

(No Model.)

H. A. SAWYER.  
Dish Heater.

No. 230,199.

Patented July 20, 1880.

Fig. 1.

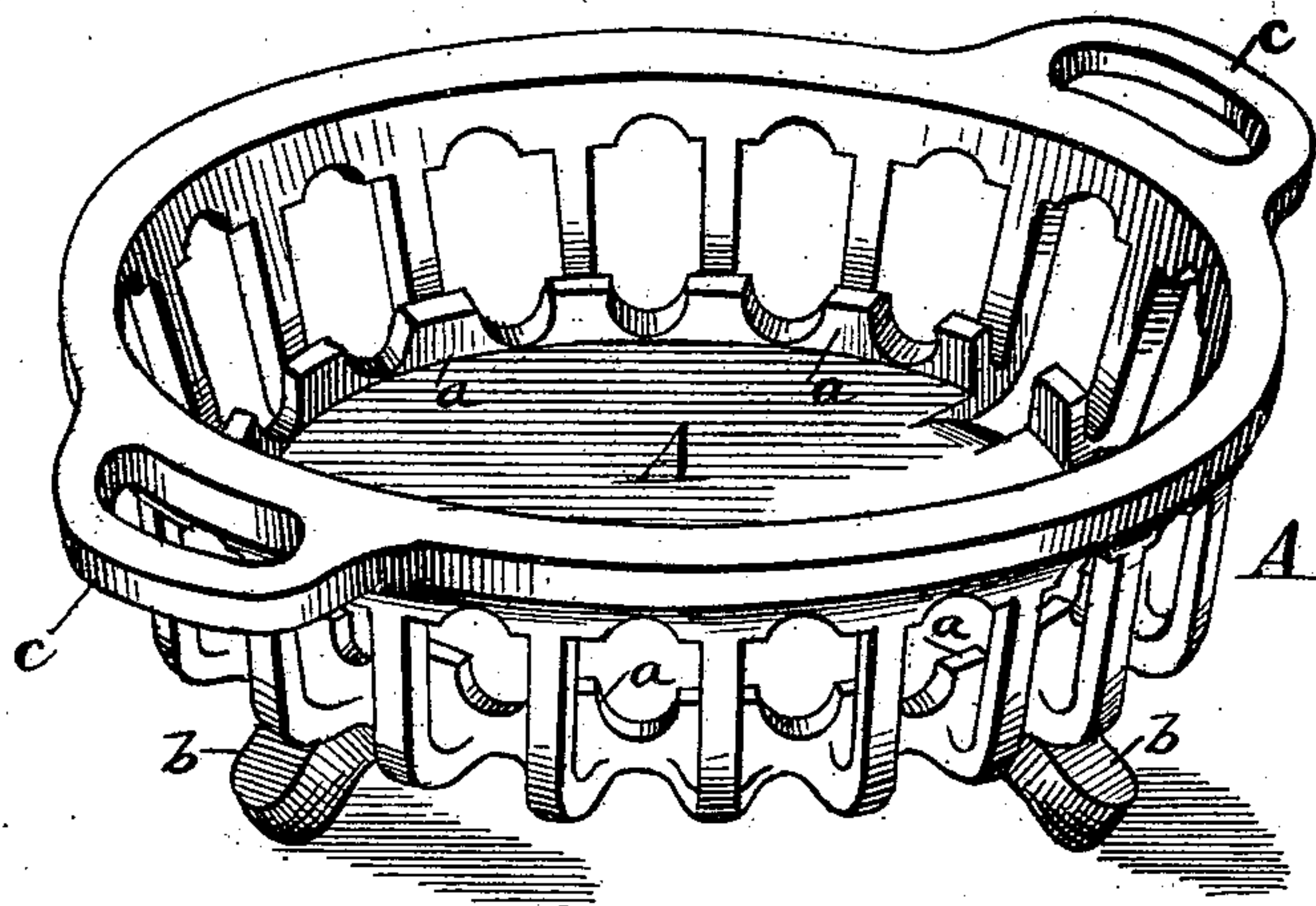


Fig. 2.

