

(No Model.)

J. F. PLACE.
OIL STOVE.

No. 520,498.

Patented May 29, 1894.

FIG: I.

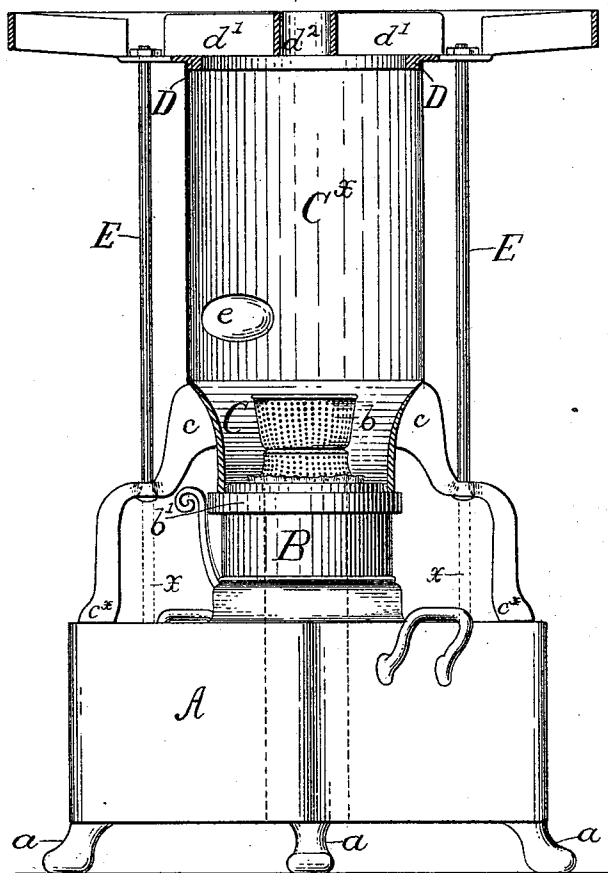
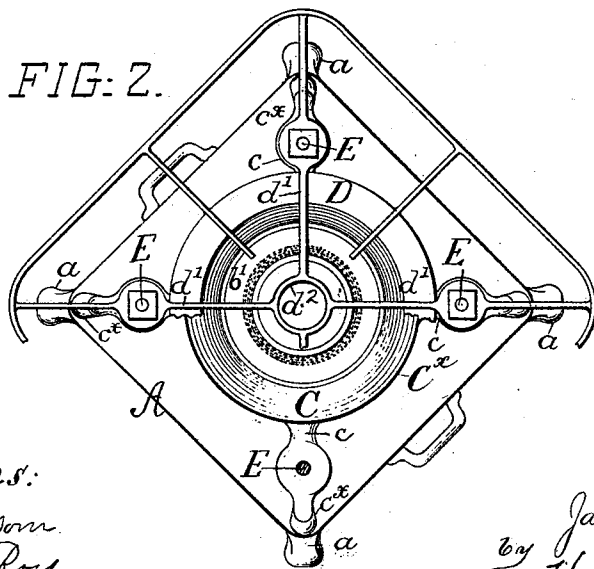


FIG: 2.



Witnesses:

Herbert Blossom.
Peter A. Ross.

Inventor:

James F. Place.
by Henry Conrad.
his Attorney

UNITED STATES PATENT OFFICE.

JAMES F. PLACE, OF MONTCLAIR, NEW JERSEY, ASSIGNOR TO CHARLES S. UPTON, OF NEW YORK, N. Y.

OIL-STOVE.

SPECIFICATION forming part of Letters Patent No. 520,498, dated May 29, 1894.

Application filed March 9, 1893. Serial No. 465,299. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. PLACE, a citizen of the United States, residing in Montclair, Essex county, New Jersey, have invented certain new and useful Improvements in Oil-Stoves, of which the following is a specification.

My invention relates to the class of stoves or heaters wherein oil and wicks are employed for generating the heat, and the object of the invention is to obtain a more perfect combustion than is reached in these stoves as ordinarily constructed, thereby eliminating the empyreumatic odors so objectionable in this class of stoves and at the same time getting the maximum of heat from the oil.

