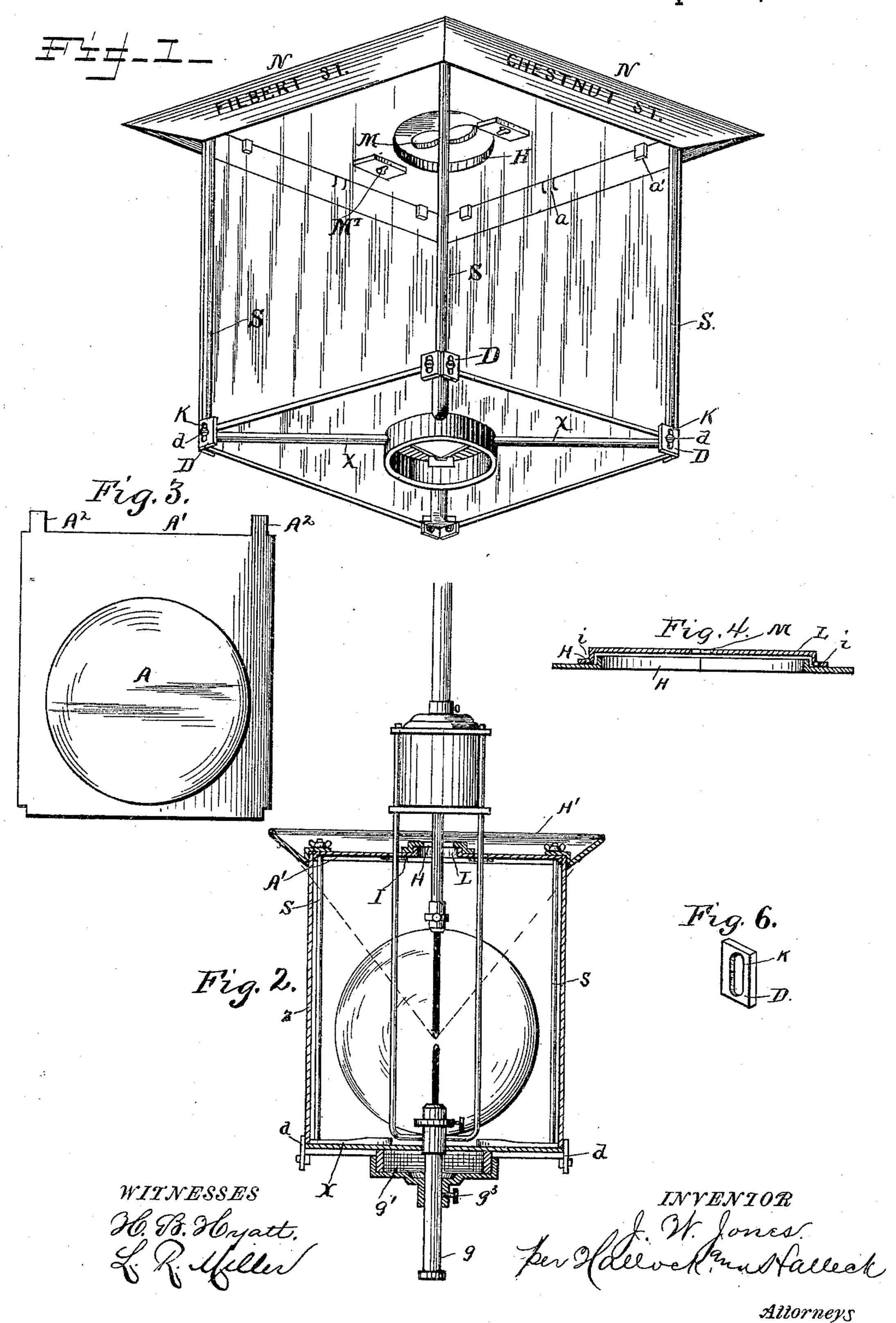
## J. W. JONES.

GLOBE FRAME FOR ELECTRIC ARC LIGHTS.

No. 411.448.

Patented Sept. 24, 1889.

