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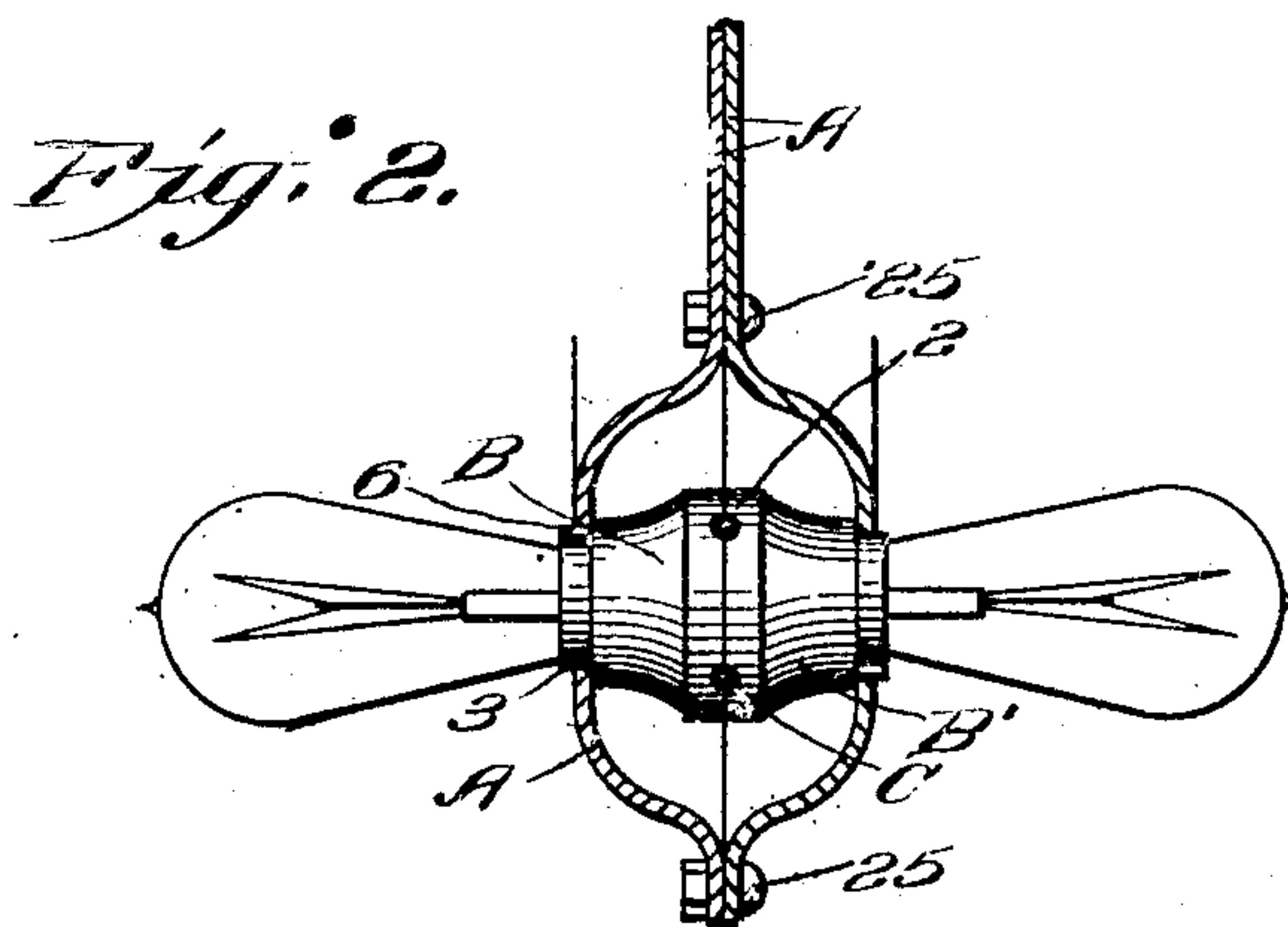
