

G. WEISSMANN.
ELECTRIC ILLUMINATING BODY.
APPLICATION FILED FEB. 20, 1911.

1,047,353.

Patented Dec. 17, 1912.

2 SHEETS-SHEET 1.

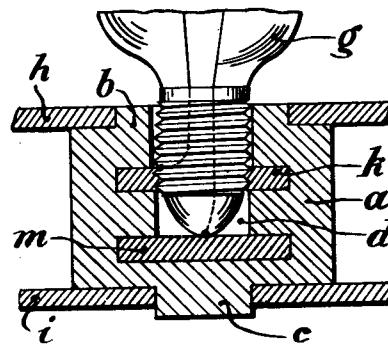
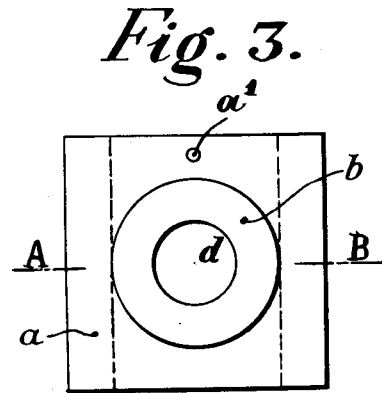
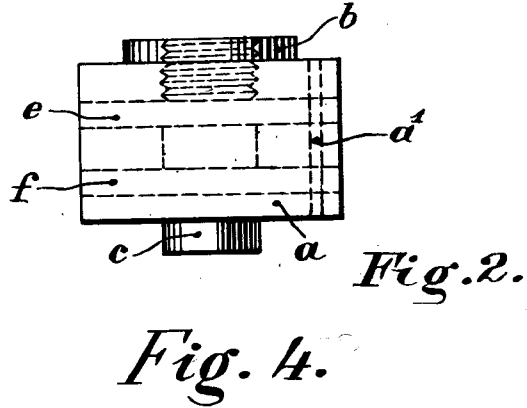
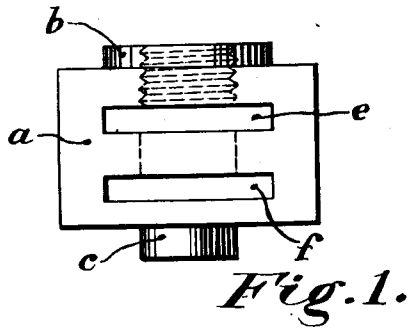


Fig. 5.

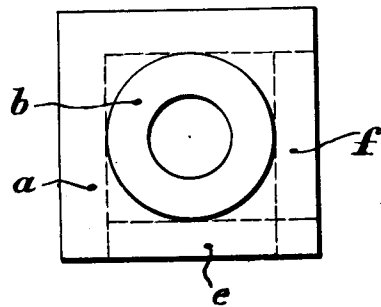
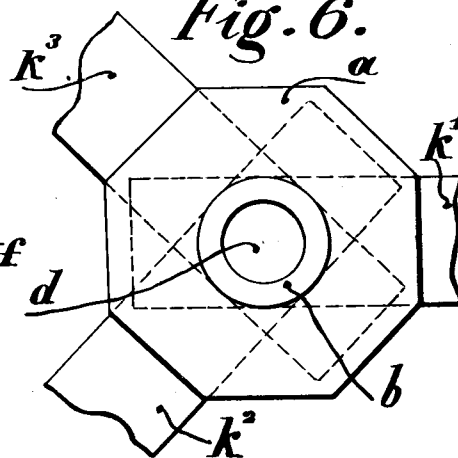


Fig. 6.



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2 SHEETS—SHEET 2.

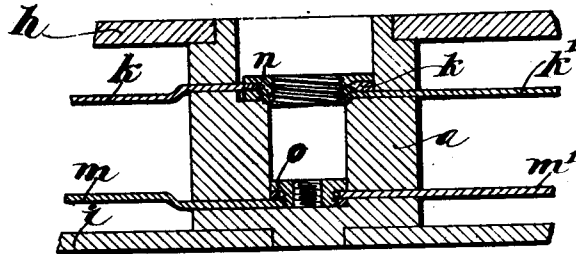


Fig. 7.

