

(No Model.)

B. F. FOWLER.

DEVICE FOR CARRYING OFF ODORS FROM COOKING VESSELS.

No. 512,650.

Patented Jan. 9, 1894.

FIG. 1.

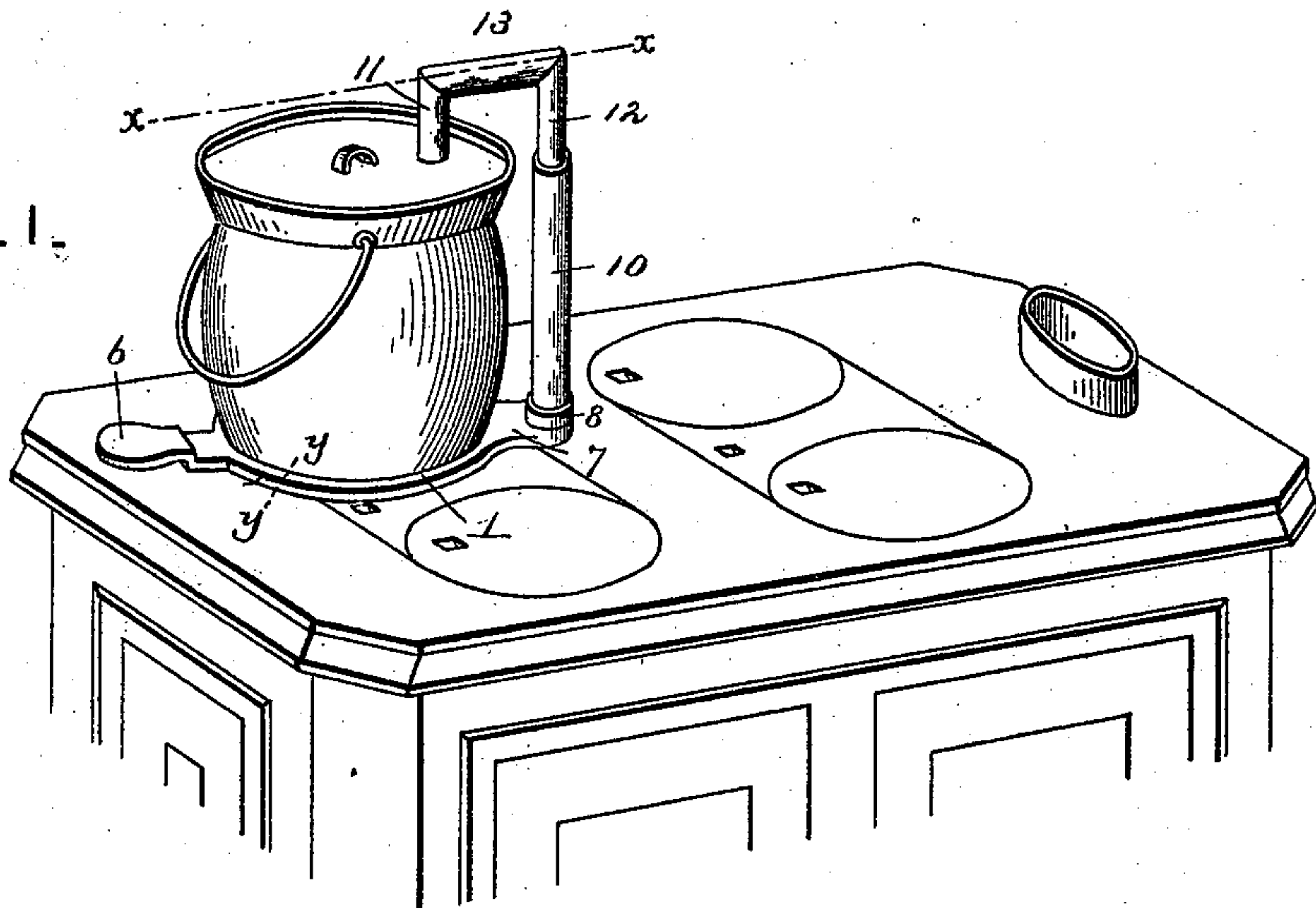


FIG. 2.

