

No. 709,023.

Patented Sept. 16, 1902.

J. W. LIEB, JR. & J. H. TYLER.
STREET SIGN ILLUMINATING DEVICE.

(Application filed Jan. 10, 1902.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

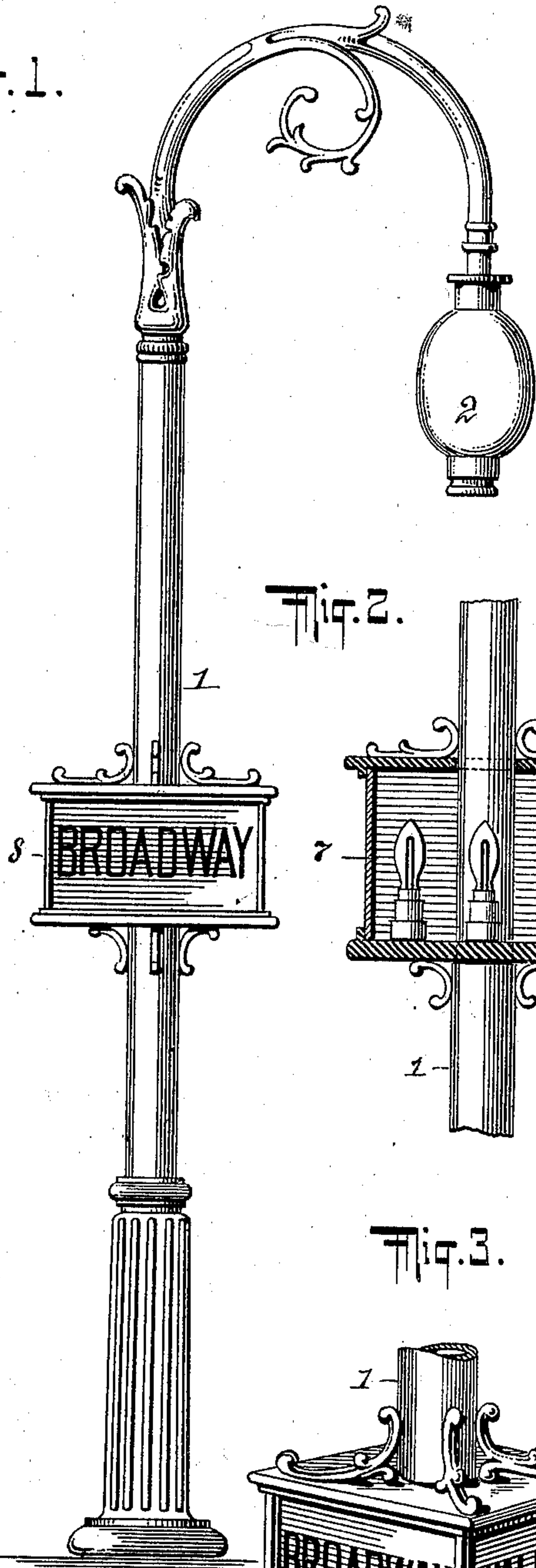


Fig. 2.

