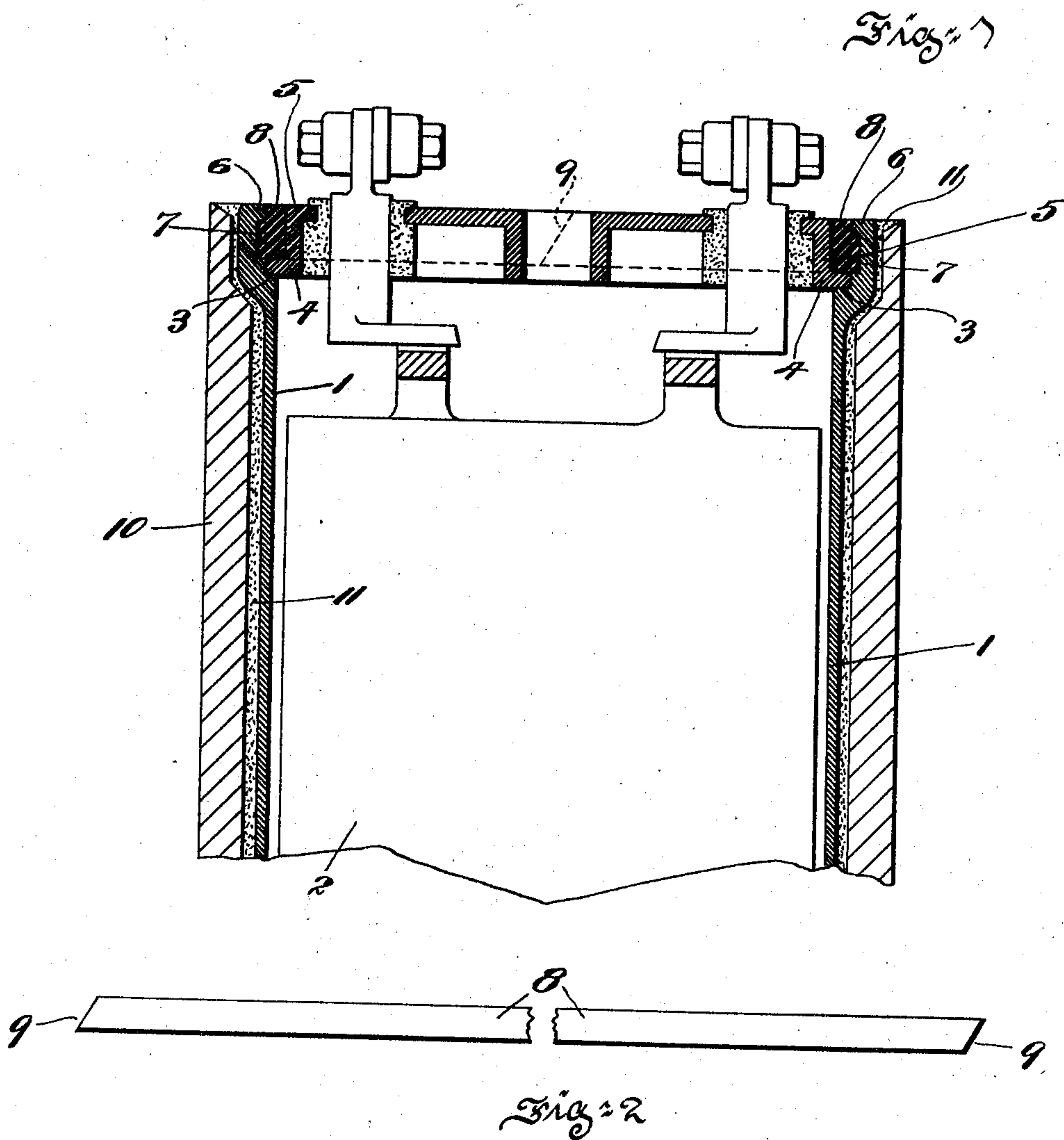


B. FORD.
 SECONDARY OR STORAGE BATTERY.
 APPLICATION FILED MAY 4, 1908.

986,449.

Patented Mar. 14, 1911.



Witnessed
[Signature]
 Frank H. Hinch.

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 By
 Augustus S. Skougston.
 Attorney

UNITED STATES PATENT OFFICE.

BRUCE FORD, OF PHILADELPHIA, PENNSYLVANIA.

SECONDARY OR STORAGE BATTERY.

986,449.

Specification of Letters Patent. Patented Mar. 14, 1911.

Application filed May 4, 1908. Serial No. 430,832.

To all whom it may concern:

Be it known that I, BRUCE FORD, a citizen of the United States, and a resident of 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 provide for sealing the covers of so-called portable batteries in such manner that they can be conveniently applied and removed and are properly centered, and this I accomplish by providing the top of the jar with a seat that supports the bottom and edge of the flange of the cover and with a rim extending beyond the face of the flange of the cover for the reception of the sealing material which is supported on top of the flange of the cover.

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

Figure 1, is a central sectional view of the upper portion of a battery embodying features of the invention, and Fig. 2, is a top or plan view of one type of seal.

In the drawings 1, is a jar which contains the plates 2, and the electrolyte. At the top the jar is provided with a seat 3, that supports the bottom and edge of the flange 4, which projects from the bottom of the rim wall 5, of the cover. There is a rim 6, which extends upward from the jar above the seat 3, and into substantial alignment with the top of the cover. This rim 6, is shown as provided internally with a groove 7, and as constituting an off-set from the walls of the jar. The bottom wall of the groove 7, is above the seat and is substantially flush with the top of the flange 4.

8, is a seal interposed between the edge wall of the cover and the inner face of the rim 6, and it overlies the top of the flange 4, of the cover. Obviously the seal is keyed in the groove 7 and overlies the bottom of

the groove and the top of the flange 4. Thus the cover is centered and is well held to place in the jar and when a fusible seal is used and is fused for the removal of the cover, the sealing compound is excluded from the jar. The seal may comprise a fusible sealing compound or may consist of a strip of rubber. In the latter case the strip may exceed in cross section the space which receives it, and it can be placed in such space by insertion while extended or stretched, so that when released it expands and makes the necessary tight joint. The ends 9, of the strip may be beveled or chamfered and thus provide a good joint.

The described construction enables the seat 3 to center the cover and permits of the ready and convenient application and removal of the seal and cover.

10, is a case that contains the jar 1, and it is shown as grooved for the reception or accommodation of the offset portion of the jar.

11, is material that may be inserted between the case and jar.

What I claim is:

In a storage battery the combination of a cover having a rim and having a laterally extending flange arranged below the top of the rim and at right angles to the surface of the rim, a jar provided near its top with a seat that supports the bottom of the flange and fits the rim of the flange and also provided above said seat with a groove the bottom of which is an inward offset aligned with the top of the rim of the flange, and a seal arranged between the jar and cover and in the groove and above the top of the flange, whereby the top of the flange and juxtaposed bottom of the groove prevent the seal if fused from reaching the interior of the jar.

In testimony whereof I have hereunto signed my name.

BRUCE FORD.

Witnesses:

WM. J. JACKSON,

FRANK E. FRENCH.