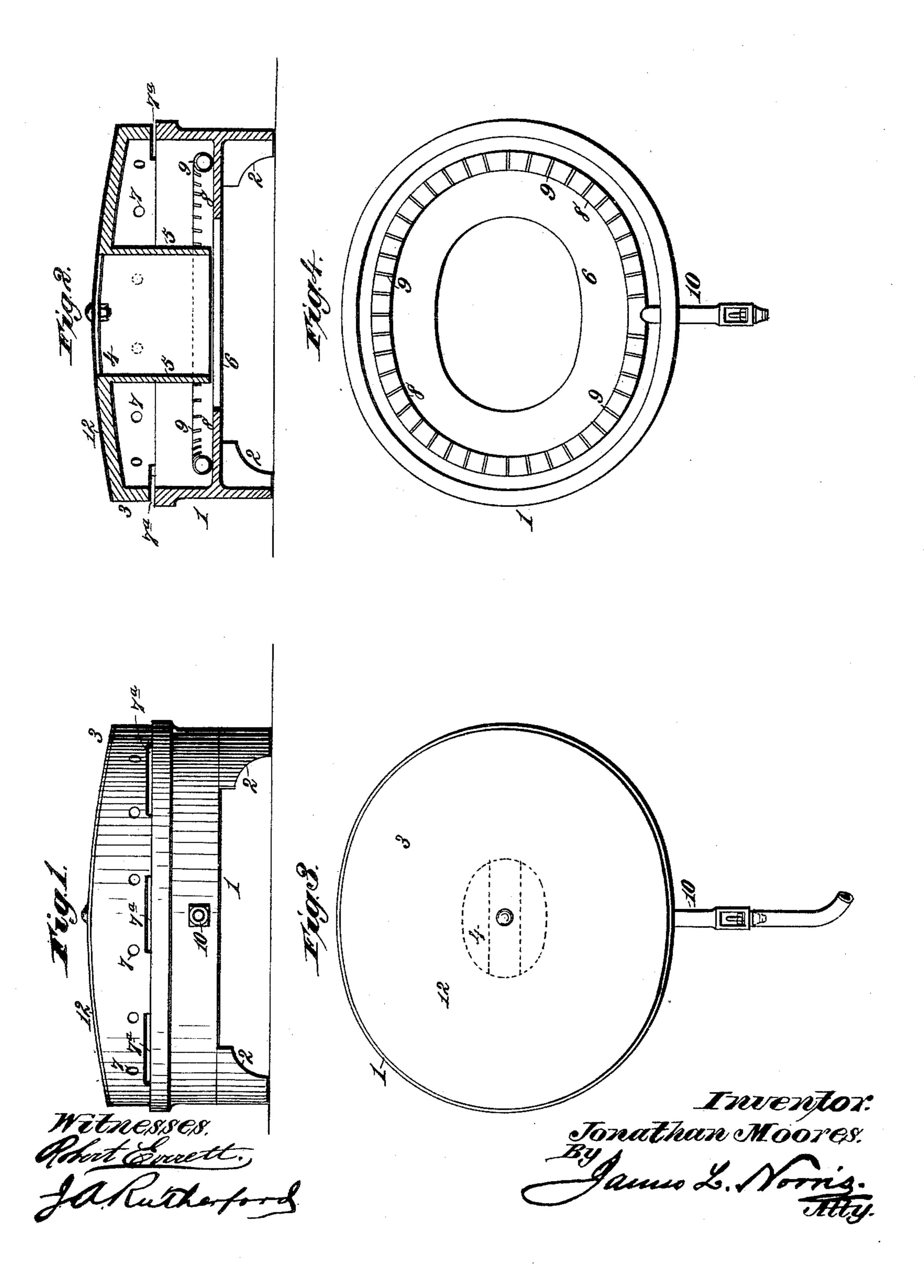
(No Model.)

J. MOORES. APPARATUS FOR HEATING HAT BRIMS.

No. 450,889.

