To all whom it may concern:  
Be it known that I, LEROY M. TAYLOR, a citizen of the United States, residing at Brown's Court, in the city of Washington, District of Columbia, have invented a new and useful Chafing-Dish Heater and Support, of which the following is a specification.

My invention has for its object to provide an improved form of support and heater for chafing-dishes and other vessels, in which the heating-flame is distributed and utilized to the best advantage without permitting the flame to come into actual contact with the dish and tarnish or deposit carbon thereon.

A further object is to embody the essential elements of the device in the form of an attachment which may be made and sold as a separate article and attached to chafing-dish supports and heaters in common use.

In the accompanying drawings, Figure 1 is a sectional elevation of a chafing-dish support and heater, and Fig. 2 is a detached perspective view illustrating the more essential elements of the device forming the subject of my invention.

The main body of the support (illustrated in the drawings) is similar to that in general use and comprises a base A, formed of thin sheet metal, an upper dish-receiving rim B, and supporting-standards C, extending between the base and rim. On the base is a burner D, of the usual type, which may be filled with alcohol or other heating fluid.

1 designates a ring formed of thin sheet metal and adapted to rest upon the rim B. From the ring depends a tapering cylindrical shield or guard 2, which entirely incloses the space between the rim and base and protects the flame from side drafts. The lower edge of the guard may be spaced a short distance from the base to permit the entrance of the air necessary to support combustion, but preferably is in close contact with the base, openings 3 being formed in the latter to permit the passage of air. The ring 1 supports a sheet 4 of fine wire-gauze, against which the flame impinges and by which it is spread and evenly distributed throughout the entire area of said gauze.

The ring 1 serves to support a chafing-dish or other vessel, as indicated in dotted lines, the bottom of said vessel being immediately above the gauze, but not in actual contact therewith. To the top of the ring are secured pivot-ears 5 for lifting rings or handles 6. In using this device it is found that the flame will gradually and evenly heat the wire-gauze throughout its entire area, the gauze in some cases becoming incandescent. The gauze is made of very fine wire of fine mesh and prevents the passage of flame, so that the chafing-dish is not soiled or tarnished by contact with the flame. The necessary heat for cooking purposes is secured by radiation from the heated gauze, and as the distance between the gauze and the bottom of the dish is very small, the heat is all utilized and is distributed evenly throughout the bottom of the dish. When the dish rests upon the ring 1, it covers or incloses the space above the gauze and within the ring, and this space becomes filled with gases in a highly-heated condition and acting as a conductor between the gauze and the bottom of the vessel. The products of combustion will escape between the upper surface of the ring and the bottom of the chafing-dish or other vessel; but the space is at all times filled with gases and air, which pass through said gauze.

The thorough and even heating of the gauze is due in part to the cylindrical shield or guard 2, said shield preventing any drafts which would tend to sweep the flame from side to side and render its action uncertain and irregular. The air necessary to support combustion passes through the openings 3 in the base A, a continuous circular row of said openings being formed in the base, so as to afford an even supply around the burner.

The device may be employed in connection with a burner or chafing-dish support of any desired size or character, and the particular construction herein described and illustrated may be modified to suit any special requirement without departing from the spirit or sacrificing any of the advantages of my invention.

Having thus described my invention, what I claim is—

1. An attachment adapted for removable application to a chafing-dish heater, comprising an imperforate guard inclosing the burner and flame and forming at its upper end a support for the chafing-dish or other vessel, and
a sheet of wire-gauze supported by said guard and forming a heat absorbing and distributing medium.

2. An attachment for a chafing-dish support, comprising a metallic ring for the support of the chafing-dish or other vessel, a sheet of wire-gauze supported by said ring and adapted to act as a heat absorbing and distributing medium, and a depending guard carried by said ring and adapted for contact with the base portion of the support, said guard being adapted to inclose the space around the burner.

3. An attachment for a chafing-dish support, comprising a cylindrical burner-inclosing guard or shield adapted for contact with the base of the support, a metallic ring secured to said guard and serving as a dish-support, and a heat absorbing and distributing medium carried by the metallic ring and adapted for contact with the flame to provide a heat-radiating flame-interrupting surface.

4. The combination of the perforated base, a supporting-rim, legs or standards connecting the supporting-rim and the base, a burner carried by the base, a metallic ring adapted to be seated in said rim, lifting handles or rings on said rim, a tapering circular guard depending from said ring and adapted to inclose the burner, and a sheet of fine wire-gauze carried by said ring, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

LEROY M. TAYLOR.

Witnesses:

E. E. BOYLE,

J. ROSS COLHOUN.