(Model.)

J. W. MELVIN.

HEATING FRAME FOR LAMPS.

No. 258,457. Patented May 23, 1882.

Fig. 1.

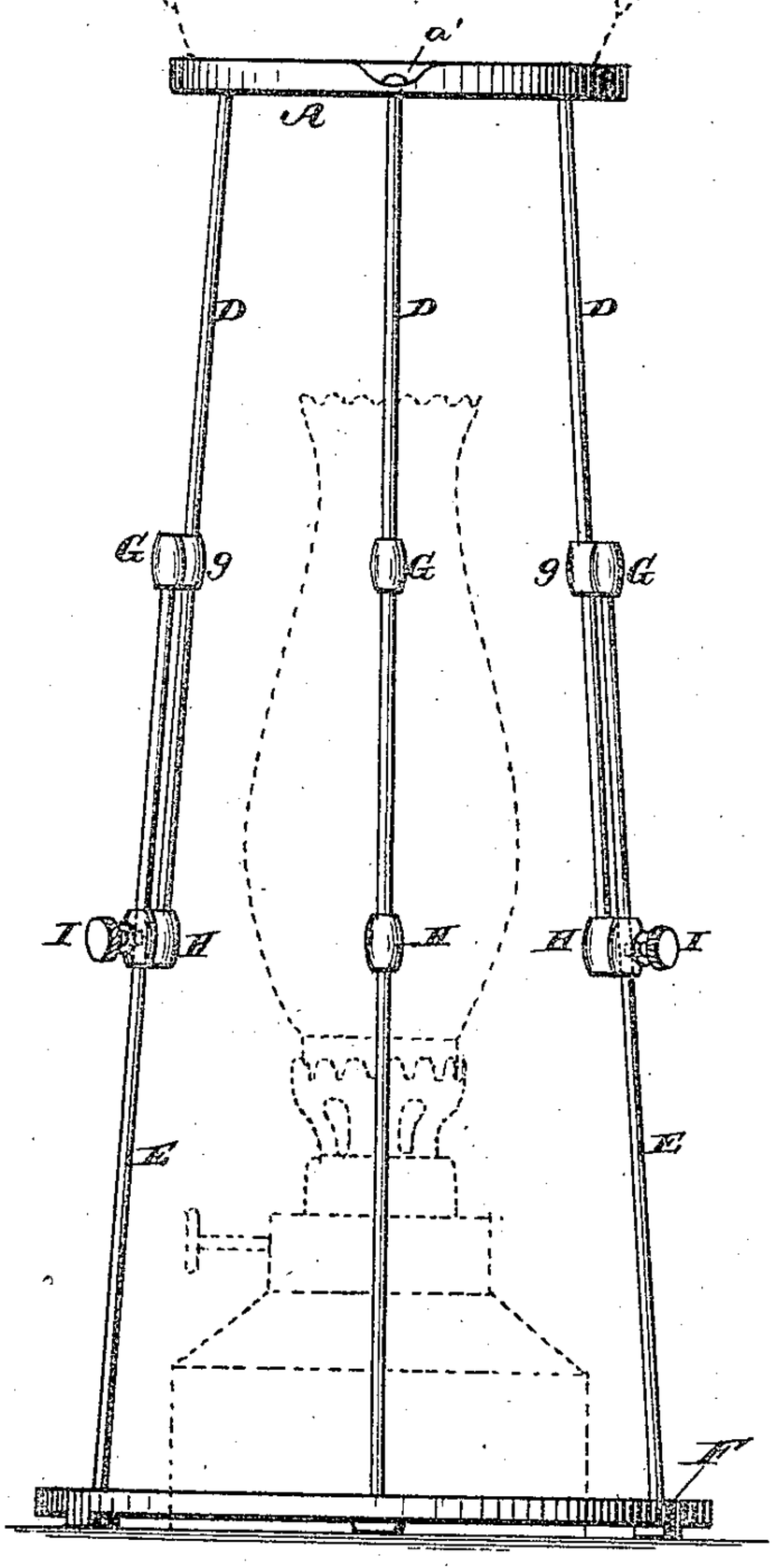


Fig. 2.

