BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

SECTION G71.137
Issue 1, February, 1934
Standard

CABLE TERMINATING
TERMINATION OF CABLES IN BUILDINGS

Contents

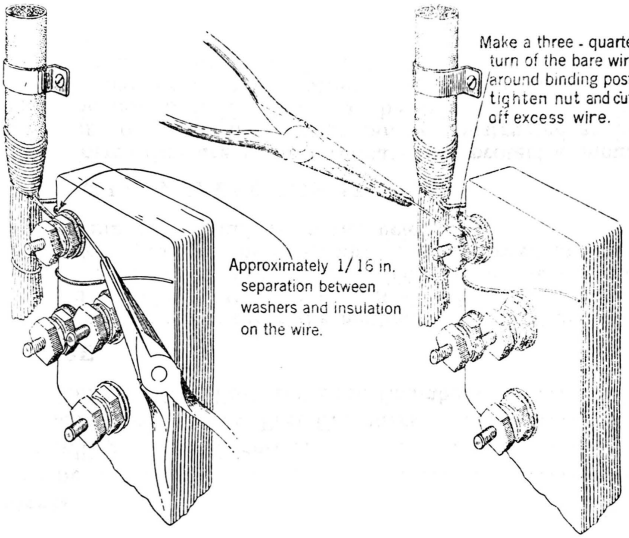
1. SCOPE

1.01 This section outlines the method of terminating cables in buildings other than central offices and includes illustrations of typical installations. The section also gives a detailed description of the procedure to be followed in assembling binding post chambers in the field.

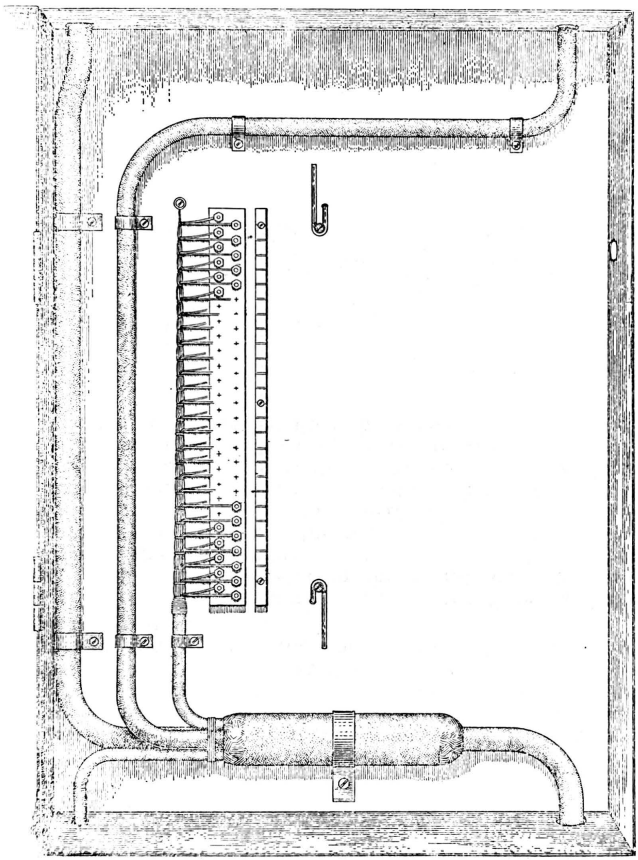
2. INSTALLING CABLE FORMS

2.01 Forms that are to be terminated on protector mountings or on terminal strips can be constructed as outlined in Section G71.135. They can be installed in essentially the same manner as that outlined in Section G71.136, for terminating cable forms on "A" and "B" type main distributing frames.

2.02 In terminating forms on blocks equipped with binding post (No. 30 type connecting blocks) mark the skinner at the point where the insulation is to be removed. Remove the textile servings, being careful not to nick the wire. Place the wire between the washers under the lower nut of the binding post so that there is approximately 1/16-inch separation between the washers and the insulation on the wire. Make a three-quarter turn of the bare wire around the binding post and tighten it by turning the lower nut as shown.



2.03 The installation of connecting blocks in various type terminal boxes is described in Section G61.122. A typical splicing arrangement for the cables in a terminal box equipped with a No. 30 type block is illustrated below.

