

(No Model.)

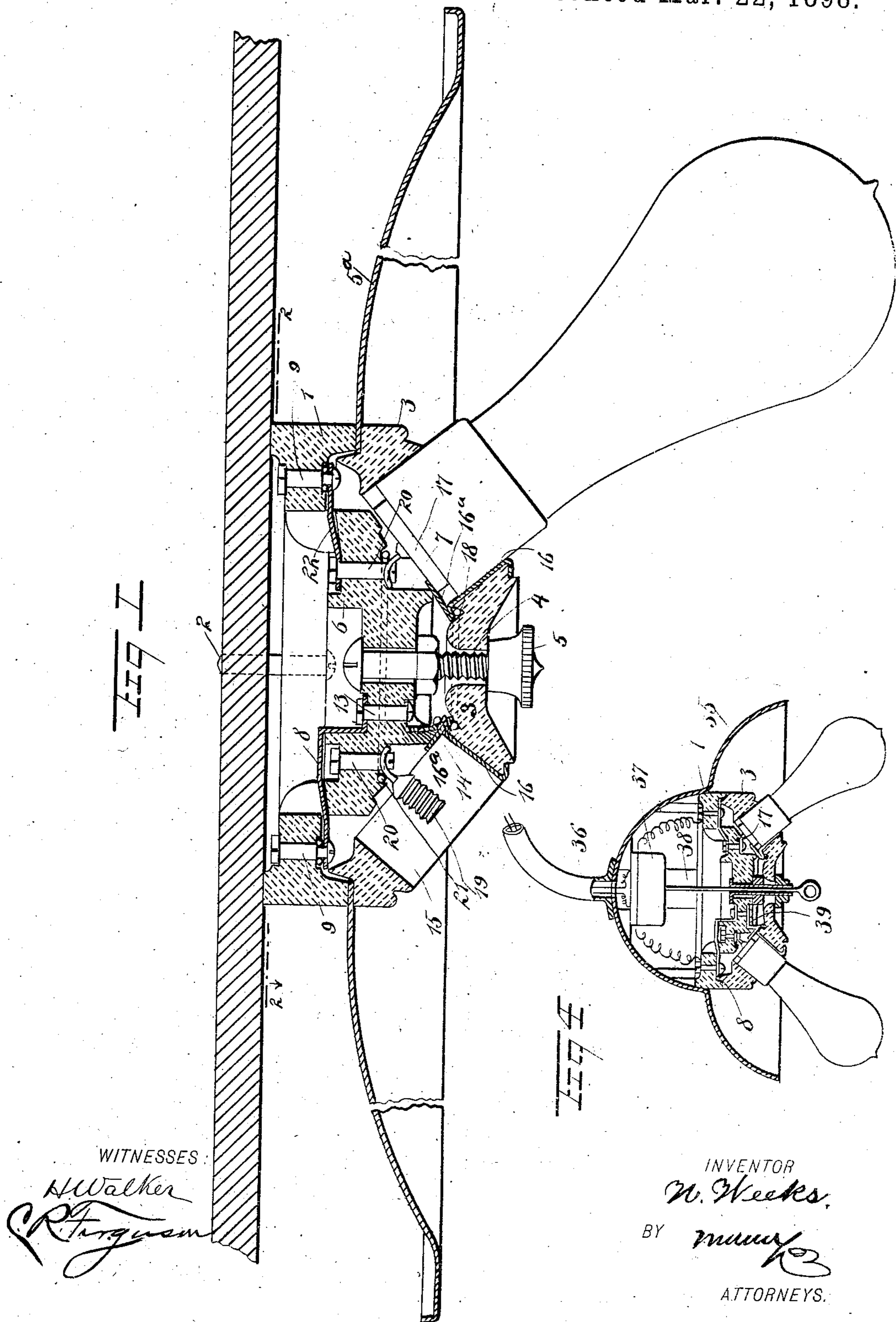
2 Sheets—Sheet 1.

N. WEEKS.

CLUSTER FIXTURE FOR ELECTRIC INCANDESCENT LAMPS.

No. 601,108.

Patented Mar. 22, 1898.



(No Model.)

