(No Model.)

D. M. B. H. COCHRANE.

POCKET STOVE.

No. 566,662. Patented Aug. 25, 1896.

Fig. 1.

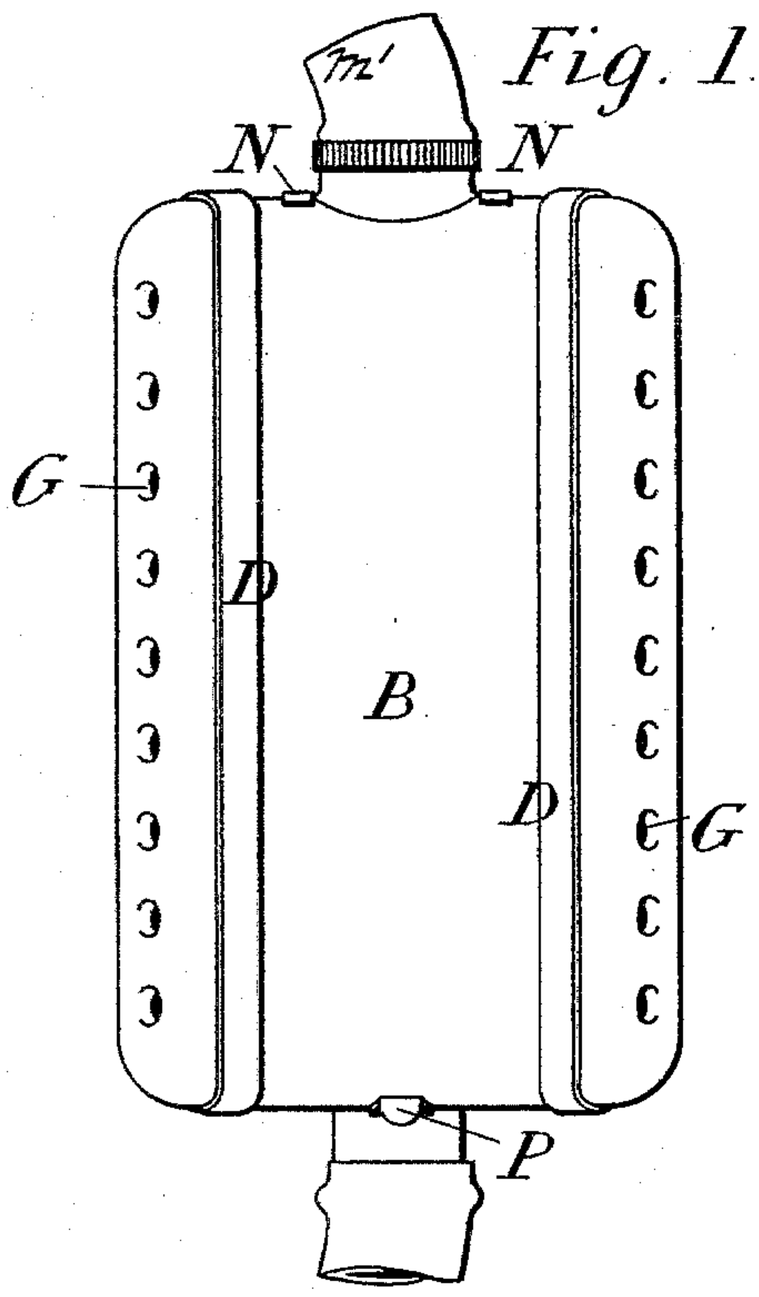


Fig. 3.

