FINISH STRIP FOR ELECTRIC BARRIERS

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This invention relates to means for finishing off electric barriers arranged between high tension conductors and apparatus in electric power plants, substations and the like, and has for its principal object the provision of finish strips adapted to be mounted upon the outer edges of the barriers to give them a uniform, pleasing appearance, and enable the completion of fire-proof inclosures for the electrical apparatus or conductors.

In my companion application, Serial No. 684,733, I have disclosed preferred constructions of detachable fire-proof electric barriers for use between high tension conductors and electrical apparatus, but in practice I have found that the free edges of such barriers do not lend themselves to the ready attachment of finish strips to enable the completion of inclosures around the electrical apparatus or conductors, for the reasons that the barriers are of a hard, stone-like composition in which nails and bolts cannot be readily fastened and because of the fact that the outer edges of the barriers are separated from each other by varying distances. The present application discloses simple and effective means for mounting finish strips upon the outer edges of the barriers without cutting the barriers and whereby the finish strips may be readily adjusted laterally upon the barriers to rectify the varying spaces between the barriers and enable the use of uniform panels or doors to complete the inclosures of the electrical apparatus or conductors.

A further object of my invention is the provision of adjustable jamb alignment strips directly secured upon the barriers by means of the bolts utilized for positioning the barriers, and a fire-proof jamb fitting over the alignment strip and having a central portion spaced from the alignment strip a sufficient distance to permit the use of slightly varying lengths of bolts.

Other objects and advantages will be apparent from the following description, wherein reference is made to the accompanying drawings illustrating a preferred embodiment of my invention and wherein similar reference numerals designate similar parts throughout the several views.

In the drawings:

Fig. 1 is a detail perspective view, with parts broken away showing the manner of mounting my improved finishing strips upon electric barriers and the manner of mounting panels or doors upon the finishing strips. Fig. 2 is a detail cross section taken substantially on the line 2—2 of Fig. 1, and Fig. 3 is a detail vertical section taken substantially on the line 8—8 of Fig. 2.

Referring now to the drawings, the numeral 5 designates electric barriers adapted to be secured to the walls of electric power plants, substations and the like by means of elongated bolts 6 extending through apertures 7 in the barriers. These barriers are preferably formed of a stone-like composition that is both fire-proof and electrically insulating, such as fully disclosed and claimed in my companion application, Serial No. 684,733, filed January 7, 1924. These barriers are ordinarily arranged either horizontally or vertically, or both, between high tension electrical apparatus or conductors, and serving to isolate the electric members and also to insulate them against possible arcing. It is desirable, moreover, to complete an enclosure around the electric members by providing fire-proof and electrically insulating panels or doors between the outer edges of the barriers to completely isolate the electric members and avoid the danger of injury to persons or apparatus adjacent the electric members. To enable the ready completion of such enclosures around the electric members, I provide jamb alignment strips 8 on the outer edges of the electric barriers 5, and secure them to the barriers by means of the same bolts 6 that are utilized for securing the barriers in position upon the wall of the power house, etc. The jamb alignment strips 8 are herein shown as formed of wood sheathed with a light metallic cover wherever they are exposed to sparks from the electric members. A plurality of spaced apertures 9 are provided in the jamb alignment strips 8, the distances between the centers of said apertures being substantially the same distance as that between adjacent bolts 6. The apertures 9, however, are of much greater diameter than the diameter of the bolts 6 to enable the moving of the alignment strips 8 laterally across the ends of the barriers until the side edges of adjacent alignment strips are separated from each other by uniform distances. When the alignment strip 8 has been correct-
ly positioned upon the barriers it is secured in such position by suitable means, such as the nuts 10 and elongated washers 11, substantially as shown in Figs. 1 and 3. The turning of the nuts 10 serve to tightly bind the alignment strip 8 upon the outer edge of the barrier. It will be observed that the extremities of the bolts 6 project outwardly beyond the outer face of the alignment strips 8, and in practice I have found that these ends project varying distances, due to the varying lengths of the bolts, etc. To enable the ready covering of the projecting extremities of the bolt 6 I provide a jamb strip 12 having side portions adapted to fit over the sides of the jamb alignment strips 8, then turned portions at substantially right angles to the side portions, and a raised central portion between such turned portions, the raised central portion being of sufficient depth to clear the projecting extremities of all the bolts 6 (note Fig. 2). The jamb strips 12 are preferably formed of metal or other fire-proof substance, and are secured to the sides of the alignment strips 8, substantially as shown in Figs. 1 and 2. When the alignment strips 8 are suitably positioned upon the barriers 5 the turned portions of the jamb strips serve as recesses for the reception of the side portions of fire-proof panels 13 or doors 14, substantially as shown in Fig. 1, it being understood that the panels 13 are arranged between adjacent jamb strips whenever the electric members are desired to be enclosed in a substantially permanent manner and the doors 14 are arranged between adjacent jamb strips 12 whenever the electric members are desired to be enclosed so as to permit their ready inspection or repair. The panels 13 are preferably formed of sheet asbestos or other fire-proof material cut to the width desired, and their side portions are fitted into the recesses at the sides of the raised portions 12 of the jamb strips and are then suitably secured to the jamb strip and the alignment strip 8. If desired, a molding strip 15 may be utilized substantially as shown in Fig. 1 for enhancing the appearance of the panels and strengthening their side portions. The molding strips 15 are preferably of wood shaped as desired and with their exposed surfaces covered by a metal sheathing. The doors 14 are preferably of fire-proof material and are formed to substantially the width between adjacent raised portions 12 of the jamb strips. They may be secured to the jamb strips and alignment strips 8 by means of screws, bolts or tapers like passing through hinges 16, and suitable locks may be employed for maintaining the doors closed as long as desired.