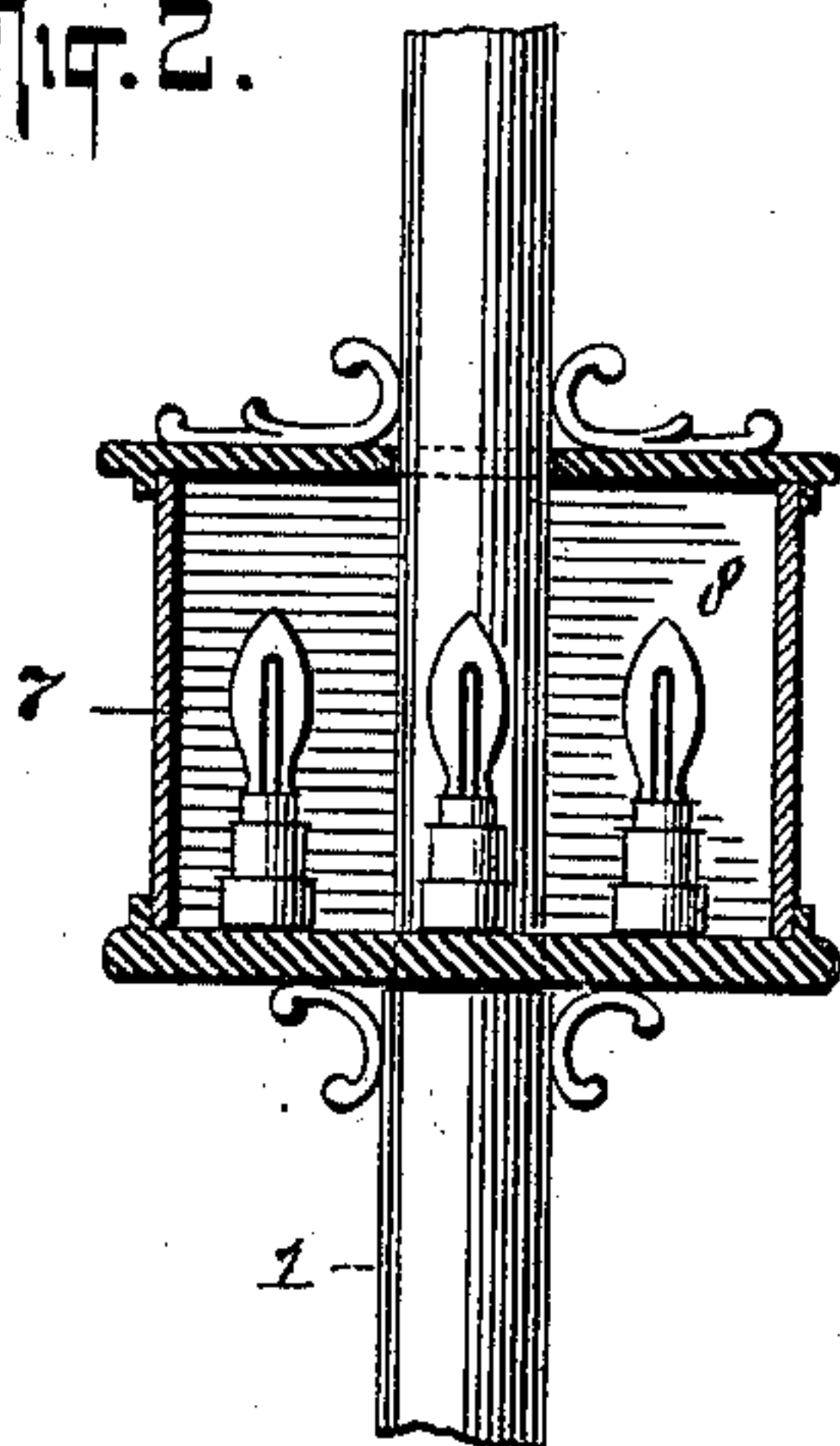


Fig. 3.

