

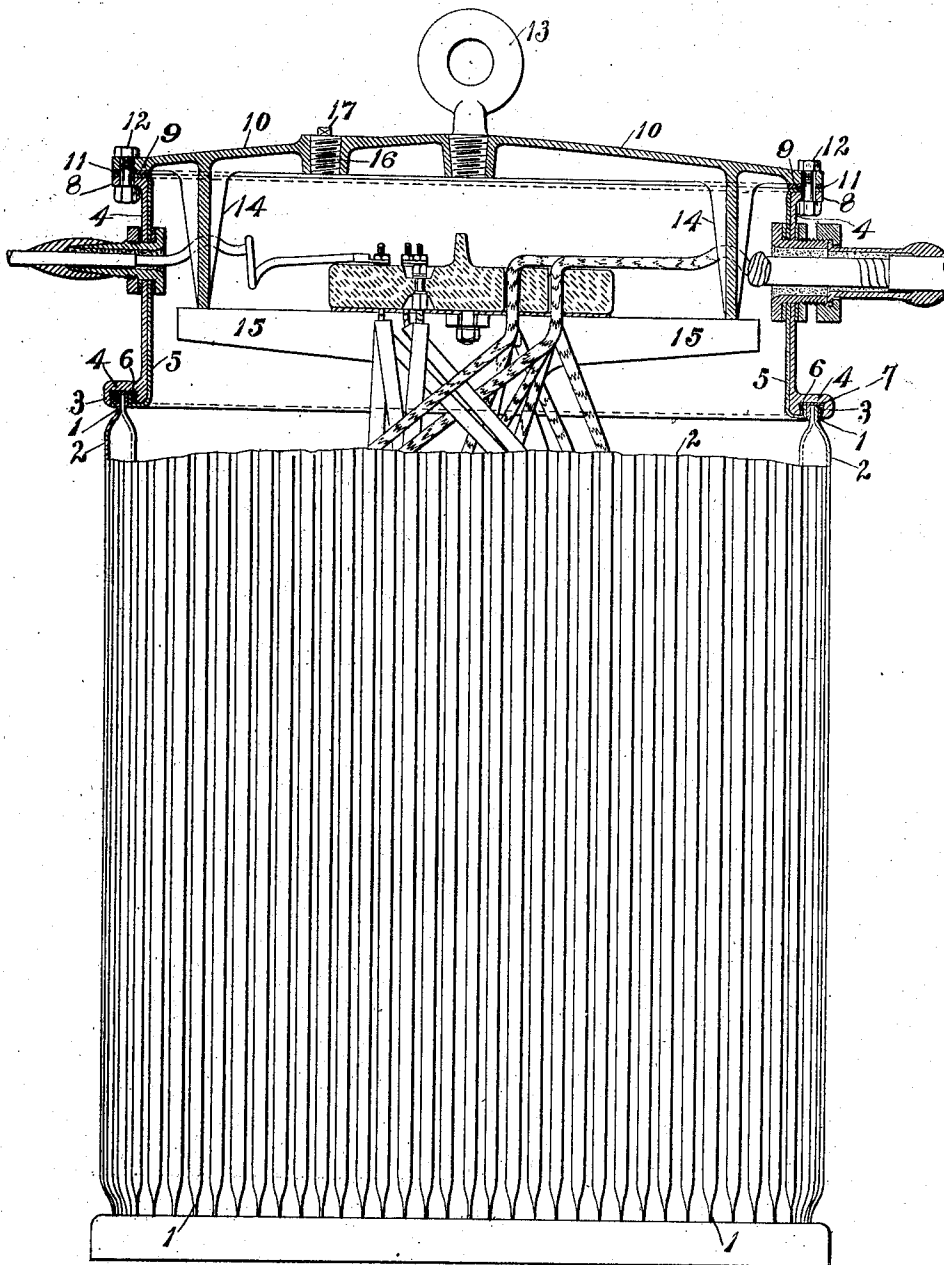
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PATENTED MAY 3, 1904.

J. S. PECK & A. L. ZWARNIK.
MOISTURE PROOF CASE OR RECEPTACLE.

APPLICATION FILED SEPT. 16, 1903.

NO MODEL.



WITNESSES:

F. H. Miller.
Otto S. Scharrer

INVENTORS
John S. Peck
& Albin L. Zwarnik
BY
Hesley Scharr
ATTORNEY

UNITED STATES PATENT OFFICE.

JOHN S. PECK, OF PITTSBURG, AND ALBIN L. ZWARNIK, OF BRADDOCK, PENNSYLVANIA, ASSIGNORS TO WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, A CORPORATION OF PENNSYLVANIA.

MOISTURE-PROOF CASE OR RECEPTACLE.

SPECIFICATION forming part of Letters Patent No. 758,684, dated May 3, 1904.

Application filed September 16, 1903. Serial No. 173,484. (No model.)

To all whom it may concern:

Be it known that we, JOHN S. PECK, a resident of Pittsburg, and ALBIN L. ZWARNIK, a resident of Braddock, in the county of Allegheny and State of Pennsylvania, citizens of the United States, have invented a new and useful Improvement in Moisture-Proof Cases or Receptacles, of which the following is a specification.

