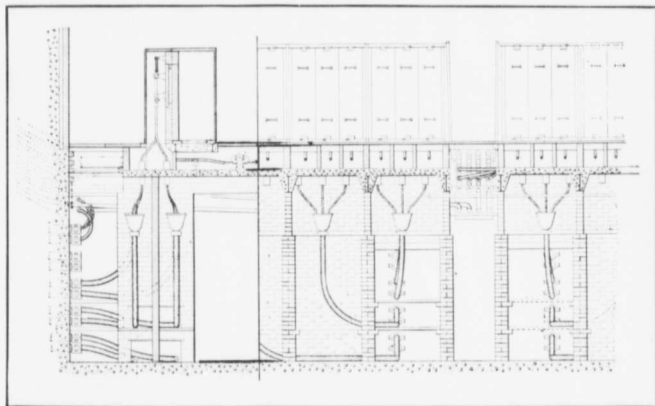


ment involved. Neglect of this precaution has caused many of the most disastrous electrical accidents and has recently taught several bitter lessons. Some rather extreme measures here taken for its more complete application may be of interest. The five sections or rooms, heretofore mentioned, forming the distributing station, are of concrete-and-steel fire-proof construction, separated by full-height masonry walls with intervening air-spaces. No windows and but few doorways (these latter protected by fire-proof doors usually closed) penetrate these walls.

The transformer pits already mentioned, each containing a bank of three transformers, are isolated and extended to a height of 23 ft. by masonry fire-walls. Each individual transformer is in a boiler-iron casing



CABLE BELL COMPARTMENTS AND BARRIERS.

designed to withstand 150 lb. per sq. in. explosive pressure. Each case communicates through an 8-in. pipe from its top with a special drain for free vent in case of accident, as proposed before the INSTITUTE some time ago; but here the supply is cold oil instead of water as then proposed. With these precautions it is believed that the transformers have been surrounded with an environment unprecedented as to safety.

The power from each generator is conducted to its switch through three single-conductor braided cables carried by line insulators and isolated by shelf barriers in a subway beneath the floor. From the switches the three conductors pass to a bell chamber where between individual barriers they are united into two parallel three-conductor lead-covered and armored