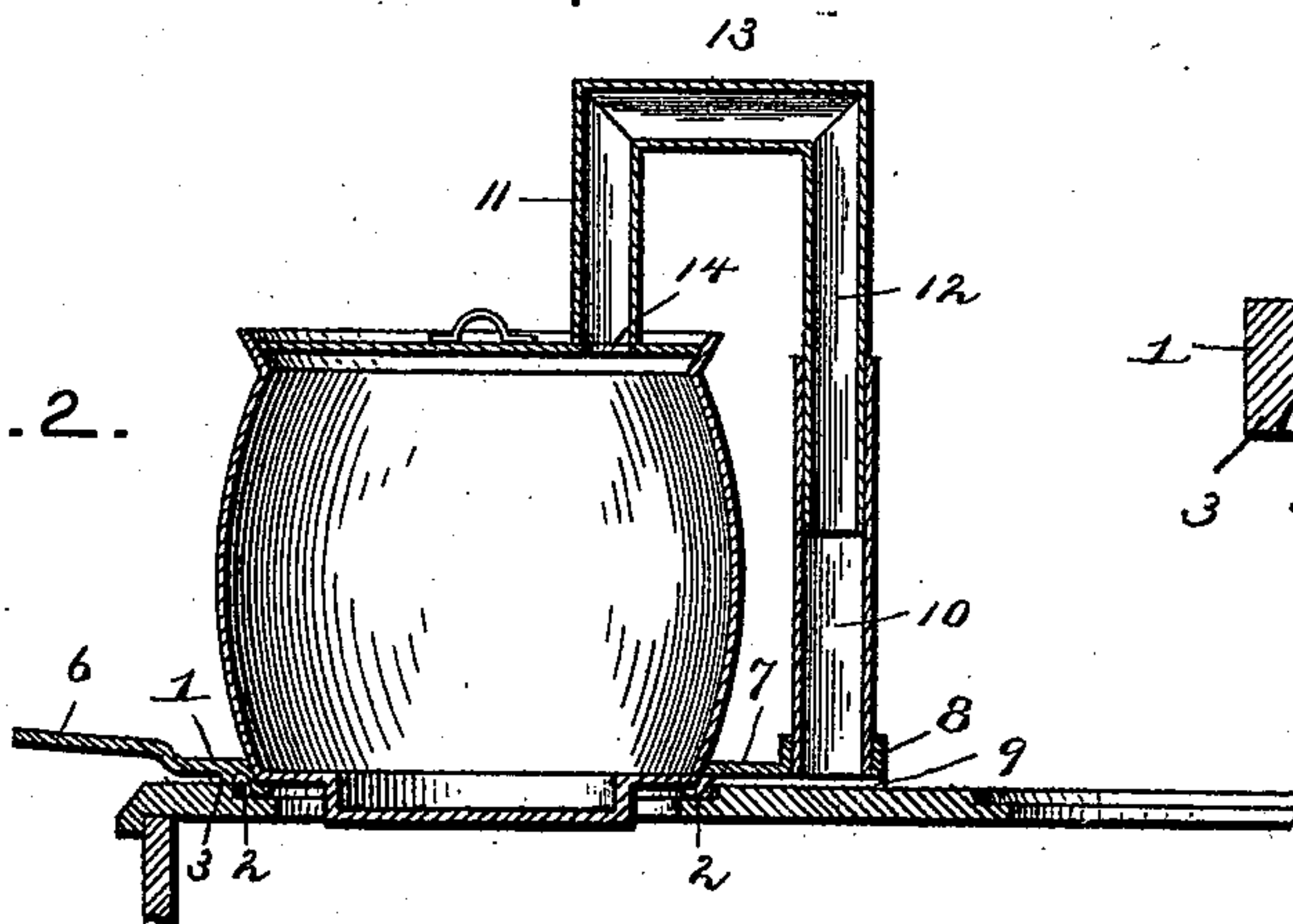


FIG. 5.