Our invention relates to casings or receptacles; and it has for its object to provide means for making such casings moisture-proof.

In the construction of transformer casings or receptacles having top and bottom castings and fluted sheet-metal sides it has heretofore been unnecessary to make a water-tight joint between the top extension and the sides, because the level of the oil in which the transformer is immersed has been kept below the joint. It is becoming a usual practice to place in manholes or other suitable subterranean chambers the transformers employed in connection with urban systems of electrical distribution, the distributing and supply mains of which are placed in underground conduits. In order to fully protect such transformers, it is necessary that all joints be strictly moisture-proof, and to accomplish this result we provide a terne-plate or other suitable sheet-metal lining for the top extension.

Our invention is illustrated in the accompanying drawing, the single figure of which is a view in elevation of a partial section of a casing constructed in accordance therewith.

The crushed ends 1 of the fluted sheet-metal sides 2 are placed in suitable grooves 3 in the lower edge of the top extension 4, which is generally formed of cast metal. The top extension 4 is lined with terne-plate 5 or other suitable sheet metal, the lower edge of which is bent into the groove 3 and seated in solder 6, substantially as shown, said solder being poured into the groove while in a molten state and the groove being of dovetail form in cross-section or being otherwise undercut to insure a firm joint. The solder when cold securely anchors the sides 2 of the receptacle to the top extension 4 and forms a good moisture-proof

joint between the tinned parts 2, 4, and 5. In order to facilitate the flowing of the hot solder, a piece of tinned metal 7 may be placed in the bottom of the groove 3, as shown. The upper edge of the sheet-metal lining 5 is bent over the upper flange 8 of the casting 4, and thereby forms a face between which and the corresponding face 9 of the cover 10 is placed a gasket 11, of rubber, soft metal, or other suitable material. The cover 10 is clamped tightly to the casting 4 by means of a plurality of bolts 12 and is provided with an eyebolt 13 to facilitate the handling of the transformer. When the transformer is in its proper position, the eyebolt 13 may be removed and one end of a vent-pipe substituted therefor, the other end being open to the air at any desired and proper place. The cover 10 is provided with lugs 14, which bear upon the transformer-supporting brackets 15, and thus serve to hold the transformer in position. Oil may be introduced into the receptacle through an aperture 16, which is normally closed by a plug 17. The transformer-terminals may be brought through apertures in the casing in any suitable manner, the means here shown for obtaining a moisture-proof connection to the cables being no part of our present invention.

The fluted sides 2 may have their ends crushed or compressed, as indicated, or not, as desired, the joints between said sides and the lining 5 being made substantially the same in either case.

While we have described our invention as applied to receptacles employed for holding transformers, we desire it to be understood that such receptacles may be otherwise utilized and that our invention is not to be construed as limited to any specific service to the exclusion of others to which it may be applicable.

It is evident from the description and illustration that we have provided a moisture-proof casing or receptacle for transformers by providing a soldered joint between tinned parts, one of which forms a lining for an upper extension, and also a seat or face to which a cover is securely clamped.

We claim as our invention—

1. A case or receptacle comprising fluted sheet-metal sides, a top extension, a cover for said extension, a gasket and a sheet-metal lining for said extension one edge of which is soldered to said fluted sides and the other edge of which and the gasket are clamped between the upper edge of the extension and the cover.
2. A moisture-proof case or receptacle comprising fluted sheet-metal sides, a top extension having a groove in its lower edge, a sheet-metal lining for said extension, a cover and a gasket, the lower edge of said lining being soldered to said fluted sides in said groove and the other end and the gasket being clamped between the cover and the top edge of the extension.
3. A moisture-proof case or receptacle comprising sheet-metal sides, a cast-metal top extension, a sheet-metal lining for said extension having its lower edge soldered to the upper edges of the sides, a cast-metal cover and means for clamping the upper edge of the lining between the cover and the upper edge of the extension.
4. A moisture-proof casing or receptacle comprising sheet-metal sides, a cast-metal top extension having an undercut groove in its

lower edge, a sheet-metal lining for said extension the lower edge of which is soldered to the top edges of the sides in said groove, a cast-metal cover and means for clamping the upper edge of the lining between the cover and the top edge of the extension.

5. A case or receptacle comprising sheet-metal sides, a cast-metal top extension having a groove in its lower edge in which the upper edges of the sides are seated, a sheet-metal lining for the extension the lower edge of which is also seated in said groove, a body of solder filling said groove around the edges of the sides and lining, a cast-metal cover for the extension and means for clamping the upper edge of the lining between the cover and the upper edge of the extension.

In testimony whereof we have hereunto subscribed our names this 1st day of September, 1903.

JOHN S. PECK.
ALBIN L. ZWARNIK.

Witnesses as to J. S. Peck:

HONORIA L. DOUGHERTY,
BIRNEY HINES.

Witnesses as to Albin L. Zwarnik:

W. J. RUSH,
BIRNEY HINES.