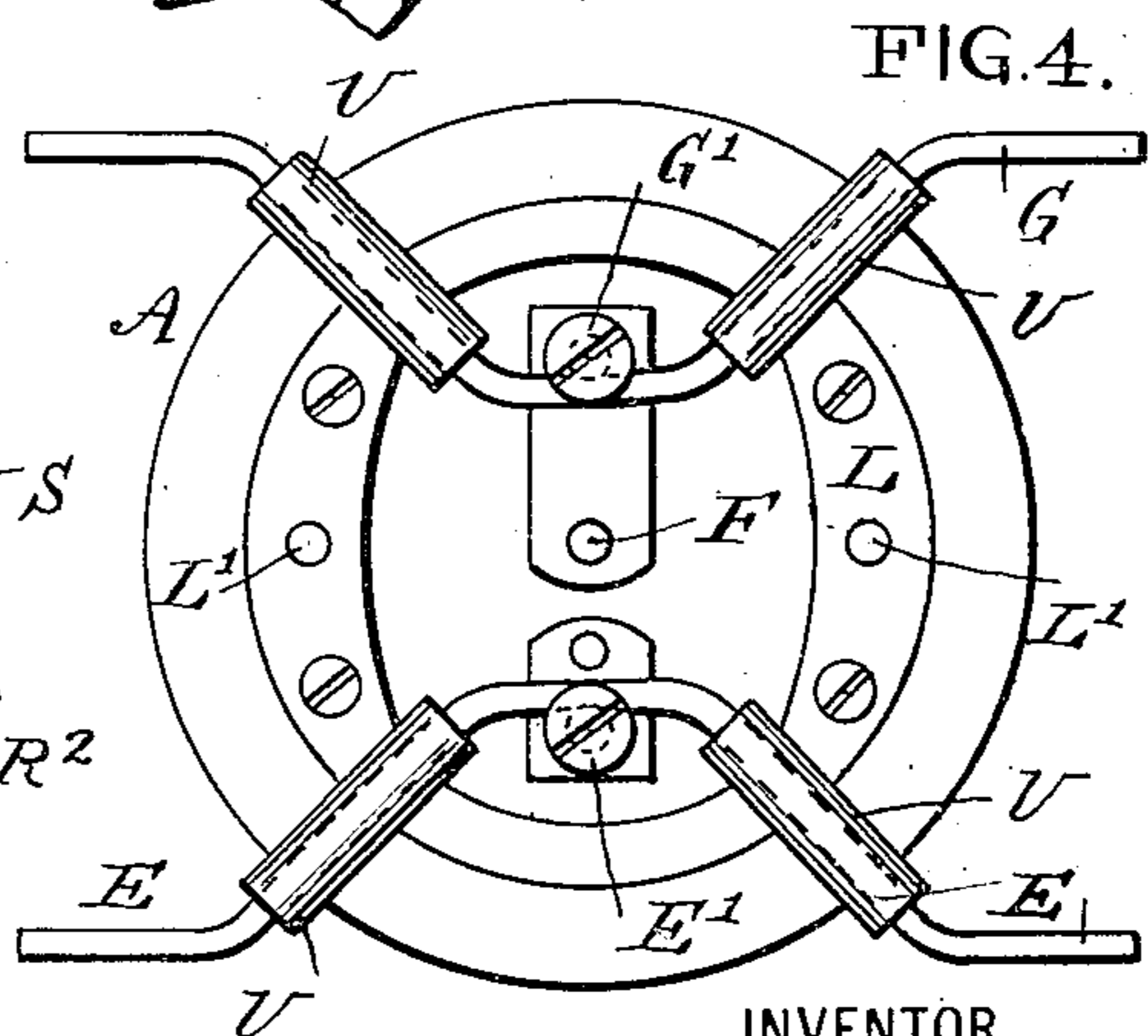
