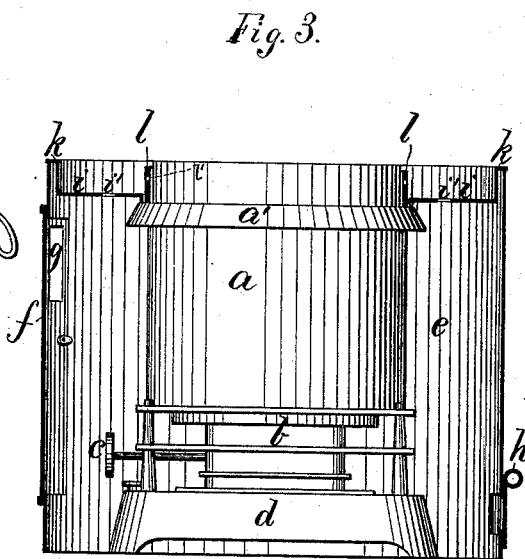
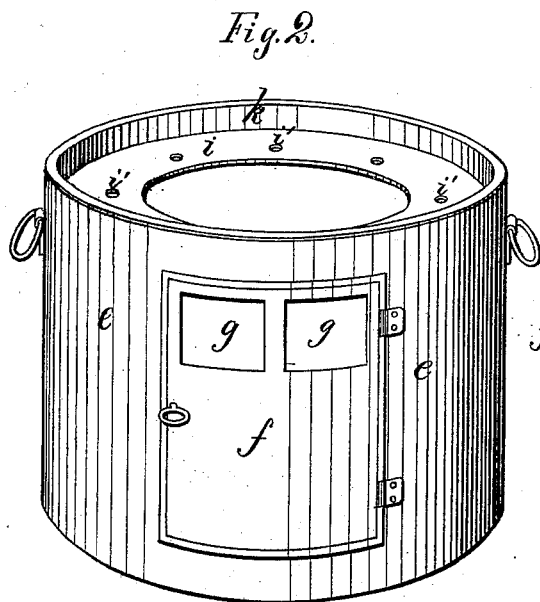
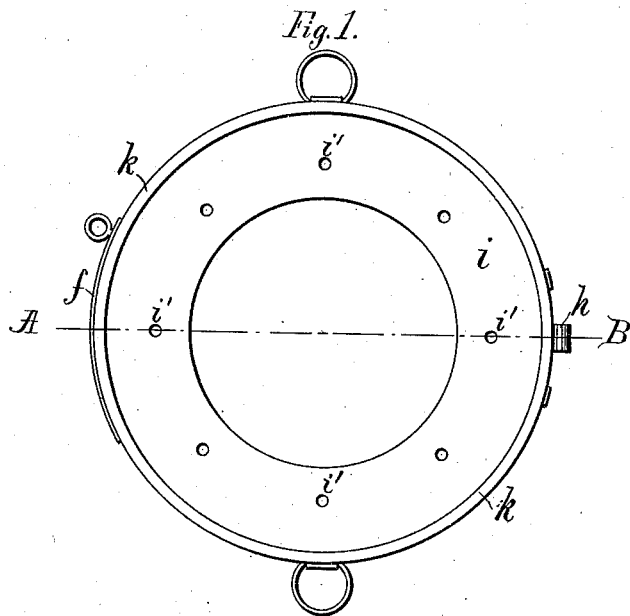


A. FREEMAN.
Attachment to Kerosene-Stoves.

No. 199,531.

Patented Jan. 22, 1878.



Witnesses:

Henry Chadbourn.
H. Allen

Inventor:

Abraham Freeman
by Allan Andrien.
his attorney.

UNITED STATES PATENT OFFICE.

ABRAHAM FREEMAN, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN ATTACHMENTS TO KEROSENE-STOVES.

Specification forming part of Letters Patent No. **199,531**, dated January 22, 1878; application filed August 9, 1877.

To all whom it may concern:

Be it known that I, ABRAHAM FREEMAN, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Attachments to Kerosene or Oil Stoves; and I do hereby declare that the following is a full, clear, and exact description thereof, which 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 letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in attachments to kerosene-oil stoves; and consists of a sheet-iron cylinder surrounding the stove, which cylinder is provided with a door on one side for the purpose of regulating the wicks, &c., and with a sliding damper at the rear for the purpose of regulating the admission of the air from without to the burners. The top of the cylinder is covered by an annular perforated plate, having an annular flange in its upper end, resting loosely upon the upper edge of the cylinder or casing. The inner edge of said annular cover rests upon a circular flange on the stove.

Besides the said perforated flange, I use a loose perforated cylinder, encircling the top of the stove, for the more effectual circulation of the air from and around the stove.

This my invention is made for the purpose of utilizing kerosene-oil stoves on board of yachts, sailing-vessels, &c., as well as for camping-out purposes, where an ordinary oil-stove would be useless on account of the flame being blown out, by being exposed to strong winds. This objection is obviated by my invention, and a stove provided with my arrangement, as described, can be used for cooking purposes when exposed to wind and rain as easily and comfortably as if it were placed in an ordinary room or kitchen.

In the accompanying drawings, Figure 1 represents a plan view of my improved casing. Fig. 2 represents a perspective front view of the same; and Fig. 3 represents a longitudinal section of the same, showing its application to a kerosene-oil stove.

a in Fig. 3 represents an ordinary oil-stove, on which *b* is the wick-tube, with its regulator *c* and oil-receptacle *d*, in the usual manner.

e represents the annular sheet-iron cylinder or wind-guard, provided with a hinged door, *f*, having isinglasses *g g*, as shown in Fig. 2. The cylinder *e* is provided at its lower rear side with a sliding damper, *h*, for the admission of air to the burners.

i represents the annular perforated cover in the upper end of the cylinder *e*, which cover is detachable from the said cylinder, and is provided with an annular flange, *k*, resting on the upper edge of the said cylinder *e*, as shown in the drawings. *i' i' i'* represent the perforations in the annular detachable cover *i*.

l represents the cylindrical ring, provided with perforations *l' l'*, as shown in Fig. 3, which ring is made to rest upon an annular flange, *a'*, of the oil-stove *a*.

Having thus fully described the nature, construction, and operation of my invention, I claim and wish to secure by Letters Patent—

The herein-described wind-guard or oil-stove protector, consisting of the cylindrical casing *e*, with its door *f* and damper *h*, in combination with the annular perforated and detachable cover *i' i' i' k* and the perforated ring *l' l' l'*, as and for the purpose herein set forth.

In testimony that I claim the foregoing as my own invention I have affixed my signature in presence of two witnesses.

ABRAHAM FREEMAN. [L. S.]

Witnesses:

ALBAN ANDRÉN,
HENRY CHADBOURNE.