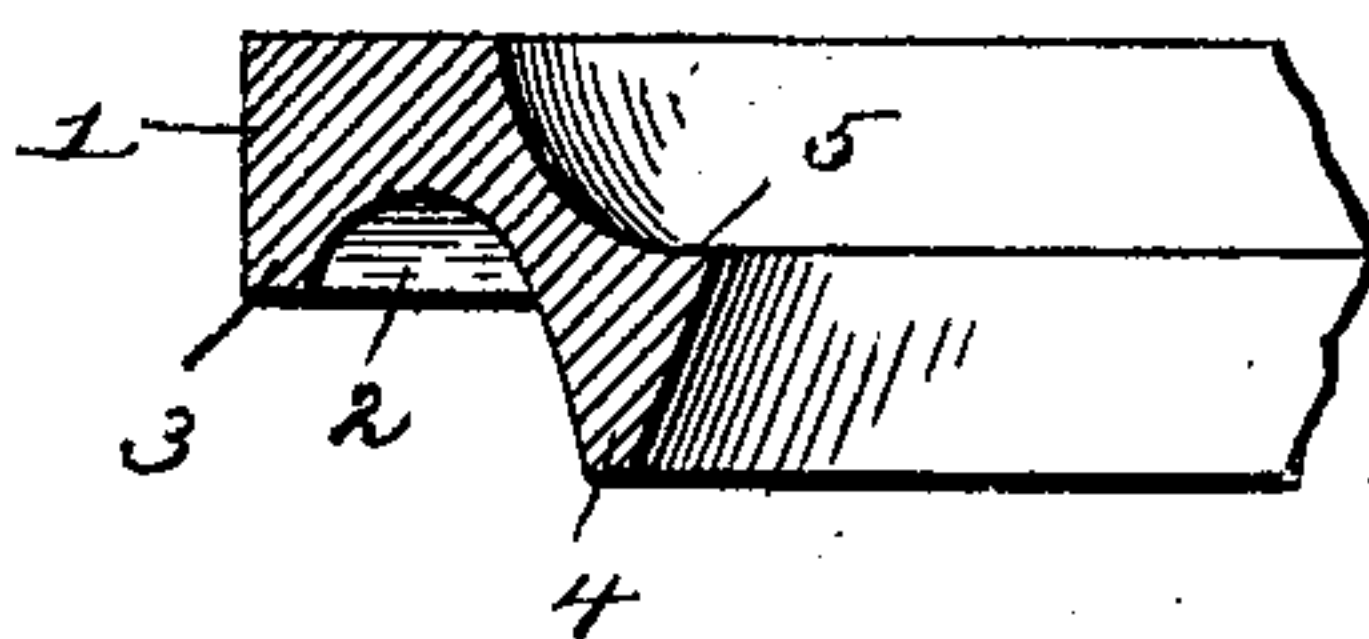


FIG. 4.