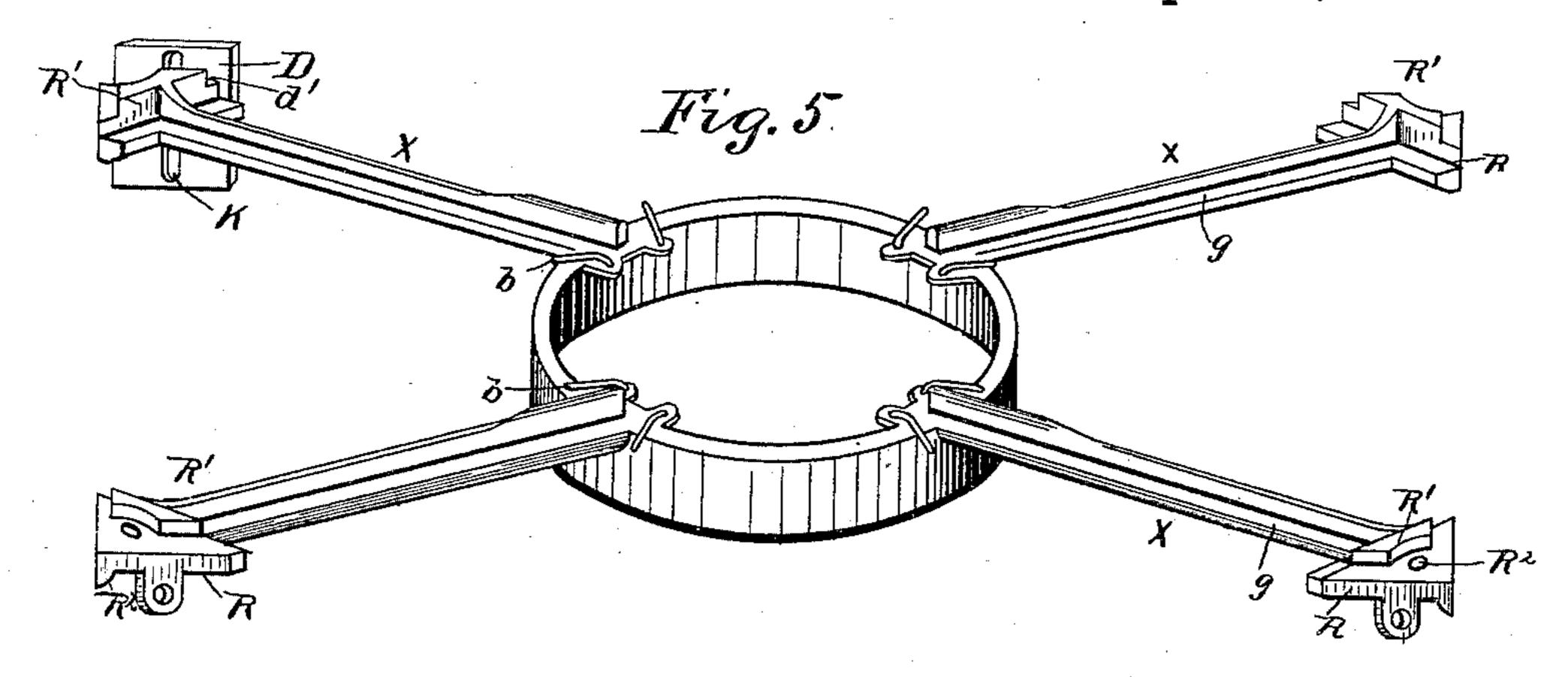


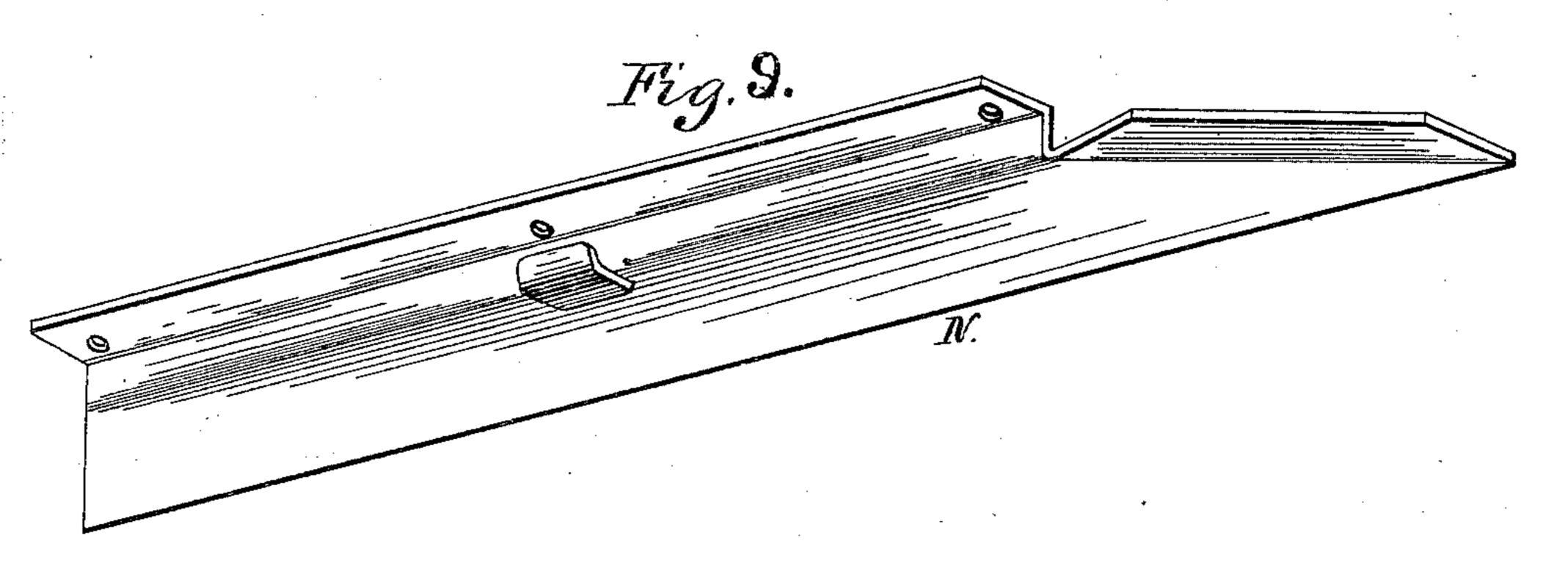
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