Patented Apr. 21, 1891.



United States Patent Office.

JONATHAN MOORES, OF DENTON, NEAR MANCHESTER, ENGLAND.

APPARATUS FOR HEATING HAT-BRIMS.

SPECIFICATION forming part of Letters Patent No. 450,889, dated April 21,1891.

Application filed June 14, 1888. Renewed April 25, 1890. Serial No. 349, 578. (No model.) Patented in England April 28, 1887, No. 6,217.

To all whom it may concern:

Be it known that I, Jonathan Moores, a subject of the Queen of Great Britain, residing at Denton, near Manchester, in the county 5 of Lancaster, England, have invented a new and useful Improvement in Apparatus for Heating Hat-Brims, (for which I have obtained Letters Patent in Great Britain and Ireland, No. 6,217, dated April 28, 1887,) of ro which the following is a full, clear, and exact

specification.

My invention relates to apparatus for heating the under side of hat-brims for the purpose of curling and setting the same; and the 15 purpose thereof is to provide means whereby the hat-brim may be heated without danger of scorehing and burning the same, and whereby the process of curling and setting may be conveniently and expeditiously car-

20 ried out.

To this end the invention consists in the several novel features of construction and new combination of parts hereinafter fully set forth, and specifically pointed out and 25 defined in the claim following this specification.

Referring to the accompanying drawings, Figure 1 is a front elevation of an apparatus embodying my invention. Fig. 2 is a central 30 vertical section of Fig. 1. Fig. 3 is a plan view of the parts shown in Fig. 1. Fig. 4 is a plan view of the same, the top plate being removed.

In the said drawings, the reference-numeral 35 1 denotes a circular disk-shaped vessel, preferably composed of cast metal, and forming the base of the apparatus, said vessel being mounted upon suitable legs or brackets 2. Upon said base is mounted the top plate 3, 40 which may also be composed of cast metal. The plate 3 is provided with a central orifice 4, from the edge of which the flange 5" depends, its lower edge extending to a point in or nearly in the plane of the bottom 6 of the 45 base-plate 1. Atsuitable intervals in the vertical edge or flange of the top plate 3 are formed air-openings 7, and slots or channels 7° may also be formed at intervals in the edge i

of the flange which rests upon the perimeter of the base-plate 1. Arranged within the an- 50 nular space lying between the perimeter of the base-plate and the depending flange 5 is a circular tube 8, having slits 9 at frequent intervals. This tube is connected in any suitable manner to a gas-supply pipe 10, and 55 forms in connection therewith a Bunsen burner, in which the combustible element is preferably air and gas mingled together. Upon the exterior surface of the top plate 3 I lay a coating or stratum 12, formed of asbestus or 60 other non-combustible material. By the construction shown the heat generated by the Bunsen burner can be regulated with great nicety, the products of combustion passing out of the interior space laterally through the 65 apertures 7 or 7^a, or through both.

It is found in practice that the asbestus becomes heated sufficiently for the purposes specified without danger of injury either to the layer 12 or to the hat-brim laid thereon. 7° The hat may thus be laid thereon with the crown or body uppermost and left with the under side of the brim in contact with the hatplate until the operator is ready to remove it to subject it to the process of curling and set- 75

ting.

Having thus described my invention, what I claim is—

The herein-described apparatus for heating hat-brims preparatory to curling and setting 80 the same, said apparatus consisting of the cylindrical base 1, the top plate 3, provided with lateral orifices 7 and having in its top an opening 4, from which depends a cylindrical flange 5, the heating-tube 8, inclosed in the 85 cylindrical base and provided with openings 9, and a covering 12, of asbestus or non-inflammable material, on top of the top plate, substantially as and for the purpose described.

Intestimony whereof I affix my signature in 90 presence of two witnesses.

JONATHAN MOORES.

Witnesses: JOHN G. WILSON, WALTER GUNN.