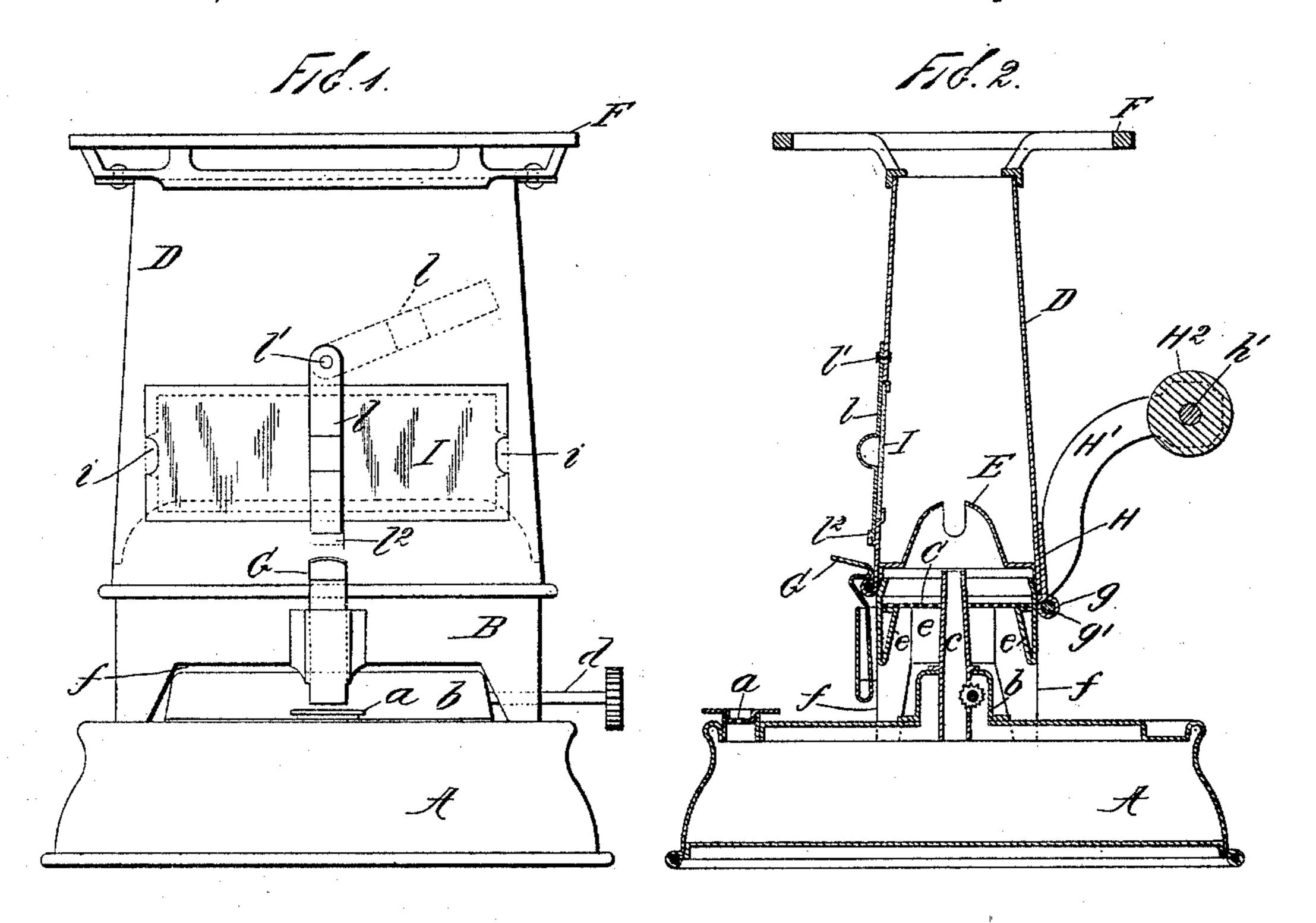