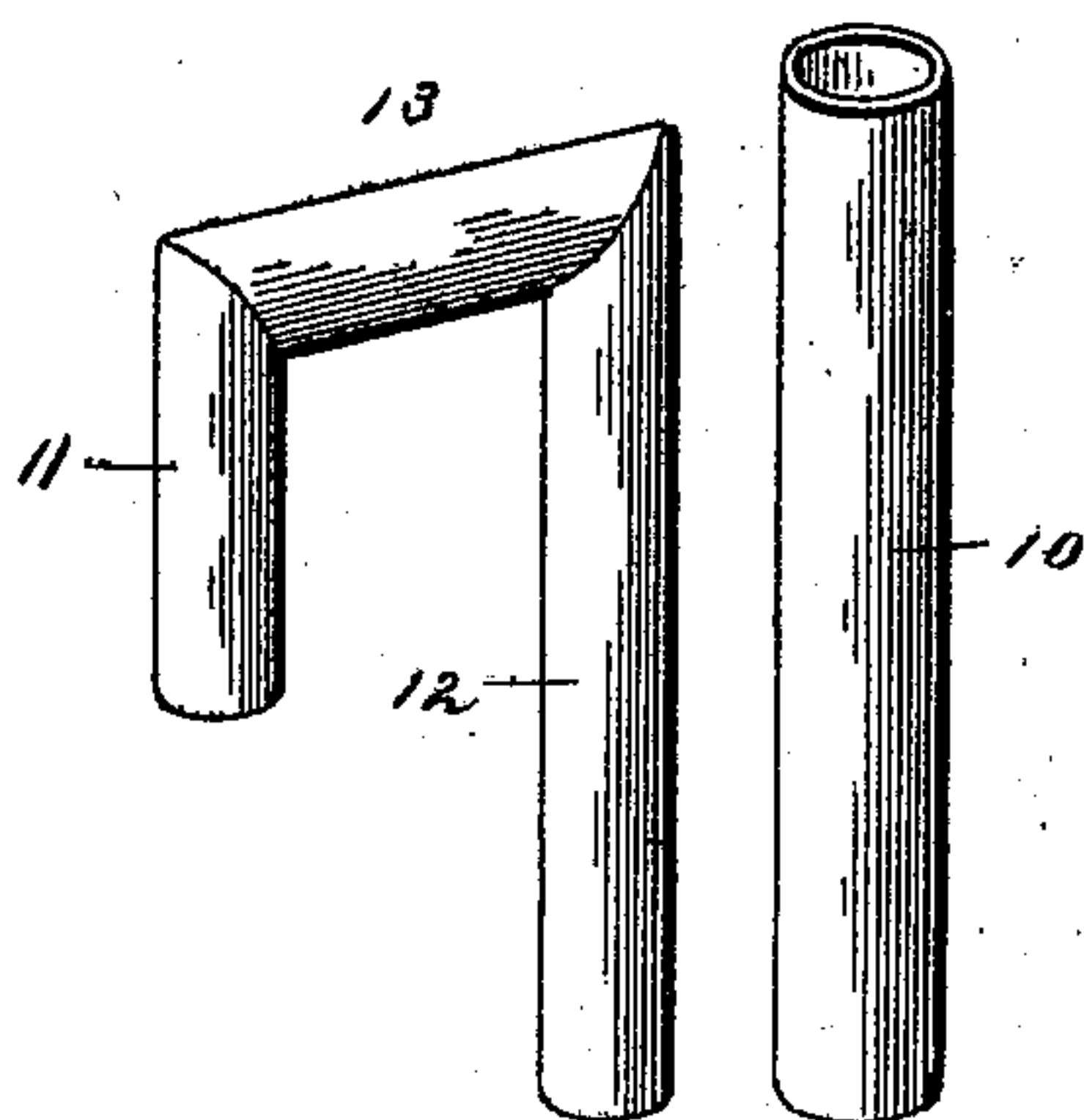
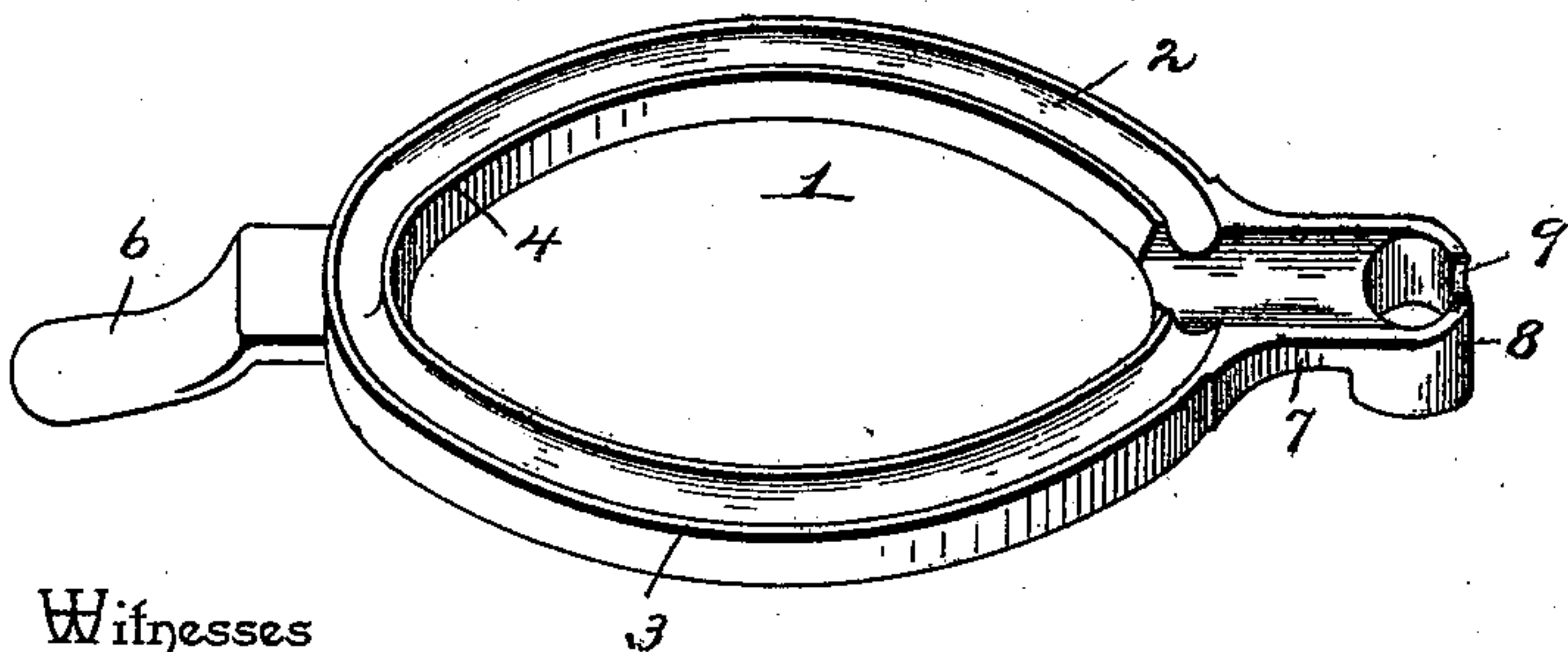


