## P. C. HEWITT.

VAPOR LAMP WITH CONCENTRATED RADIATION.

APPLICATION FILED MAR. 19, 1903.

966,203.

Patented Aug. 2, 1910.

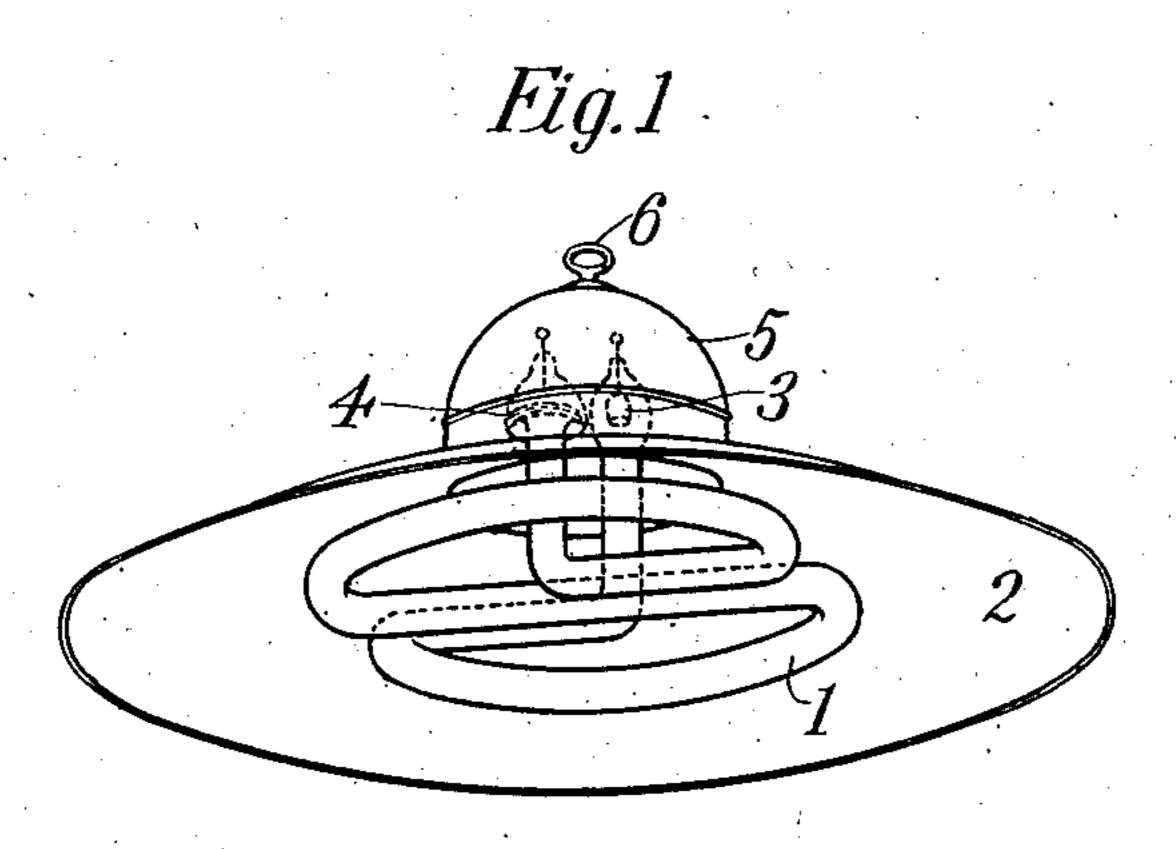
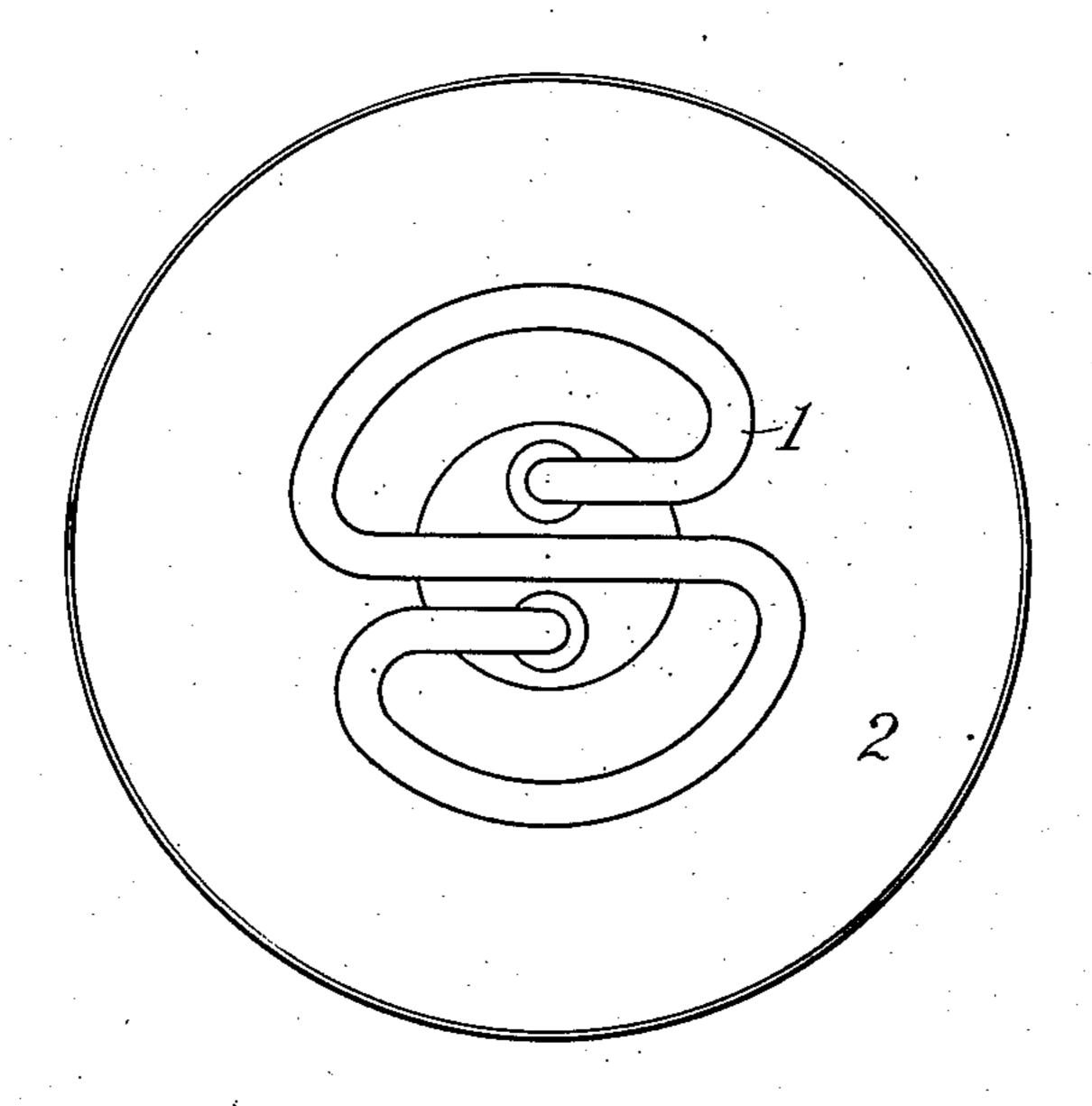