2 Sheets—Sheet 2.

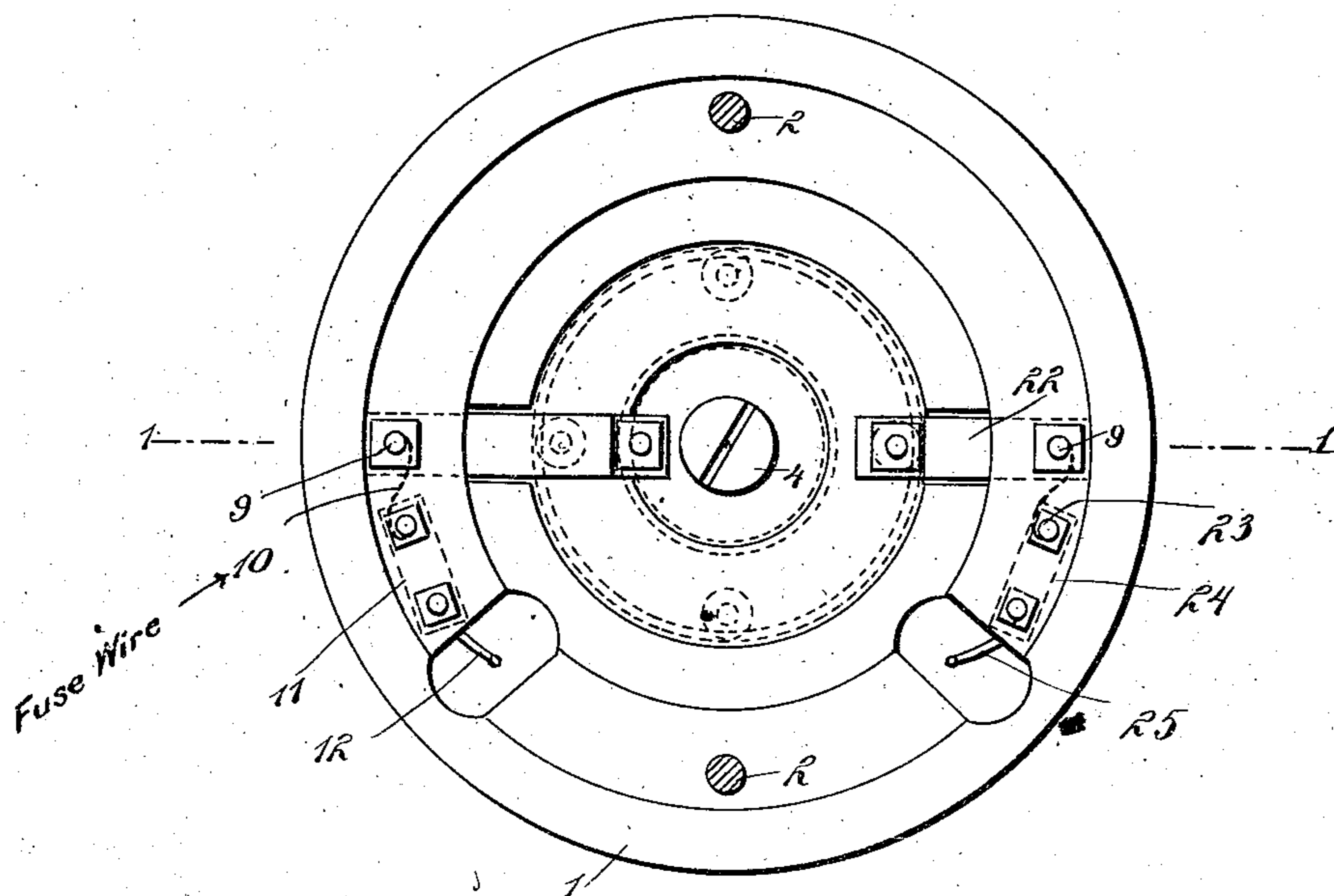
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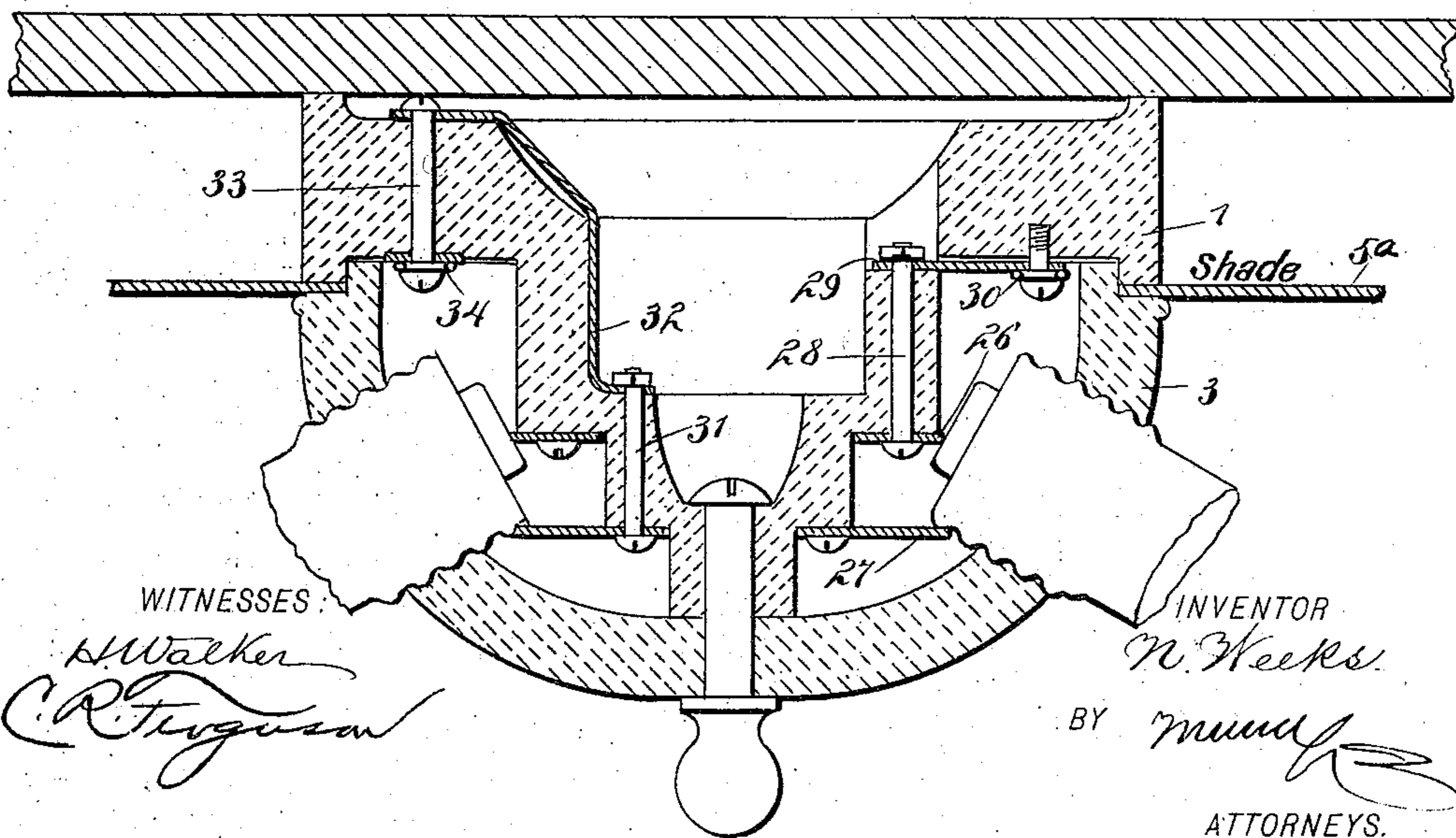
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Fig 2