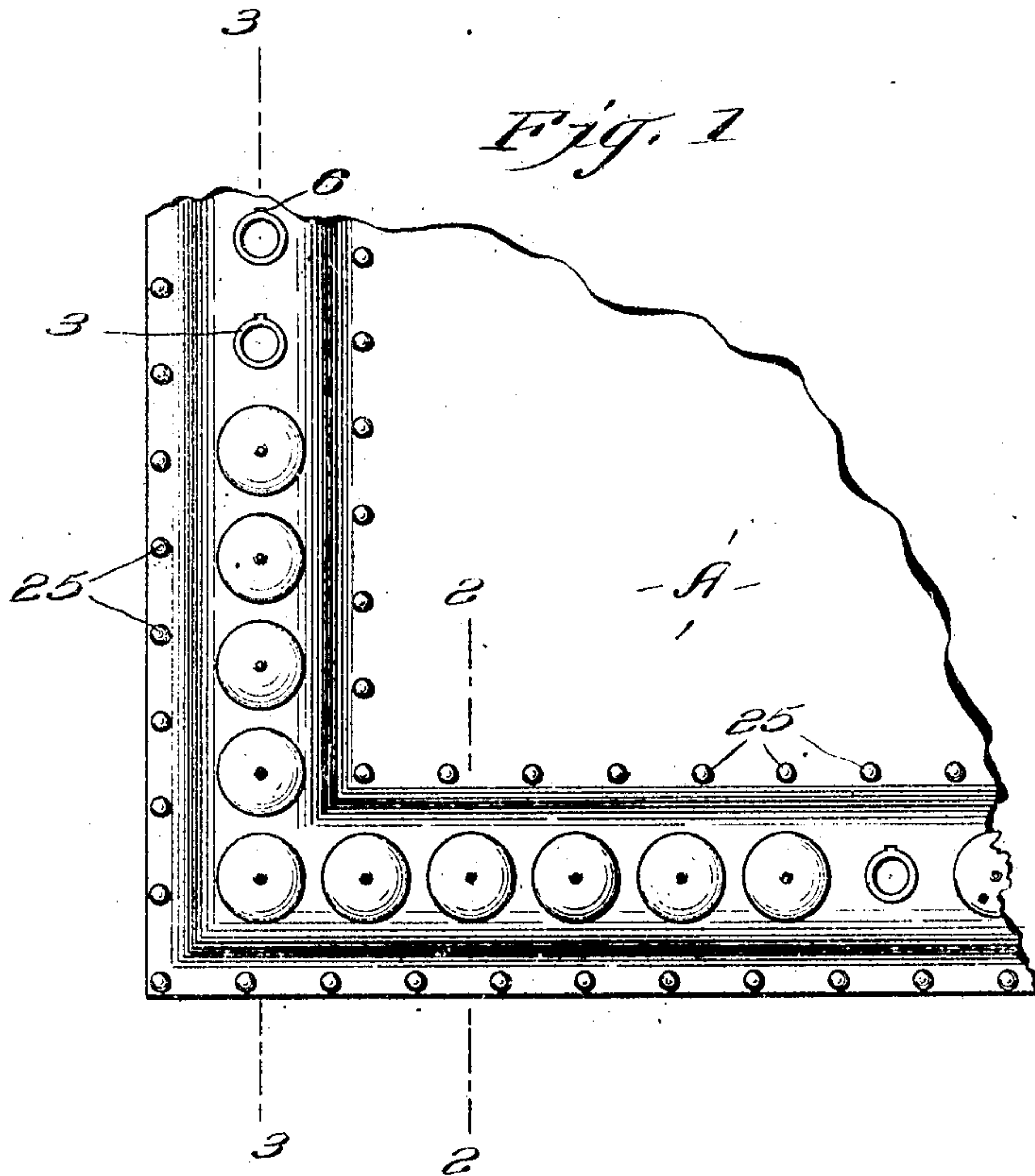
ELECTRIC SIGN.