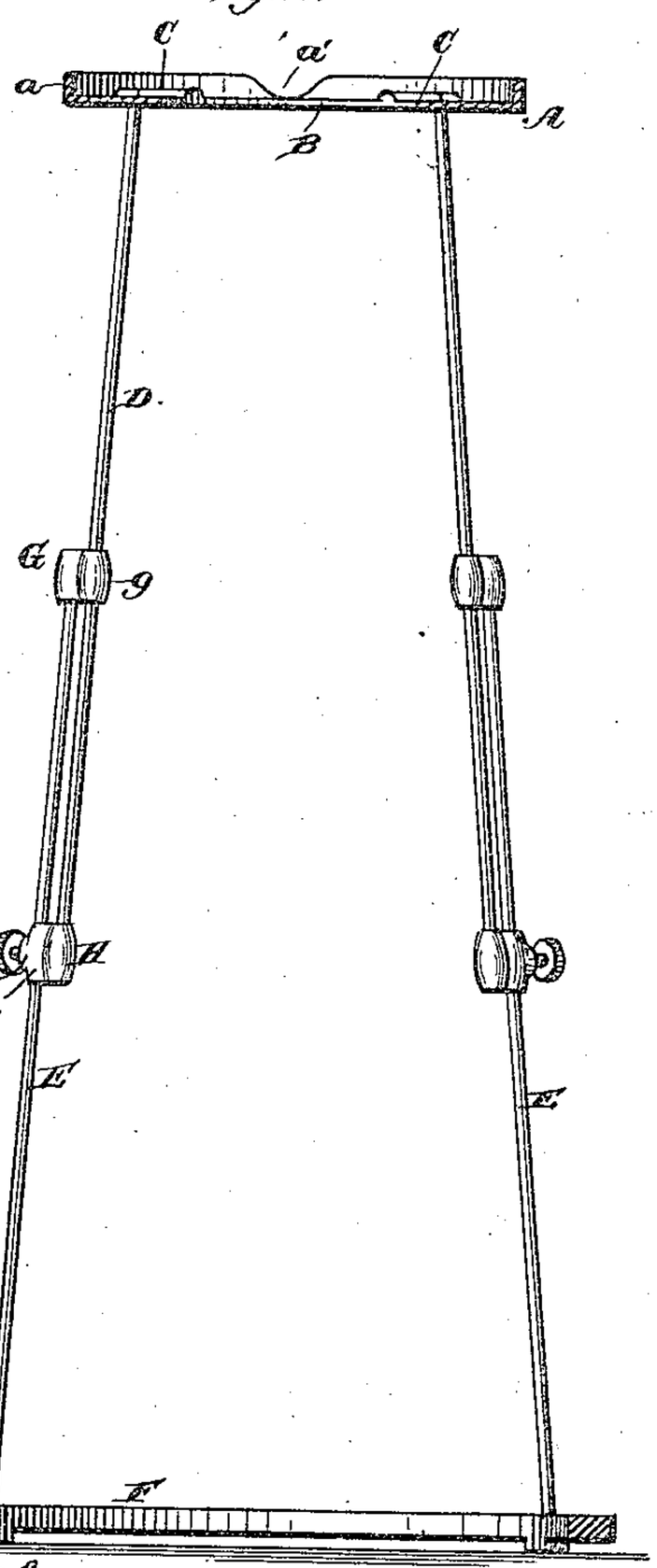
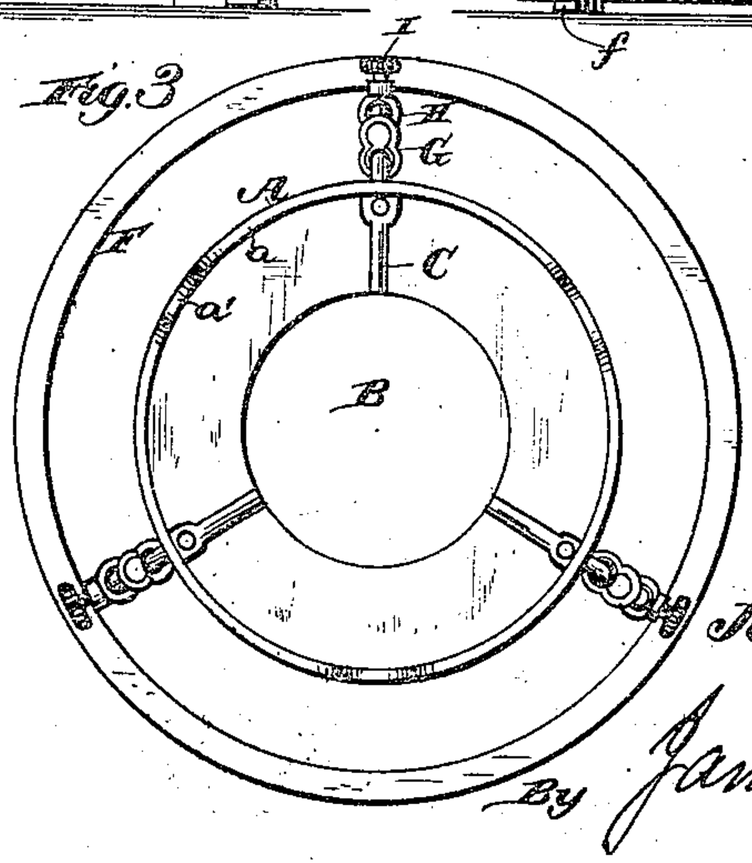


Fig. 3



Witnesses.
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UNITED STATES PATENT OFFICE.

JOSIAH W. MELVIN, OF HOUSTON, TEXAS.

HEATING-FRAME FOR LAMPS.

SPECIFICATION forming part of Letters Patent No. 258,457, dated May 23, 1882.

Application filed April 3, 1882. (Model.)

To all whom it may concern:

Be it known that I, JOSIAH W. MELVIN, a citizen of the United States, residing at Houston, in the county of Harris and State of Texas, have invented new and useful Improvements in Heating-Frames for Lamps, of which the following is a specification.