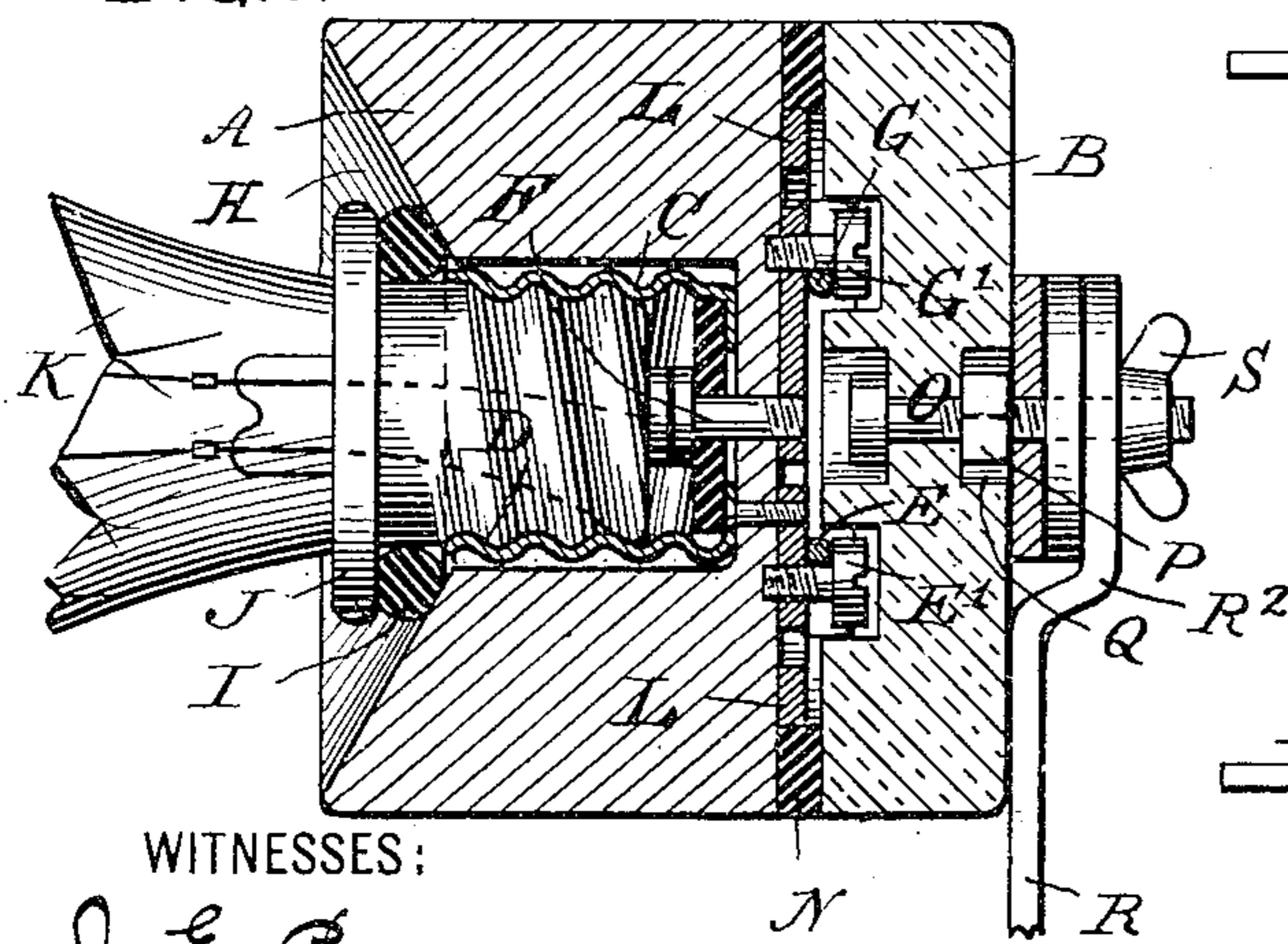
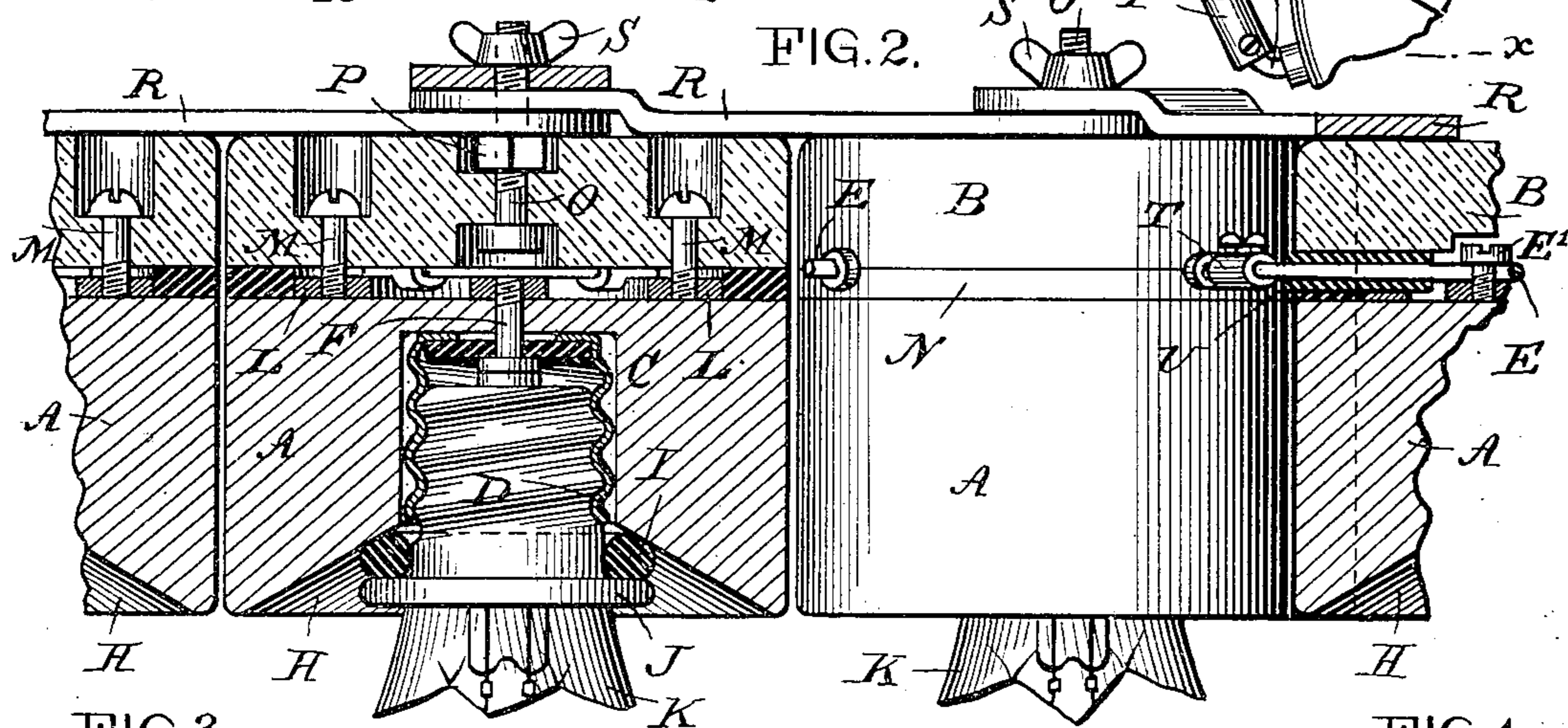
