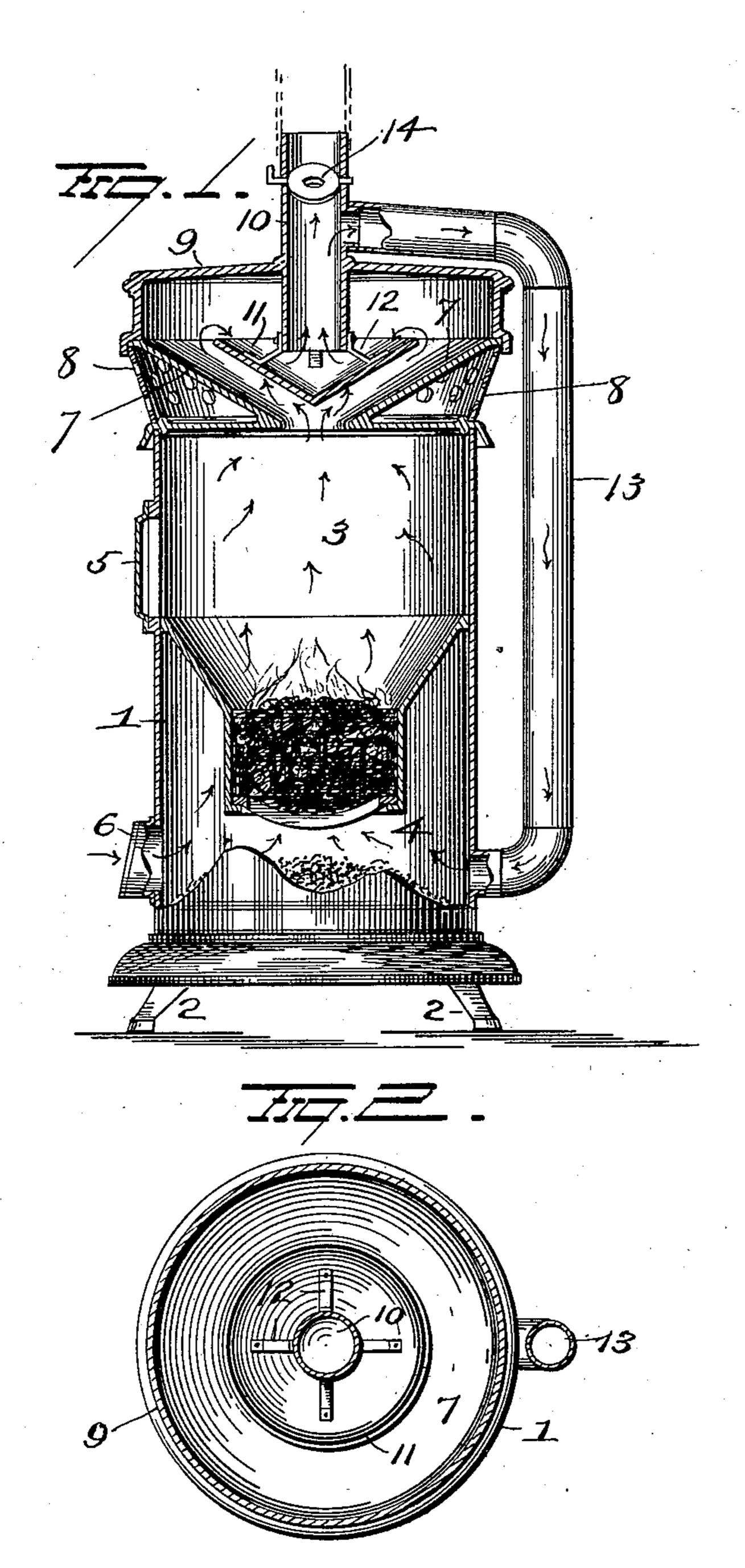
H. R. ONEY. HEATING STOVE.

(Application filed Mar. 6, 1902.)

(No Model.)



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United States Patent Office.

HUGH R. ONEY, OF JACKSON, OHIO.

HEATING-STOVE.

SPECIFICATION forming part of Letters Patent No. 706,097, dated August 5, 1902.

Application filed March 6, 1902. Serial No. 96,981. (No model.)