Fig. 2



Witnesses: Thos. H. Brown, fr. Wint Capel.

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## UNITED STATES PATENT OFFICE.

PETER COOPER HEWITT, OF NEW YORK, N. Y., ASSIGNOR TO COOPER HEWITT ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

VAPOR-LAMP WITH CONCENTRATED RADIATION.

966,203.

Specification of Letters Patent.

Patented Aug. 2, 1910.

Application filed March 19, 1903. Serial No. 148,503.

To all whom it may concern:

Be it known that I, Peter Cooper Hewitt, a citizen of the United States, and resident of New York, county of New York, State of New York, have invented certain new and useful Improvements in Vapor-Lamps with Concentrated Radiation, of which the following is a specification.

The gas or vapor electric lamp which is now well-known in the art has generally been constructed in such shapes and forms as would afford large surface of radiation in distinction from a compact or concentrated source of radiation. For example, these lamps have often been manufactured in the form of long transparent tubes wherein the inclosed gas or vapor is made luminous by the passage of electric current, extends through a suitable space, and does not approximate a light focus from which as a center the radiation takes place.

The present invention relates to a form of vapor lamp in which the radiation starts from a more concentrated source. One device by means of which the result above mentioned is accomplished is that of a reflector forming a unitary structure with the lamp itself. I prefer to so shape the lamp tube itself as to concentrate the surfaces from which the radiation emanates, as will presently appear.

The invention is illustrated in Figures 1 George H. Stockbridge.

and 2 which are, respectively, a perspective and a bottom view of one embodiment of this invention.

In the drawings, 1 is the vapor tube, and 2 is a reflector to which the ends of the tube are joined by any suitable means. The center surface of the reflector should be suitably polished and capable of reflecting the radiation thrown upon it in directions de-

ably polished and capable of reflecting the 40 radiation thrown upon it in directions determined by the curve on which the reflector is constructed. The electrodes 3 and 4 of the lamp are held within a cap, 5, and may be connected with the external circuit from 45 which the supply of current is obtained. An eye-piece, 6, secured to the top of the cap 5 may form a convenient means of at-

tachment to any suitable support.

I claim as my invention:

The combination with a vapor lamp of the character described, the tube of which is arranged in an S-shape and its terminals extending upward, of a reflector, and a hood or cover carried by the reflector and receiving the upwardly turned ends of the tube.

Signed at New York; in the county of New York, and State of New York, this 17th day of March, A. D. 1903.

PETER COOPER HEWITT.

Witnesses:

WM. H. CAPEL, GEORGE H. STOCKBRIDGE.