A. S. HUBBARD.

INSULATING SUPPORT.

APPLICATION FILED AUG. 13, 1913.

1,190,766. Patented July 11, 1916.

Fig. 1.

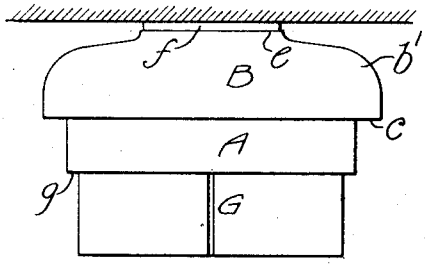


Fig. 2.

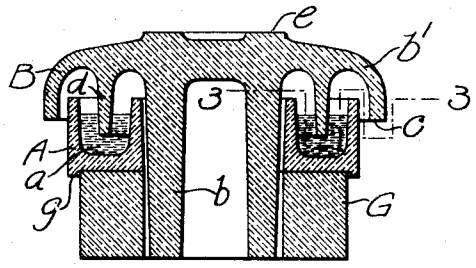


Fig. 4.

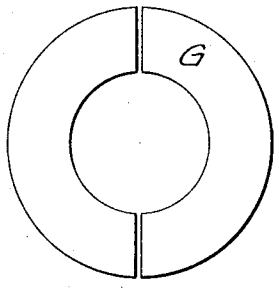


Fig. 3.

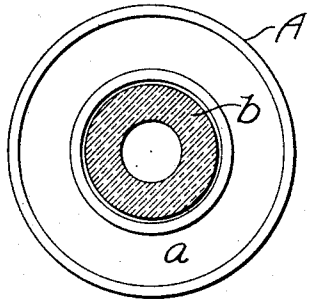
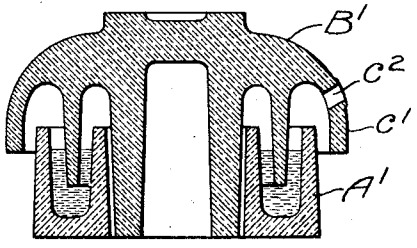


Fig. 5.



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UNITED STATES PATENT OFFICE.

ALBERT S. HUBBARD, OF NEW YORK, N. Y., ASSIGNOR TO GOULD STORAGE BATTERY COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

INSULATING-SUPPORT.

1,190,766. Specification of Letters Patent. Patented July 11, 1916.

Application filed August 13, 1913. Serial No. 784,534.

To all whom it may concern:

Be it known that I, ALBERT S. HUBBARD, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a new and useful Improvement in Insulating-Supports, of which the following is a specification.

This invention relates to insulators of the kind which are used as supports for storage battery tanks and are provided with a receptacle for holding an insulating substance, such as oil.

The objects of the invention are to produce a strong and durable insulator of a construction which will afford a stable support for and insure the perfect insulation of the battery tank or other object supported thereby, and which will effectually exclude acid from the battery or other foreign substance from the oil receptacle, while at the same time enabling the receptacle to be readily filled with the insulating oil or substance.

In the accompanying drawings: Figure 1 is an elevation of one form of an insulator embodying the invention. Fig. 2 is a vertical section thereof. Fig. 3 is a sectional plan thereof in line 3—3, Fig. 2. Fig. 4 is a plan view of the receptacle supporting ring. Fig. 5 is a sectional elevation of modified construction.

Like reference characters refer to like parts in the several figures.

In both of the forms illustrated the insulator comprises two separate pieces or members, both preferably made of like insulating material such as glass, stoneware or porcelain. One of these pieces or members forms an annular receptacle for the oil or other insulating material and the other piece or member forms the support for the battery or object to be insulated and also a cover or guard for the annular oil receptacle.

Referring first to the construction shown in Figs. 1–4 of the drawings, A represents the receptacle member and B the supporting and cover member. The receptacle member is of annular form having a bottom and inner and outer walls rising from the bottom and forming a receptacle *a* for the oil or other insulating substance. The other member B is formed with a central leg or post *b* extending through the central opening of the receptacle member A and adapted to rest on the floor or other supporting base, and an enlarged annular head or portion *b'* which projects outwardly from the post above the oil receptacle and has a marginal flange or skirt *c* which depends around the oil receptacle, thus forming a cover or guard for the latter. The head portion is also preferably provided with an inner annular flange or skirt *d* which depends into the oil or other insulating substance in the receptacle *a* in order to effectually stop the passage of current over the lower surface of the cover portion of the member B should this surface become coated with sulfuric acid from the battery or other conducting substance. The battery tank or other object to be insulated rests on the supporting member B and is directly supported thereby independently of the receptacle member A which loosely surrounds the post of the member B and is, therefore, entirely relieved from all strain. The top of the supporting member B is preferably formed over the leg or post *b* with a slightly raised central bearing portion *e* on which the tank or object is adapted to rest so as to transmit the load directly to the supporting leg and prevent strain on the enlarged cover portion *b'*. If desired a soft metal or yielding plate *f* can be placed on the top bearing *e* to prevent an uneven distribution of the weight on the supporting member and the breakage thereof in the event that it is not perfectly formed. The receptacle member is supported beneath the head of the supporting member in a position in which the skirts of the supporting member depend below the upper edge of the receptacle by means which allow the receptacle to be lowered away from the head sufficiently to be readily filled. For instance, as shown the receptacle rests on a sectional supporting ring G which can be made of the same material as the members A and B or of any other