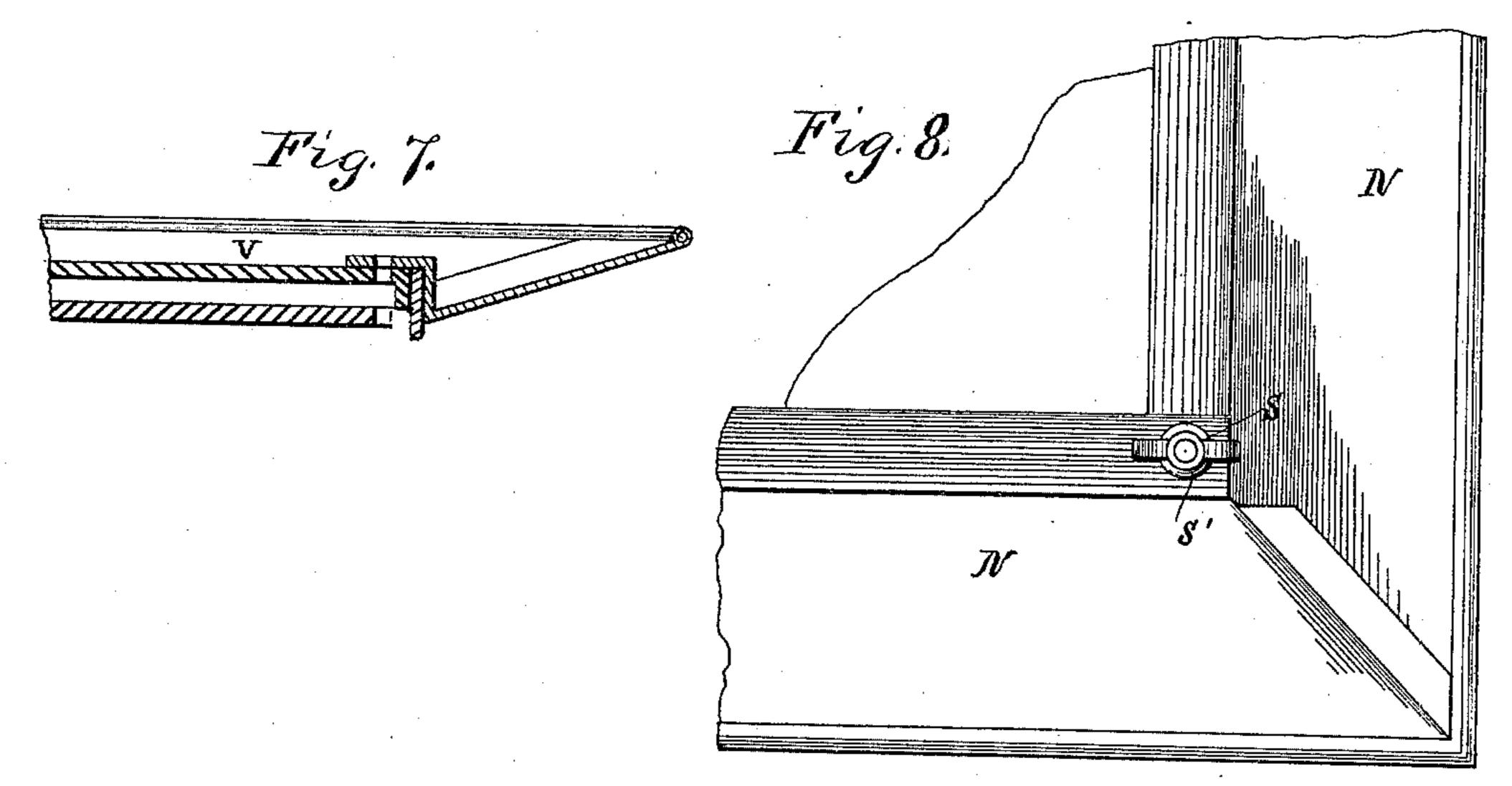
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WITNESSES 26. V. Holler L. Chiller