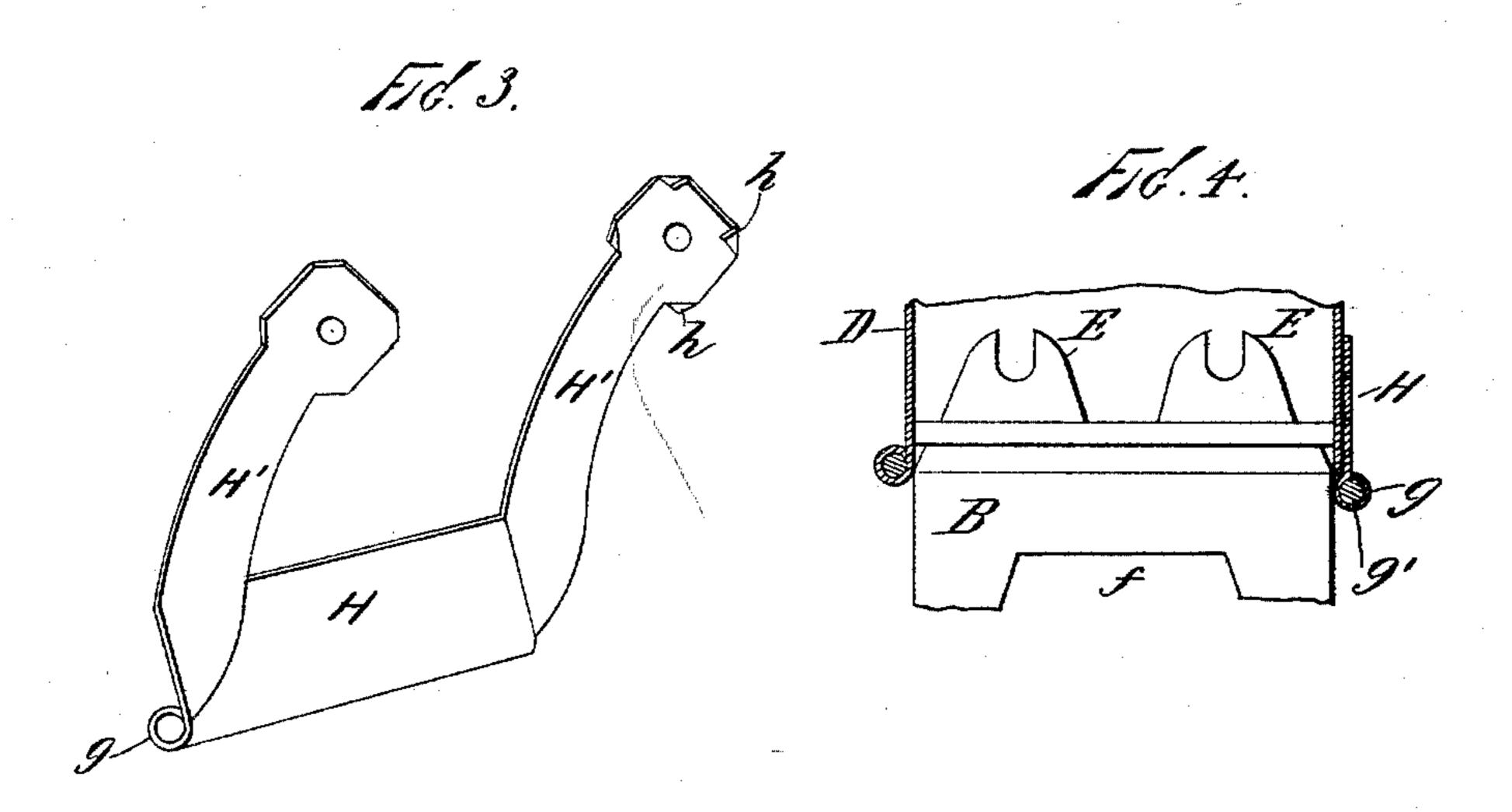
(No Model.)

