OKLAHOMA GAS & ELECTRIC COMPANY V. FRISBIE.

4-4869

Opinion delivered December 20, 1937.

- 1. APPEAL AND ERROR.—In an action by appellee for the death of her husband alleged to have been killed by a charge of electricity from appellant's wires while working under a house which its wires entered, it will not, in the absence of proof, be presumed that more than 118 volts of electricity which was supposed to enter the building entered the body of deceased and that in some manner not explained appellant was negligent, since this would require speculation both as to the amount of current which proved fatal and as to the method by which the alleged excess charge entered the house.
- 2. NEGLIGENCE.—Res ipsa loquitur cannot be applied as a rule of law in a case where it is shown that the result might have been brought about by one of two or more speculative theories, neither of which is included nor excluded by any affirmative evidence.

Appeal from Crawford Circuit Court; J. O. Kincannon, Judge; reversed.

Hill, Fitzhugh & Brizzolara, for appellant.

Searcy & Underwood and Joseph R. Brown, for appellee.

GRIFFIN SMITH, C. J. Pauline Frisbie, in her own right; also as administratrix, and as mother, next friend, and guardian of her minor children, only heirs of Jay Frisbie, recovered judgments against appellant for \$10,000.

Appellee's husband was killed when he came into contact with an electrically-charged wire. It is alleged that appellant was negligent in that an excess voltage was, in some manner not shown by the proof, permitted to enter a residence in the city of Fort Smith, beneath which appellee's intestate was working.

In the fall of 1934, two gas-burning floor furnaces were placed in the home where the accident occurred. Plumbers, in installing the furnaces, found it necessary to cut through the floors. Electric wires had been strung in a manner interfering with the furnace work, and these wires were "spread" to facilitate the installations. The furnaces were installed by a plumber engaged by the owner of the premises, appellant having no connection with such transaction. The plumber employed an electrician to adjust the wires, which was done by "splicing." The flooring of the house was low, and the space between the joists and the ground was only 18 or 19 inches. Water often accumulated beneath the house, and sometimes extinguished the furnace fires. Shortly after the furnaces had been placed, the plumber, in an effort to remedy the defects, inserted some metal boxes or tanks under and around each furnace.

When the furnaces were first installed the outer edges were from two to four inches from the electric wires; and the metal tanks or boxes, being larger than the furnaces, necessarily reduced this space. Later it was found that the ground holes beneath the tanks frequently filled with water, causing the tanks to float and to push the furnaces above the floor level.

In March, 1935, Omer Ray, the plumber, and Frisbie, appellee's intestate, with an assistant named Dinsmore, a brother-in-law of Frisbie, undertook to eliminate the difficulties attending operation of the furnaces, one of which was under a living room, and the other under the dining room. While Frisbie was working under the living room, a painter named Hogate heard him groan. Hogate called Dinsmore, who responded promptly. They found that Frisbie was lying against the furnace, dead.

Appellant's primary or high-tension wires are strung along an alley back of the house where Frisbie was at work. These wires carry 2,300 volts of electricity. This voltage is "stepped down" by means of a transformer, and the secondary wires leading from the transformer to the house and in turn connecting with the distributing system of the residence are supposed to carry from 110 to 120 volts.

It is contended by counsel for appellee that Frisbie was electrocuted by a charge in excess of 120 volts.

211

One witness testified to circumstances indicating that a "leaky" transformer might have been at fault, and that probably 1,000 volts were on the secondary wires. Testimony on this point was given by F. M. Masters, who had been an electrical contractor for 40 years. It was Masters' opinion that a "leaky" transformer would permit an excess voltage to enter a residence by way of the secondary system. He said that on one occasion 2,300 volts had entered his own home, without burning out the light bulbs or blowing the fuses.

On behalf of appellant it was shown that the transformer was comparatively new; that seventeen residences other than the one at which the accident occurred were supplied from it; also, that the public schools administration building was served from this transformer; that the voltage going to all of the buildings was the same; that no complaints were received from any such customers as to an excess amount of current; that the transformer and secondary wires were tested by appellant and by the electrical inspector for the city of Fort Smith soon after the tragedy, and the voltage was found to be normal; that there were no crossed or contacting wires on appellant's system which could have caused the alleged super-charge to enter the premises; that the soil beneath the house was guite wet -even muddy in places-affording a favorable ground connection, and that in circumstances such as these 120 volts has been known to prove fatal.

There was opinion testimony on behalf of appellee that 120 volts of electricity would not kill a man instantly, or within 90 seconds; that this voltage would not have burned the screwdriver, as shown, and that not less than 1,000 volts would have been required to produce the fused conditions; that people standing on a wet floor had been known to receive 120 volts without serious consequences, and that excessive voltage could have gone on the secondary wires without burning out the lights or fuse plugs.

Appellee also relies upon the doctrine of *res ipsa* loquitur.

Appellee's case is based upon conclusions drawn from facts and circumstances, and these, if supported by substantial testimony, would justify an affirmance of the judgments. The circumstances are such as to raise a presumption that a very strong charge of electricity passed through Frisbie's body, and that contact with one of the secondary wires was accidentally made through a screwdriver held in Frisbie's hand. While there is conflict in the testimony of appellee's witnesses regarding the condition of the ground-whether actually muddy, or merely wet-the fact seems to have been established that the place was not dry. Dinsmore testified that the ground was damp in the lower places, and "There was water in the hole under the furnace." Hogate, one of appellee's witnesses, on cross-examination, testified:

"Q. You heard Frisbie crawling through mud and water? A. Yes, sir.

