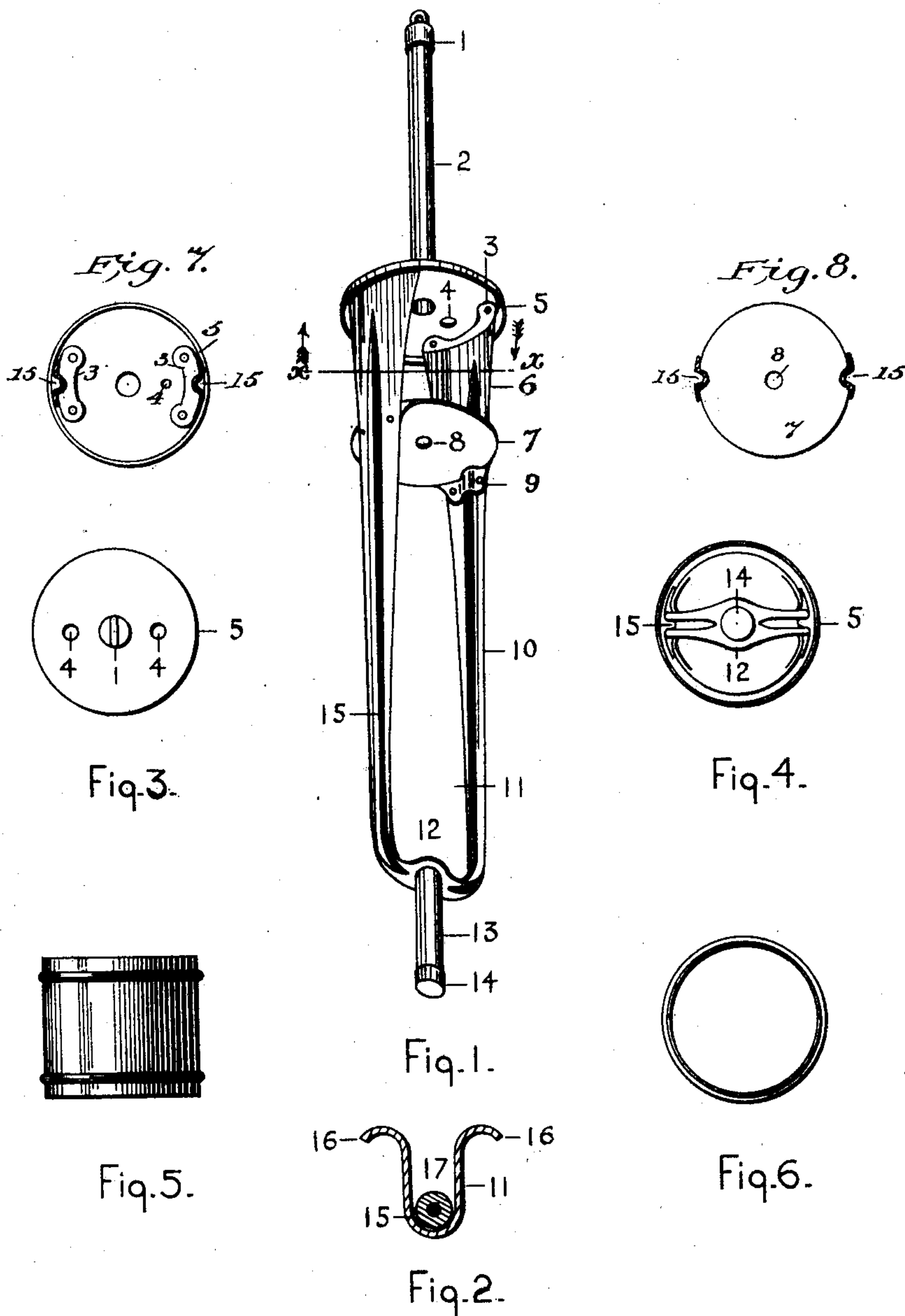


(No Model.)

A. WEBER.
ARC LAMP FRAME.

No. 502,687.

Patented Aug. 1, 1893.



WITNESSES:

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ARC-LAMP FRAME.

SPECIFICATION forming part of Letters Patent No. 502,687, dated August 1, 1893.

Application filed September 8, 1892. Serial No. 445,351. (No model.)

