

who go upon the streets shall have the most convenient and expeditious passage and carriage of person and goods, has not been made dependent upon the manner in which the defendant in error has preferred to locate its poles, stretch its telephone wires, or form the electric circuit. The demand made upon the Telegraph Association is, not that the Railway Company shall so modify its existing electrical apparatus as not to interfere with the telephone service, but shall for ever abandon the use of an essential part of its electro-motive system, or be perpetually enjoined. In other words, the Association claims the exclusive use of the grounded circuit, inasmuch as the mechanism of the telephone is so complex, and the electric currents employed so delicate and sensitive, that they cannot be used without disturbance from the heavier currents employed by neighbouring electrical enterprises that operate with the grounded circuit." The Judge said, "In our opinion there has been no invasion of the rights of the Telegraph Association by the plaintiff in error, and that the Telegraph Association is not entitled to the relief prayed for in the petition. The judgment, therefore, of the Superior Court at general and special term must be reversed, and the original petition dismissed. Judgment accordingly."

41. *Mr. Earnshaw.*] If the Tramway Company were to connect their lines with the copper strips, and were also to connect with another wire between the lines—that is, to make a perfect return as they go on—and with the climatic conditions of Dunedin; would it be the fault of the telephone system if there was any conflict between the telephone wires?—Yes, it would be entirely the fault of the telephone system if the telephones were effected, in not using a metallic return.

42. *Mr. Moore.*] If you made use of the earth-return current in the way you said, the telephone system can be protected?—Mr. Edison said there would be no particular interference with the telephone system if proper connections were made with the rails: and the proof of that is that there are so many thousands of miles on the single-trolley system, where the telegraph and telephone systems, run side by side. If the disturbances were so great that the telephones could not be used, the public would be up in arms against the single-trolley system. But they are not. There are just one or two cases that have come to light.

43. *Mr. Earnshaw.*] Are any of the overhead railways in New York being run by electrical cars instead of by steam?—No, they are run by steam entirely. There is just a light girder viaduct down every street where the lines run. They had an underground system of electric rails for a few months, in New York, but on account of melting snow there was a great difficulty in keeping the centre contact free. The street railway statistics for 1892 are: For fifty cities, with a population practically of 7,000,000, a street car trackage of 2,428 miles; gross receipts from operation, 48,810,786 dollars; passengers carried, 997,813,484. There were 13,000 ordinary cars, 7,000 box-cars, and 4,680 open cars in operation.

44. What streets in New York do the electric tramways run on? There are none in any of the main streets in New York. In the suburbs there are 276 miles of electric railway.

45. What I want to know is, where do electric tramways run through main streets where telephone wires are used?—In Salt Lake City there are three separate tramways running, and a line runs through nearly every street.

46. Do they affect the telephone wires there?—Not that I am aware of.

47. You spoke of San Francisco and San José?—Yes.

48. Does the tramway run through San Francisco itself?—No, it does not run down the main street; but it runs through over one hundred miles of country after leaving the city.

49. Is there any place—any large centre—where there is any conflict between the telephone service and the tramway?—I think, yes; in Leeds, in England.

50. Some of the lines must go very close?—Yes. In Salt Lake City there is a tramway which runs through nearly every street.

51. *Mr. Moore.*] Mr. Edison stated that only one tramway company had been successful commercially. Does that apply to the double-trolley system?—Yes; he was asked to explain the different systems, and he did so. The Judge said: "Which, in your opinion, has proved a success commercially?" And he said: "The only system that has proved commercially successful outside of the overhead-trolley system is one single case of the Siemens Electric Railway, in the suburbs of Berlin." There is the Liverpool overhead railway in England, the Staffordshire tramway, the railway on Brighton beach, that at the Giant's Causeway in Ireland, one at Leeds, and there are several under construction that will probably be a success. And here, at Hobart, an electrical tramway is being put into operation.

52. Have those systems you referred to been successful, so far?—Yes, those in Staffordshire and Liverpool have been a great success. The trams have all been running five or six months, and they have been such a success that in Liverpool the capital of the company is being increased, and large extensions are to be made.

53. You stated that in America they have had in several instances the tramway companies and the telephone system working side by side successfully?—Yes.

54. Was the telephone system a complete circuit or making use of the earth?—New York is the only place I know of in America having the metallic return for the whole telephone service. It is just possible that in some cases, where the telephone companies have prosecuted the tramway companies and the decision has been given against the telephone companies, that the telephone companies have put up metallic returns.

55. Are there not some cases where the decision of the Supreme Court in favour of the tramway companies has been reversed by the Court of Appeal?—Not that I know of.

56. If so, will that not guide the Judges in future in reference to any powers the tramway companies may get?—Not necessarily; because we have the important case of the Leeds Tramway Company, which has been decided since in favour of the tramway company. There is *The City and Suburban Telegraph Association v. The Cincinnati Inclined Plane Railway Company*, in which the Judge said that "defendant was inflicting a legal injury upon the plaintiff, from which had already arisen loss, and which must inevitably cause loss in the future, constantly recurring. The order of