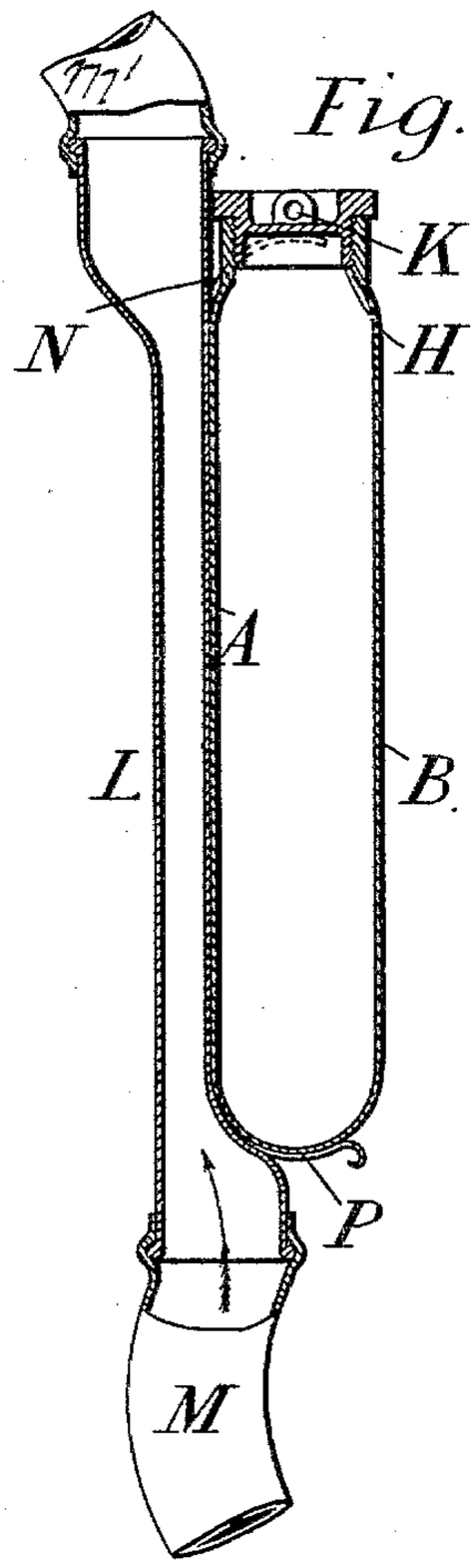


Fig. 2.

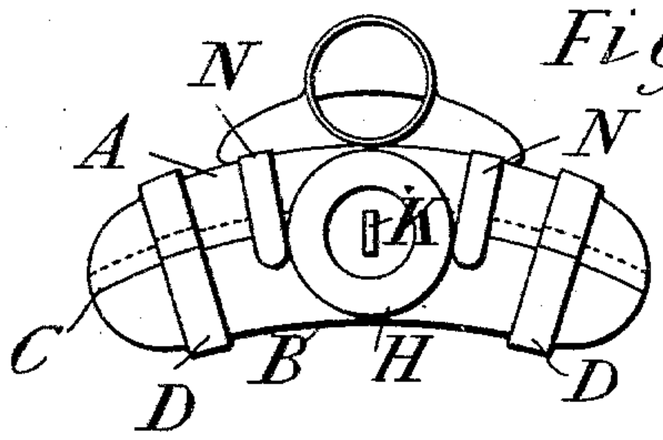
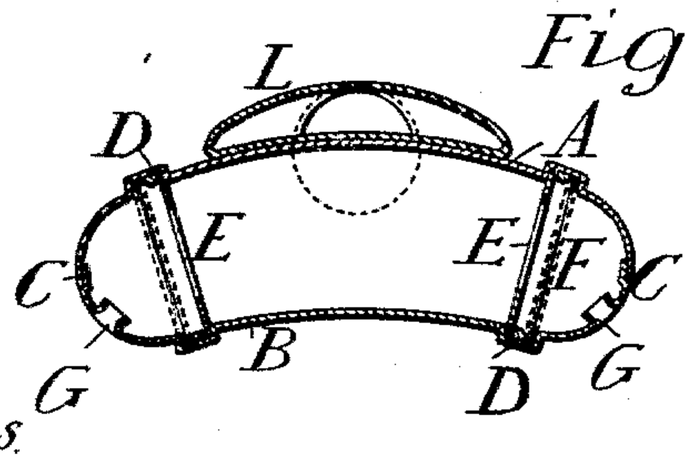


Fig. 4.



Witnesses.
Thos. A. Green
Robert Everett.

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Douglas M. B. H. Cochrane.
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UNITED STATES PATENT OFFICE.

DOUGLAS MACKINNON BAILLIE HAMILTON COCHRANE, OF LONDON, ENGLAND.

POCKET-STOVE.

SPECIFICATION forming part of Letters Patent No. 566,662, dated August 25, 1896.

Application filed March 24, 1896. Serial No. 584,635. (No model.)

To all whom it may concern:

Be it known that I, DOUGLAS MACKINNON BAILLIE HAMILTON COCHRANE, Earl of Dundonald, a citizen of Scotland, residing at 34 Portman Square, in the county of London, England, have invented a certain new and useful Improvement in Pocket-Stoves, of which the following is a specification.

This invention has for its object to provide a novel, simple, economical, and efficient pocket-stove for burning combustible fuel, and of such dimensions and shape that it can be conveniently carried in a pocket or other part of a garment. To accomplish this object, my invention consists in the features of construction and in the combination or arrangement of parts hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved pocket-stove. Fig. 2 is a top plan view of the same. Fig. 3 is a longitudinal central sectional view, and Fig. 4 is a transverse sectional view.

