

March 28, 1939.

A. W. DRING

2,151,751

HOUSING

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FIG. 1

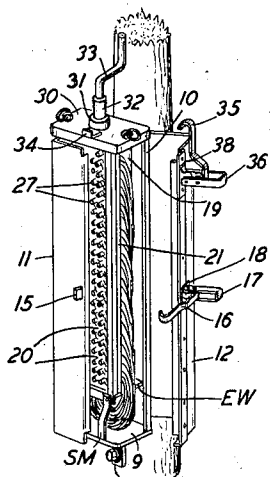


FIG. 5

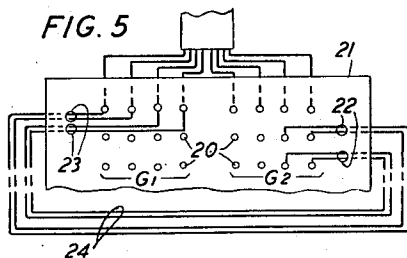


FIG. 4

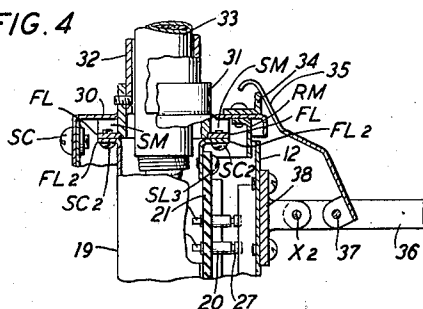


FIG. 2

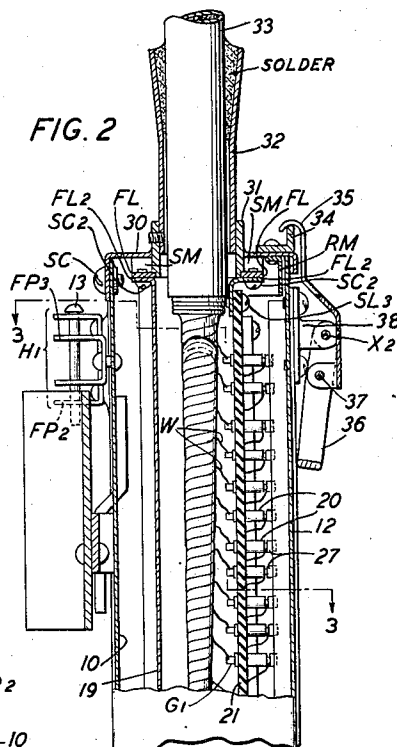
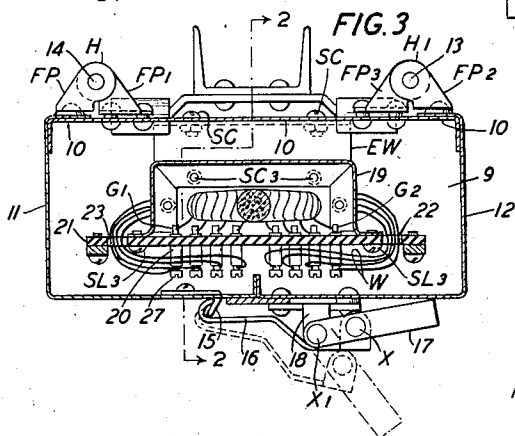


FIG. 3



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2,151,751

HOUSING

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1 Claim. (Cl. 220—55)

This invention relates to housings and more particularly to a type of housing used for example for mounting cable terminals for joining aerial and underground telephone or telegraph cables.

The object of the invention is to improve the construction of such devices.

According to the invention a housing is provided in which a rear plate or wall serves for pivotally mounting on each side thereof combined side and front wall sections which when moved in the closed position form, with end walls carried by the rear wall, a housing for terminal connectors. These terminal connectors are disposed on an insulating plate forming the front wall of another housing in which the cable wires are connected to terminal posts carried by the insulating plate which also serves as fanning strips for conductors used for interconnecting the cable wires. The combined side and front wall sections of the outer disposed housing are mounted for axial movement on their pivots under the action of a latching mechanism operable for forcing the top edges of these combined side and front wall sections collectively against the underside of the topmost disposed end wall portions for rendering such a closure substantially moisture-proof at this point, another latching device being provided for firmly holding the abutting edges of the pivoted wall sections in their closed position for rendering the housing substantially moisture-proof at this point.

Other features and advantages of the invention will appear from the following description and by the claim appended thereto, reference being made to the accompanying drawing, in which:

Fig. 1 is a perspective view of the housing shown with combined side and front wall sections pivoted substantially 90 degrees from its closed position;

Fig. 2 is a side view shown partly in section;

Fig. 3 is a cross-sectional view taken approximately on line 3—3 of Fig. 2;

Fig. 4 is a partial view showing one of the latches in its unoperated position; and

Fig. 5 is a diagrammatic view of the wire connections.