To all whom it may concern:

Be it known that I, HUGH R. ONEY, a resident of Jackson, in the county of Jackson and State of Ohio, have invented certain new and 5 useful Improvements in Heating-Stoves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in heating-stoves, the object of the invention being to so construct a stove of this character that it will radiate the greatest possible amount of heat by the expenditure of a com-15 paratively small quantity of fuel and consume practically all of the fuel and at the same time provide a neat and attractive freeburning stove; and with this object in view the invention consists in certain novel fea-20 tures of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is 25 a view in section, illustrating my improvements; and Fig. 2 is a view in section on the line x x of Fig. 1.

1 represents the stove-body, preferably supported on feet 2 and divided into the combus-30 tion-chamber 3 and ash-pit 4, a fuel-door 5 being provided for the former and a door 6 for the latter to permit the removal of ashes and to regulate the draft.

On top of the stove-body 1 and forming a 35 permanent part of the stove my improved heating-drum is located and consists of an inverted truncated cone 7, communicating with a central opening in the top of body 1 and forming a large heat-radiating surface 40 inclosed in a perforated casing 8 to permit the free circulation of air about said radiating surface, and the top 9 of the drum is made solid and projects the desired distance above cone 7 and forms, together with casing S, an 45 inclosure for the cone.

The smoke-pipe 10 projects down through this top 9 and has secured to its lower end and spaced therefrom an inverted cone 11, metal straps or strips 12 being employed to 50 connect the cone 11 and pipe 10 and permit the smoke and gases to freely enter the pipe. The cone 11 is appreciably smaller than cone |

7 to provide a smoke-passage between said cones, the former serving to deflect the smoke and gases against the latter to insure the in- 55 tensely heating of cone 7 and permit the same

to radiate a large amount of heat.

In order to insure the burning of practically all smoke and gases, a returning-flue 13 connects the pipe 10 with ash-pit 4, and a 60 damper 14 is provided in pipe 10 above its connection with flue 13 to regulate the quantity of return to produce the best results. This damper 14 is preferably perforated, as shown, to prevent the draft through the pipe 65 from being entirely cut off, as some draft through pipe 10 is always advisable.

In operation the smoke and gases pass up between cones 11 and 7, intensely heating the latter, and as air finds a free entrance and 70 escape through perforated casing 8 a great amount of heat is thereby imparted to the air. The smoke and gases find their way around and down into cone 11, as indicated by the arrows, and escape through pipe 10, 75 a portion of the same being drawn down through flue 13 to ash-pit 4, where it mixes with fresh air entering through door 6 and again passes through the combustion-chamber to be entirely consumed.

Slight changes might be resorted to in the general form and arrangement of the several parts described without departing from my invention, and hence I would have it understood that I do not limit myself to the pre- 35 cise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what 90 I claim as new, and desire to secure by Letters

Patent, is—

1. In a stove, the combination with a combustion-chamber and an ash-pit below the same, of an inverted cone communicating 95 with the upper end of the combustion-chamber, a casing inclosing the cone and perforated around said cone, a smoke-pipe projecting through the top of the casing and an inverted cone connected with and spaced from 100 the pipe and adapted to deflect the smoke and gases against the first-mentioned cone before they enter the pipe.

2. In a stove, the combination with a com-

bustion-chamber and an ash-pit below the same, of a heating-drum on top of the combustion-chamber comprising two inverted cones one within the other and forming a smoke-passage between them, a casing inclosing the cones and perforated around the outer cone and a smoke-pipe communicating with the top of the casing and adapted to carry off the waste products of combustion.

3. In a stove, the combination with a combustion-chamber and an ash-pit below the same, of a heating-drum on top of the combustion-chamber, comprising two inverted cones one within the other and forming a

smoke-passage between them, a casing inclosing the cones and perforated around the outer cone, a smoke-pipe communicating with the casing and projecting down into the inner cone, a flue connecting the smoke-pipe and ash-pit, and a damper in said smoke-pipe 20 above its connection with the flue.

In testimony whereof I have signed this specification in the presence of two subscrib-

ing witnesses.

HUGH R. ONEY.

Witnesses:

R. L. GRIMES,
JOSEPH ROCKLAND.