APPLICATION FILED SEPT. 16, 1907.

913,309.

Patented Feb. 23, 1909.

2 SHEETS—SHEET 1.



WITNESSES

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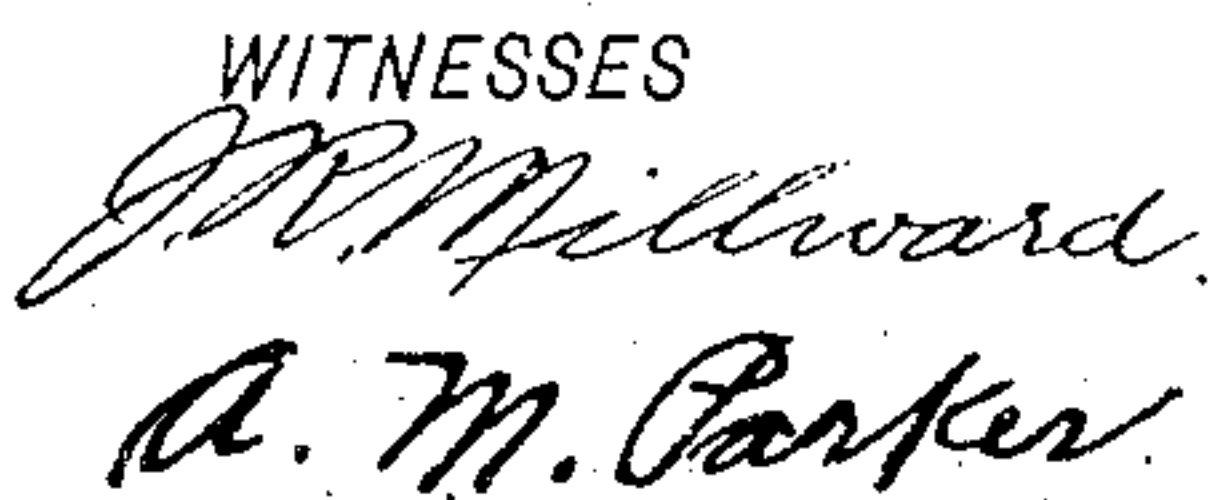
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ELECTRIC SIGN.

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2 SHEETS--SHEET 2.



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ELECTRIC SIGN.

No. 913,309.

Specification of Letters Patent.

Patented Feb. 23, 1909.

Application filed September 16, 1907. Serial No. 393,099.

To all whom it may concern:

Be it known that I, BERT E. SALISBURY, citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented new and useful Improvements in Electric Signs, of which the following is a specification.

My invention relates to an electric sign composed of two plates bolted together and of a series of peculiarly formed lamp-receptacles clamped between the plates. The plates, preferably of thin metal, are made in any desirable outline. Their center portions are set in contact to afford flat surfaces on both sides for the lettering. Adjacent to the margin, each plate is outwardly bent, forming a continuous peripheral channel for the receptacles. Around this channel portion are opposite holes, suitably spaced and arranged to receive the outer ends of the receptacles and for the insertion of the lamps. The extreme margins of the plates are bolted together thus inclosing and protecting the receptacles and the conductors. The receptacles are duplex, or double, adapted each to receive two lamps. Each receptacle comprises two similar porcelain bodies and two sets of lamp terminals. These bodies, or halves, are set together, base to base, with the single pair of conductors extending between the bases. By means of cooperating metallic parts the two halves are clamped together, securing the conductors in position and making connection therefrom to the two sets of lamp terminals. These lamp terminals are secured in the mouth of each body, so that when the whole receptacle is secured in place between the two plates of the sign, the mouths are open to the exterior through the holes in the plates and the lamps may be inserted from opposite sides.

My invention is fully shown in the drawing herewith in which the reference letters and numerals of this description are used to indicate the corresponding parts in all the figures.

Figure 1 is a plan of a portion of a rectangular sign, with the receptacles arranged in a straight row along each side. Fig. 2 is a cross section on line 2—2 of Fig. 1. Fig. 3 is a parallel section on line 3—3 of Fig. 1. Fig. 4 is a full size, longitudinal section of a receptacle arranged between the plates of the sign. Fig. 5 is a rear plan of one of the halves, or bodies, of a receptacle, showing one of the faces between which the conductors are se-

cured. Fig. 6 is a front plan, reduced, of a receptacle. Figs. 7 and 8 show my receptacles provided with different means for securing them in the position in the sign plates.

In the figures A A indicate the two plates of the sign and B B' the two bodies of the receptacle, made of porcelain, or other suitable insulating material. These bodies have their bases 2 preferably enlarged, for strength and to give sufficient separation between the wires and terminals. From the base, each half tapers toward the outer end, where it is provided with an annular rim 3 to project outwardly through the hole in the sign plate, made just large enough to admit said rim. The formation of this reduced rim produces a shoulder which sets against the inner surface of the sign plate.

6 is a projection adapted to engage with a corresponding notch in the edge of the hole to guide in assembling and to prevent accidental rotation of the receptacles, with consequent displacement and strain.

The two body halves, which are of identical form, have the usual mouths, or recesses, 7 7' in which are arranged the lamp terminals of any suitable construction; the common "Edison" terminals are here shown.

