FORT SMITH LIGHT & TRACTION COMPANY v. COOPER. Opinion delivered January 25, 1926.

MASTER AND SERVANT—NEGLIGENCE—SUFFICIENCY OF EVIDENCE.—Where an injury might have been caused in either of two ways, for one of which the master would be liable, but not for the other, and the testimony does not preponderate that the injury was caused in the way for which the master would be liable, there can be no recovery, because liability in such case cannot be predicated upon speculation or conjecture.

Appeal from Crawford Circuit Court; James Cochran, Judge; reversed.

Hill & Fitzhugh, for appellant.

Dave Partain and G. L. Grant, for appellee.

SMITH, J. On August 25, 1922, C. L. Cooper and H. K. Deason and Lee Ringer, all employees of the Fort Smith Light & Traction Company, hereinafter referred to as the company, were directed by the superintendent of the company to put in eight switches on a certain pole in the city of Fort Smith. Cooper was a line foreman and was in charge of the other two men, but at the time of his injury herein sued for was performing a duty usually performed by linemen.

The pole was about forty or forty-five feet high, and had six cross-arms fastened to it, and was about fifty to seventy-five feet from the company's powerhouse where the electricity was generated. There were iron braces connecting the arms at their ends, and braces ran from the ends of the lowest of these arms to the pole, one brace being placed over the other at the point where both were fastened to the pole. There was an insulator on each of these arms where the wire was stretched across it, the purpose of the insulator being to hold the wires in place and to keep them off the arms. The insulators were all in good order, and all the wires were properly in place. The top arm carried what was called the 13,000-volt wires. The second and third arms from the top of the pole carried what was called 2,300-volt wires, and it was on the third arm from the top that the switches were to be placed. It was five feet from the pole to the end of the arms.

The insulators on one pole were 24 inches higher than those on the poles below, and, as there were six of these arms, the insulators on the top arm were 10 feet higher than those on the lowest arm, and this is true of the wires as well as the insulators, as the wires were fastened to the insulators. The wires on one side of the pole were positive while those on the other side were negative.

Cooper first climbed the pole, and was followed by Deason; and, when they reached the place where the switches were to be installed, they were standing on opposite side of the pole and on the second arm from the bottom. Cooper received a severe shock, which caused him to fall to the ground, and when he fell his chest was caved in, and after suffering great agony for nearly an hour, during a portion of which time, at least, he was conscious, he died. The physician who attended deceased described his injuries as follows: "He was burned on the outside of his right arm between the elbow and shoulder: He was suffering from an injury to the chest, the ribs and perhaps the breast bone had been broken,

and either one or the other had perforated the lung. It took about thirty minutes for him to suffocate himself. The chest and neck were ballooned out with air. He suffocated himself, taking about thirty minutes to do it in."

This suit was brought by Cooper's widow as administratrix to recover damages, and from a judgment for \$30,000 in her favor is this appeal.

The case was tried on the second amended complaint filed in the case, which alleged negligence in four particulars in paragraphs numbered A, B, C and D. Paragraph A was stricken from the complaint.

Counts B, C and D alleged negligence as follows:

- "(B). That there was an insulated ground wire upon the pole extending from near the top of the pole down to and into the ground; that the covering or insulation on the wire was worn at the point where it crossed the braces on the pole below the cross-arms; that the ground wire which ran up the pole had been installed to conduct any electrical discharge into the ground, but its use for that purpose had been discontinued, yet, on account of the damaged condition of the insulation, the electricity connected up with the iron bars or braces and, coming in contact with the ground wire, formed a circuit, which resulted in Cooper being shocked when he touched one of the braces in the discharge of his employment.
- "(C). That the wires upon said pole and cross-arms had become worn and the insulation had decayed and damaged so that the electricity could and did escape from the wires, and, so escaping, came in contact with Cooper and caused his injury and death.
- "(D). That the company negligently failed to exercise ordinary care to furnish Cooper a reasonably safe place in which to work by failing to keep its wires covered and insulated so that the current of electricity carried on the wires could not come in contact with the employees who were required to work among them, and in negligently failing to have its wires so covered and protected that they would not come in contact with each other

and with the metal bars holding and connecting the crossarms on the poles."

It is not claimed that deceased came in contact with the 13,000-volt wires, but it is claimed that electricity may have escaped from them and have gotten on to the metal braces which, connecting with the ground wire, formed a circuit, and that deceased was shocked by coming in contact with one of the braces. This theory of the case may be disposed of by saying that the undisputed testimony shows that the 13,000-volt wires were held securely in place by the insulators to which they were attached and that the insulators were in good condition, and were six inches from the braces, and all the testimony shows that the current would not are or leap over this distance.

As we understand the theory of the plaintiff's case, it is essential that the testimony be found to be legally sufficient to support a finding, not only that the braces had become charged with the current, but also that the braces were in contact with the ground wire fastened on to the pole and extending into the ground, thus forming a circuit. As tending to show that the ground wire had been charged with electricity, testimony was offered that, at a point on this wire and near the place where the braces were fastened to the pole, the wire presented the appearance of having been burned. This was explained by testimony showing that it could have been caused by carrying to the ground a flash of lightning, the wire having been placed on the pole for that purpose.

