

E. BOEKENKAMP.
 COMBUSTION TUBE FOR OIL BURNERS.
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1,120,124.

Patented Dec. 8, 1914.

Fig. 1.

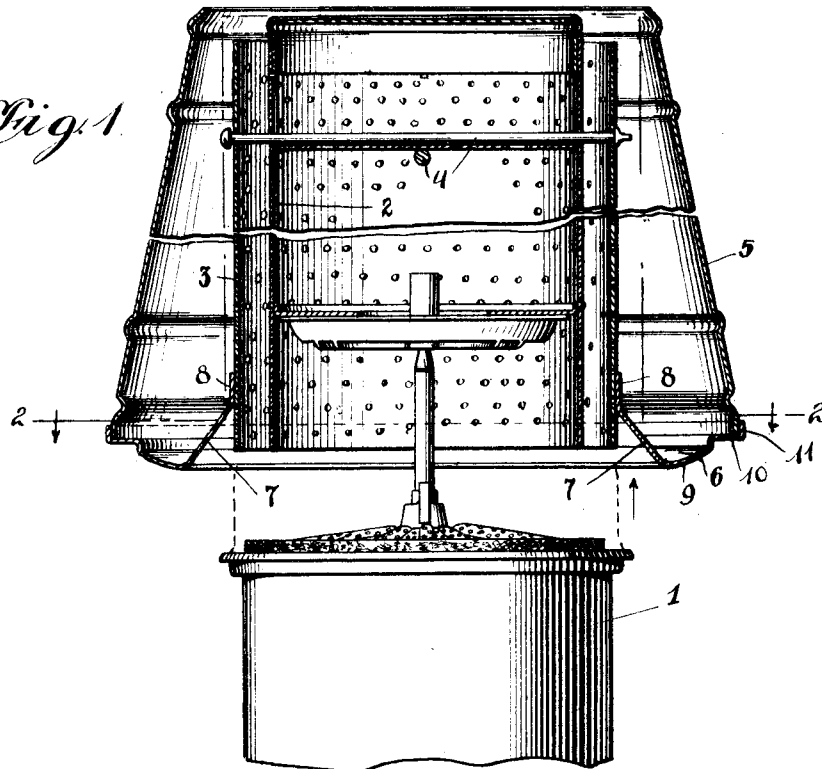
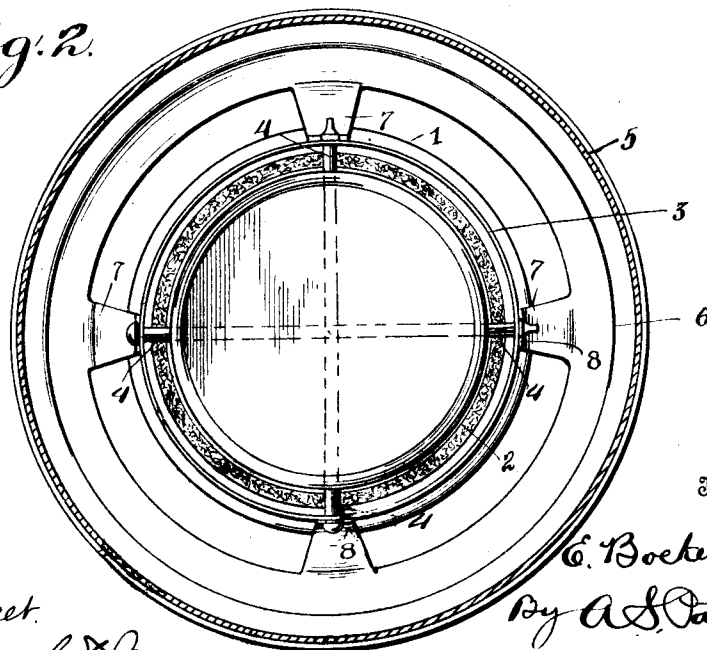


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

EDWARD BOEKENKAMP, OF ST. LOUIS, MISSOURI, ASSIGNOR TO AMERICAN STOVE COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF NEW JERSEY.

COMBUSTION-TUBE FOR OIL-BURNERS.

1,120,124.

Specification of Letters Patent.

Patented Dec. 8, 1914.

Application filed October 27, 1913. Serial No. 797,560.

To all whom it may concern:

Be it known that I, EDWARD BOEKENKAMP, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Combustion-Tubes for Oil-Burners, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to improvements in combustion tubes for oil-burners.