1193



# UNITED STATES PATENT OFFICE.

NELSON WEEKS, OF NEW YORK, N. Y.

## CLUSTER-FIXTURE FOR ELECTRIC INCANDESCENT LAMPS.

SPECIFICATION forming part of Letters Patent No. 601,108, dated March 22, 1898.

Application filed October 1, 1897. Serial No. 653,735. (No model.)

*To all whom it may concern:*

Be it known that I, NELSON WEEKS, of New York city, in the county and State of New York, have invented a new and Improved  
5 Cluster-Fixture for Lamps, of which the following is a full, clear, and exact description.

This invention relates to fixtures for incandescent electric lamps, the said fixtures being of the kind in which a number of lamps  
10 are arranged as a cluster. In fixtures for this purpose as ordinarily made it is necessary in placing the fixture to splice the lamp-wires to the house-wires and to run the lamp-wires through a tube which is necessarily of considerable length, because the cup employed  
15 to cover the splice must be moved down the pipe in order to enable a person to make the splice.

One object of my improvement is to provide a fixture that may be applied directly  
20 to a ceiling, wall, or other support and in which the usual short extended ends of the house-wiring may be attached directly to the lamp-contacts.

25 Another object is to provide a fixture that will present a compact and neat appearance and which will be comparatively inexpensive to manufacture.

30 I will describe a cluster-fixture for lamps and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

35 Figure 1 is a section on the line 1 1 of Fig. 2 of a fixture embodying my invention. Fig. 2 is a partly sectional plan view of the base of the fixture on the line 2 2 in Fig. 1. Fig.  
40 3 is a section similar to Fig. 1, but showing a modification; and Fig. 4 is a section showing another modification.

Referring first to the example of my improvement shown in Figs. 1 and 2, 1 designates a base of fictile material—such, for instance, as porcelain—designed to be attached  
45 to a ceiling or other support in any desired manner. I have here shown it as provided with openings for the passage of screws 2.

50 Removably attached to the base 1 is a cap 3, also of fictile material. This cap may be secured to the base by means of a screw 4,

depending from the base, and a thumb-nut 5, engaging with said screw at the outer side of the cap. If desired, a shade or reflector 5<sup>a</sup> 55 may have its inner edge secured between the base and the cap, as indicated in Fig. 1. The base 1 carries a number of contact-points, and the cap 3 is provided with a plurality of openings through which the base portions of  
60 lamps may be inserted and engaged with the contacts.