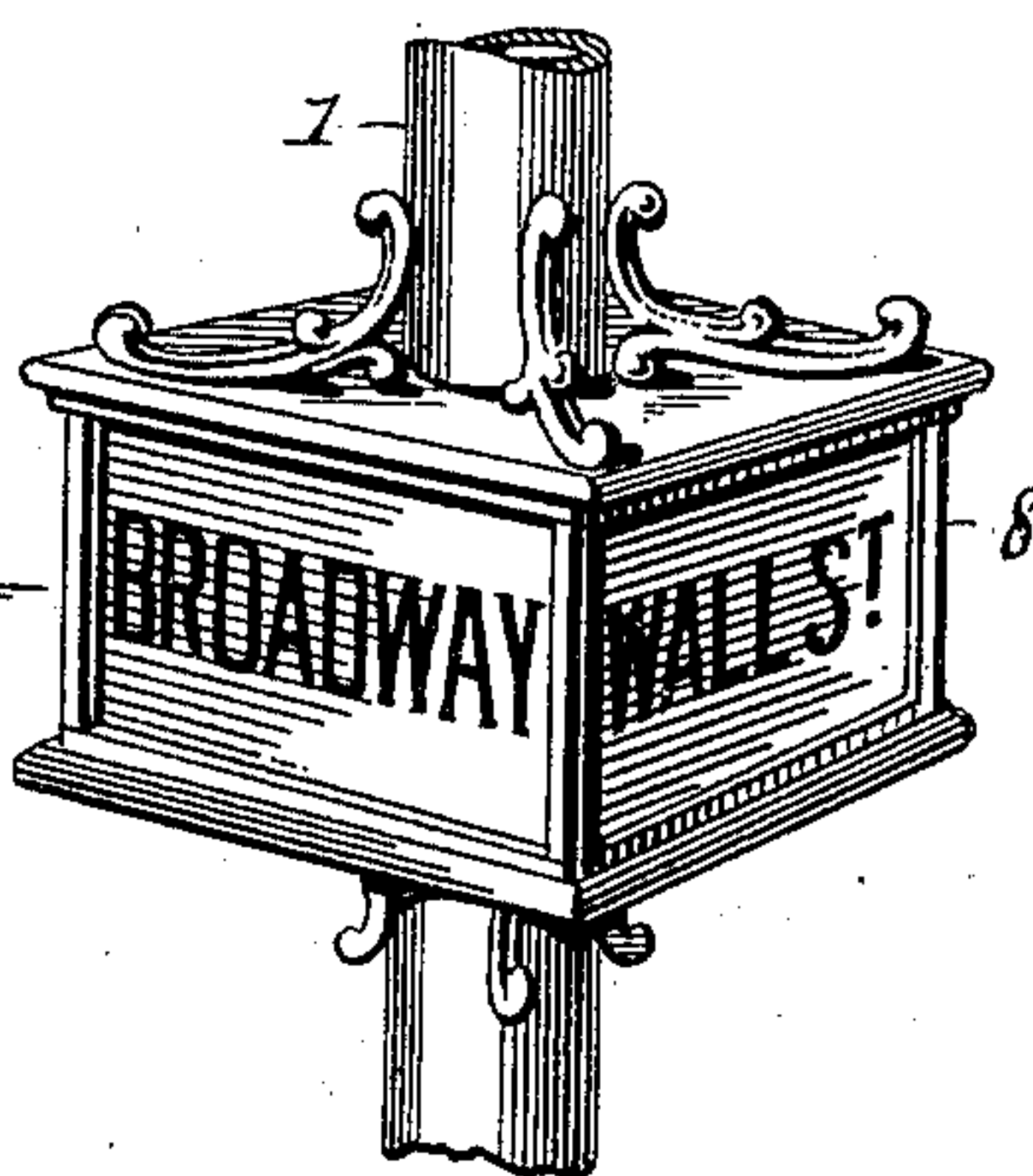
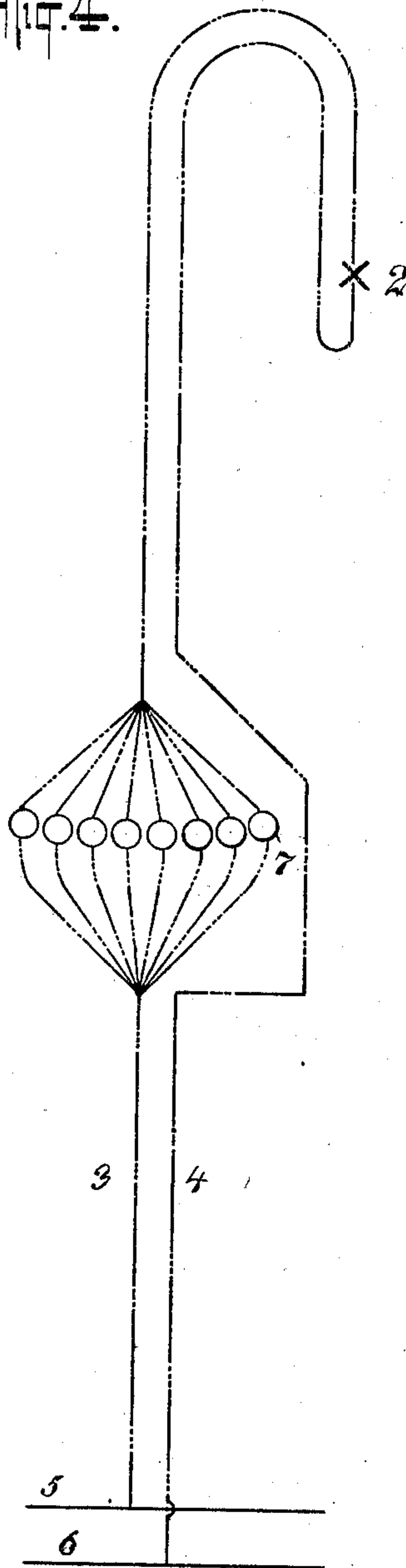