"Q. There was mud and water under there?" Α. I heard him crawl through slush.

"Q. All the way up to the tank? A. Yes, sir."

Dinsmore testified that after Frisbie went under the house, he asked for a screwdriver, which was given him. Later he asked for a larger screwdriver, and it was handed to him by witness. This was passed to Frisbie through an opening in the foundation, about fifteen or twenty feet from one of the furnaces. Dinsmore said:

"I then went back to the truck in front of the house. Just after I got out of the truck Mr. Hogate hollowed to me, saying that he heard Frisbie groan. He was about 30 or 40 feet from where I was-about 65 feet, probably. After getting Mr. Frisbie a larger screwdriver I went back to the truck to replace the smaller one and had just gotten there when Mr. Hogate called and told me that something had happened. I then called to Mr. Frisbie and he did not answer, and I crawled toward him. When I got within about six feet of him I received a shock. I then hollowed to Hogate to turn off the current. I then crawled up to Mr. Frisbie, felt his pulse, and saw he was dead. When I pulled his arm out, the screwdriver that I had handed him fell out of

213

his hand into the hole and I heard water sizzling like it was hot. The screwdriver had a burned place on the wooden handle where it connected with the metal part."

This testimony would indicate that, at least from the time Frisbie was heard to groan until the current was switched off, electricity was being discharged from the secondary wiring system by means of a ground contact through Frisbie's body and the screwdriver. Whether his hands were wet or merely moist and whether his clothing and back had become wet or moist in crawling under the floor are matters not definitely developed by the testimony of any of the witnesses.

S. J. Green, a witness for appellee, although stating that in his opinion it would have required 1,000 volts to have marked the screwdriver as it was shown to have been marked, and that 120 volts would not blacken paper within nine minutes, testified on cross-examination that "If a man is standing on dry ground he will not receive a shock by coming into contact with a wire, but if he is lying down on damp ground he would get the full charge of 120 volts, but would have to get a firm grip in order to be electrocuted by that voltage . . . I do not think 120 volts would kill a man lying on wet ground . . . If the wires were tested within an hour or two after the accident and it was found that 118 volts were passing over the wires, I would say there was nothing the matter with the transformer. I would say that it was all right, and I would say that just 118 volts passed into the house in question."

W. S. Youse, on behalf of appellee, testified that the only way the secondary wire could get an excess voltage would be through a defect in the transformer, or the primary wires would have to be in contact with the secondary wires. On cross-examination he was asked, "Do you find from your reading that more people are killed from 120 volts?" The answer was, "I read that, yes, sir."

There is no testimony that the transformer was defective, or that the primary and secondary wires were crossed, nor is there any testimony that more than 118 volts entered the building. If the judgments can be affirmed, that result must be arrived at by assuming, from the testimony offered and from the fact of the death and the attending circumstances, that more than 118 volts passed through Frisbie's body, and that in some manner not explained appellant was negligent.

We cannot indulge this presumption. It is wholly speculative. Appellee's own witnesses establish the fact that the ground supporting Frisbie at the time the fatal shock was received was wet. One of appellee's witnesses says Frisbie crawled through slush. Another admitted that in reading of deaths caused by electricity, it had been brought to his attention that 120 volts may prove fatal. It is a scientifically established fact that a person whose body is wet, and who is in contact with wet ground, will, because of the concurrence of these conditions, receive a greater charge of electricity from a given point of contact than he would if his hands and body and the ground were dry. Water is a highly efficient conductor.

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Saunders, in his work on Legal Medicine and Toxicology, published in 1930, pages 121-122, says: "While there is no question about the danger of the high tension current, there has been some doubt as to the harm-That the latter fulness of the low tension currents. currents do cause fatal accidents is shown by the reports in the literature. Thus, as stated by Jaffe, 'Jellineke says that currents of more than 25 volts should be considered dangerous. He observed a fatal accident in Vienna caused by a current of 60 volts. In the case reported by Capello and Pelligrini the tension was even lower, 46 volts. Jex-Blake speaks of 65 volts as being dangerous when the current passes through the heart. Of the 300 electric accidents which occur annually in France, 100 are caused by currents at low tension. In Switzerland accidents caused by low voltages seem to be more common than those caused by high tensions. Kawamura, who studied 110 electric accidents in the Mitsui mines of Japan, found that 69 persons were injured by currents of low tension and 41 by currents of high tension.'"

Under the sub-title: "Death or Injury Resulting

[195

from Electricity," the following statements are found in Herzog's Medical Jurisprudence:

"While the power used for house lighting is generally reduced to from 55 to 110 volt alternating current and from 110 to 220 volt so-called direct or constant current, and the general idea is that such currents are not sufficiently high to be dangerous, deaths have frequently occurred in consequence of persons coming in contact with exposed wiring, generally by forming a short-circuit, either by standing on the wet floor and touching the wire or leaking electric fixture with one or both wet hands, or by touching the fixture with one hand, while the other one is perhaps grasping a water pipe or in some other manner forming a good ground."

To say that appellee's intestate came to his death by reason of appellant's negligence would require speculation not only as to the amount of current which proved fatal, but also as to the method by which such alleged excess charge entered the house. Neither allegation is established by any direct testimony, and res ipsa loquitur cannot be applied as a rule of law in a case where it is shown that the result—in this case death—might have been brought about by one of two or more speculative theories, neither of which is included or excluded by any affirmative evidence.

' The judgments are reversed, and the causes dismissed.