

CABLE SPLICING—GENERAL

CASTING AND

PREPARATION OF END PLATES

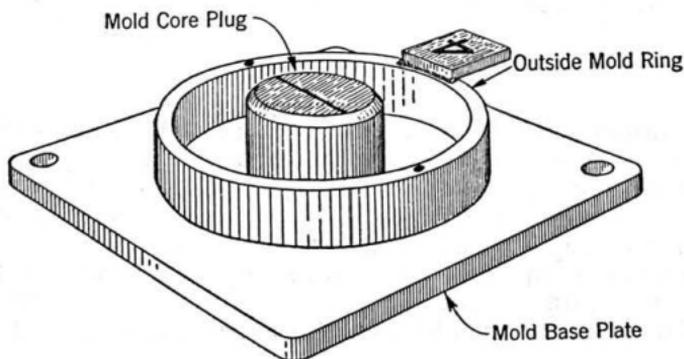
Contents	Page
1. Description of B Mold Set	1
2. Casting End Plates	1
3. Preparation of Plates	3

1. DESCRIPTION OF B MOLD SET

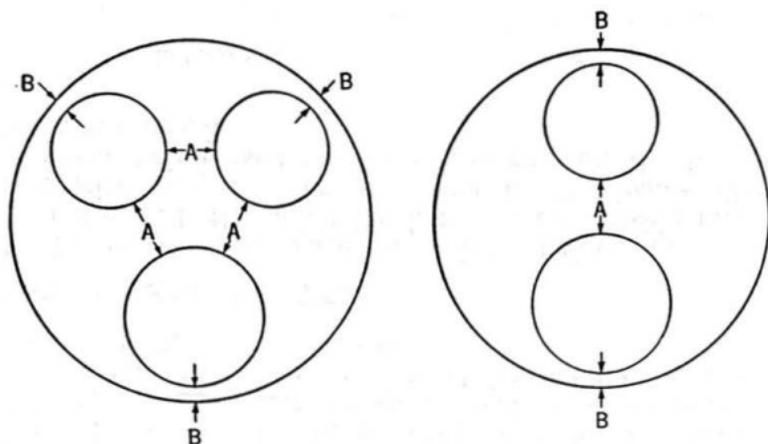
1.01 The equipment needed to cast the plates consists of the following: A set of nine outside mold rings ranging from 3 to 7 inches in diameter in 1/2-inch steps to correspond to the standard lead sleeves; 17 mold core plugs, 1/2 to 2-7/8 inches in diameter; a spirit level; a 7-inch square base plate on which the molds are placed for casting. These items are assembled in a carrying case.

2. CASTING END PLATES

2.01 Place the base plate on a firm surface and level the plate with the spirit level. Select an outside mold ring stamped with the size corresponding to the inside diameter of the sleeve being used and place the ring on the base plate, as illustrated below.



2.02 Select core plugs of a size equal to or slightly smaller in diameter than the main cables and stubs. For a straight splice the main cable hole may be centered in the plate or may be offset. The plugs have reference marks to facilitate centering them. On lashed aerial cable it is desirable to offset the hole toward the top of the plate so that the cable may be positioned close to the strand. Where stubs or branch cables are involved, space the plugs as shown below.



A = As much as possible but never less than $\frac{5}{8}$ in.

B = $\frac{1}{4}$ in except when A would be less than $\frac{5}{8}$ in.
in which case reduce to not less than $\frac{1}{8}$ in.

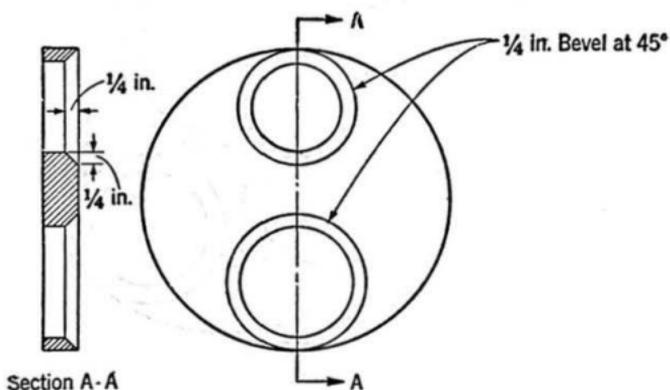
2.03 Prepare a pot of lead, using junk lead sheath, lead-antimony sleeving or pure lead sleeving, and heat it to about 900° or 1000° F. which is somewhat above the temperature of wiping solder. Pour the molten lead into the mold using two ladles simultaneously, one from each side. The use of two ladles aids in flowing the molten metal around the plugs and permits filling the mold before the material solidifies. The streams of metal should be directed between the plugs in the case of a multiple joint plate. The pouring operation should be done with a smooth, fast, double stream of molten lead. Splashing the lead should be avoided. The ring should be completely filled with lead to the height of the ring, which determines the proper thickness of the end plate.

2.04 The steel rings and plugs may be removed from the plate as soon as the metal has hardened. Asbestos or heavy leather-faced gloves should be worn by the splicer for these operations. The ring is readily removed by prying upward on the ring while pressing down on the plate. The plugs

may be removed by tapping lightly with a hammer. It is important to protect the plugs from damage by falling when they are removed from the mold.

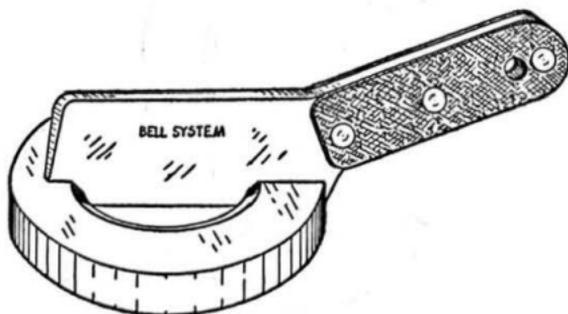
3. PREPARATION OF PLATES

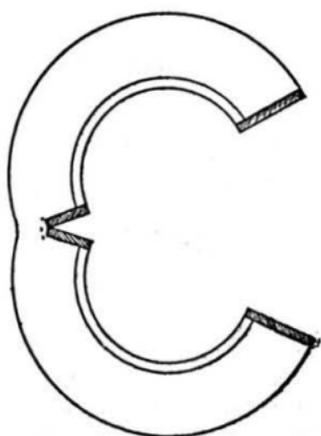
3.01 Rasp the opening in the end plate to the minimum diameter required to permit slipping the plate freely over the cable sheath. Bevel the holes on the outside surface of the plate to the angle of 45° and approximately $1/4$ inch deep, as shown below. This bevel provides space on the outside face of the plate for a concealed fillet between the sheath and the plate. Then, using a carding brush clean all surfaces of the plate that will be in contact with the wiping solder, and coat with stearine.



3.02 Where the cable ends are not free, it is necessary to use split end plates. These plates are prepared as outlined above, then placed on a smooth surface, cut with a chipping knife and spread by hand as shown below.

(a) Plate with single opening.





(b) Plate with multiple openings.