This invention relates to a stand or frame adapted to support vessels over a lamp having a chimney or globe, whereby the vessel can be conveniently heated and its contents warmed or cooked, as may be required.

Prior to my invention a stand or frame for such purpose has been constructed with a cast-metal ring for supporting the vessel, said ring being upheld by rods or legs that are received in sleeves, and adjusted therein by means of set-screws, so as to support the vessel at the proper height. In such instance the upper edge of the ring upon which the vessel rests is serrated. Lugs or projections extending up to the level of the upper edge of the ring are formed upon the inner side of the ring, and the supporting-rods are screwed into the said projections.

The object of my present invention is threefold, viz: first, to simplify and improve the adjustable supports for the top plate upon which the vessel is supported; secondly, to improve the construction of said top plate, so that vessels can be securely held thereon, and provision made for allowing the warm air to circulate both under and around the vessel, and at the same time providing suitable sockets for the supporting-rods; thirdly, to construct and combine the top plate and a base-ring with the supporting-rods in a firm, durable, and efficient manner. These objects I attain by means of the devices illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of the frame, with a lamp shown in dotted lines arranged below its top plate; Fig. 2, a vertical section; Fig. 3, a top or plan view.

Referring by letter to the several figures of the drawings, A indicates the top plate upon which the vessels to be heated are supported in an elevated position above the lamp. This top plate consists of a thin cast-metal disk formed with a marginal annular flange, *a*, which constitutes a guard for keeping the vessel in position upon the plate. This top plate is further formed with a central opening, B, for allowing the heated air from the lamp to pass up and come into direct contact with the vessel, and it is further formed upon its upper surface with a series of horizontal radial ribs, C, upon which the vessel rests, so that by thus supporting the vessel above the top surface of the plate a space will be left between the two for the circulation of hot air under the bottom of the vessel. The annular flange *a* is formed with the recesses *a'* extending from the top edge of the flange to the upper face of the plate, so that the hot air, after circulating freely under the entire bottom of the vessel, will pass out through said recesses in the flange and then circulate upward around the sides of the vessel, thereby subjecting the greater portion of its exterior to the action of heat. The support for this top plate consists of the upper and lower metal rods, D and E, arranged in sets of one pair each, the two rods of a set being held together by means of a slidable connection. The rods D of the upper set are reduced in diameter at their top ends and inserted in perforations formed through the radial ribs C of the top plate, so that the plate will seat upon the shoulders thus formed on the rods, the ends of the rods above said ribs being headed, thereby rigidly connecting the parts together. It is desirable to make the top plate quite thin, so that it can be rapidly heated, and hence the ribs C, while supporting the vessel above the plate, so as to leave a hot-air space between the two, will also thicken up the plate at their points of location sufficiently to form an increased bearing for the rods. The base-ring F at the bottom of the structure is provided upon its under side with the feet or lugs *f*, which rest upon the table or other support, and serve to maintain the frame in a level and steady condition. These feet also serve in one respect the same functions as the radial ribs of the top plate, since I perforate the base-ring at the points where such feet occur, and then pass the reduced lower ends of the lower set of rods, E, through such perforations, and head their extremities on the under side of the feet or lugs. This, it will be seen, affords an increased bearing for the lower rods. The lower set of rods are connected at

their upper ends with the upper set of rods by means of the socket-pieces G, that are fitted upon the lower set of rods, and each provided with sleeves *g*, through which sleeves the upper set of rods are arranged to slide. The lower ends of the upper set of rods are likewise fitted into socket-pieces H, that fit the rods, and are provided each with a sleeve, *h*. These sleeves, carried by the upper set of rods, fit upon and slide along the lower set of rods, G, each one of the sleeves being formed with a boss, *h'*, through which a thumb-screw, I, passes. By this arrangement it will be seen that the expense of tubes, which are also liable to become clogged by dust, is avoided, and that after loosening the thumb-screws the top plate, with the rods secured thereto, can be raised to the required height above the lamp, and then secured in such elevated position by tightening up the thumb-screws. The legs or supports for the top plate, which, as has been seen, consist of rods connected in pairs by slidable joints, spread out at the base, after the manner of the legs of a tripod. The base-ring is made sufficiently large to encircle the base of any lamp, which, when a vessel containing water or food is to be heated, is placed within the base-ring and below the top plate, as illustrated in Fig. 1.

What I claim is—

1. In a frame for supporting vessels above a lamp in position to be heated, the thin cast-metal top plate, A, formed with an annular marginal flange, and having upon its upper surface a series of horizontal radial ribs, C, upon which the vessel to be heated rests, the flange being recessed at intervals, and the plate being supported upon rods secured in its ribbed portions, substantially as described.

2. The combination, with the flanged cast-metal top plate, A, formed with a central opening and a series of radial ribs, C, of the two sets of supporting-rods D and E, and the metal base-ring provided with ugs *f* upon its under side, the upper set of rods being secured in the ribbed portions of the top plate, the lower set of rods being inserted in the base-rings where the feet or lugs occur, and both sets of rods being connected together by slidable connections, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOSIAH W. MELVIN.

Witnesses:
P. F. HARDCASTLE,
E. P. TURNER.