## Importance of the Ground Wire

Where conduit wiring is installed great care should be taken to see that the ground wire is kept in good order. This ground wire is one which, upon examination of the conduit installation, will be found securely strapped to the conduit pipe at some point with a copper clamp, and where there is underground water piping it should be run right down and securely attached to the water pipe. Where there are no water pipes a rod or length of pipe, about eight feet long, is generally driven down into the ground its full length, unless in a permanently moist location, where a lesser distance would do. The ground wire is then securely sweated to this pipe. The object of this ground wire is to render this conduit safe, or, in other words, prevent anyone from receiving a dangerous or fatal shock which might be caused under certain conditions if the pipe were grasped by the bare hand while standing on wet ground. This ground wire also possesses the function of automatically cutting off the circuit in case a ground, or what might be termed a leakage, should it occur on the system. Sometimes these ground wires appear to be of little or no use to those who do not understand their nature, and a person might thoughtlessly put this wire out of commission or permit it to continue loose until some danger had developed. An occasional examination of these ground wires is therefore recommended.

## Proper Fusing of Cutouts

The fuse on an electric light or power circuit performs the function, and is the safety valve of your wiring. It is therefore of the utmost importance that this safety valve be not tied up or prevented from operating when the safety point has been passed.

In all wiring installations will be found what are known as Edison Plug Cutouts. These consist of a porcelain block with round brass plugs, which are familiar to everyone who has had electric light in their houses. Either on the brass face of these plugs or on the brass point will be found stamped in the metal the size or rating of the plug, for instance, 5, 10, or 15 amperes. Under no conditions existing or likely to exist is it ever necessary, or permitted by law to put larger than **a** 10 ampere plug in a branch electric light circuit. There is only one place in the whole system where a larger plug is necessary, and that is in the main service box.

If a 10 ampere fuse or plug continues to melt or "blow" on a branch circuit it is the surest evidence that the circuit is either overloaded or that there is something radically wrong. Do not under such conditions attempt to remedy the trouble by inserting pieces of copper wire, discarded pant buttons, mutilated coin or other metallic objects for the purpose of bridging this fuse or you will incur a serious danger.

The Rules and Regulations of the Hydro-Electric Power Commission, which govern all electrical installations in this Province, prohibit the filling of fuse holders with anything but proper fuses, so that in addition to incurring a danger, offenders in this respect are liable to be prosecuted. When fuses continue to blow and you are in doubt, send for a qualified electrical wireman.