

Finally, a word on the mains. These are, of course, in all cases underground, and, except for the troubles before referred to, due to the surging, there was only one fault developed on the H.T. system in five years. The cables are .5 two-conductor concentric, paper insulated, with lead sheath and outer steel wire armouring. The method of laying is to draw them into earthenware conduits. They cannot be spoken too highly of.

Perhaps, though it is foreign to the paper, a few concluding remarks on the L.T. system of mains will be allowed. The experience with these has been so remarkable that it is felt to be justified, and, as underground mains seem destined to come on the tapis here sooner or later, it may prove of interest.

The L.T. mains are of what is known as the solid system. The cables are coated with vulcanized bitumen, the only other protection being a covering of thick braid. They are laid in wooden troughs, supported on wooden bridges, the troughs then filled solid with bitumen, and a layer of tiles put on top.

These mains have been an endless source of trouble. The troughing rots, the bitumen cracks, and the water gets through to the cables. Sometimes a "short" will burn away as much as fifty feet of cable. But the most remarkable thing is that the mains have been opened up and not a vestige of copper found for as much as 18 feet, yet at the same time a motor has been working beyond the break.

There have been as many as three breakdowns in a day, and for a year the average mains faults have not been less than four a week.