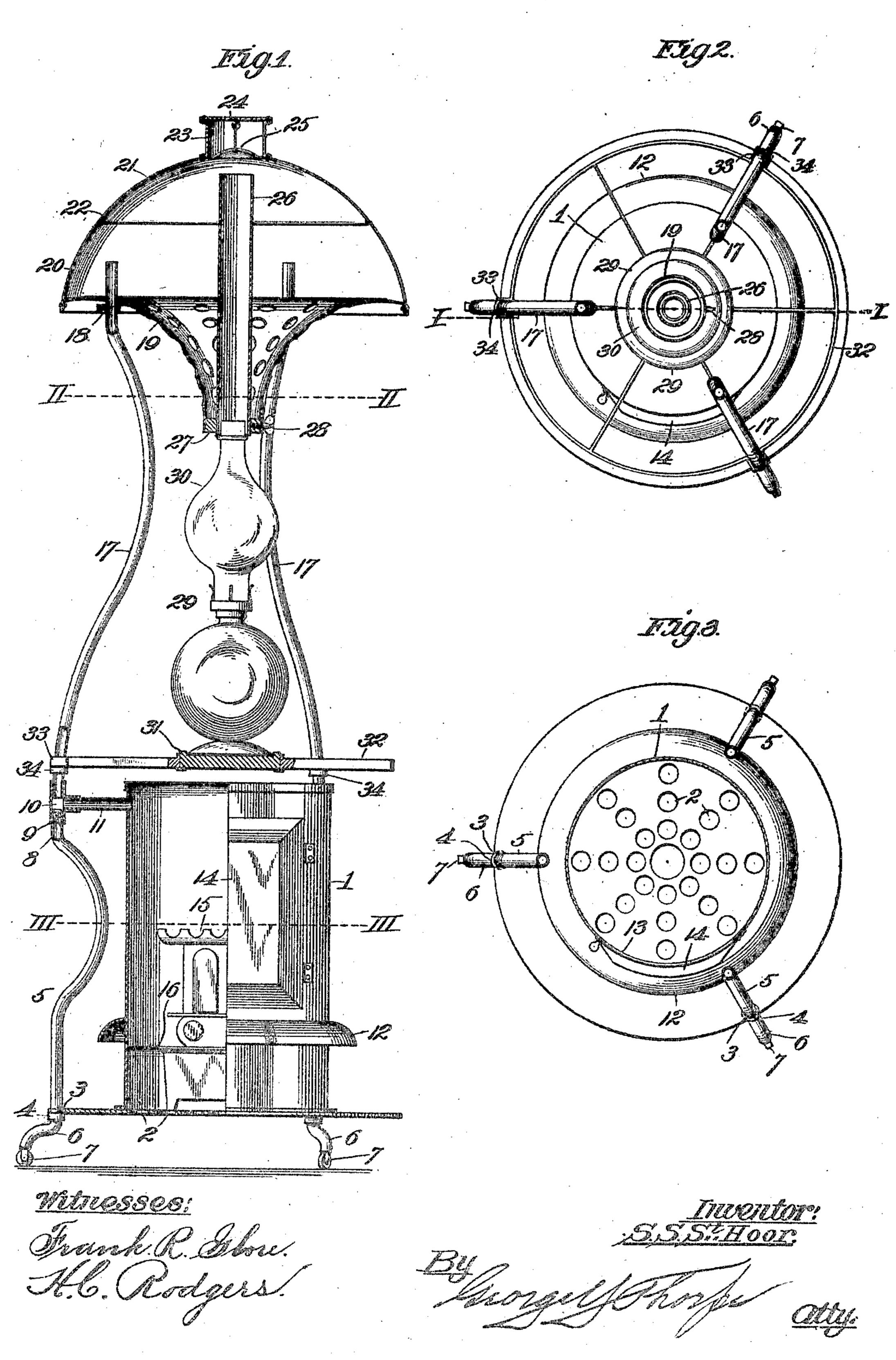
S. S. ST. HOOR.

COMBINED HEATING AND ILLUMINATING DEVICE.

APPLICATION FILED MAY 17, 1905.



## UNITED STATES PATENT OFFICE.

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## COMBINED HEATING AND ILLUMINATING DEVICE.

No. 811,591.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Samuel S. St. Hoor, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in a Combined Heating and Illuminating Device, of which the following is a specification.

This invention relates to combined heating and illuminating devices, and has for its object to produce a device of this character whereby a room may be illuminated and such room and others heated economically.

A further object is to produce a device of the character named which is of ornamental and attractive appearance and is of simple, strong, durable, and inexpensive construction.

To these ends the invention consists in certain novel and peculiar features of construction and organization, as hereinafter described and claimed, and in order that it may be fully understood reference is to be had to the accompanying drawings, in which—

on the line I I of Fig. 2. Fig. 2 is a horizon-tal section on the line II II of Fig. 1. Fig. 3 is a horizontal section on the line III III of Fig. 1.

Fig. 1. In the said drawings, 1 indicates a casing cylindrical in form, as shown, or of any other suitable or preferred configuration and having its bottom perforated, as at 2, and provided at a plurality of equidistant points with pe-35 ripheral notches 3 and coincidental therewith resting on the collars 4, secured on the standards 5, said standards being preferably of tubular metal and bent to any ornamental shape desired. The lower ends of the stand-40 ards are preferably bent outward and form legs 6, equipped with casters 7 or other rollersupports to facilitate moving from one part of the room to another. The upper ends of the standards terminate in short vertical por-45 tions 8, plugged, as at 9, by preference, and secured in the depending arms of T-couplings 10, the stems of said couplings being connected by the radial pipes 11 to the upper

ing and forming a foot-rest or support.