This particular fixture is designed for use with lamps of the Thomson-Houston type. The base 1 has a contracted depending central portion 6 and a still further contracted  
65 depending portion 7. Extended inward in the base is a contact-plate 8 for each lamp, which at its outer end connects with a screw 9, from which a fuse-wire 10 extends to a connection with a plate 11, to which a house or  
70 line wire 12 is attached. From the inner end of the contact-plate 8 a screw 13 extends through the base and is in electrical connection with a contact-finger 14. 75

Secured to the wall of each opening 15, through the cap 3, is a contact-plate 16, having a projection 16<sup>a</sup>, designed to engage with the ring-terminal 17 of the lamp. The several contact-plates 16 are electrically connected by means of a ring 18, seated in a channel or groove formed in the inner surface of the cap. When the cap 3 is in place, the contact-finger 14 will engage upon one of these contact-plates 16, as indicated in Fig. 1. 85  
The center contacts of the lamps, which in this class of lamp are in the form of interiorly-threaded thimbles, will engage with screw-plugs 19, connected with screws 20, the several screws 20 being electrically connected  
90 by means of a ring 21, surrounding a portion of the base. One of the screws 20 is in connection with a contact-plate 22, which has a fusible-plug connection 23 with a plate 24, with which the house or main line-wire 25 95 connects. In the operation of this example of my improvement the lamps will be screwed onto the screw-plugs 19 and the terminal 17 will be placed in engagement with the part 16<sup>a</sup>, and of course when the circuit is closed  
100 by any desired means the current will flow through the lamps.

In the modification shown in Fig. 3 I employ a base and cap similar to the ones first

described; but the fixture shown in this example is designed more particularly for use with lamps of the Edison type. Secured to the base 1 is a contact-ring 26, adapted to engage with the center contact of the lamps, and also mounted on this base is a contact-ring 27, designed for engagement with the outer contact of the lamp. The ring 26 has a screw connection 28 with a plate 29, which connects with the house or line wire through a safety-fuse 30. The ring 27 connects through a screw 31 with a wire 32, having its opposite end connected to a screw 33, to the lower end of which a safety-fuse 34 is connected, the other end of said safety-fuse being connected with a house or line wire in the same manner.

In Fig. 4 I have shown the device as arranged in connection with a bracket or similar support that may be extended from a wall or from a street-post and in which a cut-out is provided. The fixture shown in Fig. 4 is similar to that shown in Fig. 1. It is, however, located within a shade or reflector 35, supported on a tubular bracket 36, through which the line-wires extend. The line-wires which extend through the bracket 36 are connected with the switch 37, of ordinary construction, and arranged within the shade or reflector 35, and of course the lamp-terminals are connected with this switch or cut-out. The stem 38 of the switch or cut-out extends down through the base 1 and also through the cap 3 and may serve as a means for holding the parts together. In Fig. 4, however, instead of arranging the contact-plate 16 as indicated in Fig. 1 I have attached it directly to the screw 13, as indicated at 39, and of course the several parts will be electrically connected.

A fixture embodying my invention, it is obvious, may be easily attached to a ceiling, wall, or other support and the safety or fusible plugs may be readily reached, when desired, for renewing them.

In cluster-fixtures as now made there is an

individual socket for each lamp, each generally mounted on an arm. This is not only objectionable by reason of the difficulty in wiring, but there is a constant vibration, especially when the lamps are used in traveling vehicles. I provide, practically, a connected series of sockets, or, more properly, a multiple socket in which there can be no vibration.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An incandescent-lamp fixture, comprising a base having a contracted central portion and a still further contracted central portion, contact-supports extended through each of the contracted portions, and a cap having a plurality of openings for the insertion of lamp-bases to engage with the contacts, substantially as specified.

2. An incandescent-lamp fixture, comprising a base, two sets of electric contacts secured thereto, a cap on the base and having a plurality of openings to receive lamp-bases, contact-plates on the walls of the openings, each having projections to engage the ring-terminals of lamps, and a ring electrically connecting the several plates, substantially as specified.

3. An incandescent-lamp fixture, comprising a base, a series of electrically-connected screw-plugs carried by the base, connections between said screw-plugs and the leading-in wires, a cap on the base and having a plurality of openings to receive lamp-bases, contact-plates on the walls of the openings and having projections to engage the ring-terminals of the lamps, the said projections engaging with certain of the contacts on the base, and means for electrically connecting said contact-plates, substantially as specified.

NELSON WEEKS.

Witnesses:

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