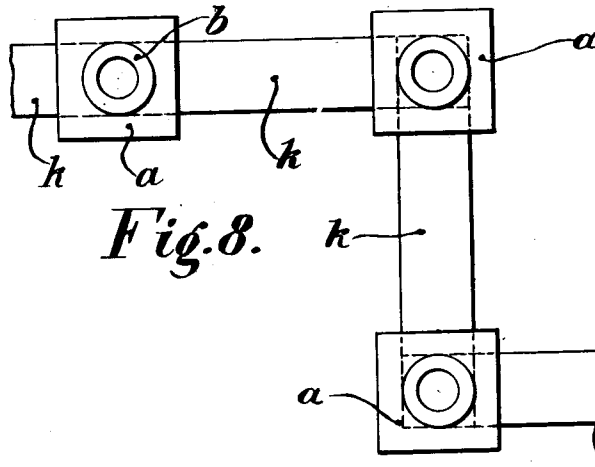
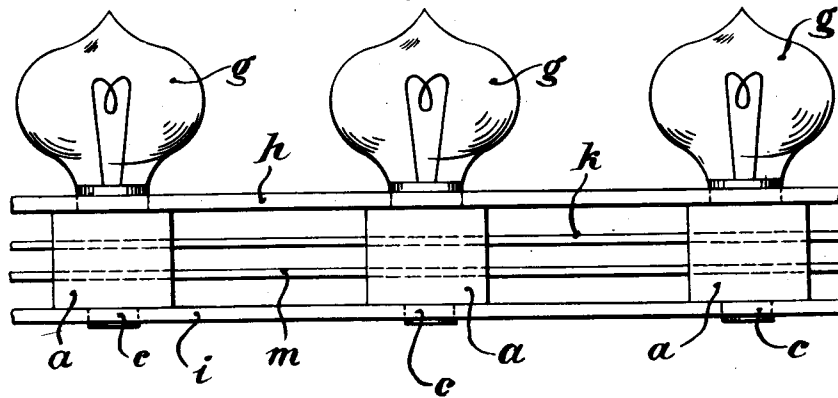


Fig. 8.

Fig. 9.



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UNITED STATES PATENT OFFICE.

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ELECTRIC ILLUMINATING-BODY.

1,047,353.

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To all whom it may concern:

Be it known that I, GUSTAVE WEISSMANN, a citizen of the French Republic, and resident of Paris, France, have invented certain new and useful Improvements in Electric Illuminating-Bodies, of which the following is a specification.

The construction of electric illuminating bodies and particularly of electric signs offers a great many difficulties of which the following are the principal ones:—

1.—It is difficult to insure the tightness of the holders in which the caps of the lamps are mounted; in any case this required tightness could be obtained only in considerably increasing the cost of manufacture. The moisture which collects and condenses in a holder produces the oxidation of the metallic parts and determines short-circuits as the poles are very close together.

2.—If the holders, of which a great many are required for one sign, are united by means of the metal plates cut out according to the outlines of the sign and which serve for conducting the current, it becomes extremely difficult to fix the eyes or other means by which the sign is to be suspended. With this object in view insulated bolts have to be fixed in both metal plates and these insulated bolts are designed to support very heavy loads, wherefrom results, as all the insulating means break very easily, frequent breakage of the insulators and consequently short-circuits or ground connections.

3.—It is necessary to put the signs together at the works wherefrom result great difficulties of transport. A further inconvenience is that the painting or enameling can be made only after the sign has been put together. The putting together of the signs requires however the use of wood, fiber or of some such material, so that it is not possible to heat the apparatus to a sufficient degree for obtaining a good enameling of the outer plates of the sign. The said plates therefore have to be simply painted, the paint to be heated at the utmost to 80° C., so that it very quickly deteriorates.

The present invention has for its purpose to obviate these inconveniences; it is essentially characterized by a holder of special shape which permits absolute tightness and a rapid putting together of the sign, as the outer metal plates are not used as current conductors they can be exposed to a very

high degree of temperature in order to be enameled. The outer metal parts which correspond in shape to the sign serve for protecting the electric parts. The improved luminous signs are cheap to manufacture. The improved signs are composed of parts easy to put together and to take to pieces and adapted to be used several times.

In the accompanying drawings the invention is shown by way of example.

Figure 1 is a front view of a holder. Fig. 2 is a side view of the same. Fig. 3 is a plan view of Fig. 1. Fig. 4 is a section on line A—B of Fig. 3 the socket of the incandescent electric lamp being shown in elevation. Figs. 5, 6 and 7 show modifications. Figs. 8 and 9 show, by way of example, part of a sign made according to this invention.