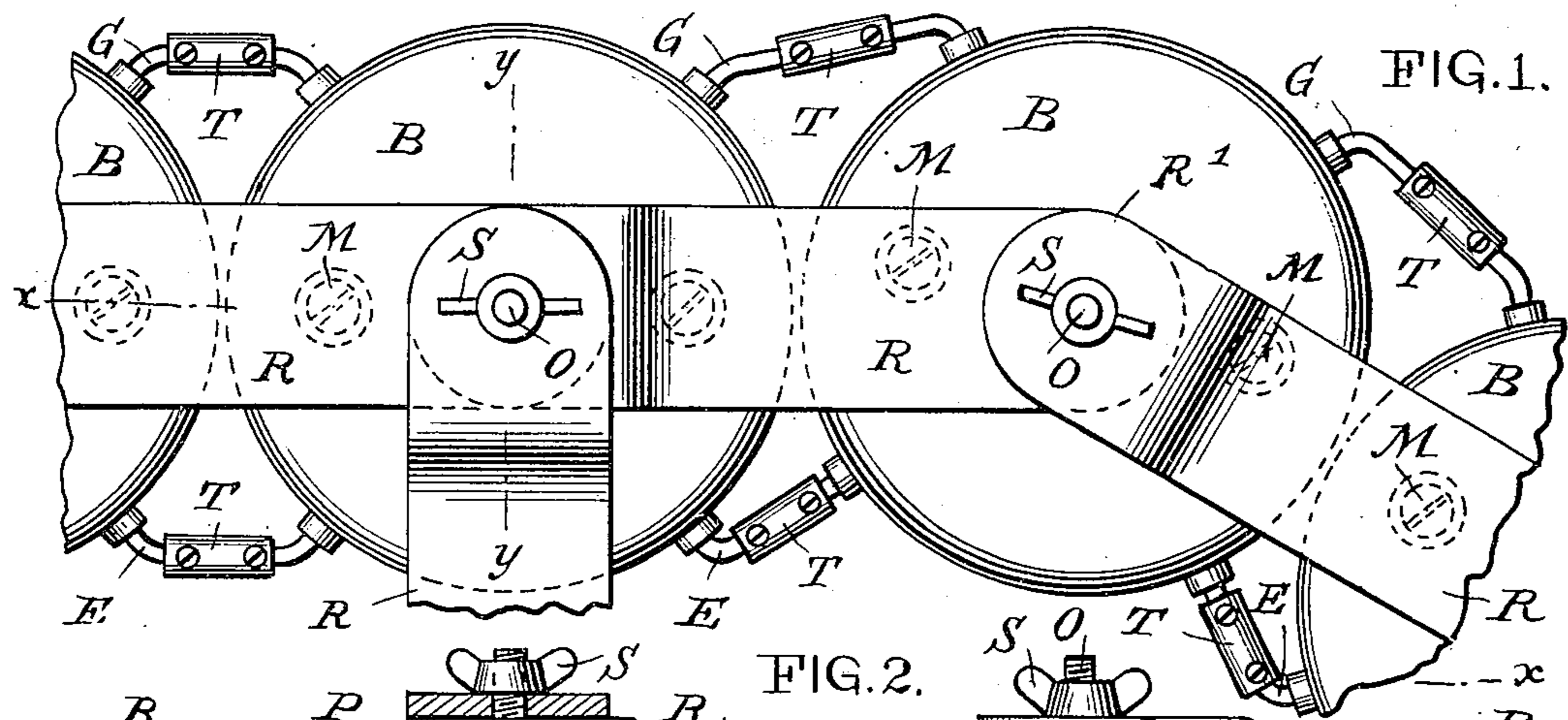


