

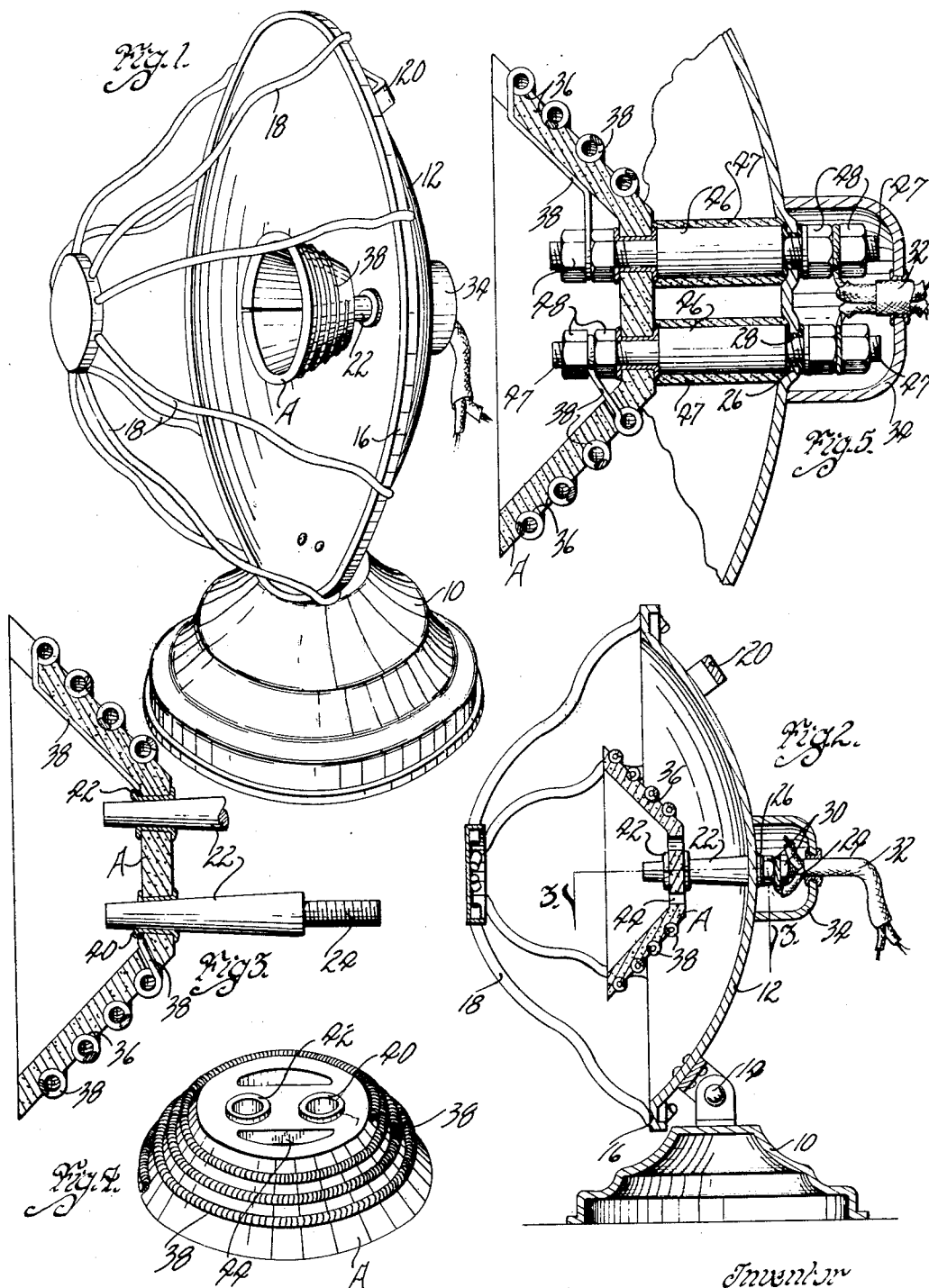
July 25, 1933.

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1,919,558

ELECTRIC HEATER

Filed May 28, 1930



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ELECTRIC HEATER

Application filed May 28, 1930. Serial No. 456,526.

The object of my invention is to provide an electric heater of simple, durable and comparatively inexpensive construction.

More particularly it is my object to provide a heating element of truncated cone-shape having an electric resistance wire mounted thereon and adapted to be supported relative to the reflector of the heater by a pair of terminal posts.