To all whom it may concern:

Be it known that I, AUGUST WEBER, a citizen of the United States; residing at Schenectady, in the county of Schenectady and State of New York, have invented a new and useful Arc-Lamp Frame, of which the following is a specification.

The object of my improvement is to provide a strong yet light frame for arc lamps which at the same time will protect the negative wire running from the mechanism to the bottom of the lamp.

Figure 1, shows my arc light frame in perspective. Fig. 2, shows a section of the leg of the frame at the point 11, Fig. 1. Fig. 3, shows a view of the frame looking from the top. Fig. 4, shows a view of the frame looking from the bottom. Fig. 5, shows a side view of the mechanism cover. Fig. 6, shows an end view of the mechanism cover. Figs. 7 and 8 are sectional views.

Similar figures refer to similar parts throughout the several views.

Referring to the drawings, Figure 1, is an arc light frame constructed of sheet metal and in such a manner that it is exceedingly strong and durable. This I accomplish by bending or forming the metal of the legs into the form shown in Fig. 2, namely, by forming a deep ridge or bead (15) in the center of the leg and two smaller ones (16, 16) one on each side of the center one. This strengthens the leg so that it can resist a strain applied at any point, and not only this, but the large groove (15) serves as a receptacle for the wire (17) running from the mechanism chamber to the negative carbon holder.

In Fig. 1, 6, 10, 15 is the corrugated metal part described above, at the upper end of which is riveted a plate (5) having a downward flange around its edge, the part (6) of the legs of the frame having inwardly bent flanges (3) through which rivets pass into the top plate (5). A little below the top plate (5) is riveted another plate (7) which serves as the bottom of the mechanism chamber. This latter plate is smaller in diameter than the former one and has flanges (9) integral therewith providing means whereby it can be riveted to the legs (10).

Into the top plate is fastened the tube (2)

into which the carbon rod can pass and which has at its upper end the cap (1) provided with an eye by which the lamp can be suspended. This top plate is also provided with hole (4, 4) through which the terminal hooks of the lamp pass and are bolted. The mechanism chamber formed by the top plate (5) the part (6) of the legs and the bottom plate (7) can be inclosed by the sheet metal cover Figs. 5 and 6. The cover passes over the legs (6) and plate (7) up under the flange on the top plate (5) thus forming a chamber into which rain cannot penetrate and dust cannot enter. The lower plate (7) is provided with a central hole (8) through which the carbon rod can pass. The lower end (12) of the leg (10) becomes flat where the lower tube (13) is fastened thereto, the latter having a cap (14) at its lower end to prevent carbon dust and sparks dropping through the tube.

I construct the legs (6, 10, 12) preferably of sheet wrought iron although sheet aluminium or other metal could be used equally well. As at present constructed, the negative wire is subjected to many abrasive influences from the handling of the lamp and from its swinging against any object while in use, as the wire is run along the leg on the outside, the heat of the arc preventing its being placed on the inside of the leg. My invention therefore serves as a perfect safeguard against short circuits or crosses through the insulation on the negative wire becoming abraded from any cause. The frame as described can be made very much cheaper and stronger than present frames while it is at the same time very much lighter. The latter advantage is a great improvement when the lamps are suspended from ropes or wires running across the street, or in fact, wherever it is used.

Having fully described my invention, so that any one skilled in the art to which it pertains could make the same, what I claim as my invention, and wish to secure by Letters Patent, is—

1. An arc lamp frame consisting of a top and bottom plate forming the mechanism chamber and corrugated sheet metal legs whereby a receptacle is formed for the negative wire as described.

2. An arc lamp frame, both legs of which

are formed from the same sheet of metal, the metal being corrugated in places to give rigidity to the structure and protection to the negative wire as described.

5 3. In an arc lamp frame the combination of the upper plate (5) having a flange at its edge and grooved or corrugated legs 6, 10 and 12 fastened thereto and a second plate (7) provided with flanges (9) fastened to said legs
10 (6, 10 and 12).

4. In an arc lamp frame the combination of

the upper plate (5) a tube (2) centrally fastened thereto and grooved or corrugated legs 6, 10 and 12 also fastened to said plate (5), a bottom plate (7) fastened to said legs forming the bottom to the mechanism chamber and a cover to inclose said mechanism chamber as described. 15

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Witnesses:

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