J. BARON.

HEAT DISTRIBUTER.

APPLICATION FILED OCT. 26, 1918.

1,304,728.

Patented May 27, 1919.

Fig. 1.

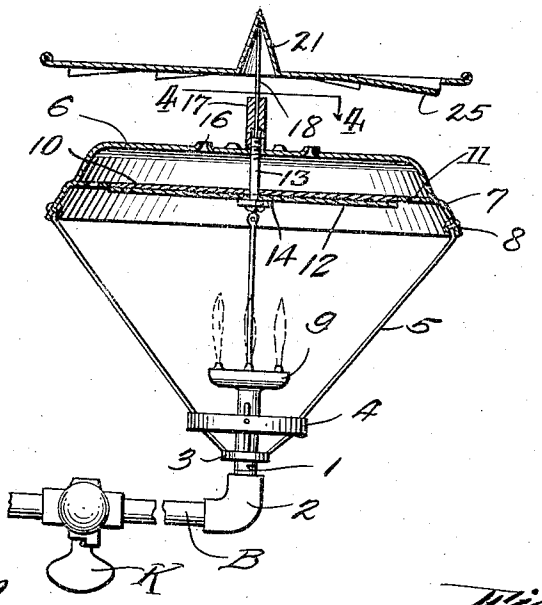


Fig. 2.

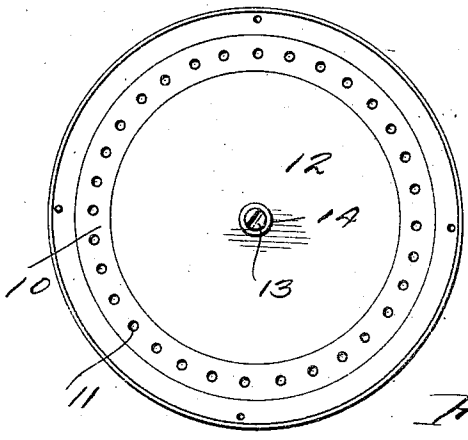


Fig. 3.

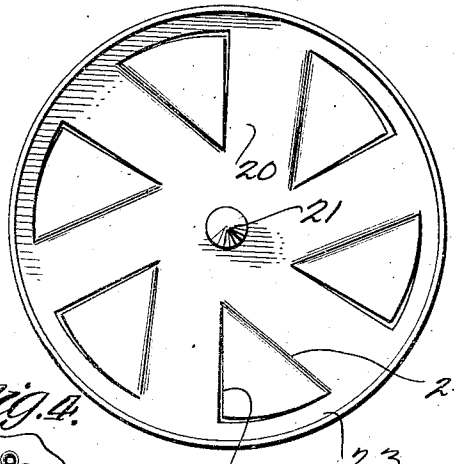
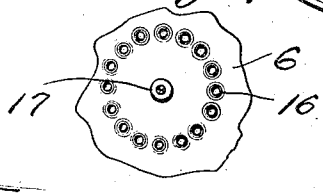


Fig. 4.



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UNITED STATES PATENT OFFICE.

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HEAT-DISTRIBUTER.

1,304,728. Specification of Letters Patent. Patented May 27, 1919.

Application filed October 26, 1918. Serial No. 259,819.

To all whom it may concern:

Be it known that I, JOSEPH BARON, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Heat-Distributers, of which the following is a specification.

This invention relates to heaters particularly for use on a gas jet, and more especially to means for distributing the heat therefrom throughout the room; and the object of the same is to produce an attachment for carrying out this end.

While the invention may be used with heaters of a number of forms, I also employ a special form of heater in this connection forming part of the invention.

Details are set forth in the following specification and claims, and reference is made to the drawings, wherein—

Figure 1 is a vertical section through this complete device.

Fig. 2 is a bottom plan view of the so-called bell with the partition in place.

Fig. 3 is a top plan view of the propeller or fan.

Fig. 4 is a sectional detail on the line 4—4 of Fig. 1.

My invention may well be applied to an ordinary gas bracket B having the usual key K, either by slipping its burner 1 over the burner ordinarily in place, or screwing it into the elbow 2 as shown. Around the burner is a collar 3 and above it a second and larger collar 4, and wires or rods 5 radiating from the lower collar through the upper are connected at their upper ends with a dome or bell. The latter has a flat top 6 and a flaring wall provided with an annular shoulder 7, beneath which it also has a flaring skirt 8 to which the wires are attached. The burner is indicated by the numeral 9 and I do not wish to be limited in its construction. The latter depends considerably upon whether or not natural or artificial gas is consumed, or in fact whether this fluid be something else.