Fig. 4.



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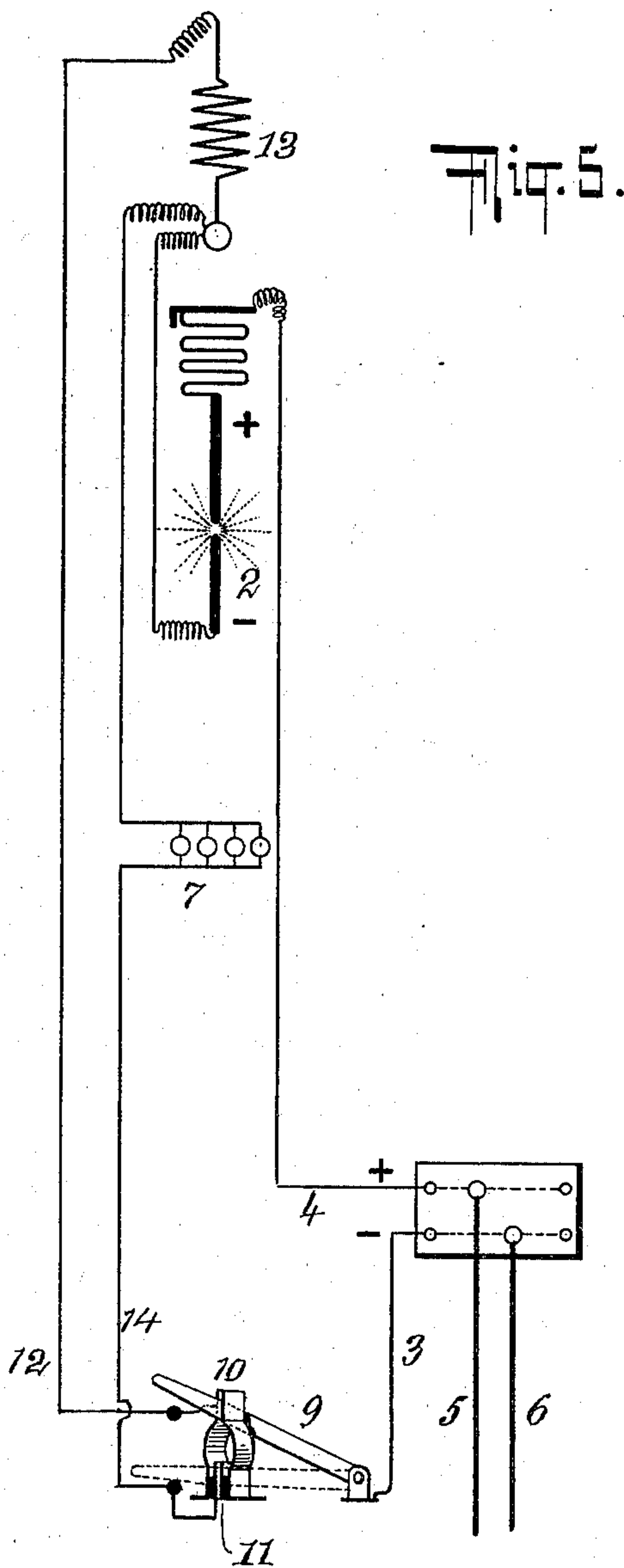
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WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN WILLIAM LIEB, JR., AND JOSEPH H. TYLER, OF NEW YORK, N. Y.

