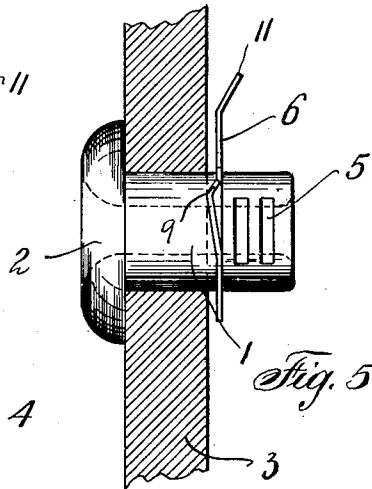
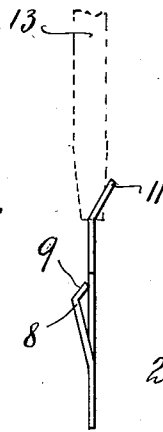
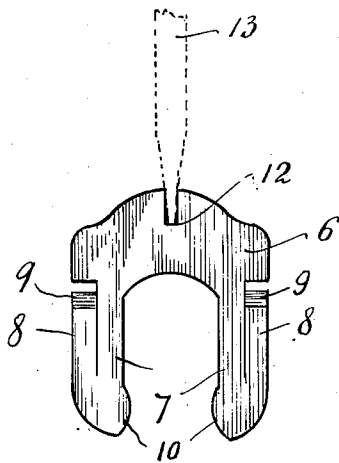
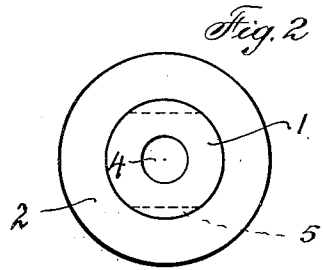
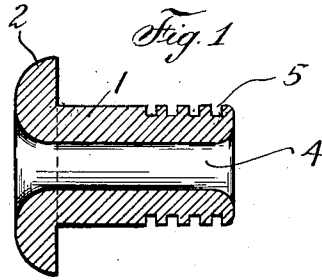


C. A. BARR & J. H. KOREN.
INSULATOR.
APPLICATION FILED DEC. 18, 1911.

1,056,392.

Patented Mar. 18, 1913.



WITNESSES
Geo. A. Shaper
Jos. Miller

INVENTORS
Carl A. Barr
Jerome H. Koren
By Robt. Klotz
Atty.

UNITED STATES PATENT OFFICE.

CARL A. BARR AND JEROME H. KOREN, OF CHICAGO, ILLINOIS.

INSULATOR.

1,056,392.

Specification of Letters Patent.

Patented Mar. 18, 1913.

Application filed December 18, 1911. Serial No. 666,312.

To all whom it may concern:

Be it known that we, CARL A. BARR and JEROME H. KOREN, both of Chicago, Illinois, have invented a certain new and useful Insulator, of which the following is a specification.

The insulator herein described is designed primarily to prevent contact between a cable or wire and any beam, partition, or other member through which such cable or wire may pass. Insulators of this character are well known, and usually consist of a hollow cylindrical body made of porcelain or other non-conducting material, which is driven into or through a perforation or aperture provided in the beam or partition to receive the insulator. If the perforation happens to be too large for the insulator, obviously, the insulator tends to pull out or to fall out, while if the perforation is too small, the insulator will be broken or damaged when the workman endeavors to force it into place.

It is the essential object of this invention to provide an inexpensive and efficient means for retaining the insulator in place upon the beam in connection with which it is used, so that the insulator cannot fall out either on account of the swaying of the wires or for any other reason.

In the drawings, Figure 1 is a longitudinal sectional view of the insulator; Fig. 2 is a transverse sectional view thereof; Fig. 3 is a plan view and Fig. 4 a side view of the clamp; and Fig. 5 is a sectional view of a beam or other member to which the insulator is applied, the insulator being shown in elevation and clamped in position.

The insulator 1 is preferably a hollow cylinder, and is of any convenient length or diameter. The insulator is made of porcelain, glass, or other non-conductor, having one end thereof provided with a head or cap 2.

The insulator is adapted to be placed in position in the beam 3 and the wires or cables (not shown) which are to be kept out of contact with the beam 3 pass through the central aperture 4. That end of the insulator opposite the head 2 is provided with a groove or grooves 5 which constitute seats for the clamp 6, which clamp is adapted to fit into any one of said seats 5. Said seats may be either circumferential corrugations

or grooves each lying in a plane perpendicular to the axis of the cylinder, or they may be segmental or arcuate grooves which extend only part way around the outer surface of the cylinder. In this last-named construction every seat on one side must be diametrically opposite to a seat on the other side.

The clamp 6 is preferably made of spring metal, though any other suitable material may be employed, but metal is recommended both because of its strength and because the clamps can be economically manufactured by stamping. The clamp 6 has two arms 7 which are just far enough apart so that, when the clamp is placed in position upon the insulator, the inner edge of each arm 7 will engage the outer surface of the insulator at any point where same is grooved at 5. Each arm 7 is provided with a spring-like tongue or projection 8, one end of which is bent at 9 to prevent exposure of any sharp edge or corner of said tongue; while the toes 10 which are upon each arm 7 adjacent the end thereof keep the clamp from too readily slipping on or off the insulator. The clamp is bent so as to form an ear 11, said ear being on the side opposite the tongues 8, and a recess or slot is provided at 12 to receive a screw-driver or similar tool.

The method of using the invention is as follows: After the insulating cylinder 1 has been placed in the perforation provided therefor in the beam 3, and either before or after the wire or cable is strung, the clamp 6 is fitted over the grooved end of the insulator, each arm 7 engaging one of the seats 5, and the clamp being so placed that the spring-like tongues 8 are on the side next to the beam, while the ear 11 projects outwardly away from the beam. The screw-driver 13 is placed within the slot 12, and the clamp then pushed into place. The tongues 8 engage the surface of the beam and thus tend to force the clamp and the cylinder toward the right, Fig. 5, and thus take up all lost motion and prevent any rattling or moving of the insulator within the beam. When it is desired to remove the insulator from the beam, the ear 11 is grasped with a pair of pliers, and the clamp pulled off the insulator by a sharp jerk, after which the insulator itself can easily be taken off the beam.

We claim as our invention:

An insulator provided with a circumferential seat, and a clamp having arms adapted to engage said seat, the outer edge of
5 each of said arms being bent to form a spring-like tongue, and the end of said tongue being turned toward the main body of said clamp.

In testimony whereof we affix our signatures in the presence of two witnesses.

CARL A. BARR.
JEROME H. KOREN.

Witnesses:

JOSEPH SCHLENKER,
ROBT. KLOTZ.