Within the bell I dispose a disk-like partition 10 perforated in a ring around its edge as shown at 11, and beneath this partition is an asbestos disk 12 which is of such size that it exposes the perforations. The periphery of the partition bears upward against the shoulder 7, and a screw 13 passes through a washer 14 and then through the asbestos disk and partition for holding the parts assembled. The top 6 of the bell has a series of perforations which are preferably disposed in the form of a ring as seen at 16 rather closely surrounding its center, from which latter rises a boss 17 internally threaded so that the screw 13 may pass upward into it as shown in Fig. 1. The screw by preference carries a rod 18 passing upward through the boss and rising above the same. When this screw is inserted and tightened the partition and the asbestos are held within the bell, and the heat rising from the burner will spread outward over the asbestos and flow upward first through the perforations 11 then collect in the space between the two flat sheets and flow inward and upward through the perforations 16.

My distributer proper is made in the form of a propeller or fan, perhaps best seen in Fig. 3. It comprises a circular body 20 having a conical cap 21 rising from its center and resting on the tip of the rod 18; and the body is cut with a number of L-shaped incisions 22 radiating from its center to rim, where a ring 23 is left uncut, and then each wing so cut out is bent down at a line 24 to produce blades or flukes as indicated at 25 in Fig. 1. Attention is invited to the fact that the narrow ends of these substantially triangular blades are innermost and they grow wider in their bodies toward the periphery. The heated air rising through the perforations 16 strikes the narrower ends and flows outward under the blades at the same time that it is escaping upward through the propeller. The result of this rise of hot air will be to cause the propeller or fan to rotate on the pin or rod 18 as will be clear. Its rotation I find by experiment throws the heat to quite remote parts of the room, so that the products of combustion rising from the perforations 16 do not quickly ascend to the ceiling and become lost, but are utilized throughout an apartment of considerable size.

When now a match is applied to the gas issuing from the burner 9 (as controlled by the key K) the flame ascends as seen in Fig. 1 and the products of the combustion first strike the disk. This causes them to flow horizontally outward so that they ascend through the perforations 11 and then flow inward and ascend through the perforations 16, finally rising through the openings and under the blades of the propeller as has already been described. The latter rotates

slowly upon the pin or supporting rod 18, so that the heat passes only partly through the propeller and considerable of it flows to remote parts of the room.

The foregoing description and the drawings have reference to what may be considered the preferred or approved form of my invention. It is to be understood that I may make such changes in construction and arrangement and combination of parts, materials, dimensions, et cetera, as may prove expedient and fall within the scope of the appended claims.

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent is:—

1. In a heater of the class described, the combination with a source of heat, a support rising therefrom, a bell having a perforated top standing above said source and a downwardly flaring skirt connected with said support and provided with a shoulder, and a perforated partition within the bell and having its edge contacting with said shoulder; of a screw passing upward through the partition and the top of the bell, a threaded boss engaging the upper end of the screw, and a distributer rotatably mounted above the boss.

2. In a heater of the class described, the combination with a burner, a collar around the same, a series of wires rising from said collar, a bell having a perforated top and a shoulder around its skirt, the latter being connected with said wires, a partition within the bell having perforations out of registry with those mentioned, a binding screw for holding the periphery of the partition against said shoulder, and a pin rising from said screw; of a distributer rotatably mounted on said pin.

3. In a heater of the type described, the combination with a burner, a support rising therefrom, a bell carried by the support and having perforations through its top, a partition mounted within said bell and having perforations, an asbestos disk underlying said partition, a washer under the disk, and a screw passing upward through the washer and disk and the top of the bell; of a boss upon said top and engaging the upper end of the screw, and a distributer above the boss.

4. In a heater of the type described, the combination with a burner, a support rising therefrom, a bell carried by said support and having perforations through its top, a partition mounted within said bell and having perforations, an asbestos disk underlying said partition, a washer under the disk, and a screw passing upward through the washer and disk and the top of the bell; of a boss on the top of the bell engaging the upper end of the screw, a pin rising from said screw, and a distributer rotatably mounted upon the pin above the perforations in the top, for the purpose set forth.

5. In a heater of the type described, the combination with a burner adapted to be mounted on a perforated gas jet, and a series of wires rising and radiating therefrom, a bell having perforations in its top and a boss rising from its center and containing a threaded socket, the skirt of the bell flaring downward and containing a shoulder; of a partition plate, its periphery resting against said shoulder, a screw passing upward through the partition and bell and into said boss, a pin rising from the screw, and a distributer mounted rotatably upon the pin.

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

JOSEPH BARON.

Witnesses:
HARRY BERLIN,
JESSE BERLIN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."