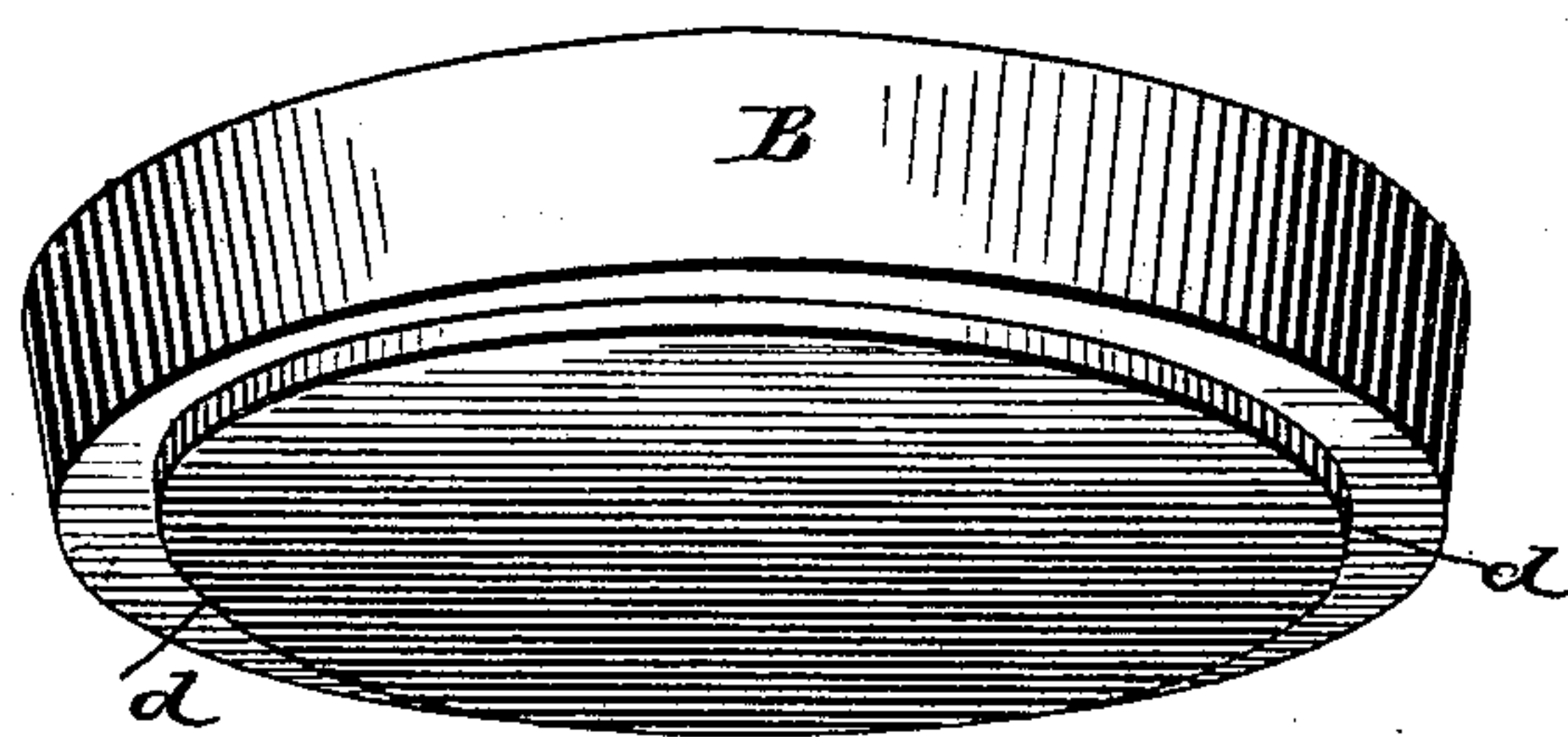
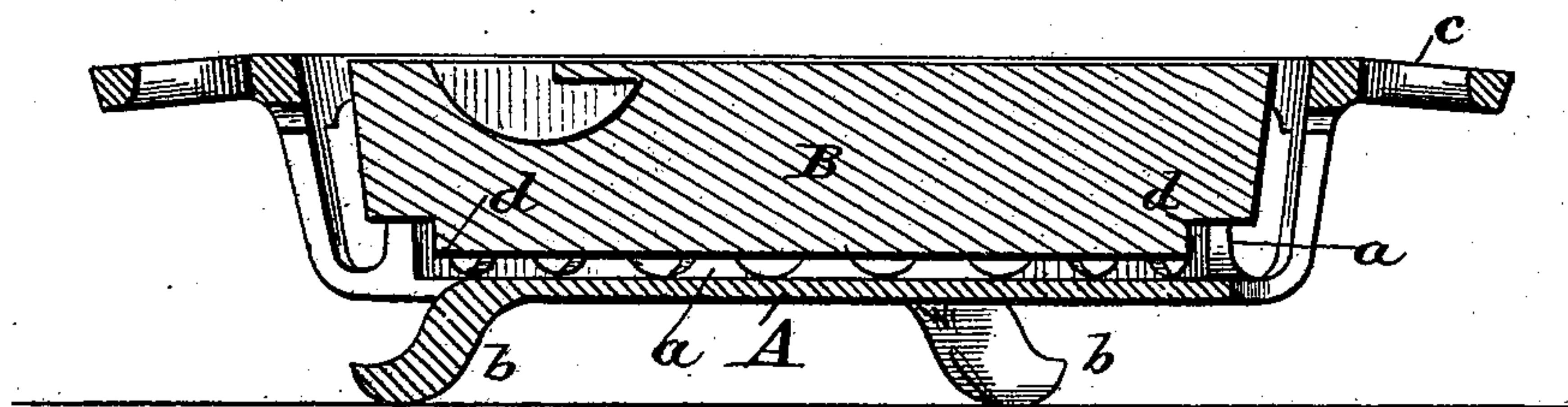


Fig. 3.



