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H. FRIEDRICHSEN

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ELECTRIC GLOW LAMP

Filed July 9, 1929

Fig. 1

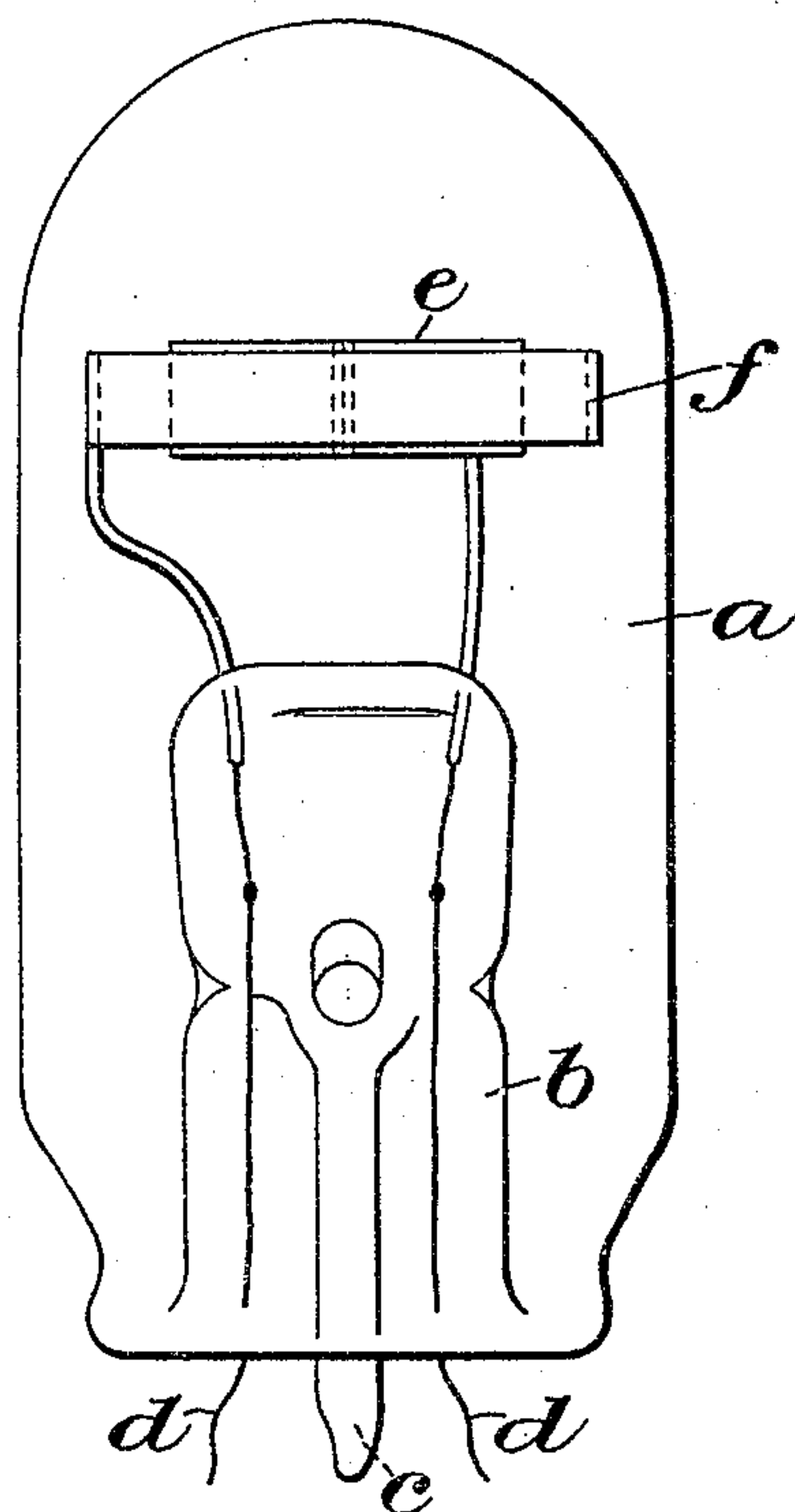
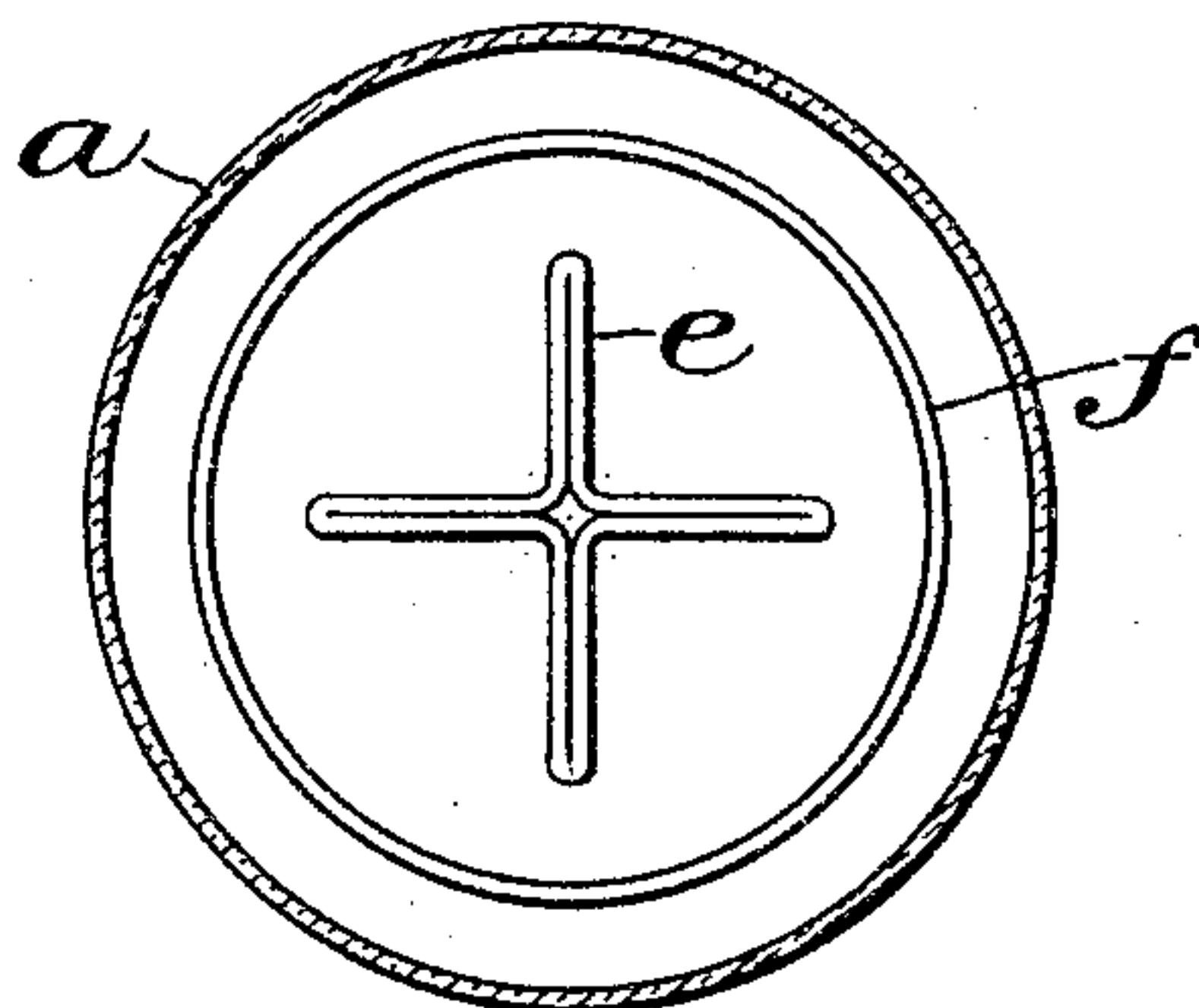


