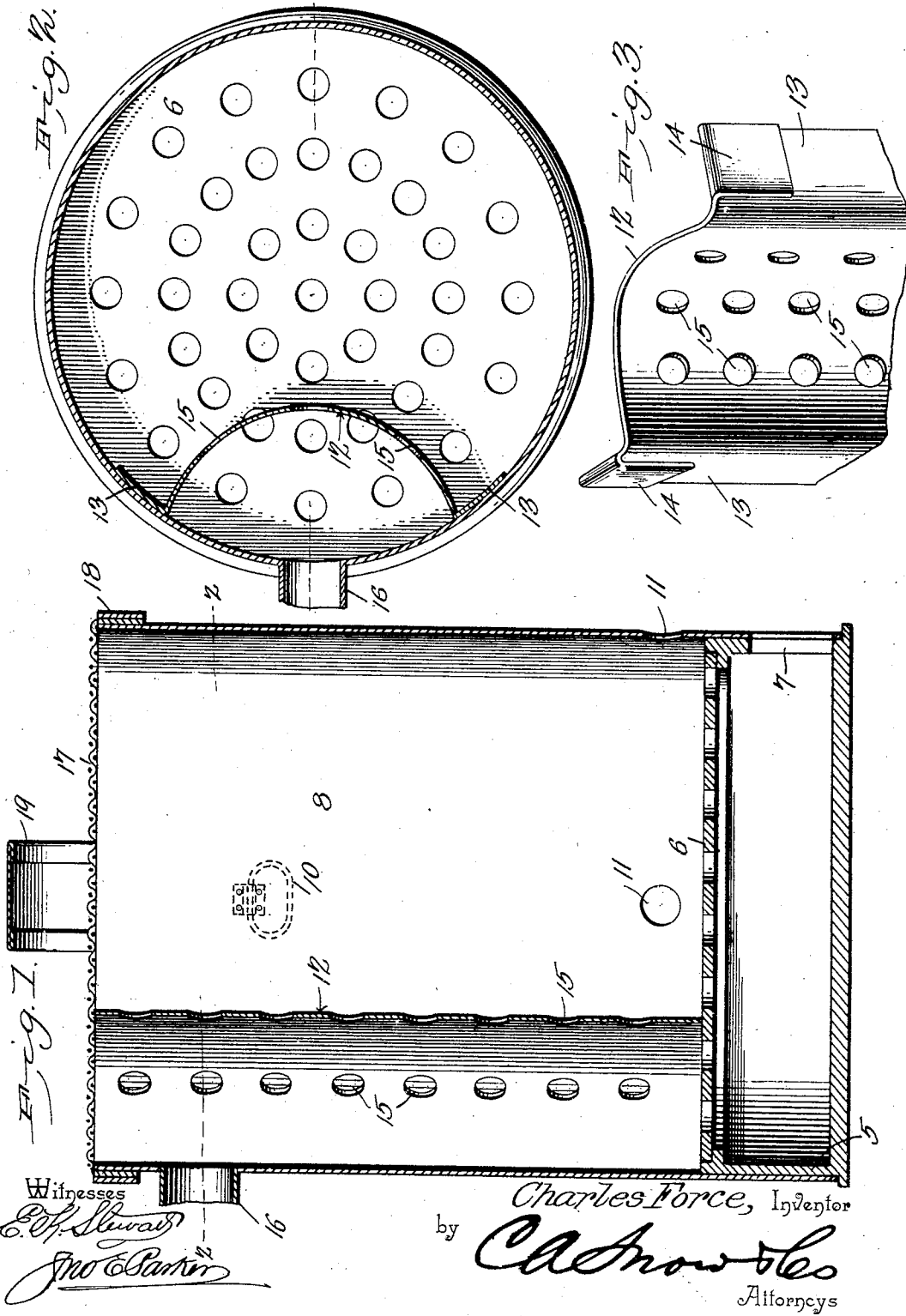


No. 774,871.

PATENTED NOV. 15, 1904.

C. FORCE.  
REFUSE CREMATORY.  
APPLICATION FILED OCT. 15, 1902.

NO MODEL.



# UNITED STATES PATENT OFFICE.

CHARLES FORCE, OF CHICAGO, ILLINOIS.

## REFUSE-CREMATORY.

SPECIFICATION forming part of Letters Patent No. 774,871, dated November 15, 1904.

Application filed October 15, 1902. Serial No. 127,420. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES FORCE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have  
5 invented a new and useful Refuse-Crematory, of which the following is a specification.

This invention relates to certain improvements in devices of that class employed for destroying accumulations of paper and other  
10 refuse matter, and has for its principal object to provide a portable device which may be employed as a repository for loose material and in which such material may be consumed without danger to either persons or property.

15 A further object of the invention is to provide a device of this character in which the various parts may be readily assembled when necessary; and a still further object is to insure free draft without regard to the quantity of material within the receptacle.