FIG. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

BENJAMIN F. FOWLER, OF MINNEAPOLIS, MINNESOTA.

DEVICE FOR CARRYING OFF ODORS FROM COOKING-VESSELS.

SPECIFICATION forming part of Letters Patent No. 512,650, dated January 9, 1894.

Application filed April 24, 1893. Serial No. 471,606. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. FOWLER, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented a new and useful Device for Carrying Off Odors from Cooking-Vessels, of which the following is a specification.

This invention relates to an odor or steam exhaust attachment for stoves, ranges, or other purposes, and has for its object to provide means for carrying all fumes and odors or steam from cooking utensils, or any other vessels of whatever nature that are used with cooking-stoves, ranges, &c.

With these and other objects in view the invention consists of the construction and arrangement of the parts thereof as will be hereinafter more fully described and claimed.

In the drawings: Figure 1 is a perspective view of the top part of a stove or range, showing a kettle or pot thereon and the improved attachment in connection therewith. Fig. 2 is a section on the line $x-x$, Fig. 1. Fig. 3 is a detail perspective view of a ring embodying one feature of the invention and looking toward the bottom thereof. Fig. 4 is a detail perspective view of a telescopic tube attachment embodying a part of the invention. Fig. 5 is a section on the line $y-y$, Fig. 1, on an enlarged scale.

Similar numerals of reference indicate corresponding parts in the several figures of the drawings.

Referring to the drawings, the numeral 1 designates a ring or circle that is mounted in a stove-hole, and which, as shown, is formed with an under circumferential flue 2, but it will be understood that more than one flue may be employed of a similar form, if found desirable, or the size of the single flue may be regulated at will and to suit the purpose for which the device is adapted to be employed. The said ring or circle is constructed with an outer under rim 3, that forms a seat or bearing-edge to rest on the shoulder of the stove-hole, and in order also to construct the outer limiting wall of the flue 2. The inner part of the ring or circle is provided with a depending flange 4, that extends below the rim or edge 3 and forms the inner limiting wall of the flue 2. It will be seen that the lower side

of the said flue 2 is open and is located over the fire-bed and extends partially into the fire-chamber, and the whole exterior upper portion of the ring or circle is closed and at the inner edge is formed with a seat 5, to receive the stove-cover or lid. At one side, also, the said ring or circle is provided with a handle or grip 6, whereby the same may be placed in position or readily withdrawn from the top of the stove or range when not required for use. At the opposite side of the ring or circle is located a flue-arm 7, that has an opening with a surrounding collar, as at 8, at the outer end thereof, the under side of the said arm being concaved or hollow to form the flue thereof which is continued through the rim 3 and flange 4, transversely and is also extended at the opposite end to form a small exterior opening 9, that institutes an inward draft through the flue of the said arm by permitting a small quantity of air to enter the same from the exterior and thereby effectually direct the odors or steam coming into the said flue-arm to the fire-bed or chamber. Of course the flue 2 is in communication with the flue-arm and serves a useful function in directing that part of the odor or steam which may enter the same downwardly into the fire bed or chamber, and is low enough, by reason of the flange 4, to prevent leakage or driving upwardly of the odor through the covering lid or plate that rests within the circle or ring before the same shall have become thoroughly absorbed by the fire. The flue 2 also serves to spread the steam or air passing thereinto and carrying the odors over a larger surface to be attacked by the fire, and thereby be more quickly consumed and carried away; or, if not consumed, to be taken up by the draft of the stove and carried up through the chimney. It will be understood in this connection that the flue-arm set forth may be used singly or in greater numbers in connection with each ring or circle without in the least changing the nature of the invention, and that the ring or circle with said flue-arm or arms may be used alone to remove odors from the top of a cooking stove or range or other place that will be more or less carried into the said flue-arm through the exterior opening in the end thereof. It is especially intended, however, to employ a telescopic pipe-