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FLEXIBLE SUPPORTING STRUCTURE FOR ELECTRIC LAMPS.

(Application filed June 12, 1900.)

(No Model.)



WITNESSES:

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WILLIAM FARLEY BREWSTER, OF NEW YORK, N. Y.

FLEXIBLE SUPPORTING STRUCTURE FOR ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 663,532, dated December 11, 1900.

Application filed June 12, 1900. Serial No. 20,005. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM FARLEY BREWSTER, a citizen of the United States, residing at New York city, in the county and State of New York, have invented a Flexible Supporting Structure for Electric Lamps, of which the following is a specification.

My invention consists, essentially, in combining with a series of receptacles for incandescent electric lamps a series of flexible and adjustable connections arranged between such receptacles, by reason of which the receptacles and the contained lamps may be given and fixed in any required position or grouping—such, for instance, as may be required to indicate letters, figures, ornamental designs, &c.

My invention further relates to various details of construction of the lamp-receptacles and the flexible and adjustable connections employed with the receptacles.

The object of my invention is to provide a supporting structure for electric lamps which may be altered at will to permit a rearrangement of the receptacles and lamps to indicate different letters, figures, or designs and without requiring anything more than the manipulation of the lamp-receptacles to the new positions required and fixing them in such new positions.

The accompanying drawings will serve to illustrate my invention, in which similar letters of reference indicate like parts.

Figure 1 is a rear view showing a number of lamp-receptacles connected together through flexible and adjustable mechanical and electrical connections. Fig. 2 is a partial section and elevation taken on the line X X of Fig. 1, looking upward. Fig. 3 is a vertical section taken on the line Y Y of Fig. 1. Fig. 4 is a plan view of the bottom of the upper portion of one lamp-receptacle, showing the manner in which the electrical conductors are disposed and connected.