Still a further object is to provide a pair of terminal posts which serve as a means for detachably supporting the heating element and at the same time serve as conductors for forming an electric circuit to feed the resistance wire of the heating element.

Another object is to provide a pair of terminal posts having each of their ends contracted and threaded, whereby one end of each post may be bolted and secured to the reflector bowl and the other free end arranged to receive the heating element, and permitting the heating element to be bolted thereto.

With these and other objects in view my invention consists in the construction, arrangement and combination of the various parts of my device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claim and illustrated in the accompanying drawing. Although the invention is susceptible of a variety of embodiments, it is unnecessary to fully describe and illustrate more than one in order to give a full understanding of the invention both from its structural and functional standpoints. Accordingly, I have illustrated a preferred and desirable embodiment of the invention in the accompanying drawing, in which:

Figure 1 is a perspective view of my electric heater.

Figure 2 is a central, vertical sectional view through the same.

Figure 3 is a detail sectional view taken on line 3—3 of Figure 2.

Figure 4 is a perspective view of the heating element.

Figure 5 is a detail sectional view illustrating a slightly modified form of terminal post for supporting the heating element.

In the accompanying drawing I have used the reference numeral 10 to indicate generally a base or support upon which is mounted a reflector bowl 12. The reflector bowl 12 is secured to the base 10 by means of a pivotal connection 14 whereby the angle of the reflector or heater may be adjusted.

The reflector bowl includes a peripheral flange 16 upon which is mounted a wire guard structure 18, as clearly illustrated in Figure 1 of the drawing. A handle 20 is secured to the back side of the reflector 12. A pair of terminal posts 22 of slightly tapered outline are mounted in the reflector bowl 12. Each terminal post 22 is provided with a contracted and threaded end 24. The end 24 projects through openings 26, formed in the bowl 12. Each side of the openings 26 is provided with a washer 28 formed of insulated material. A pair of nuts are mounted on the threaded end 24. One nut is used for securely holding the post in position relative to the reflector 12 and the other nut is used for the electric wire connections. The nuts have been referred to by the reference numeral 30. The electric wire 32 projects through an opening formed in a housing 34.

The housing 34 is mounted on the back side of the bowl 12 and serves as a cover for the connections between the electric wire and the posts 22. Each post is connected with one side of the electric wire 32.

A heating element A formed of porcelain, or some other suitable non-conducting material, is provided. The element A is of truncated cone-shape and has a plurality of spirally arranged grooves 36 formed in its outer surface. A resistance wire 38 of coil shape is mounted within the grooves 36. One end of the resistance wire 38 is connected to an eyelet 40 and the other end to a similar eyelet 42. The eyelets 40 and 42 are mounted in the small end of the element A, and are adapted to receive the tapered ends of the terminal posts 22.

When the heating element as shown in Figure 4 is mounted upon the posts 22 there is completed an electric circuit with the resistance wire 38 in connection with the two

posts 22. The small end of the heating element A may be provided with a pair of openings 44 for permitting a draft for circulation therethrough within the heating element A.

In Figure 5 of the drawing, I have shown a slightly modified form of terminal post. In this form of device the posts are referred to by the reference numeral 46.

Each post has its ends contracted and threaded as at 47. Each end includes a pair of nuts 48. The posts are mounted within the reflector, substantially as disclosed in connection with the posts 22. The outer free ends of each post have the heating element A received upon their contracted ends. The nuts 48 are used for securely holding the heating element A onto the terminal post 46. The ends of the resistance wire 38 are wrapped around the contracted ends and retained by the outer nuts 48.

To insure against any accidental short circuits, insulating sleeves 47 or porcelain or other suitable material may be positioned on the terminal posts 46 between the reflector bowl 12 and the back wall of the element A.

It will be noted that in the form of device

shown in Figure 5 the heating element is supported by a pair of posts and bolted thereto. In Figure 2 contact and connection is obtained by forcing the heating element A onto the tapered posts 22.

Some changes may be made in the construction and arrangement of the parts of my device without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claims, any modified forms of structure or use of mechanical equivalents which may be reasonably included within their scope.

I claim as my invention:

A heater of the class described, comprising a metal reflector, a pair of shouldered terminal posts secured thereto by nuts, insulating sleeves through said reflector and against the shoulders of said posts and against said nuts, a truncated cone-shaped heating element having its smaller end adjacent the reflector, said element being detachably supported upon said terminal posts, said element including an electric resistance wire with its ends in contact with said terminal posts as and for the purposes stated.

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