(No Model.)

H. RUPPEL.

OIL RADIATOR.

No. 588,780. Patented Aug. 24, 1897.

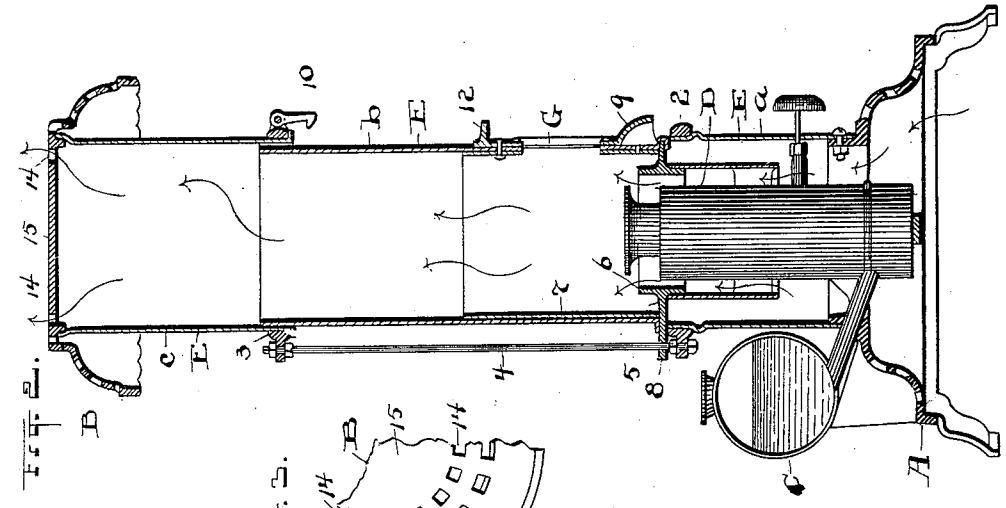


Fig. 2.

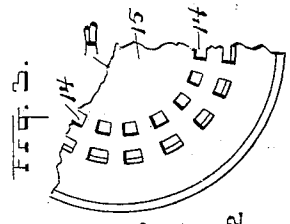


Fig. 1.

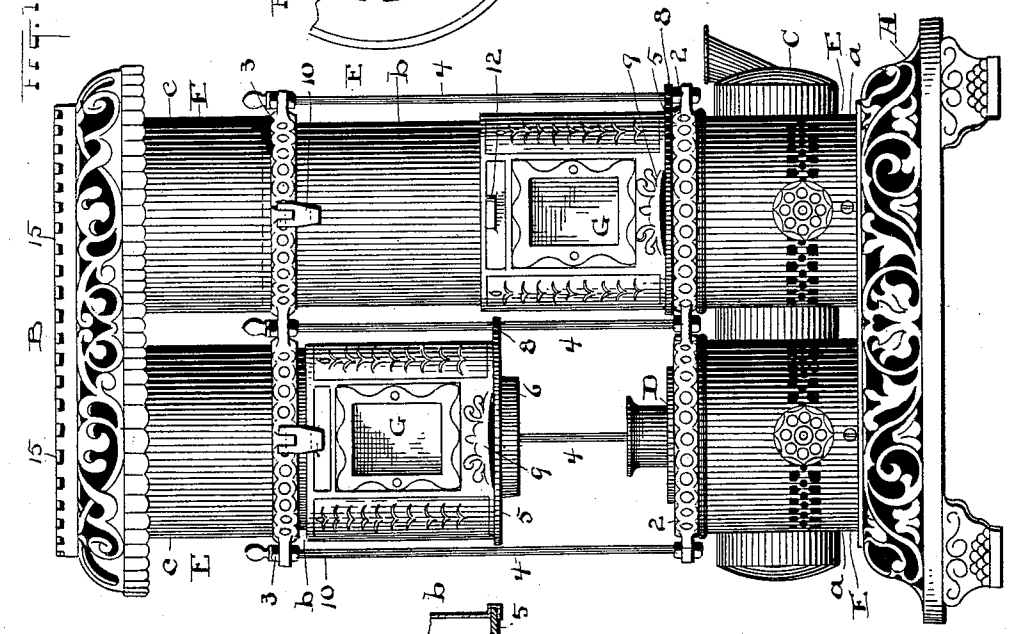
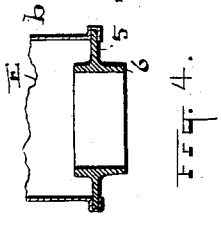


Fig. 4.



Attest

E. B. Moser

H. E. Maydra

Inventor.

Henry Ruppel

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HENRY RUPPEL, OF CLEVELAND, OHIO.