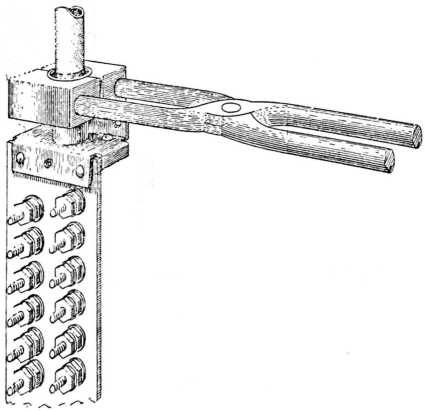


3. ASSEMBLY OF BINDING POST CHAMBERS

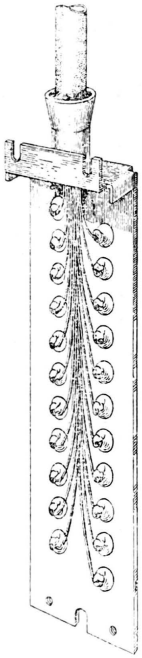
3.01 G binding post chambers (11, 16, and 26-pair sizes) are supplied with or without cable stubs. Chambers that are furnished without stubs can be assembled in the field. The cable should be terminated as outlined below. The stub will usually be made of strip paper or pulp insulated cable, but in special cases textile insulated cable may be specified for the purpose.

(a) Mark the sheath at the point where it is to be cut, scrape the sheath with a shave hook and coat the cleaned portion with stearine. Then remove the sheath, protect the conductors at the cut edge with freshly boiled muslin and boil out the conductors with paraffin in the usual manner.

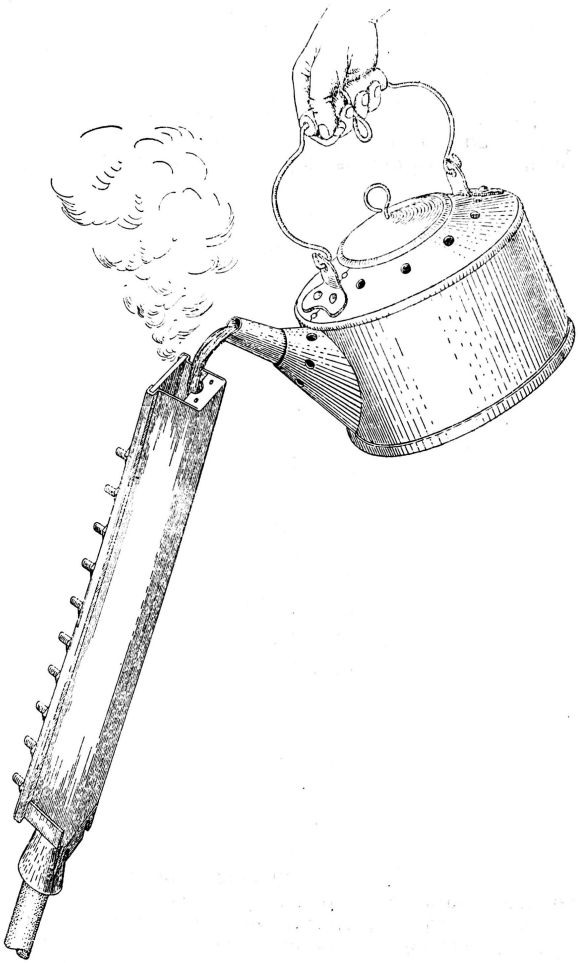
(b) Thread the conductors through the flared end of the nipple until the edge of the sheath extends 3/8 inch beyond the inside edge of the nipple. Seal the opening between the cable and the nipple by packing it to within 3/8 inch of the top with small strips of the caulking material supplied with the terminal. The remaining space should be filled with solder. The point of a well tinned copper or a split soldering copper of the type illustrated below may be used to float the solder.



(c) The skinners should be connected and soldered to the lugs as shown below. The conductors should not be sewed into a form. The red conductor should be terminated on the right-hand binding post of a pair of lugs viewing the chamber from the front with the stub at the top. When the chamber is to be installed with the stub at the bottom, the termination of the conductors should be reversed. Terminate the tracer pair on the highest numbered terminals.



