

April 29, 1930.

M. E. NORDAN

1,756,033

HEATING DEVICE

Filed Sept. 29, 1928

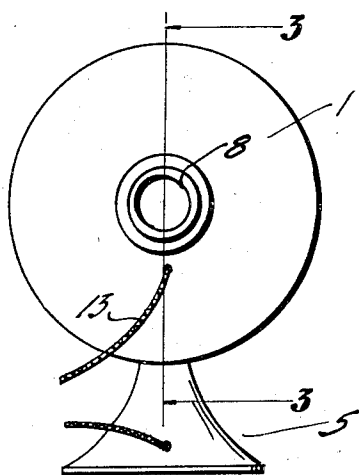


Fig. 1.

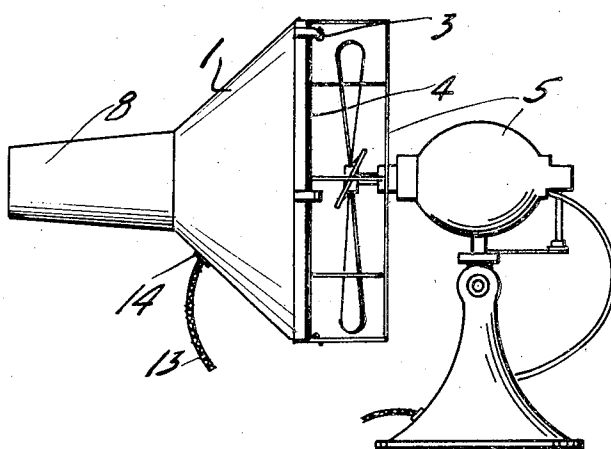


Fig. 2.

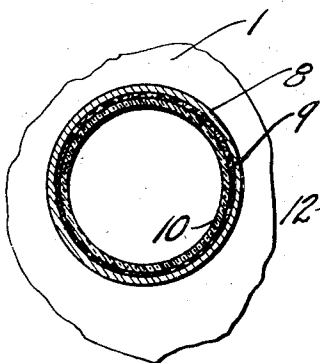


Fig. 4.

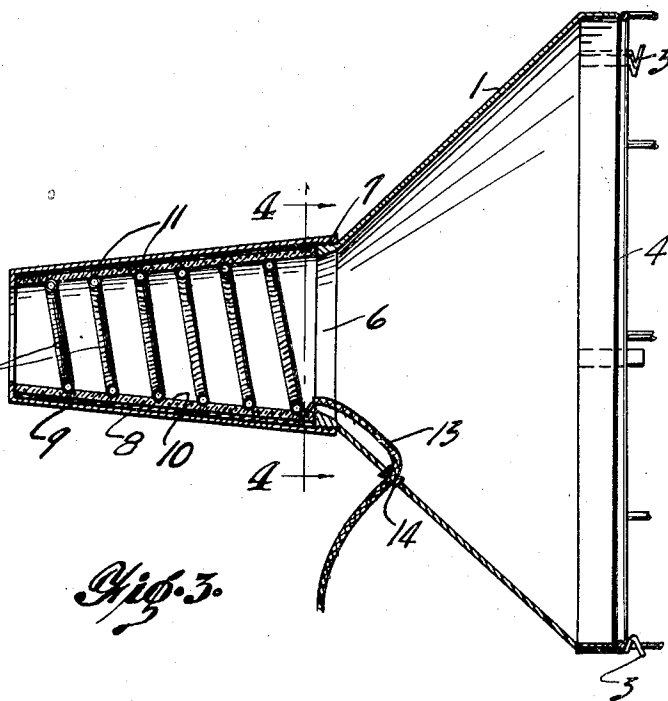


Fig. 3.

Inventor
Monte E. Nordan.

By Adam E. Fisher.

Attorney

UNITED STATES PATENT OFFICE

MONTE E. NORDAN, OF ST. LOUIS, MISSOURI

HEATING DEVICE

Application filed September 29, 1928. Serial No. 308,241.

This invention relates to heating devices of the electrically energized type and the main object is to provide a heater for attachment to an electric fan whereby the air forced from the fan will pass through an electric heating element causing a hot blast of air.

Another object is to provide such a device which is simple, durable and efficient and readily mounted upon any type of electric fan.

With these and other objects in view the invention resides in the novel construction and arrangement of the parts as hereinafter set forth and claimed.

In the drawing:

Figure 1 is a front view of the device mounted for use upon a fan.

Figure 2 is a side view thereof.

Figure 3 is an enlarged section on the line 3—3 of Figure 1.

Figure 4 is a section on the line 4—4 of Figure 3, partially broken away.

In carrying out the invention I provide a conical air collector 1 having around its flared mouth 2 a plurality of spring clips 3 adapted to releasably engage the wire guard 4 of a conventional electric fan 5. The convergent end 6 of the collector 1 is threaded as shown at 7 for the reception of the threaded end of the tapered tubular heater casing 8. This casing 8 is lined with asbestos or some analogous heat resisting or insulating material as indicated at 9 and a porcelain heater coil holder 10 is placed inside this lining 9, the arrangement being such that by unscrewing the casing 8 from the collector 1 the holder 10 may be withdrawn for replacing when necessary. This heating coil holder 10 is provided with an internal spiral groove 11 for the reception of the coiled resistance wire 12, the connections 13 of which are passed out through a bushing 14 in the air collector 1.

When the current is turned on the resistance wire 12 will heat so that air forced through the air collector 1 and heating element by means of the electric fan will be heated and discharged into the room. In this manner a continuous flow of air passes through the device, entering as cool air and being expelled as warm air so that a room

may be heated without setting up an objectionable draft of air.

While I have herein set forth a certain preferred embodiment of my invention it is understood that I may vary from the same in minor details, not departing from the spirit of the invention and within the scope of the appended claim.

I claim:

In a device of the kind described, a conical air collector formed with relatively steep walls and having a flared mouth adapted to receive a conventional electric fan, the convergent end of the air collector being threaded, a plurality of spring clips around the margin of the flared mouth for releasably engaging the wire guard of the fan, a tapered, tubular heater casing having its wider end threaded for engagement with the convergent threaded end of the air collector, the walls of the said heater casing being sloped at a decidedly less degree than the walls of the air collector, a heat resisting lining for the inner face of the casing, a dielectric coil holder, the same being spirally grooved upon its inner face, and a resistance element disposed within the said spiral groove of the coil holder.

In testimony whereof I affix my signature.
MONTE E. NORDAN.