Referring first to Fig. 3, the lamp-receptacle consists of the upper portion A, which may be formed of wood, rubber, or any suitable material, and the lower portion B, preferably formed of porcelain or other insulating material. Located in the center of the upper portion A there is arranged the usual lamp-socket C, such as is commonly employed

with electric incandescent lamps and which consists, essentially, of an interiorly-threaded tube D of spun brass, which is connected to one of the circuit-conductors—as, for instance, the conductor E—through the medium of the screw E' and a plug F, of brass or other conducting material, insulated from the socket C and connected to the opposite conductor G through the medium of a screw G'. In place of using the particular form of socket shown any suitable construction of socket may be employed.

The outer face of the receptacle A is made concave, and this concavity H may be treated with any material, if desired, which will give it a reflecting-surface. I represents a ring, of rubber or other suitable material, located in the concavity H and under a shoulder J, formed upon the lower part of the lamp K. The object of this ring is to make a watertight joint between the base of the lamp and the socket C.

Connected to the base of the lamp-receptacle is a metallic ring L, provided with threaded openings L', adapted to receive the screws M, by means of which the lower portion B of the lamp-receptacle is secured to the portion A. Any suitable means of connecting these parts may be employed instead of that shown.

N is a rubber ring introduced between the parts A and B. The object of this ring is to form a tight joint between the parts A and B. The upper surface of the part B has formed in it a cavity, in which is located the threaded bolt O, the end of which is carried through and out at the bottom or rear of the part B.

P represents a threaded washer on the bolt O, located in a countersunk recess Q in the base of the upper surface of the part B. The object of this washer is to form a bearing-surface against which the device for connecting the lamp-receptacles together may bear.

R represents links of metal or other suitable material perforated with an opening to receive the bolts O. These links I prefer to give the shape of oblong plates with rounded ends R'. The plates may be flattened throughout their length or one end or both ends turned upward and disposed in a different horizontal plane, as at R², if desired.

S is a thumb-nut.

T represents ordinary sleeves, such as are commonly used to connect the ends of electrical conductors. The electrical conductors E and G may, if desired, be incased in rubber sleeves U.

In the practical embodiment of my invention it is my purpose to provide each receptacle with one link R and preferably to make one end of the link flat and the other bent upward and disposed in a different horizontal plane from the rest of the link. By this arrangement when two or more receptacles are connected together their faces may be maintained in the same plane.

It will be readily understood from the foregoing description that when it is required to form a letter, figure, or design the receptacles will first be placed in the required positions and the successive or adjacent receptacles united through the links, after which the thumb-nuts may be turned down to force the ends of the links together and upon the washer P.

In this specification I have described only an oblong link as a means for connecting the lamp-receptacles together and a thumb-nut for retaining the parts in the required positions. Manifestly various other mechanical devices may be used which will permit the existence of a flexible relation between the different lamp-receptacles and yet embody the intent of my invention.

Having thus described my invention, I claim—

1. The combination with a series of lamp-receptacles, of a series of link connections between them, and means for defining the positions of the receptacles relative to each other.

2. The combination with a series of lamp-receptacles, of a series of link connections

between them, each link formed as a flat plate with one end turned upward and in a different horizontal plane, and means for defining the position of the receptacles relative to each other.

3. The combination with a series of lamp-receptacles, each receptacle consisting of two parts, one part connected to the electrical conductors and carrying a socket for the lamps, and the other part connected to an adjustable connecting device, a series of adjustable connecting devices, and means for defining the position of the receptacles relative to each other.

4. The combination with a series of lamp-receptacles, each receptacle consisting of two parts, one part having a concave reflecting-face and carrying the usual socket, and the other part carrying a projecting bolt and thumb-nut, and a series of adjustable connections interposed between the receptacles.

5. A supporting structure for electric lamps, comprising a series of independent receptacles, a series of independent connecting devices which will permit relative movement of the receptacles, while maintaining their distance, and means for fixing the position of the receptacles.

6. The combination with a series of lamp-receptacles, of a connecting device between pairs of such receptacles which will permit of the position of the receptacles relative to each other being altered, while maintaining the distance between such receptacles.

In testimony whereof I affix my signature in the presence of two witnesses.

WILLIAM FARLEY BREWSTER.

Witnesses:

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W. H. PUMPHREY,