L. F. BETTS.
OIL STOVE.

No. 497,760.

Patented May 23, 1893.





Sta Buckler, L. H. Osgood INVENTOR

Lewis F. Betts,

BY

ATTORNEY

## United States Patent Office.

LEWIS F. BETTS, OF BROOKLYN, NEW YORK, ASSIGNOR OF ONE-HALF TO THE R. E. DIETZ COMPANY, OF NEW YORK.

## OIL-STOVE.

SPECIFICATION forming part of Letters Patent No. 497,760, dated May 23, 1893.

Application filed January 12, 1893. Serial No. 458,123. (No model.)

To all whom it may concern:

Be it known that I, Lewis F. Betts, of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Oil-Stoves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

of the kind employed for domestic purposes—and has for its object the production of a simple, cheap and efficient stove whereof the parts are easily accessible for lighting, cleaning, &c., wherein provision is made for conveniently turning the chimney upon its hinge and carrying the stove without danger of burning the hand, and wherein the hinge and other fittings are made strong and durable and capable of being replaced or repaired if required.

To accomplish all of this and to secure other and further advantages in the matters of construction, operation and use, my improvements involve certain new and useful arrangements or combinations of parts and particular features of construction as will be herein first fully described and then pointed out in the claims.

In the drawings, Figure 1 is a front elevation and Fig. 2 a central vertical section of
my improved oil or lamp stove. Fig. 3 is a
perspective view of the handle-support detached from the stove, the wooden handle or
cross bar being omitted. Fig. 4 is a sectional
view of a fragment showing two burner cones
instead of one and indicating that the stove
may be made of any size or employ any number of burners.

In all the figures, like letters of reference 40 wherever they occur indicate corresponding parts.

A is the oil pot or base having any filler cap as a, and provided with a ratchet-cover b and wick tube c which are fastened in place. The wick raising ratchet shaft d extends a little beyond the margin of the oil pot.

Upon the top of the oil pot is secured an open standard B which serves to support the chimney and sustain the weight of any vessel 50 or article placed thereon. This standard is

made of sheet metal which is cut and bent as indicated, the bent portions e being turned in, affording a convenient means for supporting the removable perforated air distributing plate C and leaving ample openings for adplate C and leaving ample openings for admission of air as at f f. When the chimney is turned back upon its hinge the plate C may be removed for cleaning.

D is the draft chimney, of metal, having the burner cone or cones E fixed in its lower mar- 60 gin and carrying at top a metal frame work F for sustaining vessels or articles to be heated. The chimney is hinged upon the standard B along one side and supplied with a spring catch G on the opposite side. A metallic piece 65 H is shaped and bent so as to afford projecting arms H' H' which sustain a wooden handle H<sup>2</sup> between them, and so as to afford a portion g of the hinge connection. This piece H is firmly secured to the side of the chimney 70 by soldering or riveting and the part g bent around the hinge axis g' which is secured to the standard B, thus uniting the chimney with the standard. The handle H2 is for the purpose of carrying the stove (like a lamp) and 75 being of wood and well removed from the chimney does not become too much heated. It also serves for opening the stove for lighting or extinguishing, &c. The handle should not be allowed to turn in its supports and I 80 prevent such turning by bending the corners h, driving these into the ends of the handle and securing all by a rod h' passing through the handle and arms H' and secured by upsetting the ends or otherwise as may be desired. 85

I is a mica or other transparent plate extending across the front face of the chimney. In the ordinary forms of lamp stoves these plates have been placed in frames soldered or otherwise secured so that when damaged it 90 was difficult to replace them. I dispense with any separate frame for the mica by indenting the material of the chimney around the opening and cutting the margin so as to form tongues as i. The plate I rests in the in-95 dented part and under the tongues, being held against accidental displacement by a strap l pivoted as at l' and entering beneath a bent portion  $l^2$  in the chimney. To remove the mica it is only necessary to turn the strap l as 100

indicated by the dotted lines in Fig. 1, and then slip the mica from its seat. A new piece may be as easily and quickly inserted.

When it becomes necessary or desirable to employ the stove as a lamp, it may be conveniently carried by the handle H<sup>2</sup> in an upright position, the chimney and oil pot being united by the hinge and spring catch.

The device thus constructed is simple and durable in all its parts and well calculated to answer all the purposes or objects of the in-

vention above mentioned.

Having now fully described my invention, what I claim as new herein, and desire to se-

15 cure by Letters Patent, is—

1. In an oil stove, the standard cut and bent as explained and secured to the oil pot, the bent pieces serving as supports for the removable perforated air distributer, the parts being combined and arranged substantially as shown.

2. In an oil stove, the combination with the

chimney of the handle sustaining arms secured thereon, said arms being formed with the piece or plate which constitutes a portion 25 of the hinge, substantially as and for the purposes set forth.

3. In an oil stove, the combination with the hinged chimney, of the arms H' having bent portions h entering the wooden handle  $H^2$  to 30 prevent the latter from turning, substantially

as and for the purposes set forth.

4. In an oil stove, the chimney indented as explained, the mica plate resting in the indentation and removably secured therein by 35 the bent tongues and a pivoted strap, substantially as shown and described.

In testimony that I\_claim the foregoing I have hereunto set my hand in the presence of

two witnesses.

LEWIS F. BETTS.

Witnesses:

W. J. Morgan, Worth Osgood.