Fig. 2



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ELECTRIC GLOW LAMP

Application filed July 9, 1929, Serial No. 377,006, and in Germany July 23, 1928.

The present invention relates to electric lamps of the negative glow type and more particularly the invention relates to improvements in the configuration of the electrodes of such devices.

The object of the invention is to provide a means whereby the polarity of various electrical devices can be clearly and unmistakably indicated.

10 In accordance with the object of the invention the electrodes of the electric negative glow lamp, which may be of the gas filled type, have received an entirely new and novel configuration. One electrode is shaped
15 in the form of a cross and the other electrode is shaped in the form of a ring. The ring shaped electrode surrounds the cross shaped electrode, lies in the same plane therewith and is concentric thereto. This arrangement and shaping of the electrodes gives
20 great visibility to each of them, which permits the building of the device in very small proportions without hindrance to the inspection of the electrodes.

25 In the drawing accompanying and forming part of this specification an embodiment of the invention is disclosed.

Fig. 1 shows the electric negative glow lamp in side elevation.

30 Fig. 2 is a top cross sectional view of the device.

The electrodes are mounted in the cylindrical glass chamber "a" in any known manner. The exhaust tube "c" is attached to the
35 base "b". The current leads "d" run through the pinched part of the base "b". One current lead is attached to the cross shaped electrode "e" and the other electrode is attached to the ring shaped electrode "f". As is
40 shown in the drawing both electrodes "e", "f" are arranged in a plane and so placed with relation to each other that the ring shaped electrode "f" entirely surrounds the cross shaped electrode "e", and is concentric there-
45 with.

In operation the device has the following characteristics. In testing the polarity of direct current a glow is induced around the cross shaped electrode, when the polarity is
50 right. With wrong polarity a glow is in-

duced around the ring shaped electrode. Used in an alternating current arrangement a glow discharge takes place around both electrodes.

While I have shown and described and 55 have pointed out in the annexed claim certain novel features of the invention, it will be understood that various omissions, substitutions and changes in the details of the device illustrated and in its use and opera- 60 tion may be made by those skilled in the art without departing from the spirit of the invention.

What I claim is new and desire to secure by Letters Patent of the United States, is: 65

An electric current indicator device, comprising a gas filled glass chamber, electrodes sealed therein, one of said electrodes having a cross shape, and another of said electrodes having an annular shape, the electrodes being 70 mounted concentric with each other, and located in the same plane, the annular shaped electrode surrounding the cross shaped electrode.

In witness whereof I have hereunto set 75 my hand this 24th day of June, 1929.

HEINRICH FRIEDRICHSEN.

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