No. 755,642. PATENTED MAR. 29, 1904.

C. P. ELIESON.

ELECTRIC ACCUMULATOR PLATE.

APPLICATION FILED OCT. 16, 1903.

NO MODEL.

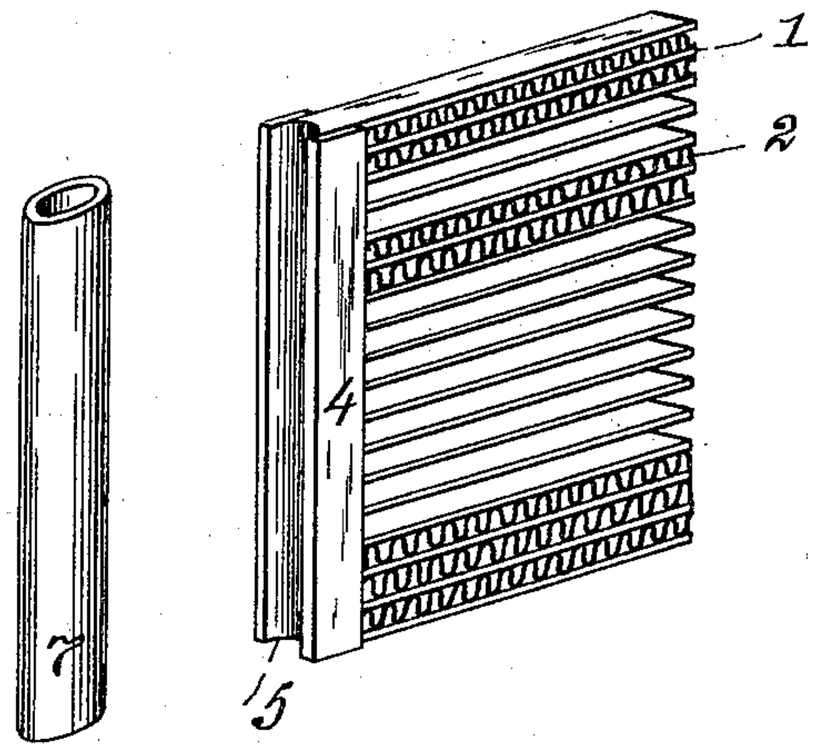

Fig. 1.

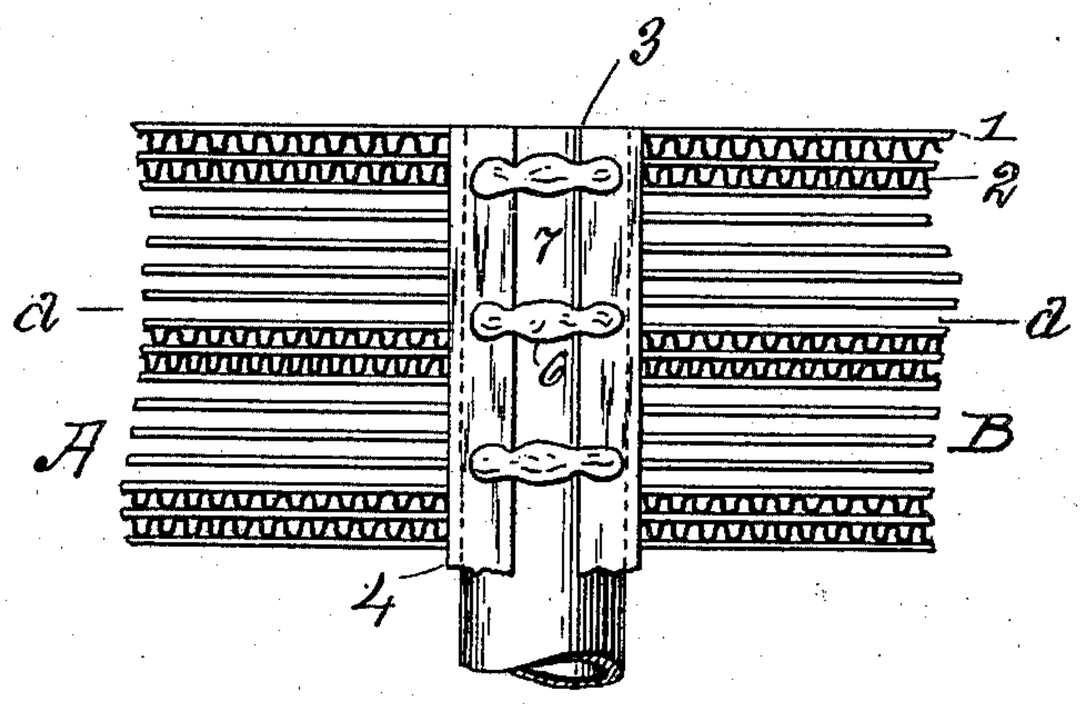

Fig. 2.