Above said annulus the casing is provided with a large door-opening 13, controlled by

end of casing 1.

a suitable door 14, to give access to the interior of the casing for the purpose of placing 55 therein or removing therefrom a suitable heater—for instance, the oil-heater 15. The preferred type of heater will be that known as a "center draft," and where such a heater is used the casing will be provided with a 60 flange 16, projecting inwardly to the heater and forming a partition which will prevent the hot air impinging upon the reservoir portion of the heater.

17 indicates pipes preferably describing 65 graceful curves and provided near their upper ends with adjustable collars 18. An umbrella-shaped drum mounted upon said pipes and supported at the desired height by said collars consists of a perforated base 19 70 of small diameter at its lower end and flaring upwardly and outwardly to its upper margin, an upwardly-tapering body portion or ring 20, united rigidly at its lower end to the upper edge of the base, and a cap 21, the cap being 75 flanged inwardly at its lower margin, so as to provide a shoulder 22 to reliably seat upon the upper edge of the body portion. The cap is provided with a central dome 23, having a depending hook 24, from which is suspended 80 a bell or deflector 25, overhanging the upper end of a tube 26, extending slidingly through the collar 27, secured by set-screws 28 in the lower end of the base 19, said set-screw being capable also of impinging on the tube to pre- 85 vent the same from sliding downward when not in use.

29 designates a lamp having its globe 30 projecting up into the lower end of the tube 26 and normally supporting the latter, as 90 shown, though it is to be understood that the tube may be supported by the set-screw, if desired. The lamp rests upon the plate 31, of onyx, marble, or any other suitable material, secured in and forming the central portion 95 of a skeleton frame 32, provided with forked portions 33, embracing pipes 17 and resting upon the collars 34, secured upon said pipes.

When the device is to be used for illuminating purposes only, the cap of the drum is removed and the lamp used in the ordinary way. In the fall and spring of the year, when the mornings and evenings are chilly, the cap of the drum is secured in position as shown and the lamp lighted, so as to not only illuminate the room, but generate sufficient heat

to make the room comfortably warm. The passage of the products of combustion up through tube 26 and their concentration in the drum raises the air in the latter to a high 5 temperature, which air escapes through the perforated base in every direction and is disseminated throughout the room, this action creating and maintaining a circulation which in a very short time makes the room comfortable. In this circulation the cold air enters the casing through the perforations 2, passes out through pipes 11, and up through pipes 17 into the drum, where, as stated, it is heated and escapes into the room through the per-15 forated base 19. When the room is cold, the heater in the casing is employed, and when very cold is supplemented by the heat from the lamp, which incidentally provides the necessary light.

It will be obvious, of course, that the heater in the casing may be employed independently of the lamp and that any suitable type of heater may be employed—for instance, a gas-heater, in which case it should be con-25 nected by flexible tubes (not shown) to a gas-

supply.

From the above description it will be apparent that I have produced a device of the character described which possesses the de-30 sirable features of advantage enumerated and which may obviously be modified in its form, proportion, detail construction, and arrangement of the parts without departing from the essential spirit and scope or sacri-35 ficing any of the advantages of the invention.

Having thus described the invention, what I claim as new, and desire to secure by Let-

ters Patent, is—

1. A device of the character described, 40 comprising a casing provided with perforations in its lower portion, a suitable drum having its lower portion perforated, a conduit or pipeway communicating at its lower end with the upper portion of the casing and 45 at its upper end with said drum, means for adjustably supporting the drum upon said pipeway or conduit, and means for heating the air in said drum.

2. A device of the character described, 50 comprising a casing provided with perforations in its lower portion, a suitable drum having its lower portion perforated, a conduit or pipeway communicating at its lower end with the upper portion of the casing and 55 at its upper end with said drum, and a heater within the casing.

3. A device of the character described, comprising a casing provided with perforations in its lower portion and with a doorcontrolled opening, a suitable drum having 50 its lower portion perforated, a conduit or pipeway communicating at its lower end with the upper portion of the casing and at its upper end with said drum, and means for heating the air in said drum.

4. In a device of the character described, a suitable casing having its lower portion perforated, a drum suitably supported and having its lower portion perforated, a conduit or pipeway communicating at its lower end with 70 the upper portion of the casing and at its upper end with the drum, a lamp suitably supported and having its chimney arranged to discharge into the drum, and an adjustable tube arranged within the drum and having 75 its lower end externally embracing the upper end of the lamp-chimney.

5. In a device of the character described, a suitable casing having its lower portion perforated, a drum suitably supported and hav- 80 ing its lower portion perforated, a conduit or pipeway communicating at its lower end with the upper portion of the casing and at its upper end with the drum, a lamp suitably supported and having its chimney arranged to 85 discharge into the drum, a tube arranged within the drum and having its lower end externally embracing the upper end of the lamp-chimney, and a deflecting-bell suspended from the top of the drum and overhanging 90 the upper end of said tube.

6. In a device of the character described, a casing having its lower portion perforated, a drum having its lower portion perforated, a plurality of conduits or pipeways communi- 95 cating with the upper portion of the casing, and projecting upward into the drum, collars on the conduits or pipeways below the drum to support the latter, a lamp having its chimney arranged to discharge into the drum, and 100 a support for the lamp above the casing and supported by said conduits or pipeways.

7. A device of the character described comprising a casing having a perforated bottom, a drum having a perforated bottom, 105 pipes leading from the casing into the drum, a lamp supported by said pipes, and a tube adjustably secured in the bottom of the drum and passing up into the same and having its lower end encircling the top of the chimney 110 of the lamp.

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

SAMUEL S. ST. HOOR.

Witnesses:

H. C. Rodgers, G. Y. THORPE.