

OVERHEAD ELECTRIC WIRES.

LIVE WIRES SHOULD BE BURIED—WHAT THEY BURN AND WHOM.

The burying of live wires is a burning question. Or, perhaps it should be said that burying of burning wires is a live question. For, the multiplication of wires, on poles, has in many towns filled streets and alleys with dangers to life so serious that it is impossible to exaggerate them. At thousands of city corners there cross six or seven different systems of wires. There are arc-light wires carrying an electric charge, one-third of which would kill the strongest man; below these are telephone wires (running into hundreds of buildings) any one of which would be heated white hot or consumed through its entire length if touched by a broken or swaying light wire; telegraph wires large enough to carry a death dealing shock; power wires for shop motors; messenger and fire alarm wires, and usually beneath these the trolley wire with voltage enough on it to kill one who would get the full force of its current.

In Cincinnati two weeks ago a power wire was broken during a storm and a young lady who in passing pushed it aside with her hand and was instantly killed. Such breaks may come from the pressure of a high wind, but they oftener result from the swaying of a branch of a shade tree.

ARC-LIGHT WIRES.

Arc-light wires which usually carry 6,000 volts and feed wires to trolley substations, which usually carry 30,000 volts and interurban lines of 26,500, should be on poles occupied by them exclusively and they should have below them a screen of cheap woven wire fencing to furnish a cradle for broken ends. This wire netting not being continuous past the cross arm would not carry current.

There should also be a loop of wire at the end of the cross arm to prevent the loaded wires from falling off if an insulator should break. Parallel lines of poles should be so far apart that a falling pole would not carry wires across the space.

Recently a lineman of experience working on a pole in front of the writer's window touched an arc-light wire while his leg was in contact with a telephone wire and fell dead across the wires below.

In large cities the telephone wires are placed under ground because their number taxes the possible pole capacity, rather than for the reason that the hundreds of wires in alleys often delay work by fire departments and endanger life from cut wires coming in contact with wires carrying high voltage. Firemen dare not cut high voltage wires such as those for arc-lights until the current is shut off. This causes delay in getting at the fire.

The largest pole line carries 250 wires. Single

cables are made to carry 1,200 wires and a single underground conduit contains ducts for 90 cables, or over forty times the capacity of the largest pole line.

DESIRABLE LEGISLATION.

Within a few years legislatures will provide statutes which will require that systems of high voltage shall be placed on separate lines of poles and that they have a screen under them; or, that in cities all electric wires shall be placed in conduits below the street pavement.

An electrical engineer of long and varied experience as superintendent of power plants advocates for cities a tunnel 5 by 7 feet into which wires for all purposes shall be put. This would give room for workmen to pass along the lines.

It is possible that the law will require the lowering of the pressure on high pressure lines by the use of much larger copper wires, but it would add largely to the cost of construction.

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THE LAW RESPECTING FALLEN BUILDINGS.

Owing to the collapse a large portion of the buildings at San Francisco by earthquake which led to the outbreak of fires that developed into a conflagration, there is likely to be litigation on an extensive scale to decide disputes as to the liability of fire insurance companies for losses by fire that originated under such conditions on the fall of buildings.

An important decision bearing on this matter is given in "The Insurance Monitor" as having been rendered by the United States Circuit Court of Appeal, Pittsburg.

The United States Circuit Court of Appeals at Pittsburg has recently rendered a decision, regarding the fall of a building, which has attracted considerable attention, and which appears in the March number of the Insurance Law Journal. A partition wall in the building containing the insured goods was discovered by the watchman to be cracking, and shortly after a large part of the wall fell. Later the remainder came down, carrying with it the upper floors and the fire then broke out below and extended through the building. There was no evidence of any explosion other than such as would attend the noise of the falling walls. Under such circumstances the court was asked to charge that if the fire preceded the fall the plaintiff could recover. This the court amended by adding, if the fall was the result of the fire. This correction was objected to, but sustained on the ground that there was no evidence of any preceding fire or explosion. In other words, if a fire had actually started before the fall this would