9 9' are the outer screw-ring terminals; the center terminals are supplied by the heads of the screws 10 10', whose shank-tips engage with the inner ends of the respective angular wire-terminals 11 11'. These inner ends are arranged respectively in the central cavities 12' 12 formed in the inner faces of the bodies, while the outer ends 13 13' are arranged in the respective cross-grooves 14 14' in the opposite bodies, and are there secured in position and electrically connected to the outer lamp terminals 9 9' by screws 15 15'. 16 are supplementary securing screws for the terminals 9 9'. For instance, the central screw 10 of the body B extends into the central cavity 12, where it engages with the inner end of the wire terminals 11', whose outer end 13' fits in groove 14' of body B', and is connected by screw 15' to the terminal 9'. The outer ends of the wire terminals extend across the wire grooves 17 17, formed on the inner faces of the bodies for the conductors C. 18 are binding screws on the wire terminals to engage with the wires or conductors at the point where the insulation is stripped for a short distance. 21 are bent tips on the wire terminals to assist in maintaining the wires in position under the binding-screws.

26 are split washers strung on the center screws to make a resilient contact with the lamp-base terminal. The receptacle bases and metallic parts secured to each base are similar in form, but on one side are indicated by prime numerals, more conveniently to describe the arrangement. Thus, by these center screws 10 10' the two bodies are securely clamped together and the conductors are secured in the grooves, filling the grooves. At the same time the inner lamp terminal on one body and the outer lamp terminal on the other are by the same part, electrically connected to one of the conductors.

By the particular construction and arrangement of parts here shown I have produced a sign which is simple and economical to manufacture. The sign is easily assembled, by wiring the two sets of receptacle halves, each set to one of the conductors, then securing the two sets together by the center screws, with the conductors in the base grooves, and clamping the receptacles between the sign plates, by means of the marginal bolts 25, or other means. The two plates of the sign support and also protect the receptacles without other supplementary part. By means of one pair of conductors, the two sets of lamps around the entire periphery of the sign are connected in circuit.

The receptacle here shown and described is strong, and particularly adapted for these signs, but may be modified in form and in details of construction and adapted to other purposes, without departing from the spirit of my invention.

The metallic parts of opposite polarity are widely separated and these arranged between the inner faces of the two halves are perfectly protected from dust, moisture, etc.

The receptacles and lamps will commonly be arranged as shown in straight, marginal rows, but this is not essential, for other simple designs may be shown—it being understood that the designs on the two sides must register.

If desired, each receptacle may be secured positively to each sign plate by any suitable means, as shown in Figs. 7 and 8, whereby the two sign plates are more firmly clamped together. In Fig. 7 each screw-ring terminal (9 9') is arranged to extend beyond the rim 3, and a threaded clamping ring 27 of porcelain, hard rubber, or other suitable material is fitted to the outwardly extending end of the terminal. In Fig. 8 integral perforated ears 28 are provided on the outer ends of the bodies which set against the inner surface of the sign plate. Bolts 29, provided with nuts, are fitted to these ears and to corresponding holes in the sign plates.

Having thus described my invention, what I claim and desire to protect by Letters Patent, is:—

1. A receptacle for incandescent electric

lamps composed of two similar bodies of insulating material having their inner faces set in contact, an outer and an inner lamp-terminal arranged on each body, and wire terminals arranged in recesses between said inner faces, each wire terminal being connected to the inner lamp terminal on one body and the outer lamp terminal on the other body.

2. A receptacle for incandescent electric lamps composed of two similar bodies of insulating material having their inner faces set in contact and having mouths in their outer ends, said inner faces being provided with cross-grooves for the conductors, of outer and inner lamp-terminals arranged in said mouths, and of wire terminals arranged in recesses between the inner faces, each wire terminal being connected to one terminal in each mouth and each wire terminal having an outer end extending adjacent to one of the conductor-grooves.

3. A receptacle for incandescent electric lamps composed of two similar bodies of insulating material having their inner faces set in contact and having mouths in their outer ends, said inner faces being provided with cross-grooves for the conductors, and said outer ends being formed with a shoulder and a rim to extend through the hole in the sign plate and with a projection on said rim to engage with a notch in the plate, outer and inner lamp-terminals arranged in said mouths, and wire terminals arranged in the recesses between the inner faces, each wire terminal being connected to the inner lamp terminal in one mouth and the outer lamp terminal in the opposite mouth, and each wire terminal having an outer end extending adjacent to one of the conductor-grooves.

