

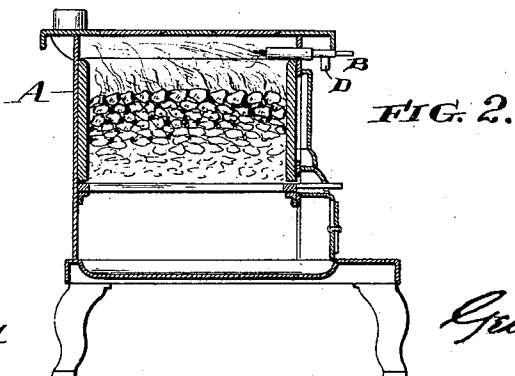
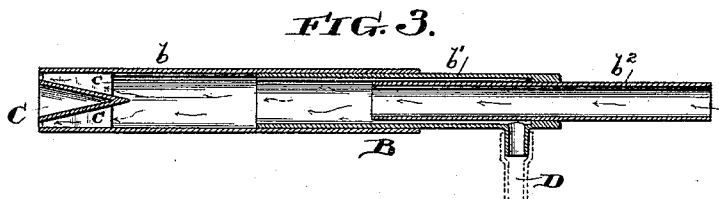
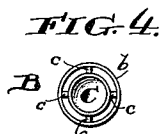
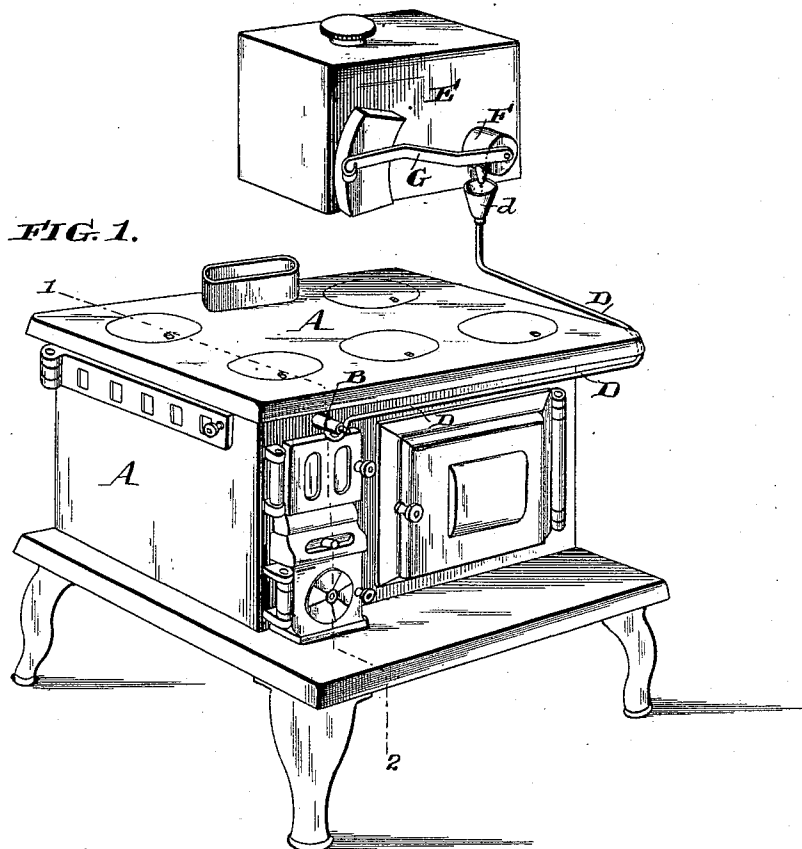
(No Model.)

G. R. MOORE.

OIL BURNER ATTACHMENT FOR STOVES OR HEATERS.

No. 472,268.

Patented Apr. 5, 1892.



Witnesses:

Henry D. ...
James F. Hagen

Inventor:

G. R. Moore

UNITED STATES PATENT OFFICE.

GEORGE R. MOORE, OF PHILADELPHIA, PENNSYLVANIA.

OIL-BURNER ATTACHMENT FOR STOVES OR HEATERS.

SPECIFICATION forming part of Letters Patent No. 472,268, dated April 5, 1892.

Application filed March 7, 1891. Serial No. 384,153. (No model.)

To all whom it may concern:

Be it known that I, GEORGE RODNEY MOORE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Oil-Burner Attachments for Stoves or Heaters, of which the following is a specification.

The object of my invention is to provide an oil-burner to be attached to the fire-chambers of stoves, heaters, or ranges as an adjunct to the ordinary coal fires used therein, though capable of independent or sole use without the coal fire, if so desired.

The mechanism of this burner will be readily understood by the accompanying drawings.

Figure 1 in perspective shows a cook-stove with my oil-burner attached by passing through the front casing into the fire-chamber a little above the ordinary coal fire an oil-conveying pipe from the burner to an oil-tank in the distance. Fig. 2 is a cross-section taken on the line 1 2 of Fig. 1. Fig. 3 is a vertical central section of the burner by itself on an enlarged scale. Fig. 4 is a plan view of the same.

Similar letters indicate similar parts in all the drawings.

A is the stove; B, the burner; *b*, the combustion-pipe and the exposed portion of the burner over the fire; *b'*, the oil-pipe part of the burner; *b²*, the air-pipe part of the burner.

C is a deflector, and *c c* are ribs to hold it in place.

D is the oil-conveying pipe, and *d* an enlarged feeder to it.

E is the oil-tank; F, the valve to regulate the oil-supply.

G is a manual lever to the valve. It is made elastic and fitted to crowd upon a friction-plate by which the valve is stayed with some firmness wherever the hand leaves it.

In further description of the burner by itself, *b²*, the outward end of the burner, is an air-pipe, through which a current of air is constantly passing, because of the draft of the stove and its own contribution to it in the direction of the arrows toward the most-heated end of the burner, where the combustion of the oil or oil-vapor takes place when it is lighted. *b'* at its outward end closes upon the air-pipes so as to prevent any escape of oil outward, but drops slightly away from it at the point where it takes in oil from the pipe D, and continues large enough to give room outside of the air-pipe for the oil to flow toward the combustion end of the burner. Ordinarily these two pipes—the oil-pipe and the air-pipe—are all that need be used. The combustion end is in that case the oil-pipe itself, either with or without the deflector C at its end; but a more complete decarbonization and combustion of the oil is obtained by the enlargement and extension of it, as shown in the drawings. Some air may pass between this enlarged extension and the oil-pipe proper.

When in use, the burner always converts the oil that is run into it into vapor before it reaches the place of combustion, and the oil-vapor and air are what I aim to mix more thoroughly by the use of the deflector C.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of a stove, range, or heater, an oil-burner provided with evaporating-pipe *b'*, air-pipe *b²*, oil-conveying pipe D, tank E, and valve F, substantially as and for the purpose herein shown.

GEO. R. MOORE.

Witnesses:

WILLIAM D. WATSON,
JAMES F. HAGEN.