The testimony on behalf of the plaintiff locates this ground wire within an inch of the brace fastened to the pole. The testimony on behalf of the company was that the distance was an inch and a half. We accept as true the testimony most favorable to the plaintiff and assume the distance to be only an inch. But the testimony of the expert electrician who testified on behalf of the company was to the effect that electricity will arc, that is, pass from one wire to another, one inch for each 10,000 volts,

and that 2,300 volts could not establish an arc at that distance. This statement was not challenged by the -electricians who were present and testified on behalf of the plaintiff. We are cited to a statement contained in Foster's Electrical Engineer's Pocket Book, which is said to be a standard authority with electrical engineers, in which it is stated that a voltage of 20,000 is required to arc a current a distance of an inch. But the undisputed testimony shows that, of the 13,000-volt wires, the nearest wire which carried that current at any time was six inches from the braces and was securely in place on the insulators to which they were attached.

There was a current on the 2,300-volt wires which were attached to the second and third arms from the top, but these wires were also securely in place on the insulators to which they were fastened, and no one of these wires was nearer than six inches to the iron braces.

The wires on the second and third arms from the bottom were dead wires at the time deceased was burned. The current was on the wires strung on the first arm from the bottom, but these wires carried only 500 voltage, and the nearest of these to the braces was six inches.

It appears to us therefore that, unless the jury was warranted in finding from the testimony that the braces fastened to the pole came in contact with the ground wire, also fastened to the pole and placed there only to throw off flashes of lightning, an essential link in the plaintiff's case is missing, for only in this way could the jury find that deceased would have come into contact with the electrical current at a place where he had the right to expect. it to be absent.

The testimony shows that the insulation on the wires was worn, one witness saying that it was only 65 per cent. of good condition, but this testimony, of itself, could not support a recovery, because the undisputed testimony shows that no insulation in use protects from a voltage greater than 550, and the arm on which the switches were to be place carried a voltage of 2,300, and it was not alleged the deceased was unaware of that fact.

The company insists that there could be no recovery for deceased's death because the shock which caused him to release his hold and fall to the ground would not have seriously injured him had he used a safety belt provided him and which would have prevented the fall, and, further, that he would not have been shocked had he used a rubber covering for the wires called pigs, or one called a blanket, which would have afforded a protection which the ordinary insulation on the wires was not intended to give. But, inasmuch as we have reached the conclusion that no negligence on the part of the company is shown, we do not consider these defenses.

The superintendent of the company, who was shown to have a thorough knowledge of the working of the system and of the relation of the wires, was asked how, from his knowledge of the situation, deceased, standing on the second cross-arm, could have received a shock. He answered that it was hard to determine, but that he might have gotten between the wires, and he also stated that, if deceased came in contact with the two wires, he would have been shocked, and that no insulation on the wires could have prevented the shock, for the wires carried a voltage of 2,300.

It is not contended that plaintiff would have the right to recover if deceased received the shock which caused him to fall by coming in contact with two of the wires at the same time. The insistence is that he received the shock from the braces from which he had no reason to expect a peril of that kind. As we have said, we do not think the testimony sustains this contention. Another and much more probable theory is that deceased was shocked by coming in contact with two of the wires at the same time, thus making a short circuit out of his body, and if this is true—and the testimony certainly did not exclude that theory—the company is not liable.

It is a well-settled principle that, where an injury might have been caused in either of two ways, for one of which the master would be liable, but not for the other, and the testimony does not preponderate that the injury was caused in the way for which the master would be liable, there can be no recovery, because liability in such cases cannot be predicated upon speculation or conjecture. The jury must be able to find from the preponderance of the evidence that the injury was occasioned by some act of negligence on the part of the master, and this showing is not made when it is as probable under the evidence that the injury occurred in one way as it is that it occurred the other. On this question the case of Denton v. Mammoth Spring Electric Light & Power Co., 105 Ark. 161, is directly in point.

We think the testimony does not sustain the allegations of negligence on which a recovery is asked, and that it is a mere matter of conjecture how he was shocked, and the company can not be held liable unless the affirmative showing is made that the injury was occasioned by some act of negligence on the company's part. As was said in the case cited, "the cause of the accident is purely a matter of conjecture, and 'a servant cannot recover where it is merely a matter of conjecture, surmise, speculation or supposition, whether the injury was or was not due to the negligence of the master." 2 Labatt on Master & Servant, 167.

Here the testimony is undisputed that deceased was an experienced lineman, was, in fact, a foreman, and had been in this service for a number of years, and there is no contention that he was not fully aware of the danger of coming into contact with two of the wires at the same time.

It follows, from what we have said, that a case of liability was not made, and, as the case appears to have been fully developed, the judgment of the court below will be reversed, and the cause will be dismissed.