The simplicity of the arrangement of my improved finishing means for electric barriers is believed to be apparent, and by the use of such finishing means I am enabled to readily enclose the electric members with fire-proof materials with a minimum expenditure of time and labor.

While it will be apparent that the illustrated embodiment of my invention herein disclosed is well calculated to adequately fulfill the objects and advantages primarily stated, it is to be understood that the invention is susceptible to variation, modification and change within the spirit and scope of the subjoined claims.

Having described my invention, I claim:

1. Finish means for electric barriers positioned by bolts having projecting ends comprising a jamb alignment strip having enlarged openings therein adapted to receive the projecting ends of said bolts used for securing the barriers in position, and a jamb strip having side portions adapted to be secured to the sides of said alignment strip and having a raised central portion of lesser width than the side portions, whereby a pair of spaced recesses are provided at opposite sides of said central portion.

2. Finish means for electric barriers positioned by bolts having projecting ends comprising a jamb alignment strip having enlarged openings therein adapted to receive the projecting ends of said bolts used for securing the barriers in position, a jamb strip having side portions adapted to be secured to the sides of said alignment strip and having a raised central portion of lesser width than the side portions, whereby a pair of spaced recesses are provided at opposite sides of said central portion, and enclosing members arranged with their side portions in said recesses.

3. Finish means for electric barriers positioned by bolts having projecting ends comprising spaced jamb alignment strips having enlarged openings therein to permit the passage of the projecting ends of said bolts while permitting lateral adjustment of said strips upon the barriers, jamb strips having side portions adapted to be secured to the sides of said alignment strips and having raised central portions of lesser width than the side portions and of sufficient depth to house the projecting ends of said bolts, whereby a pair of spaced recesses are provided at opposite sides of said central portions, and enclosing members arranged with their side portions in adjacent recesses of adjacent jamb strips, substantially as described.

4. Finish means for electric barriers positioned by bolts having projecting ends comprising a plurality of spaced jamb alignment strips of comparatively soft material sheathed with metal on its exposed surfaces, said alignment strips being provided with spaced enlarged apertures to permit the passage of the projecting ends of said bolts while permitting lateral adjustment of said strips relatively to the barriers, securing
means upon the projecting ends of the bolts for fastening said strips upon the barriers, metallic jamb strips having side portions adapted to be secured to the sides of said alignment strips and having raised central portions of lesser width than the side portions, whereby a pair of spaced recesses are provided at opposite sides of said central portion, and enclosing members of fire-proof material arranged with their side portions in adjacent recesses of adjacent jamb strips and secured through the jamb strips to said alignment strips.

In witness whereof I hereunto set my hand.

PAUL NICHOLAY.