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# UNITED STATES PATENT OFFICE.

HARRIET A. SAWYER, OF ST. LOUIS, MISSOURI.

## DISH-HEATER.

SPECIFICATION forming part of Letters Patent No. 230,199, dated July 20, 1880.

Application filed April 30, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, HARRIET A. SAWYER, of the city of St. Louis, county of St. Louis, and State of Missouri, have invented certain  
5 new and useful Improvements in Dish-Heaters, of which the following is a specification.

My invention relates more particularly to that class of heaters in which a pre-heated block of metal or other suitable material is used  
10 as the heating agent; and it consists in such a construction of this block and the stand which supports it as insures the substantial insulation of the block from the stand, and prevents any burning or scorching of the table and  
15 such heating of the stand as would occasion inconvenience in handling it.

Figure 1 of the accompanying drawings is a perspective of the stand or support in which I place the heated block. Figure 2 is a perspective  
20 of the block as seen from the under side. Fig. 3 is a vertical cross-section taken through the center of the block and stand when they are placed together as in use.

The stand as I construct it consists of an  
25 open skeleton-frame with closed bottom, having formed upon it, within the outer frame, a series of lugs, *a a a*. It is also provided with suitable legs *b*, and ears or handles *c*.

The block has formed upon its bottom, near  
30 the outer edge, a shoulder, *d*, corresponding to the lugs *a* of the stand. This shoulder I form by a groove in the bottom of the block, which does not interfere with the block being brought in direct contact with the stove while being  
35 heated. When the block, after being heated, is placed in this stand the lugs will support it and prevent its coming in contact with the bottom of the stand, while at the same time these lugs, combined with the shoulder about the  
40 edge of the block, will prevent the block from coming in contact with the sides of the stand. The block is thus substantially insulated upon these lugs, and is prevented from communicating its heat to either the bottom or sides of the  
45 stand, which serves as a kind of guard about the block. By making a close bottom in combination with these lugs I prevent any scorching or blistering of the surface of the table, as this bottom forms a shield separated itself  
50 from the block by an air-space, and, having no

direct contact with the block, serves to intercept the heated rays from the table beneath.

The heated block is guarded on every side except the top, on which the dish rests, by the frame, which is separated from it by an air-  
55 space. The heat-rays rising from all parts of the block have uninterrupted access to the dish above.

The lugs could be formed into a solid ring and the sides of the stand be made solid, and  
60 still serve some of the purposes of my invention; but this would not only unnecessarily increase the weight and consume unnecessary material, but would cause a much larger amount of heat to be communicated to the  
65 stand, and especially to the upper part and handles, which the open frame-work seems in a great measure to insulate. The formation of a solid ring in place of the lugs would prevent a circulation of air beneath the block and  
70 render the bottom less effectual in shielding the table. It is obvious, too, that a slight inclination to the lugs or bevel to the edge of the block might be made to answer substantially the same purpose as the groove on the  
75 block, though it would be less convenient, as liable to bind and not so readily centered.

Metal or other suitable material may be used for the construction of both the block and stand. A more perfect insulation may be se-  
80 cured by making them, or the parts which come in contact, of material of different conductive powers.

The block is provided with a socket in its upper surface or with other suitable means for  
85 enabling it to be lifted into its place by an ordinary stove lever, handle, or other suitable appliance.

Both the block and frame may be made of any desirable shape and dimensions, to corre-  
90 spond with the dishes to be heated upon them.

I claim as my invention—

1. In a dish-heater, the combination, with the heating-block, of a supporting-frame provided with a series of lugs which serve to pre-  
95 vent the block from coming in contact with the bottom of said frame.

2. In a dish-heater, the combination, with the heating-block, of a supporting-frame the sides of which are substantially parallel with  
100

the sides of said block, and a series of lugs upon said frame, which serve to prevent contact between the sides of the block and frame.

3. In combination with the frame of a dish-heater provided with internal lugs to support the heating-block, a heating-block of less diameter than the interior of said frame and provided with a groove or rib near its bottom edge corresponding to said lugs and serving in connection therewith to prevent said block from coming in contact with the lateral walls of said frame.

4. The frame or support A, having open lateral walls, lugs *a*, to support the heating-block, with spaces between them to admit the free circulation of air between the block and the bottom of the frame, and a closed bottom, serving as a shield to the table.

5. In a dish-heater, the combination, with the heating-block, of a supporting-frame provided with a series of lugs which receive the block and support it out of contact with both the bottom and the sides of the frame.

6. In combination with the frame A, having internal supporting-lugs, closed bottom, and open lateral walls, the heating-block B, provided with a shoulder or groove upon its bottom edge to prevent its coming in contact with the lateral walls of said frame.

HARRIET A. SAWYER.

Witnesses:

MELVILLE SAWYER,  
MAY LEATHERMAN.