20 With these and other objects in view the invention consists in the novel construction and arrangement of parts hereinafter described, illustrated in the accompanying drawings, and  
25 particularly pointed out in the appended claims, it being understood that various changes in the form, proportions, size, and minor details of the structure may be made, without departing from the spirit or sacrificing any of the advantages of the invention.

30 In the accompanying drawings, Figure 1 is a sectional elevation of a refuse-crematory constructed in accordance with my invention. Fig. 2 is a sectional plan view of the same on the line 2 2 of Fig. 1. Fig. 3 is a detail perspective view of the upper portion of the detachable flue member.

35 Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

40 The base of the device is in the form of a cup, preferably made of cast-iron, and having a vertically-disposed annular flange 5, forming at its upper end a seat for the reception of a  
45 removable grate 6, and provided with a draft-opening 7, corresponding to the ash-pit opening in an ordinary stove.

50 The main portion of the device is in the form of a sheet-metal cylinder 8 open at top and bottom, the bottom portion fitting over the

vertical flange 5 and suitable handles 10 being arranged at opposite sides of said cylinder in order that the crematory may be transported from place to place. In the lower portion of the cylinder are a number of openings 11, arranged slightly above the grate and  
55 permitting the introduction of a poker or similar implement for clearing the grate or shaking up the material being burned.

60 12 indicates a removable flue member curved in cross-section and provided at each side with flanges 13, curved to correspond to the inner wall of the cylinder 8, against which such flanges are pressed by the material within the cylinder. The flanged portions of the  
65 flue member are extended up beyond the top of the curved portion and are thence bent outwardly and downwardly to form engaging ears 14, which fit over the upper edge of the cylinder, the ears fitting tightly in place in  
70 order to hold the flue member in proper position and serving also by the contact of the lower end of said flue member with the top of the grate to retain said grate in place should the crematory be accidentally overturned.  
75 The flue member is provided with a large number of openings 15, forming passages through which the products of combustion may escape to a discharge-flue 16, the flue being connected,  
80 if necessary, to a chimney when it is necessary to convey the smoke from the immediate neighborhood.

85 At the top of the cylinder 8 is a cover 17, formed of wire-netting or foraminous material and having a depending flange 18, which embraces the upper edge of the cylinder and serves to hold the cover in position. The cover is provided with a handle 19, by which it may be removed when refuse is being placed  
90 within the crematory.

95 The grate may be formed of a perforated plate or may be of the character ordinarily employed in devices of this character, and in some cases the cast-metal base portion of the device may be omitted and the grate members supported directly by the cylinder.

100 The flue member may be adjusted to any desired position within the cylinder, and where the device is not connected directly to a chimney or escape-flue it is not necessary that this

flue member be directly in front of the escape-flue 15. The flue member forms a partition which divides off a portion of the interior of the cylinder, forming a clear passage from  
 5 top to bottom, and divides the interior of the cylinder into two compartments, of which one forms at all times a free passage for the smoke and other products of combustion, while the  
 10 other chamber serves as a receptacle for the refuse. When the foraminous or reticulated cover is placed in position, it serves to hold the flue member down in proper place, and said flue is additionally held by the mass of material pressing against its semicircular  
 15 walls and against the widened flanges 13, which, as previously described, are curved to conform to the contour of the cylinder.

When the apparatus is used in the open air and without being connected to a chimney,  
 20 the foraminous cover will admit air and at the same time will prevent embers from flying off and injuring surrounding property. The air may enter through the bottom grate through the reticulated cover and will pass  
 25 through the flue member and make its escape through the reticulated cover directly above and in alinement with this flue member, and if this flue member be arranged in  
 30 such manner as to control the escape through flue 16, which will usually be the case, a portion of the products of combustion may also pass out through said escape-flue. When connected to a chimney, the air will enter both at  
 35 the top and at the bottom and all of the smoke and products of combustion will pass out through the escape-flue, owing to the superior draft of the chimney.

Having thus described my invention, what I claim is—

40 1. In a refuse-burner, the combination with

a base having a draft-opening, of a removable perforated grate carried by the base, a cylindrical body portion extending over the periphery of the base and provided with a draft-opening coincident with that of the base, an  
 45 escape-flue near the upper end of the body portion, a removable foraminous cover for said body portion, a detachable flue member extending from the grate to the cover and having its opposite ends engaging respectively  
 50 with the grate and the cover, said flue member having perforations disposed in different horizontal planes to provide escape-openings for the products of combustion from the material to be consumed within the burner. 55

2. In a refuse-burner, the combination with a base having a draft-opening, of a removable grate member carried by the base, a cylindrical body portion fitted to the base and provided with a plurality of draft-openings  
 60 above the upper surface of the grate, a curved flue member formed of perforated sheet metal, the opposite edges of which are bent to form flanges that conform to the contour  
 65 of the inner wall of the body portion and are pressed closely into contact therewith by the refuse to be burned, said flanges terminating at the upper end in clips that embrace the top of the body portion, and a removable foraminous cover having a rim portion in engage-  
 70 ment with said clips and tending to hold said flue member in position.

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

CHARLES FORCE,

Witnesses:

WILLIAM G. RUDD,  
 ANTON B. FIEDLER.