suitable material. The receptacle A preferably has a bottom marginal lip g which surrounds the supporting ring, thus preventing the accidental separation of the sections of the ring and retaining the receptacle in proper position thereon. The receptacle can be readily lowered for filling it by raising it slightly off of the supporting ring and removing the sections of the latter from beneath the receptacle, when the receptacle can be lowered to the floor. Ample space will then be left between the rim of the receptacle and the outer skirt of the cover portion to permit the insulating substance to be poured into the receptacle.

In the construction shown in Fig. 5 the receptacle member A′ and the supporting and cover member B′ are constructed and coöperate with each other substantially as above described. Instead, however, of supporting the receptacle A′ in an elevated position on a removable support it rests in a fixed position on the floor or other stationary support and the outer skirt c' of the cover member is provided with a filling hole c^2 through which the insulating oil or substance can be poured into the receptacle.

While all of the parts of the insulator are preferably made of the same insulating material, such as indicated, it is not absolutely essential for the receptacle member and the supporting ring G to be made of insulating material.

I claim as my invention:

1. An insulating support comprising a supporting member of insulating material having a leg of sufficient breadth to rest stably on a supporting base and an integral enlarged head having a broad top face on which an object is adapted to rest, and an annular receptacle for an insulating substance which surrounds said leg under said head and is supported on said base independently of said leg, said enlarged head overhanging said receptacle and having a portion which depends into said receptacle and is adapted to dip into the insulating substance therein.

2. An insulating support comprising a supporting member of insulating material having a leg of sufficient breadth to rest stably on a supporting base and an integral enlarged head having a broad top face on which an object is adapted to rest, and an annular receptacle for an insulating substance which surrounds said leg under said head and is supported on said base independently of said leg, said enlarged head overhanging said receptacle and having depending skirt portions respectively surrounding said receptacle and depending into said receptacle.

3. An insulator for supporting a substantially downwardly acting load comprising an annular receptacle for an insulating substance, an insulating supporting member of unitary structure having an integral leg extending through the central opening of the receptacle and adapted to rest on a base and an integral enlarged head which overhangs said receptacle and has a portion which depends into said receptacle and dips into said insulating substance, and means independent of said supporting member for supporting said receptacle and constructed to permit the receptacle to be lowered away from said head.

4. An insulator for supporting a substantially downwardly acting load, comprising a receptacle for an insulating substance, an insulating supporting member of unitary structure having an integral leg adapted to rest on a base and an integral part which depends into said receptacle and dips into said insulating substance, and means independent of said supporting member for supporting said receptacle and constructed to permit the receptacle to be lowered away from said depending part.

5. An insulating support comprising an annular receptacle for an insulating substance, a separate supporting member of insulating material which has a supporting leg extending through the central opening of said receptacle and a head which overhangs and forms a cover for said receptacle, and a sectional supporting ring for said receptacle, said receptacle having a depending lip encircling said supporting ring.

6. An insulating support comprising a supporting member of unitary structure made of insulating material and having a central supporting leg adapted to rest on a supporting base and an integral enlarged head, and a separate member which is supported independently of said supporting member on said base and which surrounds said leg beneath said head and forms a receptacle for an insulating substance, said head having depending skirts respectively surrounding and entering said receptacle.

7. An insulating support comprising an annular receptacle for an insulating substance, a separate supporting member of insulating material which has a supporting leg extending through the central opening of said receptacle and a head which overhangs and forms a cover for said receptacle, and a sectional supporting ring for said receptacle, said sections being adapted to be removed to permit the receptacle to be lowered away from said head.

8. An insulating support comprising a receptacle for an insulating substance, a separate supporting member of insulating material having a portion adapted to rest on a supporting base and which supports an object independently of said receptacle

and a portion of which depends into said receptacle and is adapted to dip into the insulating material therein, and means resting on said base for supporting said receptacle, said means being removable to permit the receptacle to be lowered away from said depending portion.

Witness my hand, this fifth day of August 1913.

ALBERT S. HUBBARD.

Witnesses:
A. J. SOFT,
J. F. CARROLL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."