The object is also to simplify the construction, thereby lessening the cost and rendering the management of the stove simple and easy.

In the accompanying drawings I have illustrated an embodiment of my invention.

Figure 1 is a vertical mid-section of the stove as to its upper portion, the oil reservoir and burner being in elevation. Fig. 2 is a plan of the stove with one-half of the platform broken away.

A represents the oil-holder or reservoir, supported on short legs, *a*, and B, the burner, mounted on said reservoir. The burner employs a tubular wick and a central draft, and is provided with a perforated flame-spreader or cone, *b*, said spreader being mounted on the upper extremity of the tube which supplies the central draft.

As here shown the chimney of the stove comprises a lower portion or section, C, which rests on the chimney gallery, *b'*, and an upper portion or section, C^x. The lower section of the chimney may be of cast metal and the upper section of sheet metal.

The section or portion C of the chimney is of least diameter at its base, where it fits onto the chimney gallery and flares outwardly and upwardly, being widest at its top which will be, approximately, at the level or point where combustion takes place. The upper portion of the chimney may be cylindrical, or of uniform diameter throughout its length. Its form is not very essential, however; but if this

upper section be made, of sheet metal the plain, cylindrical form will be cheapest to construct.

On the lower, flared portion, C, of the chimney are branches, *c*,—four, equally spaced, as here shown,—and these branches are curved downward to form legs, the feet *c^x* of which rest on the crown or top of the reservoir A when the base of the portion C rests on the chimney gallery.

On the top of the chimney is the stove-platform or top, D, which is connected to the respective radial branches *c* by tie-rods, E. The platform D is made up of a ring-like plate *d* having radially arranged ribs, *d'*, to receive and support a vessel to be heated, said ribs converging and connecting with a ring, *d²*, arranged over the open top of the chimney.

To light the wick of the burner the chimney and the platform D, connected therewith, are simply lifted off; and when the wick is lighted they are set back again in place as before. There may be a plate of mica, *e*, set in the upper portion of the chimney to permit of inspection of the flame.

The flaring form of the lower portion C, of the chimney, is very important as it provides a combustion chamber at the proper level, which chamber has a larger diameter than the base of the chimney at the chimney gallery.

The upper section of the chimney might be of glass and the lower section of metal, or vice versa; but if both be made of metal there will be less danger of breaking them. Or the entire chimney, together with the legs or branches *c*, might be of glass, but it would be very fragile if so made.

By simply lifting off the chimney and platform, an ordinary glass chimney may be set on the burner for ordinary illumination.

The radial branches *c* on the chimney, provided with feet resting on the reservoir, give the removable superstructure stability to resist lateral pressure.

The rods E serve to connect the platform with the branches or arms *c*, respectively, and these rods might extend down to the upper

surface of the lamp-body to serve as legs or supports, as indicated in dotted lines at x in Fig. 1. In this the branches c may be cut off just outside of the points where the rods pass through them. The construction of the branches or arms to serve as supports is preferred, however, as it is less costly and affords a broader base.

The chimney may be made in one piece, from sheet or other metal. The radial branches or arms c may be formed integrally with the chimney or be made separately and secured thereto. This latter mode of construction is advisable where the lower part of the chimney is of sheet metal.

By point or level of combustion I wish to be understood as meaning a point about where the flame terminates or just above the top of the perforated cone or flame-spreader. However, this level cannot be fixed very positively, as combustion actually takes place below

this point, but the point or level is about the level of the top of the cone or flame-spreader.

Having thus described my invention, I claim—

In a central draft oil stove, the combination with a reservoir and a central draft burner, of a chimney having branches secured thereto near its base, said branches projecting outward and curving downward to form legs which rest upon the reservoir of the lamp, a platform upon the upper end of the chimney, and tie rods connecting the said platform and projecting branches, substantially as described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JAMES F. PLACE.

Witnesses:

HENRY CONNETT,
JAS. KING DUFFY.