In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, referring to the drawings, wherein—

The letter A indicates the front part of a case, and B the back part thereof. These parts are both punched in dish form from thin sheet metal and so shaped that when the two parts are put together the edge of the one part, A, slightly overlaps the edge of the other part, B, making a close joint all round at C. The two parts are preferably curved, as shown, as the hollow on the one side makes the case better accommodate itself to the curves of the wearer; but it may be of any other convenient shape. In punching the parts I form two grooves D, sunk a little, in each of the parts, each constituting a continuous groove all round the inside when the two parts are put together. In each of these grooves is held a metal grating E and two strips of wire-gauze F, having between them a layer of asbestos fabric or other incombustible porous material, such, for instance, as muslin, rendered incombustible by chemical treatment. These gratings may, however, be fixed in position by other means, so as to avoid the protuberances on the outside of the vessel. For instance, the one edge may be brazed to the one side of the vessel, and when the halves are put together the other edge is forced onto steady-pins on the inside of the other half of the vessel. I also, through the curves of the part B, punch a a number of holes G, with the burs presenting themselves inward. Similar holes may be punched through the curve of the part A. I braze or otherwise attach to the upper side of either of the parts A or B an internally-screwed socket H, fitting the upper side of the other part to the exterior of this socket, and I provide a screw-plug K to close the socket, which plug can be loosely attached to the vessel by a chain, so as to prevent loss. Instead of fixing K in H by a screw, it may be fixed by a bayonet-joint in the well-known manner. The parts A and B having been prepared as above described, and the gratings E and wire-gauzes F, with incombustible layers between them, being put in position, the two parts A and B are put together face to face. The fitting at the joint C may be such that the two parts have to be sprung together, so as to hold together with sufficient tightness to prevent the parts from separating, or several small screw-pins may be passed through holes in the one part and screwed into threaded holes in the other part. I attach to the plug K, or any other suitable part of the vessel, by a light chain, a safety pin or hook or loop by which the appliance can be hung to some part of a garment, pieces of prepared carbonaceous material, one of them ignited, being introduced through the socket H, which is then closed. These pieces in slowly burning heat the casing, which can be worn on any desired part of the person, being preferably inclosed in a casing or covering of fabric which is a bad conductor of heat to prevent any scorching by direct contact with the stove. The gratings E, the gauze F, and intermediate material, while they allow passage of air, which enters by the holes G, to support the combustion of the fuel, also the inward burs of the holes G, effectually prevent issue of the ashes and dust from the interior.

In order to utilize the stove for heating air

for respiration, I provide a flattened tube L of thin metal, having pieces of flexible tube M M′ attached to its ends. To the upper part of the tube I attach two brackets N, bent to fit over the top of the stove, and to its lower part I attach a spring-clip P. On placing the tube against the stove, its brackets N resting on the top of the stove, and pushing the lower part of the tube the spring P clips over the lower side of the stove and the tube L is thus held in position. Air entering from the flexible tube M in passing up the flattened tube L becomes warmed on its way to the mouth of the wearer by the upper flexible tube M′.

Having thus described the nature of my invention and the best means I know for carrying it into practice, I claim—

1. A pocket-stove for burning fuel, consisting of two sheet-metal sections having overlapping edges, both constructed with continuous grooves near their side portions, and having a plurality of air-inlet holes for supporting combustion of the fuel, and two metal gratings engaged with said grooves and between which the fuel is placed, the air to support combustion entering said air-holes and passing through said gratings to the fuel, substantially as described.

2. A pocket-stove for burning fuel, consisting of two sheet-metal sections A and B having overlapping edges, both constructed with continuous grooves D, and having a plurality of air-inlet holes G for supporting combustion of the fuel, two metal gratings E engaged with said grooves and between which the fuel is placed, and wire-gauze sections F arranged between said gratings and said air-inlet holes, the air to support combustion entering the holes and passing through the wire-gauze sections and gratings to the fuel, substantially as described.

3. A pocket-stove for burning fuel, consisting of a flattened sheet-metal case provided with air-inlet holes G and opposite gratings E, between which the fuel is placed, the air to support combustion entering said air-holes and passing through said gratings to the fuel, and a sheet-metal air-heating tube L extending along one side of the case and provided at its opposite ends with tubes for the entrance and exit of air, substantially as described.

4. A pocket-stove for burning fuel, consisting of a flattened sheet-metal case provided with air-inlet holes G and opposite gratings E, between which the fuel is placed, the air to support combustion entering said air-holes and passing through said gratings to the fuel, and a sheet-metal air-heating tube L provided with brackets N, spring P, and air inlet and outlet tubes M and M′, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 13th day of March, A. D. 1896.

DOUGLAS MACKINNON BAILLIE
HAMILTON COCHRANE.

Witnesses:
OLIVER IMRAY,
JNO. P. M. MILLARD.