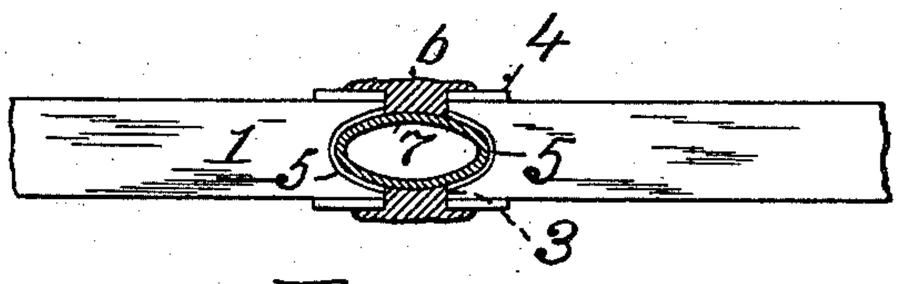

Fig. 3.

WITNESSES:

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No. 755,642. Patented March 29, 1904.

UNITED STATES PATENT OFFICE.

CHAIMSONOVITZ PROSPER ELIESON, OF PARIS, FRANCE.

ELECTRIC ACCUMULATOR-PLATE.

SPECIFICATION forming part of Letters Patent No. 755,642, dated March 29, 1904.

Application filed October 16, 1903. Serial No. 177,291. (No model.)

To all whom it may concern:

Be it known that I, CHAIMSONOVITZ PROSPER ELIESON, of Paris, France, have invented a new and useful Improvement in Electric Accumulator-Plates, of which the following is a specification.

The invention relates to an electric accumulator-plate of the type shown in United States Patent No. 692,433, granted to myself and Vladimir de Bobinsky on February 4, 1902.

The object of the invention is to secure greater strength and stiffness of the central conductor and also at the same time to reduce the weight of the plate without impairing its qualities.

The invention consists in the improved construction hereinafter set forth.

In the accompanying drawings, Figure 1 shows in perspective a portion of an accumulator-plate, exhibiting the inner grooved edge and also the central tube. Fig. 2 also represents a portion of the plate, showing the two sections forming the plate united to the central tube. Fig. 3 is a cross-section on the line *a a* of Fig. 2.

Similar characters of reference indicate like parts.

The plate shown in the above-mentioned patent No. 692,433 has a central conductor of lead from each side of which extends a group of thin flexible strips of lead alternately straight and corrugated, as shown at 1 and 2 in the accompanying drawings. The strips of each group are united at their inner ends 3, the outer ends being left free. The united ends are also secured to guard-strips 4 on each side.

In accordance with my present invention the strips of each group are united to one another and to the guard-strips 4 by soldering, preferably, autogenous. A rib of solid metal is thus produced on the edge of each group or plate-section A or B, which rib is usually greater in bulk than is necessary to insure the proper connection of the parts and proper amount of conductivity and which serves no useful purpose in the plate, but, on the contrary, adds to its weight. I form a groove 5 on the longitudinal edge of this rib. I then place the grooved edges facing one another and seat in the grooves a tube 7, preferably of lead. Said tube is preferably elliptical in cross-section and is almost wholly inclosed in said grooves. It may be directly connected to the interior of the groove by solder or otherwise or preferably by a number of transverse bars of solder 6 to the guard-strips 4, as shown in Figs. 2 and 3. By means of this construction I obtain a very strong connection for the plate-sections A B and render the plate more compact by bringing said sections closer together and get rid of needless metal. I thus also cheapen the plate. I find by actual manufacture that by this means I am enabled to reduce the weight of the plate sometimes as much as fifteen per cent. without impairing its accumulating properties.

I claim—

1. In an electric accumulator-plate, a plurality of strips of thin flexible lead in juxtaposition and free at one end, a conducting-rib united to the ends of said strips on one side and having a longitudinal groove in its opposite side, a tube of conducting material constructed to be received in said groove and means for securing said tube.

2. In an electric accumulator-plate, a plurality of strips of thin flexible lead in juxtaposition autogenously soldered together at one end and free at the other end, the rib formed by said soldered ends having a longitudinal groove, a tube of conducting material constructed to be received in said groove and means for securing said tube.

3. In an electric accumulator-plate, two sections formed of strips of thin flexible lead in juxtaposition free at their outer ends and united at their inner ends by a conducting-rib having a longitudinal groove, the said sections being placed with their grooved edges facing and a tube of conducting material received and secured in said grooves.

4. In an electric accumulator-plate, two sections each formed of flexible strips of lead al-

ternately flat and corrugated free at their outer ends and united at their inner ends by a conducting-rib having a longitudinal groove, the said sections being placed with their grooved edges facing, a tube of conducting material seated in said grooves and a plurality of transverse connections securing said tube to said rib.

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

CHAIMSONOVITZ PROSPER ELIESON.

Witnesses:

WM. H. SIEGMAN,

I. A. VAN WART.