F. C. VAN ETTEN.

INSULATOR.

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1,013,241. Patented Jan. 2, 1912.

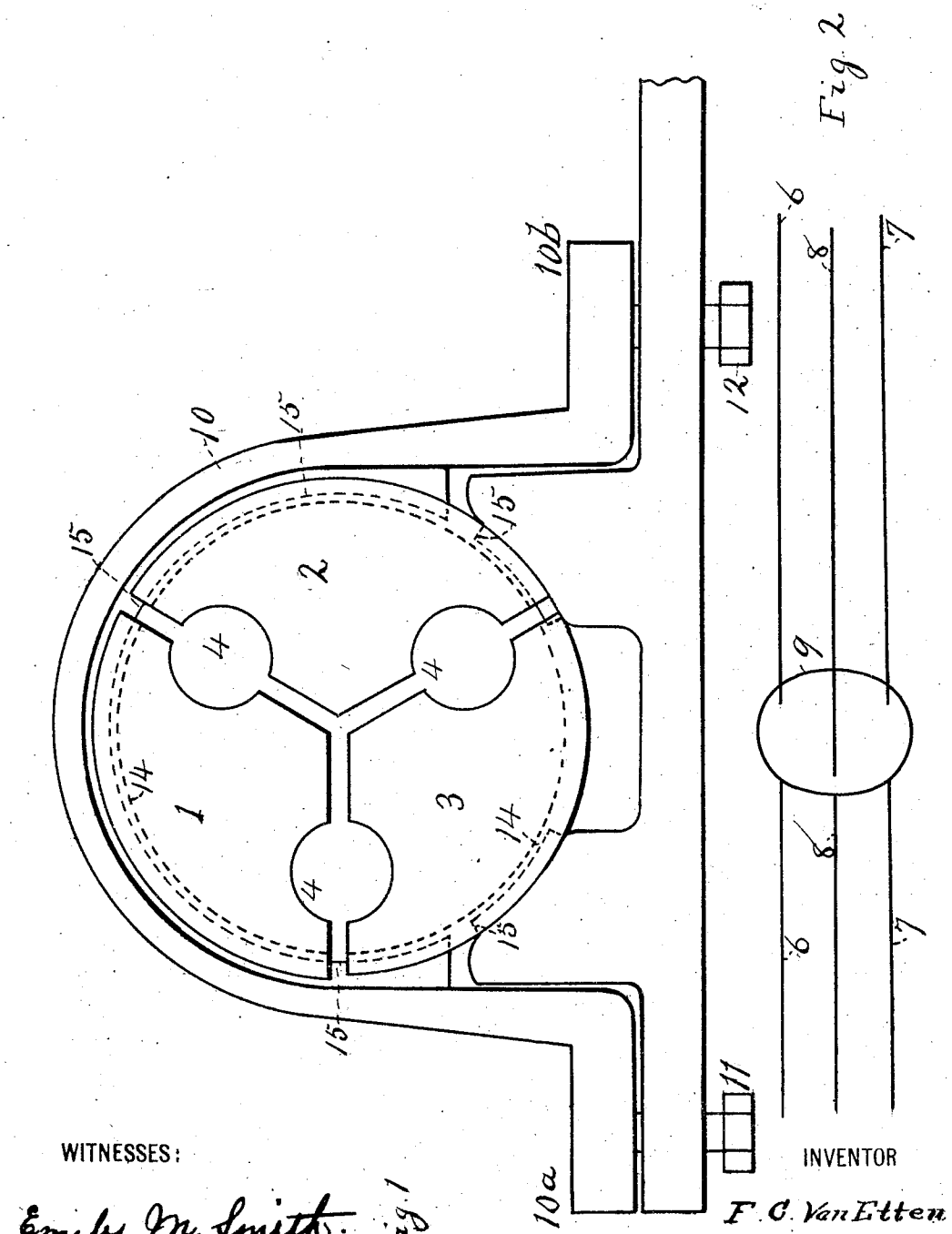

Fig. 1

Fig. 2

WITNESSES:

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FRANK C. VAN ETTEN, OF DAVENPORT, IOWA.

INSULATOR.

1,013,241. Specification of Letters Patent. Patented Jan. 2, 1912.

Application filed October 16, 1911. Serial No. 654,849.

To all whom it may concern:

Be it known that I, FRANK C. VAN ETTEN, a citizen of the United States of America, and resident of Davenport, in the county of Scott and State of Iowa, have invented certain new and useful Improvements in Insulators, of which the following is a specification.

My invention relates to an insulator especially adapted to support wires or cables for carrying an electric current in low voltage systems and wherein said wires or cables are symmetrically located.

The objects of the invention are, by means of a simple but effective and strong construction, to balance the circuit by locating the three wires of a three phase system at the vertices of a triangle; to reduce the reactance of the circuit by bringing the three wires into proximity; to be able to transpose one circuit relative to other circuits by simply rotating the different groups of wires with their insulators through the proper angle; to balance the heating effect on the clamp, which may therefore be of iron, by the fact that the complete circuit is within the retaining ring.

Figure 1 is an elevation of the device assembled and ready for being clamped, the wires, however, being omitted. Fig. 2 is a perspective diagram to illustrate the relative location of the wires which are carried by the insulator.

The structure consists of three equal triangular sectors 1, 2, 3, with semi-circular recesses in the radial sides of the sectors for receiving wires. These recesses are in pairs and any recess is opposite a recess on the adjacent sector to form circular holes 4, for the reception of wires 6, 7, 8. The assembled sectors forming a single plate made up of parts is represented in outline by the oval 9 in Fig. 2. A curved clamp 10 holds the three insulators 1, 2, 3, together to form a circular plate. The clamping may be accomplished by bolts 11, and 12, which may pass through the base 13 at lugs 10^a and 10^b on the ends of the curved clamp 10. The sectors may be rotated to any angle in the clamp and to prevent them from falling out of the clamp especially when they are rotated therein, they are provided with circular grooves 14 on their outer curved edges, and the clamp portions 15 lie in these grooves.

The result of the invention is an insulator in which the wires forming a complete circuit are held at the vertices of a triangle at a distance from each other consistent with theory and practice and within the retaining ring all for accomplishing the objects stated heretofore.

I claim as my invention;—

In a support, the combination of three equal sectors of an insulating plate having recesses on the radial sides of said sectors, a clamp for the sectors, and in which said sectors may be rotated to any angle, and the wires in said recesses are located at the vertices of a triangle.

F. C. VAN ETTEN.

Witnesses:
E. F. HOSTETLER,
W. C. VERDER.