(d) The back of the chamber should be placed in position and the terminal filled, as illustrated on page 6, with cable terminal compound heated to a temperature of 350° F. In filling, the terminal should be tilted so that the compound will flow down the metal back. The compound will shrink appreciably during cooling and before the cover is fastened in place, the void should be filled with more compound.



3.02 H binding post chambers (51, 76, 101, and 303-pair sizes) will, in general, be supplied with stubs. When the chambers are not so equipped, the stubs can be installed as outlined in paragraph 3.01. The conductors should not be sewed into a form. The tracer pairs should be connected to the highest numbered terminals of the color group in which they appear.

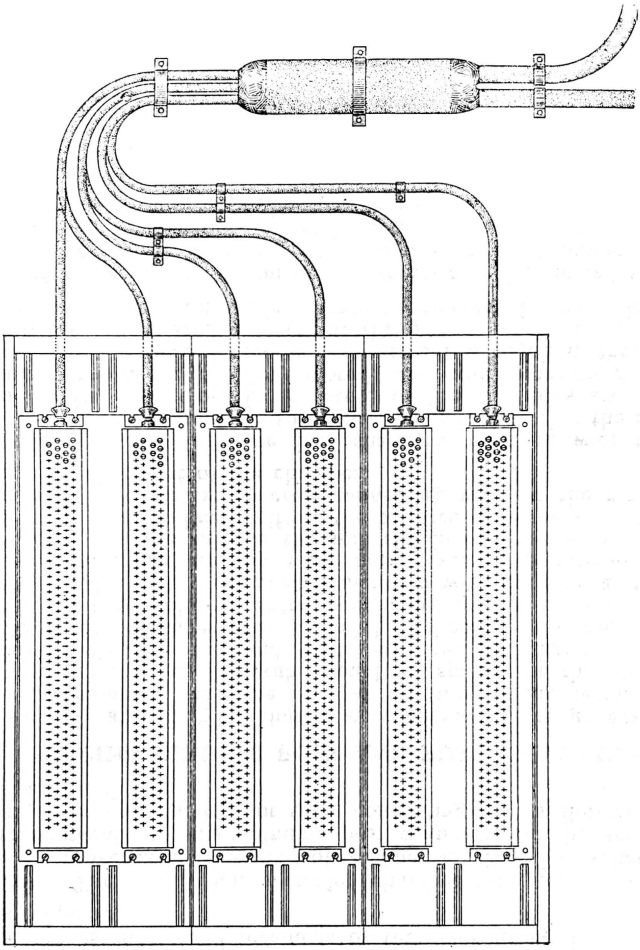
3.03 The installation of sealed chamber type terminals is covered in Sections G61.122 and G61.126. The splicing arrangement for small binding post chambers can be essentially the same as that for small connecting blocks, illustrated in paragraph 2.03.

4. SPLICING BINDING POST AND FUSE CHAMBERS

4.01 G and H type binding post chambers are generally mounted with the stub at the top of the terminal. In such instances the stub should be spliced in the usual manner, i.e., the red and white insulated conductors of a pair in the chamber stub should be spliced to the red (or colored) and white insulated conductors in the main cable, respectively. If the chamber is mounted with the stub at the bottom and the pairs have not been reversed in assembling the chamber, the pairs in the stub should be reversed in the splice in order to keep uniform the practice of terminating the tracer of the station or cross-connecting wire on the right-hand binding post of the chamber.

4.02 LA and LB type fuse chambers installed with the feeder stub at the top should be spliced so that the red and white conductors in the stubs of the chambers are associated with the red (or colored) and white conductors in the cables. Where a reverse arrangement is required, that is with the feeder stub entering at the bottom of the chamber, the pairs in the stub cables should be reversed in the splices.

4.03 The illustration on page 8 shows a typical installation of H101 binding post chambers in an assembly of H202 and J202 cable terminal sections, together with the splicing arrangement of the stub cables.



4.04 Below is illustrated a typical installation of H303 chambers on K606 sections, together with the splicing arrangement of the stub cables.