J. R. SLOAN.

TERMINAL BUSHING FOR ELECTRIC BATTERIES.

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**1,012,461.** Patented Dec. 19, 1911.

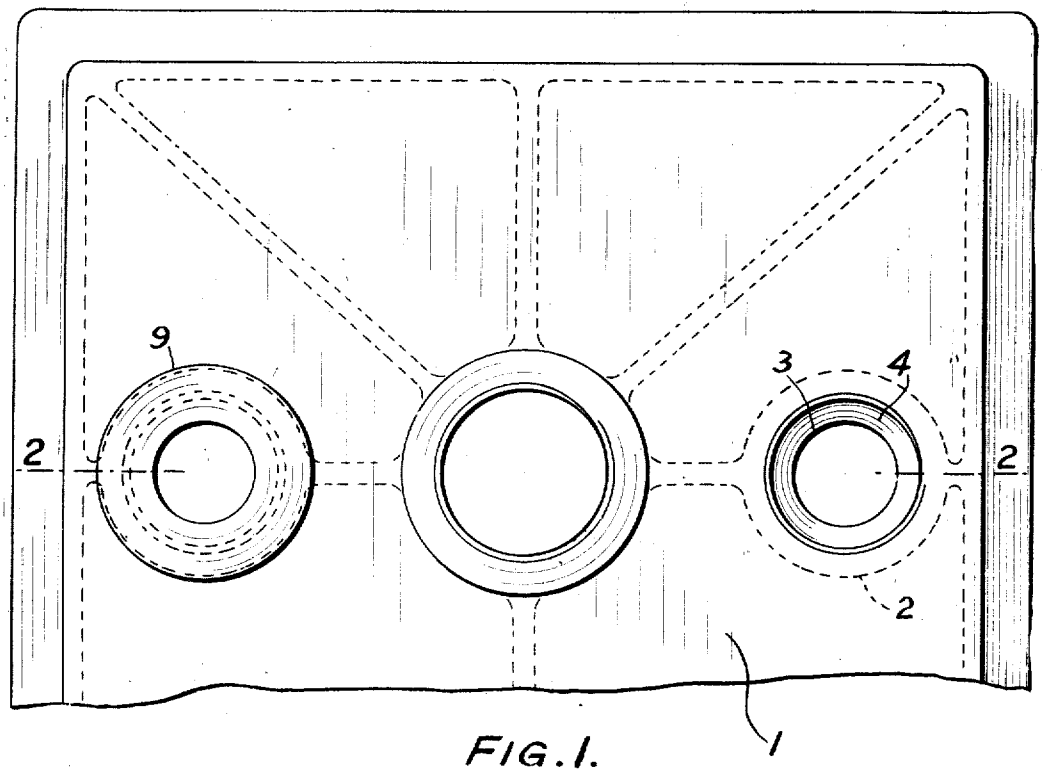


FIG. 1.

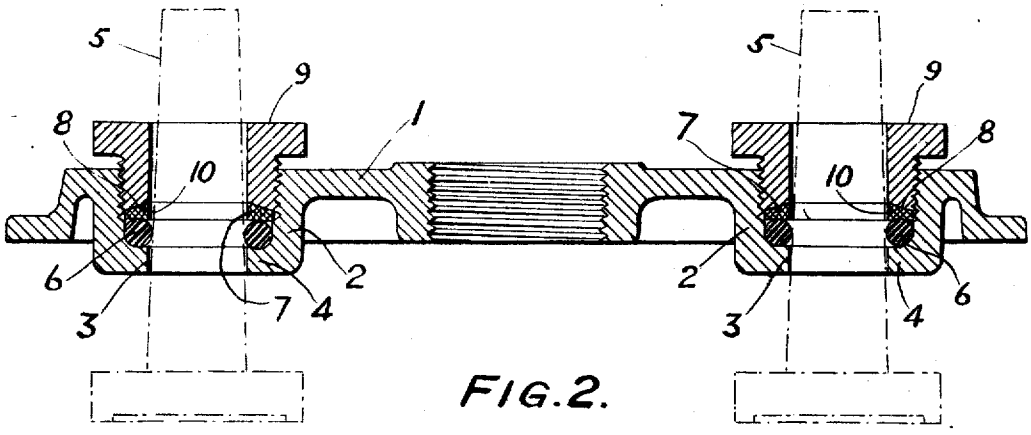


FIG. 2.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

JAMES R. SLOAN, OF ALTOONA, PENNSYLVANIA.

## TERMINAL BUSHING FOR ELECTRIC BATTERIES.

1,012,461. Specification of Letters Patent. Patented Dec. 19, 1911.

Application filed June 9, 1911. Serial No. 632,107.

*To all whom it may concern:*

Be it known that I, JAMES R. SLOAN, a citizen of the United States, residing at Llyswen, Altoona, Blair county, Pennsylvania, have invented an Improved Terminal Bushing for Electric Batteries.

This invention is a terminal bushing designed for conveniently effecting an efficient engagement between battery cell covers and terminals passing therethrough.

The characteristic features of my invention will fully appear from the following description and the accompanying drawings in illustration thereof.

In the drawings, Figure 1 is a plan view of a part of a cover having my improvements applied thereto, and Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1.

In the drawings is shown a cell cover 1 (suitably of hard rubber or bakelite composition) having the depending sockets 2 with apertures 3 extending through the bottoms thereof and bottom flanges or seats 4 surrounding the apertures. Terminals 5 are passed through the respective apertures 3 and engaged by soft rubber rings 6 sleeved thereon and supported by the seats 4. Washers 7 (suitably of antimony lead), having coned top surfaces 8, are sleeved on the terminals and bear upon the rings 6. Followers 9 (suitably of hard rubber or antimony lead), having the coned bearing surfaces 10, are screwed into the sockets, the surfaces 10 bearing upon the surfaces 8 so as to draw the washers toward the terminals and press the rings against their seats and the terminals, whereby tight connections are made between the rings and the terminals.

This structure has the advantage of simplicity of construction, assemblage and dissociation, while providing an entirely satisfactory mechanical support, and fluid seal.

Having described my invention, I claim:

A cell cover of insulating material having a depending socket, said socket being provided with an inwardly extending bottom flange and an aperture surrounded thereby, in combination with a terminal extending through said aperture, packing means supported by said flange, and a follower sleeved on said terminal and screwed into said socket, said follower having a coned surface adapted for engaging said packing means and forcing it into engagement with said terminal.

In witness whereof I have hereunto set my name this third day of June, 1911, in the presence of the subscribing witnesses.

JAMES R. SLOAN.

Witnesses:

JAS. S. MCCORMICK,

L. J. O'BRIAN.