

Electricity Department, and Ballantynes, through their own electrician, to install an oil-circuit breaker at the main switchboard and cut-outs near the point of entry. While there is no evidence that the route taken through the cellar actually increased the fire risk, the weight of evidence in our opinion was to the effect that the better route for the cable would be that previously taken—namely, down the right-of-way outside the building.

48. Every endeavour was made to discover who made the joints in the V.I.R. conductors. In March, 1944, the power-pole outside the premises was replaced, and the workmen who did this work for the Municipal Electricity Department gave evidence, but none of them admitted that the joints were made when they undertook this operation, and, indeed, it appeared that it would have been unnecessary for these workmen to have interfered with the conductors to any extent, so that the result is we have no evidence as to when, or by whom, these joints were made. All we know is that the joints were badly made.

49. The bell-mouth of the galvanized pipe, through which the V.I.R. conductors passed, was found to be rough, and expert electricians agreed that an inspection should have noticed it and directed it be smoothed to prevent chafing of the conductors. In fact, however, the conductors had not been chafed to an extent sufficient to allow fault current to pass from the conductors to the bell-mouth.

50. Two linesmen from the Municipal Electricity Department gave evidence that on 3rd March, 1947, the position of the service mains between the power-pole in the street and the cross-arm on Ballantyne's building was altered and, at that time, at the request of Ballantyne's electrician who was present, a piece of plywood or fibre was placed in the bell-mouth to prevent chafing of the conductors. One of these witnesses thought he remembered seeing black tape on the conductor, but stated further that he did not think there might be a fault in the phase-conductor. Evidence as to the possibility of plywood or fibre being removed a week later was inconclusive.

The defects do not reflect credit on the workmanship of those doing the work, nor does failure to observe them on the inspections reflect credit on the Municipal Electricity Department officials.

51. Mr. Nicol, who speaks with undoubted authority, was faced with the charge that some fault in the cable or installation of electric power was the cause of the fire. Each defect or fault was carefully weighed by him. Without excusing the fault, he examined each with meticulous care, to ascertain its possible effect. He came to his conclusion that none of the faults singly, or together, could have caused the fire. We are satisfied he reached his conclusions not to defend electric energy as a whole, but as an expert whose findings would be scrutinized by able electrical engineers in this country and beyond it.

He was supported by the evidence of other expert witnesses. There was no evidence in respect of the general electrical installation in the building which would lead to the belief that this, in any of its parts, was the cause of the fire. It becomes quite clear in our opinion it is impossible for us, in view of the expert evidence, to determine that electrical fault was the cause of the fire with any degree of certainty.

52. We have already stated that there is no evidence, once the alibi of Smith is accepted, that the fire was occasioned by the carelessness of any employee. Indeed, the evidence showed that Ballantynes strictly enforced this rule against smoking, and there was no evidence to support any suggestion that the fire may have originated from such a cause.

53. We must, therefore, answer the first question by saying that the evidence did not disclose the cause and origin of the fire.