INVENTOR f. St. fones. perstallock mastalleek

## United States Patent Office.

JOSHUA W. JONES, OF HARRISBURG, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO DAVID HYMAN, OF SAME PLACE.

## GLOBE-FRAME FOR ELECTRIC-ARC LIGHTS.

SPECIFICATION forming part of Letters Patent No. 411,448, dated September 24, 1889.

Application filed August 29, 1888. Serial No. 284,046. (No model.)

To all whom it may concern:

Be it known that I, Joshua W. Jones, a citizen of the United States, residing at Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented Improvements in Globe-Frames for Electric-Arc Lights, of which the following is a clear, full, and exact description, which will enable skillful artisans to construct and use the same.

My invention relates to appliances adapted to electric lights, constructed to conduce to safety against fire and to be self-sheltering when exposed to weather, and specially adapted to illumine signs arranged thereon, as names of streets, business or other places, that the same may be legible and conspicuous at night by the aid of the electric light

shining on the face of the sign.

My electric-light globe-frame is built as an improvement or modification of that of David Hyman, whose application for patent was filed July 26, 1888, and serially numbered 281,157, my basal and top pieces of the frame being joined together by removable bolts, like the basal and top pieces of said frame, but they are provided with peculiar attachments for removably retaining the globe-sides without removing said bolts; also, provided with novel means for closing the top opening of the globe-so frame about the carbons and the holder-rods, as will be hereinafter described, and pointed out by the claims.

I obtain the objects of my invention by mechanism illustrated in the accompanying

35 drawings, in which—

Figure 1 is a perspective view of my invention detached from the carbon-holder and holder for the globe-frame; Fig. 2, a vertical section of globe-frame, disclosing the holder 40 for the carbons and said frame in perspective, except the attaching flanged plate, which is also shown in vertical section; Fig. 3, a front view of a metallic reflector adapted to be retained in the globe-frame in lieu of one 45 of the transparent sides thereof; Fig. 4, an edge view or vertical section of the top of the globe-frame provided with annular standard and a cap, to which are hinged the top-closing lids; Fig. 5, a perspective view of the 50 spider or basal frame of the globe-frame; Fig. 6, a like view of a pane-retaining plate adapted

to be attached to ends of the spider-arms; Fig. 7, a vertical section of joint of inclined sign-plate with the diaphragm-plate at top of globe, provided with side-retaining clip thereon; Fig. 8, a top view of a portion of the globe-frame top; Fig. 9, a perspective view of the sign-plate inverted.

Similar reference-letters denote similar parts throughout the several views and de- 60

scriptions.