OIL-RADIATOR.

SPECIFICATION forming part of Letters Patent No. 588,780, dated August 24, 1897.

Application filed July 24, 1896. Serial No. 600,324. (No model.)

To all whom it may concern:

Be it known that I, HENRY RUPPEL, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Oil-Radiators; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to oil-radiators; and the invention consists in a radiator constructed and operating substantially as shown and described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a front elevation of a double radiator constructed according to my invention and showing one of the heaters closed as in use and the other open for lighting. Fig. 2 is a central sectional front to rear elevation of one of the heaters seen in Fig. 2, say the one on the right for the time is closed. Fig. 3 is a plan view of a portion of the top of one heater, showing the arrangement of the draft-holes in a circle and a central place to set a vessel to heat the same. Fig. 4 is a cross-section of the burner-collar and the casing and showing how they are connected, as hereinafter described.

In Fig. 1 two practically distinct and separate heaters or stoves are shown, though they are treated herein as constituting a single radiator, and I make up these radiators singly, in pairs, and even with three or more heaters in series, if preferred, and all supported on a common base A and provided with a common top B and intermediate connections, substantially as shown. An oil-supply tank C also is common to all the stoves or heaters of the series, and this tank is placed at the rear of and away from the burners, where it cannot heat and is not noticeable or in the way.

Each member of the series is provided with a wick-burner D, and these burners and the casings E therefore are preferably cylindrical in cross-section, and the said casing is in this instance built up in three successive sections *a b c*, one above the other. The section *a* immediately surrounds the burner and is bolted or riveted to a flange on the base A. An ornamental band 2 encircles this section about its top, and the top section *c* is encircled about its lower portion with an ornamental band 3, and stay-rods 4 at either side and rear engage through ears on said bands 2 and 3 and together form a support for the said upper section and the top B of the radiator.

The intermediate section *b* is longer than either of the others and rests at its bottom on the lateral flange 5 of the collar 6, which corners about the top of burner D and telescopes within section *c* at its top. Within the lower portion of this section *b* of the casing is a lining or sleeve 7, of some suitable refractory material, secured to said section and movable therewith, and the section *b* is secured to the flange 5, as clearly shown in Fig. 4, or some such way, so as to be made rigid and movable therewith, as is sleeve 7. The ears or perforated lugs 8 on flange 5 at one side and at the rear of each individual burner are adapted to slide on the corresponding rods 4, which serve as guides in raising and lowering the section *b*, as occurs when the burner is lighted. The handle 9 affords a grasp to raise the section, and the swinging hook 10 engages the projection 12 thereon and holds it up while lighting occurs, as seen at the left in Fig. 1. After lighting has been accomplished the section *b* is restored, as at the right in Fig. 1.

G represents a mica window at the front of the radiator.

The top B of the radiator is peculiar in this that it has a circular series of openings 14 about its top within the edge of the upper section of the casing for the escape of heat and products of combustion, and within these openings or holes is a solid flat portion 15, adapted to place a pot or vessel upon to be heated without obstructing said openings.

Each burner has its own means for turning the oil on or off, and by having two or more burners side by side in this way the volume of heat can be controlled by turning out to diminish the heat and turning them on to increase the heat, and thus the objectionable practice of running a burner low to reduce the volume of heat is avoided. In this construction each lighted burner is burned at the best advantage for perfect combustion so as

to avoid odor, and then as more heat is wanted more burners are turned on, and with the result of odorless combustion.

The so-called "collar" 6 in fact forms part of the burner and necessarily is raised and removed in the present structure to enable access to be had to the wick. This burner-collar is secured to the middle section and forms the bottom thereof and is up out of the way when the said section is raised, as in Fig. 1.

What I claim as new, and desire to secure by Letters Patent, is—

1. A radiator comprising a base provided with a burner, upright rods carried by the base, and a combustion-chamber arranged above the burner and consisting of a top casing supported by the rods and an intermediate movable casing telescopically arranged in the top casing, and a burner-collar secured to the lower end of the intermediate casing and adapted to engage the rods so as to guide the lower end of said casing, substantially as described.

2. A radiator comprising a base provided with a burner, upright rods carried by the base, and a combustion-chamber arranged above the burner and consisting of a top casing supported by the rods and an intermediate movable casing telescopically arranged in the top casing, and a burner-collar secured to the lower end of the intermediate casing and provided with perforated ears adapted to engage the rods so as to guide the lower end of said casing, substantially as described.

Witness my hand to the foregoing specification this 9th day of July, 1896.

HENRY RUPPEL.

Witnesses:
H. T. FISHER,
R. B. MOSER.