The object of my invention is to provide means whereby the chimney may be readily placed upon and guided on the combustion tubes, so that it is supported and held in its proper position concentric to the tubes.

Another object of my invention is to provide a simple, cheap and more effective means of supporting the chimney and having certain details of structure hereinafter more fully set forth.

In the accompanying drawings.—Figure 1 is a vertical sectional view of a combustion tube showing the chimney supporting means and the chimney supported thereby. Fig. 2 is a horizontal sectional view taken on the line 2—2 Fig. 1.

Referring now to the drawings 1 represents the burner which is of the ordinary form and needs no further description as it is only shown to illustrate the application of the combustion tubes.

The combustion tubes consist of the two concentric perforated tubes 2 and 3 spaced apart and held in said position by means of the transverse rods 4 or in any desired manner as this could be varied without departing from my invention. These perforated tubes are spaced a distance apart slightly greater than the thickness of the wick and are adapted to be supported in the burner trough one on each side of the wick when in normal burning operation and which is well understood by those skilled in the art. In combustion tubes of this character the outer solid chimney 5 has heretofore been supported or spaced from the combustion tubes by means of strips secured either to the inner face of the chimney or to the outer face of the perforated tube 3 so that it is held concentric to the tube. In some instances the rods 4 extend out through the chimney and in this event the chimney is permanently secured to the tubes and which has been found to be objectionable. In my

invention I provide a ring 6 surrounding the lower end of the outer combustion tube 3 and provided with a series of upwardly extending ears or lips 7 formed integral with the ring and secured to the outer perforated tube 3 at 8 a short distance above the lower end thereof. The ring 6 as shown is provided with the obliquely arranged portion 9 at its inner edge and with the straight horizontal portion 10 provided with the upwardly extending annular flange 11 extending at right angles to the horizontal portion 10. The chimney as shown is of a truncated cone-shape and has its upper end out beyond a vertical line with the outer combustion tube 3, the ring 6 is spaced from the lower end of the tube 3 by the ears or lips 7, and it will be seen that the extreme lower end of the chimney rests upon the flat horizontal portion 10 of the ring, and is centered by the upwardly extending flange 11. By this structure the chimney is removably supported by the combustion tubes and the ring forms a guide in placing the chimney thereon and centering it so that it is at all times concentric with the tubes. The ring being supported by the ears or lips allows of the proper amount of air passing upwardly on the inside between it and the outer face of the outer perforated combustion tube 3.

While I have shown the ears or lips 7 integral with the ring it will be understood that this could be changed and also the contour of the ring, without departing from my invention.

Having thus fully described my invention what I claim and desire to secure by Letters Patent is:—

1. The combination with a combustion tube, of a ring surrounding the lower end thereof, and spaced therefrom, an upwardly extending flange carried by the outer periphery of the ring, upwardly and inwardly inclined arms carried by the ring and secured to the combustion tube above a horizontal plane with the ring, whereby the chimney is centered in respect to the combustion tube.

2. The combination with a combustion tube, of a ring surrounding the lower end thereof and spaced therefrom and arranged in a horizontal plane, an upwardly extending flange carried by the outer periphery of the ring, upwardly and inwardly inclined

arms carried by the inner edge of the ring and secured to the combustion tube above the ring, and a chimney removably supported by the ring whereby the chimney may be centered in respect to the combustion tube on the ring.

3. The combination with a combustion tube, of a ring surrounding the lower end thereof and spaced therefrom and arranged in a horizontal plane with the lower end of the combustion tube, a flange surrounding the outer periphery of the ring, upwardly inwardly inclined arms carried by the inner edge of the ring and secured to the combustion tube above the ring, a chimney adapted to be removably supported upon the ring whereby the upwardly extending flange serves as means for centering the chimney on the ring.

4. The combination with a combustion

tube, of a ring surrounding the lower end thereof and arranged in a horizontal plane with the lower edge of the combustion tube and spaced therefrom, an upwardly extending flange carried by the outer periphery of the ring, upwardly and inwardly inclined integral arms carried by the inner edge of the ring, said upwardly and inwardly inclined arms being secured to the combustion tubes above a horizontal plane with the ring, a chimney removably supported by the ring whereby the upwardly extending flange serves as a guide for centering the chimney on the ring.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.
 EDWARD BOEKENKAMP.

Witnesses:
 J. C. ELWANG,
 MAX LEPTIN.