B. FORD.

SECONDARY OR STORAGE BATTERY.

APPLICATION FILED MAY 9, 1914.

1,169,788. Patented Feb. 1, 1916.

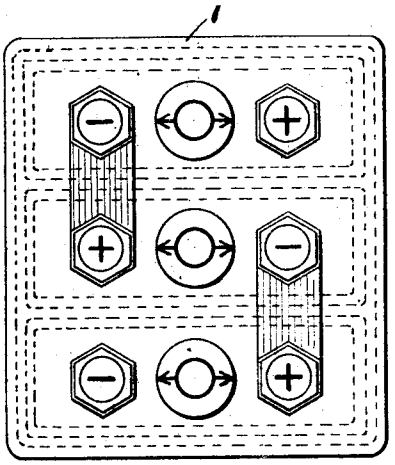


FIG. 1.

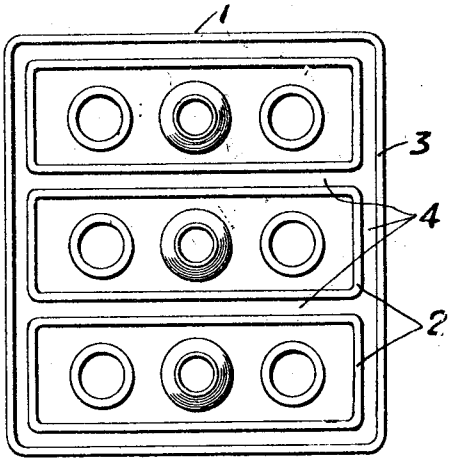


FIG. 2.

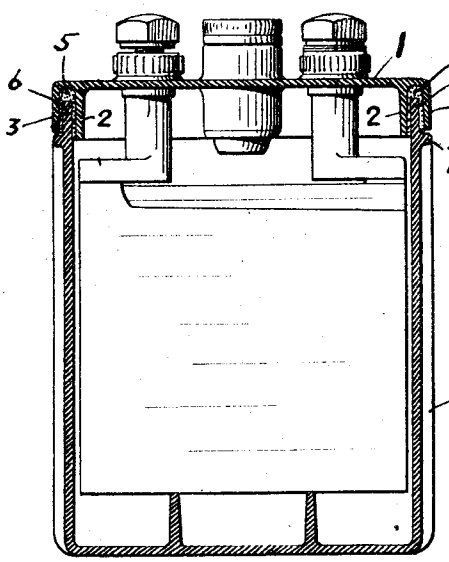


FIG. 3.

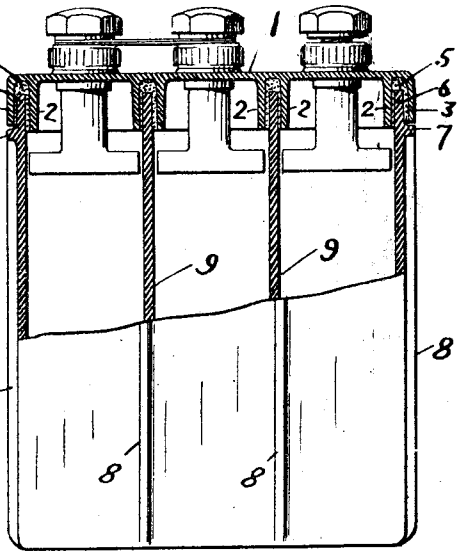


FIG. 4.

WITNESSES:

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SECONDARY OR STORAGE BATTERY.

1,169,788. Specification of Letters Patent. Patented Feb. 1, 1916.

Application filed May 9, 1914. Serial No. 837,372.

To all whom it may concern:

Be it known that I, BRUCE FORD, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Secondary or Storage Batteries, of which the following is a specification.

The principal object of the present invention is to improve the connection between a storage battery jar and its cover to the ends that the joint may be made tight, that the jar wall may be supported, that the sealing compound may be conveniently and properly applied, and that the cover may be easily taken off and put on.

The invention will be claimed at the end hereof but will be first described in connection with the accompanying drawings forming part hereof and in which—

Figure 1, is a top or plan view of a jar having a cover embodying features of the invention. Fig. 2, is a view of the under side of the cover. Fig. 3, is a sectional view of a jar having a cover embodying features of the invention, and Fig. 4, is a view, partly in section, taken at right angles to the section of Fig. 3.

In the drawings 1, is a cover having integral flanges 2 and 3, projecting from one of its faces and generally parallel with each other so as to form between them a groove 4. In this groove 4, is arranged the sealing compound 5. The sealing compound is usually a substance or material which softens, when heated, and sets upon cooling. As shown the inner flange 2, is somewhat deeper than the outer flange 3, which is a matter of some convenience. The rim 6, of the jar is received by the groove 4, in such a way that the sealing compound 5, fills the space between the two and thus forms a perfectly tight joint. The flange 3, may coöperate with the bead 7, of the jar as a stop and as a means for retaining the sealing compound. While the ribs 8, on the jar tend to stiffen it as does also the bead 7, still the flanges 2 and 3, with the sealing compound and the rigidity of the cover 1, and its unitary or one-piece flanges 2 and 3, afford a strong and reliable support for the top of the jar.

As shown in the drawings the cover is intended for use with a jar sub-divided by partitions 9, and so the jar wall proper is received by the marginal part of the groove 4, while the partitions are received by the crosswise parts of the groove 4. Of course if the jar does not have partitions, the crosswise parts of the groove 4, are omitted and the marginal part of the groove 4, is retained. Since the flanges 2 and 3, are integral with the cover 1, the cover as a whole may be made quite light. Furthermore since each of the flanges is integral with the cover, the position of the flanges in respect to each other is fixed and unchangeable. The fact that the flanges are integral with the cover provides for ease in assembling the sealing compound and the other parts.

The cover 1, is supported by the plate structure 10, and not by the top rim of the jar wall. In consequence of this the top rim of the jar wall may not be crowded into or caused to fill the space in the bottom of the groove 4, which is provided for the sealing compound, so that this space occupied by the sealing compound is maintained, and the sealing compound is not forced out.

It will be obvious to those skilled in the art that modifications may be made in details of construction and arrangement, hence the invention is not limited in regard to such matters nor further than the prior state of the art and the following claims may require.

What I claim is:

1. In a storage battery the combination of a cover provided with integral flanges projecting from one face thereof and constituting between them a groove having space for the reception of sealing compound, sealing compound in said space, a jar having the top of its wall arranged in said groove, and a plate structure holding and positioning the cover in respect to the top rim of the wall to maintain said sealing space.

2. In a storage battery the combination

of a cover provided with integral flanges projecting from one face thereof and constituting between them a groove having space for the reception of sealing compound, sealing compound in said space, a jar having the top of its wall arranged in said groove, and means holding and positioning the cover in respect to the top rim of the wall to maintain said sealing space.

BRUCE FORD.

Witnesses:
EDGAR L. LONGAKER,
WISTAR E. PATTERSON.