STREET-SIGN-ILLUMINATING DEVICE.

SPECIFICATION forming part of Letters Patent No. 709,023, dated September 16, 1902.

Application filed January 10, 1902. Serial No. 89,110. (No model.)

To all whom it may concern:

Be it known that we, JOHN WILLIAM LIEB, Jr., and JOSEPH H. TYLER, of the city, county, and State of New York, have invented a new and useful Improvement in Street-Sign-Illuminating Devices, of which the following is a specification.

The object of our invention is to provide electrically-illuminated signs for designating streets and avenues in conjunction with arc-lights commonly used for street-lighting.

Our invention consists in the combination, with an electric-arc lamp and a non-illuminating steadying resistance therefor, of an illuminating steadying resistance and means for throwing either resistance into the lamp-circuit.

In the accompanying drawings, Figure 1 is an elevation of a post carrying an arc-light and our electrically-illuminated sign. Fig. 2 is a transverse section of the sign-case, showing the glow-lamps therein. Fig. 3 is a perspective view of the exterior of said case. Figs. 4 and 5 are diagrams showing electrical connections.

Similar numbers of reference indicate like parts.

In arc-lamps especially for the lighting of city streets steadying resistances are ordinarily interposed in the branch circuit belonging to each lamp in order to prevent fluctuations of the light. This resistance now serves no useful purpose other than already stated. In accordance with our present invention we use as the steadying resistance aforesaid electric glow-lamps and arrange said lamps, preferably, in a case or lantern supported on the post which carries the arc-lamp. Said lantern may have translucent sides with opaque characters or opaque sides with translucent characters.

1 represents the lamp-post carrying the arc-lamp 2. Said post is hollow to receive the lamp-circuit wires 3 4, which connect to the street-mains 5 and 6. In the lamp-circuit are interposed a plurality of glow-lamps 7, arranged in multiple. Said lamps are supported in any suitable manner upon the post 1 and are here shown within the lantern 8, the sides of which may be translucent and marked with street-names, as indicated in Fig. 3. In Fig. 2 the lamps are represented as attached to the bottom of the lantern; but this is not essential, as they may be arranged in any way to suit the special purposes in view. In Fig.

4 eight lamps are shown; but any number may be employed.

The circuit connections may be as shown in Fig. 4; but a preferable arrangement is represented in Fig. 5. In the arrangement of Fig. 4 the arc-lamp at the moment of establishing circuit may operate to cause a current in the glow-lamps which may injure them. To avoid this, we connect the lamp-circuit wire 3 with a pivoted switch-lever 9, which is constructed to enter between the spring-clips 10 and on being carried farther down to pass from between said clips 10 and enter between the spring-clips 11. Clips 10 and 11 are insulated from one another. Clip 10 is connected by wire 12 to a resistance 13 and to the — terminal of the arc-lamp 2. Clip 11 is connected by wire 14 to the glow-lamps 7, and so to the same lamp-terminal. In operation lever 9 is first placed between clips 10, so establishing circuit through the resistance 13 and the lamp until the arc is fully established. Then lever 9 is moved to break contact at clips 10 and establish contact at clips 11, when the resistance 13 becomes cut out and the glow-lamps 7 are brought into the lamp-circuit and act thereafter as the steadying resistance for the lamp, as already explained.

We claim—

1. The combination with an electric-arc lamp and a non-illuminating resistance therefor, of an illuminating steadying resistance, and means for throwing either resistance into the lamp-circuit.

2. The combination with an electric-arc lamp and a non-illuminating steadying resistance, of an illuminating steadying resistance, and a switching device constructed to establish circuit through said non-illuminating resistance, then cut out said resistance and then cut in said illuminating resistance.

3. The combination of the arc-lamp 2, resistance 13, glow-lamps 7 means for throwing said resistance or said glow-lamps into the lamp-circuit and circuit connections substantially as set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

JOHN WILLIAM LIEB, JR.

JOSEPH H. TYLER.

Witnesses:

W. E. FREEMAN,

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