vitiated air is drawn from near the floor of the tent and ejected with the smoke and gases from said stove to the outer atmosphere through said pole, and said pipe being formed with a hook on the upper portion of its outer end adapted to detachably engage through and back of the edge of the opening in said pole while the body of the stove rests against the pole to support the stove.

In testimony whereof, I have signed my name to this specification.

CHARLES A. MOORE.