In the description, W denotes the ring of spider or main frame composed of the central ring provided with diagonally-arranged arms X, formed with vertical faces R at their ex- 65 tremities, as shown, for all sides of the polygonal frame. A plate D, provided with the slot K, is attached by a screw d to each of said faces. Next the extremities of said arms are formed the abutments R', or squarely offset 70 shoulders, between which and said slotted plates are formed the grooves d' on each side of said arm, in which are secured the corners of the panes of glass or sides at their footends. The upper ends of said panes of glass 75 or sides are retained between clips or corrugated parts of the plates Q and the standards Q', arranged a little distance interior therefrom on the under side of the top plates. The rods S are arranged in the angles of the globe- 80 frame inside where the panes Z meet. Said rods are formed with heads at their lower ends, and are inserted in holes R<sup>2</sup> in the outer ends of the arms of the spider, thus bringing said rods to bear against the inner sides of 85 said panes or sides for strengthening them. The upper ends of said rods are screw-threaded and provided with nuts S', which bind the top sections of the globe-frame upon the upper edges of the panes of glass forming the 90 sides of the globe, each bolt being inserted through holes near the margins of said sections, as shown, thus uniting the lettered signs N together, and with the central diaphragm-plate V also embraced by the same 95 bolt. Upon said diaphragm-plate V of the globe-top is mounted fixedly the annular standard H, on which is sleeved or removably attached the annular cap H', to which are oppositely exteriorly hinged the folding lids L, roo near l. Said lids are adapted to compose the cap for the top aperture in said diaphragm-

plate, excepting at cut-aways at the meeting line of said lids at M and M'. Said lids open upward and afford room when open to remove the globe-frame by lowering it below the 5 carbon-holder. The lids, when said holder is in position, as shown in Fig. 2, fold close to yet free of the carbons and their supportingrods and shield the globe-frame against weather and to be safe to property. The lids 10 also shut off the light in rear of the signs to make the light more conspicuous on the letters or faces of the signs, as shown at N, Fig. 1. The under side of the globe-frame top, including said lids when closed, serves to re-15 flect the light centrally downward through? the transparent bottom of the frame.

My globe-frame for electric lights is adapted to be attached to the lower part of the carbon-holder by the ring W of the spider, united

20 therewith in any suitable manner.

The reflector A, Fig. 3, is adapted to take the place of one of the glass sides Z in the globe-frame. It is made with projections  $A^2$ at top near the corners, and a cut-away A' 25 between said projections, which latter serves to retain the reflector in the receptacles therefor in the globe-top and leave an opening at the cut-away portion to permit the light to shine therethrough upon the face of the sign, 30 that the name of the street or other design may be readily seen at night at a little distance from the sign by observers on the sidewalk.

I do not herein claim the particular means 35 shown in Fig. 2 for holding the lamp or lantern in the lower pencil-socket, nor the special form of ring and radial arms shown in Fig. 5, as those devices form the subject-matter of an application filed jointly by David 49 Hyman and myself on the 3d day June, 1889,

Serial No. 312,985.

I claim—

1. In an electric-light globe-frame, the combination of the basal frame W, provided with arms X, formed with lateral flanges g, and 45 having end abutments R, and having also the shoulders R' offset next their ends, with the plates D, attached to said abutments by screws d in slots K in said plates, and the sides Z, retained on said abutments by said plates 50 and between the parts Q.Q' on the under side of the globe-frame top by the aid of the bolts S, joining said basal frame to the top plates, substantially as and for the purposes set forth.

2. In an electric-light globe-frame, in com- 55 bination with a reflector A, made with the projections A<sup>2</sup> and the cut-away space A' between said projections and retained in position between the top and bottom parts of the globe-frame in lieu of a transparent side of 60 globe, substantially as and for the purposes

set forth.

3. In an electric-light globe-frame, the combination of the basal part W, adapted for supporting thereon the bottoms of the glass sides 65 of the globe in connection with the slotted plates D, secured in position by screws d, the diaphragm top plate V, provided with parts adapted for embracing the tops of said glass sides, the lids L, having parts cut away at M 70 M' and fitted to fold together free of the carbons, screw-rods connecting said basal part with said top plate, and means connecting detachably said basal part W with the carbonholder, so that the globe-frame may be readily 75 removed when said lids are opened, substantially as shown and described.

JOSHUA W. JONES.

Attest:

DAVID HYMAN, THEOPHILUS WEAVER.