section in connection with the construction just set forth and consisting of a vertical tube or pipe 10 that has its lower end removably fitted in the collar 8, of the flue-arm 7, and at its upper end telescopically receives either the short tubular arm 11 or the long tubular arm 12 of a double elbow 13, and in whatever form the said double elbow may be applied to the said vertical tube, the opposite arm is free to have its lower end engage a hole 14, cut in the ordinary trade lid or cover employed for cooking utensils and which may be suitably located. In applying the said arms of the double elbow to the lids or covers of the cooking utensils, they are adjusted telescopically in the vertical tube to accommodate the height of the vessel with which the device is used. As shown, the upper section of the tube has two right angles; the one to carry the tube over the opening of the lid and the other to return on the opening. Thus it will be understood that the vertical or straight section of the tube is always attached to the flue-arm of the ring if so desired, and when the upper section of the telescopic tube is in use for vessels of considerable height, the long arm of the same extends down the side of the vessel or utensil and is connected to the upper end of the vertical or straight section of the tube that engages the flue-arm, and the short arm extends over the lid or cover and engages the opening therein; but when used on a pan or any low vessel, the short arm engages the vertical or straight tube and the longer arm extends over the lid or cover and is fitted to the opening therein. It will also be seen that the lower inside flange extends into the stove, as before set forth, and the outer rim or edge sets on top of the stove and is of the same depth as the neck or flue-arm, which is open on its lower side, so that when placed on the stove the top or surface of the stove forms a bottom for the said flue-arm. When a pot or kettle is used in connection with the said ring or circle it is placed directly in the latter, but when a frying-pan or other analogous article is arranged to be placed on top of the stove and not exposed directly to the fire, a stove lid or cover is placed within the ring or circle.

It will be understood that the ring or circle can be made in any size of gray iron or other suitable material, and that by the use of the device set forth the fumes or odors from cooking that frequently pervade the entire atmosphere of a house, rendering it offensive, uncomfortable and unhealthy, are obviated; and

where much boiling is done, saturation of the air with moisture in excess of a normal quantity, and consequent dampening of the walls, is also prevented because the odors and fumes and the steam are caused to pass into the fire-chamber and be taken up by the fire-bed or pass outwardly into the chimney.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

It will be seen that in the formation of the ring or circle the arrangement of the parts is such that a core-casting is not necessary in the construction of the same thereby saving considerable expense and labor and necessarily reducing the cost price of the device, as the opening in the flue-arm may be afterward constructed in any suitable manner. Said opening in the flue-arm may be conveniently used for suspending the ring or circle from a suitable hook or nail when the device is in disuse, as will be readily understood.

Having described the invention, what is claimed as new is—

1. A ring or circle for the purpose set forth having a flue-arm with an open bottom, and a circumferential flue in the under side thereof that is transversely intersected by the flue of the said arm and provided with an inner depending flange through which the said flue of the flue-arm also passes, the outer end of said flue-arm having an exterior opening communicating with the flue thereof and also an upper opening provided with a surrounding collar, substantially as described.

2. In an attachment of the class described, the combination of a ring or circle having a flue-arm that is open on its bottom side, a vertical tube fitted to the outer end of said flue-arm, and an upper telescoping section consisting of a double elbow having a long and a short vertical member at opposite sides of the same, that are arranged to engage the said vertical tube to accommodate variation in the heights of cooking utensils with which the device is employed, substantially as described.

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

BENJAMIN F. FOWLER.

Witnesses:

W. S. CILLEY,
W. H. WEBER.