In the drawing, 10 is the rear wall of a housing formed by end walls 9 and 30 and combined side and front wall sections 11 and 12. Sections 11 and 12 are pivoted to the rear wall 10 by similar hinges H and H' shown in Figs. 2 and 3. The flaps FP of hinges H are secured to the wall section 11 and the flaps FP' of these

hinges are secured to the rear wall section 10. Similarly, the flaps FP2 of hinges H' are secured to the wall section 12 and the flaps FP3 of these hinges are secured to the rear wall 10, the width of flap portions FP of hinges H and the flaps FP2 of hinges H' being considerably greater than the width of their cooperating flap portions FP1 and FP3 in order to permit up and down movement of the wall sections 11 and 12 on the hinge pins 13 and 14 for a purpose which will be hereinafter described in detail.

A latching device is provided for tightly holding the wall sections 11 and 12 in their closed position as shown in Fig. 3. This latching device consists of a hook 15 secured to the wall section 11 and a cooperating hook element 16 pivoted on an arm 17 which in turn is pivoted on a bracket 18 shown in Figs. 1 and 3, secured to the front of combined wall and side section 12. The hook element 16 is pivoted on the arm 17 at the point X a small distance from the pivotal point X1 of the arm 17 on bracket 18.

The top end wall 30 of the housing is secured to the rear wall section 10 by a plurality of screws SC shown in Figs. 2 and 4 and is provided with a collar 31 telescopically receiving a sleeve 32 in which the lead covering 33 of the cable extends, the lead covering 33 being held securely in the sleeve 32 as by soldering.

The top end wall 30 is provided with a plate FL, shown in Figs. 2 and 4, engaging a shoulder portion at the end of collar 31 and is held in place by a number of spacer members SM, this plate being provided to form the top end wall of a second housing which will be hereinafter described in detail.

A combined rear and side wall member 19 is provided at its upper end with a flange portion FL2 for securing it to the plate FL as by screws SC2. Another end plate EW is secured to member 19 by screws SC3, shown in Fig. 3, and is supported from the end wall 9 of the outer housing by a plurality of spacer members, such as SM shown in Fig. 1. The front wall of housing 19 is made in the form of an insulating plate 21 provided for mounting terminal connectors 20, this plate being secured to casing 19 by a plurality of screws SL3 shown in Figs. 2, 3 and 4.

The ends of the wires W extend in the chamber formed by the combined rear end and side wall member 19, the insulating plate 21, the plate FL and the lower end wall EW for connection with the inner disposed ends of connectors 20 which are arranged in two groups G1 and G2 on the insulating plate 21. The wires of group G1 which

may form the incoming lines are connected to the terminals of group G2 which may form the outgoing lines by the conducting wires 24 at the corresponding outer disposed ends of the terminals 20 by screws 27 as shown in Figs. 2, 3 and 4. The ends of conducting wires 24 passing through corresponding fanning holes 22 and 23 in the insulating plate 21 for supporting the wires at points adjacent their connections with the terminals 20 as shown in Fig. 5.

On the top end wall of housing 10 is secured an angle-shaped piece 34 shown in Figs. 1, 2 and 4 disposed in engageable relation with a hook element 35. Hook element 35 is pivoted on a handle 36 at the point 37 a small distance from the pivoted point X2 of handle 36 on bracket 38. This bracket is secured to the top of end wall member 12 so that the downward movement of handle 36 is effective to engage the hook member 35 with the angle piece 34 wherein a continuous movement of handle 36 from the position shown in Fig. 4 to the position shown in Fig. 2 due to the engagement of hooks 34 and 35, the handle member 36 now rotates on pivot 37 and thereby forces the bracket 38 and the wall portions 11 and 12 when latched, as shown in Fig. 3, in an upward direction in abutment against the under side surface of the top wall 30 for preventing the entrance of any moisture in the outer disposed housing thus formed at this point, the wall portions 11 and 12 being guided by the pins 13 and 14 of hinges H and H1 as above described.

The latch consisting of hooks 15 and 16 actuated by handle 17 is provided for forcing the wall sections 11 and 12 in edge to edge relation at their front engaged point for preventing the en-

trance of any moisture in the outer disposed housing at this point and around the peripheral edge of the end wall 9 and the ring RM carried by the end wall 30. The inner disposed housing formed by the wall member 19 and the insulating plate 21 in cooperation with the end wall 9 of plate FL may be filled with a water-proof compound as to positively exclude any moisture from this chamber.

It is to be understood that minor changes may be made to the housing device of the invention without departing from the scope of the appended claim.

What is claimed is:

A housing comprising a rear wall having end walls secured thereon, one of said end walls having a peripheral edge formed substantially at right angles to the plane of said end wall, a rim carried by the last-mentioned wall extending in parallel relation with said edge and cooperating therewith to form a groove, a pair of combined side and front wall sections arranged for pivotal and axial movements on said rear wall, a camming mechanism for forcing said wall sections in edge to edge relation, and another camming mechanism including a hook member secured to one of said end walls, a bracket secured to one of said wall sections, a handle pivoted on said bracket and a hook pivoted on said handle for engaging said hook member whereby the pivoting movement of said handle is effective to move said sections collectively on the pivots of said hinges to force their upper edges in said groove in abutting relation with the last-mentioned end wall for preventing the entrance of moisture in said housing.

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