

Under cross-examination Mr. Salvesen admitted that a piece of metal 6 in. by 4 in. would not support his theory. Under further cross-examination he was presented with an assembly at the back of the fuse panel and was unable to show that the piece of sheet metal in a horizontal position could come in contact with the thimble. He admitted that, without an electrical link between the thimble and the sheet-metal box, his theory must fail. It seemed that, without the electrical link which we think he failed to show, he was unable to contravert Mr. Nicol's opinion that none of the admitted faults in the installation could have caused the fire.

42. Mr. J. R. Templin, an electrician of standing, also called by counsel for Ballantynes, to some degree supported Mr. Salvesen as to the lead sheath and steel-tape armour as a possible conveyer of electricity sufficient to cause extreme heat. He considered the defects in the cable should have been apparent on inspection and should have been rectified, and, in his opinion, the non-earthing of the lead sheath and steel tape armouring could create a hazard which could be either a fire risk or danger to life.

Under cross-examination by the Crown he agreed that, to cause fault current to flow to the armour to enable the fire to be caused electrically, there must be an electrical link between the thimble and the sheet-metal box, so that, unless Mr. Salvesen could, in fact, produce evidence from which it could reasonably be inferred an electric link was made, Mr. Templin was unable to say how fault current could pass to the steel-tape armouring. In answer to a question as to whether, without an electric link between the thimble and the sheet-metal box, he could see how the current could have flowed to the armouring he said: "It must depend on that."

43. A theory based on the suppositions Mr. Salvesen had to make to support his theory is not, in our opinion, taking into consideration all the evidence, sufficient to support a finding that electrical fault was the cause of the fire.

44. The discovery of the fact that joints had been made in the V.I.R. conductors leading to the bell-mouth seemed at first sight somewhat alarming, inasmuch as the joints were, according to Mr. Nicol, the result of very bad workmanship, but none of the expert witnesses suggested that these joints, faulty as they were, could have been the cause of a breakdown in the cable.

45. It was suggested that the armour of the cable had not been properly earthed. There was evidence that at one time a water-pipe may have served as an earth, and been removed. It was urged by counsel for Ballantynes, and indeed other counsel that failure to provide adequate earthing of the lead sheath and steel armour of the cable could have caused such heating of the armour that, given certain circumstances, that heat could have caused the fire. That the earthing was defective was not, in our opinion, established. The supply of power was, from 1936 to the time of the fire, entirely satisfactory. The destruction of the building has prevented examination of the earthing that may have existed.

46. The wisdom of the route taken for the cable, through the basement instead of up the right-of-way, as was the case when the original cable was installed, has been in issue as relevant to unnecessarily increased fire risk in the event of breakdown in the installation.

There was some evidence that the representative for the underwriters objected to the route through the basement, and suggested it should go up the right-of-way. While it is true that the Municipal Electricity Department decided the point of entry of the cable, Ballantynes and their electrical contractors would have the final word as to the route of the cable through their premises, and apparently agreed to the route taken.

47. The State Hydro-electric Department suggested there should be an oil-circuit breaker at the point of entry of the cable to ensure the maximum degree of safety, but it was finally agreed between the State Hydro-electric Department, the Municipal