As has been said in the introduction to the specification this invention is particularly characterized by the special shape of the lamp holder. This holder has preferably the shape of a cube *a* made of insulating material. Extensions *b* and *c* project from the upper and lower surface respectively of the cube *a*. These extensions are ring shaped and their centers are situated in the vertical axis of the cube *a*. The holder *a* has a central boring *d*. The holder *a* has at least two slots *e*, *f* which are perpendicular to the central boring and parallel with each other, the two slots being separated by a sufficient thickness of the insulating material of the holder. The said slots starting from one of the sides of the cube *a* reach at least to the central boring *d*; they are designed to receive the conductors for the current. The ring shaped extensions *b*, *c* are designed to penetrate into corresponding openings of the outer metal plates which are cut out according to the shape of the sign. As shown in Fig. 4 the said extensions *b*, *c* are placed in openings of the plates *h*, *i*. The conductors for the current consist of two strips *k*, *m* of conducting material which are inserted in the slots *e* and *f*.

With the holder shown in Figs. 1 to 6 the lower strip *m* is continuous and the upper strip *k* has a hole which is threaded in order to receive the threaded part of the cap of the lamp *g*. The strip *k* is pushed into the slot *e* so that its hole coincides with the central boring *d* of the holder. If the cap of the lamp *g* is screwed in it can be screwed until its end comes in contact with

the strip *m*. To feed the lamp with current the two strips *k* and *m* have only to be connected with a source of electricity. It is obvious that this holder is absolutely tight as after the insertion of the conducting strips *k* and *m* all the joints can be cemented. The conducting strips *k* and *m* are completely insulated from the outer plates *h* and *i*. These latter are united the one with the other by screws, bolts or by any other convenient means.

The suspension of the sign on a wall does not offer any difficulty whatsoever.

The slots *e* and *f* instead of reaching from one side of the holder *a* to the opposite side, can adopt in the holder any suitable direction, for example as shown in Fig. 5, they can be arranged at right angles the one with regard to the other, that is to say, the slot begins on one side and terminates in the adjacent side, forming thus an elbow in the holder *a*. It is not necessary that the two ends of the slots be situated in the same plane. According to Fig. 6 the one of the slots is arranged at an angle of 45° with regard to the other slot.

The conducting strips can be fixed in the holders by means of pins *a'* or in any other suitable manner, said pins being made of insulating material.

The conducting strips *k* and *m* can be of any suitable length so as to traverse a certain number of holders. They can however be of such a length that they connect two holders *a*; in this case they form a kind of chain link having a hole at each end, all the conducting strips forming a chain the links of which are connected by the holders *a*. In this case it would be preferable to use holders in which the entrance slots and the outlet slots are situated at different heights as shown in Fig. 7. The conducting strips *k* and *m'* have holes without threading but the conducting strips *k'* and *m* are threaded in order to receive the two threaded rings *n* and *o* which serve at the same time for connecting the strips *k* and *m* with the strips *k'* and *m'* and for receiving the double thread of the cap of the lamp.

Figs. 8 and 9 show by way of example the manner of connecting several holders in which the conducting strip *k* is bent re-

peatedly, the angles being at their apex for example 45° and 90°.

It is evident that the improved elastic luminous signs according to this invention can be constructed with double faces.

I claim:—

1. A holder for incandescent electric lamps comprising in combination, a holder body of insulating material having an axial opening, circular extensions on the front and rear surfaces of said holder body and a plurality of slots intersecting said axial opening, a front plate of suitable material having holes to receive said front extensions, a rear plate of suitable material having holes to receive said rear extensions, a current conductor inserted in each of the slots of said holder body, at least one of said conductors being interrupted at the axial opening of the holder, an incandescent lamp having its threaded cap screwed into said holder body to connect with said interrupted conductor and having its other terminal contacting with the other conductor, and means for connecting said front and rear plates; substantially as described and shown and for the purpose set forth.

2. A holder for incandescent electric lamps comprising in combination, a holder body of insulating material having an axial opening, circular extensions on the front and rear surfaces of said holder body and a plurality of slots intersecting said axial opening, plates of sheet metal having holes to receive said extensions, a current conductor inserted in the lower slots of said holder body, and a current conductor inserted in the upper slots of said holder body and having a threaded hole registering with the said axial opening of the holder body, an incandescent lamp having its threaded cap inserted into said holder body and screwed into the threaded holes of the upper conductor and having its other terminal in electrical contact with the other conductor, and means for connecting said front and rear plates, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

GUSTAVE WEISSMANN.

Witnesses:

DEAN B. MASON,
ALBERT DE CARSALADE.