4. In an electric receptacle the combination with two similar porcelain bodies, having inner faces set in contact, outwardly opening mouths in their outer ends, said inner faces being formed with two parallel conductor-grooves outwardly arranged from the center and with cross-grooves extending between said conductor-grooves, of angular wire terminals secured in said cross-grooves, each terminal having its outer end extending into one conductor-groove, of outer annular lamp-terminals in said mouths, a screw connecting each outer lamp-terminal to the adjacent wire terminal, a screw centrally arranged in each of said mouths and having its head outwardly projecting to form the inner lamp-terminal and its shank inwardly projecting to engage with the inner end of the opposite wire terminal, conductors arranged in the conductor-grooves and having stripped portions adjacent to the outer ends of the wire terminals, and means to connect said stripped portions to the outer ends of the wire terminals, substantially as described and shown.

5. In an electric receptacle, the combination with two similar circular porcelain bodies, having enlarged inner bases, provided with inner faces set in contact and having outwardly opening mouths in their smaller outer ends, said inner faces being formed with two parallel conductor-grooves outwardly arranged from the center, with central cavities and with cross-grooves extending from said cavities to the conductor-grooves on both sides, of angular wire terminals secured in said cross-grooves on the respective faces, each terminal having its outer end extending into the adjacent conductor-groove and its inner end extending into the central cavity of the opposite body, of outer, annular lamp-terminals in said mouths, a screw connecting each outer lamp-terminal to the adjacent wire terminal, a screw centrally arranged in each of said mouths and having its head outwardly projecting to form the inner lamp-terminal and its shank inwardly projecting into said central cavity to engage with the inner end of the opposite wire terminal, conductors arranged in the conductor-grooves and having stripped portions adjacent to the outer ends of the wire terminals, and binding screws in said outer ends engaging with said stripped portions, substantially as described and shown.

6. A duplex receptacle for incandescent electric lamps, composed of two similar porcelain bodies having their inner faces set in contact and having mouths in their outer ends, lamp terminals arranged in each mouth, wire terminals arranged between the inner faces, connections between the wire terminals and the respective lamp terminals, and means to clamp the two bodies together.

7. An electric sign having a series of receptacles composed each of two similar porcelain bodies, having inner faces set in contact and outer ends formed with rims adapted to fit holes in the sign-plates, said inner faces being provided with cross-grooves for the conductors, of outer and inner lamp terminals arranged in mouths in said outer ends, and of wire terminals arranged in recesses in the inner faces, each wire terminal being connected to one outer lamp-terminal and to the inner lamp-terminal on the opposite body, and in combination with the receptacles parallel conductors arranged to extend through the cross-grooves of the receptacles and connected to the respective

wire terminals to connect the receptacles in parallel, and means such as sign plates adapted to clamp the receptacles together and to hold them in position.

8. In an electric sign a series of duplex receptacles arranged between the sign plates and having opposite rims fitting opposite holes in the sign plates, said receptacles having opposite mouths for the lamp-bases, said mouths registering with the opposite holes, lamp terminals in the mouths, wire terminals and connections between the lamp terminals and the wire terminals, and a single pair of conductors connected to the wire terminals of the entire series of receptacles, substantially as described and shown.

9. The combination with a pair of similar parallel sign plates, of a series of duplex receptacles arranged between the sign plates and having opposite rims fitting opposite holes in sign plates, said receptacles having their inner faces set in contact and in their outer ends having opposite mouths for the lamp-bases, said mouths registering with the opposite holes, lamp-terminals in the mouths, wire terminals arranged in recesses between the inner surfaces, connections between the lamp-terminals and the wire terminals, and a single pair of conductors connected to the wire terminals of the entire series of receptacles, substantially as described and shown.

10. In an electric sign, a series of receptacles composed each of two bodies of insulating material having their inner faces set close together and formed with two grooves for a single pair of conductors, an outer and an inner lamp-terminal arranged on each body, wire terminals arranged between said inner faces, each wire terminal being connected to the inner lamp-terminal on one body and the outer lamp terminal on the other, a single pair of conductors connected respectively to the opposite wire terminals of the entire series, and means to clamp the series firmly in position and in fixed relation one to the other.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

BERT E. SALISBURY.

Witnesses:

WM. J. LEWIS,
J. M. MARKS.