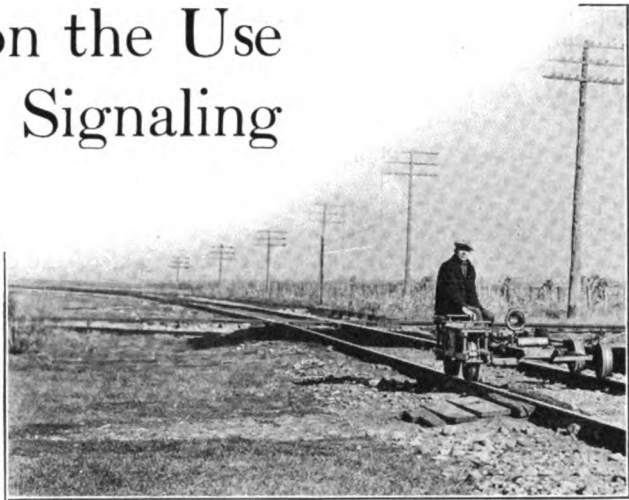


# Legal Decisions on the Use of Torpedoes for Signaling Purposes

*Few Signal men Realize What the Placing of This Device on the Track May Mean in a Court Decision*

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**A**T common law it was the duty of the employer to furnish the workman with a reasonably safe place in which to work and with reasonably safe tools and appliances. If there were any dangers attending the workman in the pursuit of his duties, which were known to the employer by reason of his advantages for superior knowledge, it was his duty to warn and instruct the workman against those dangers.

The doctrine of assumption of risk served to relieve the master from liability from injury only when the danger causing the injury was apparent to all, or especially known to the workman, so that he proceeded with full knowledge of it in such a way as to be held to have assumed the risk of his acts. The doctrine of the fellow-servant rule was that the master could not be liable for the negligence of a fellow servant which caused the injury complained of, as one man cannot be charged with the acts or negligence of another, unless he ratifies them or unless they are due to the nature of the work. The doctrine of contributory negligence was that if a man is injured partly through his own fault he cannot expect to recover for his injury entirely from another.

A signalman, track laborer or other employee may be employed upon a railroad and be in a reasonably safe place in which to work, but the placing of a torpedo upon the track will operate to change the character of the place so that under certain circumstances it is not a reasonably safe place in which to work.

If this is true, then the employing company will be liable for the injury done, but that is not the only liability attaching to the employer. He has, by changing the character of the place in which the workman is required to perform his duties, incurred the obligation of instructing and warning the said workman of the increased hazard of his place of work. If the employer fails to so warn his workmen then he is liable in damages; but if the employer does warn his workman of the danger he may be relieved of liability, depending upon the manner in which the injury occurred. If the workman has been warned as to the presence of torpedoes upon the track in a certain area and he proceeds carelessly with his car, running over them and causing them to explode and injure him, he would doubtless be held guilty of contributory negligence and would be unable to recover.

But there are many possibilities even where he has been warned of the danger of his being injured in such a way as to hold the employer liable for the damage done. An employer or his representative may warn the workman of the presence of torpedoes in a certain locality and say nothing about them in another place. The workman

may proceed cautiously in the stated locality and receive no injury and then proceed over the other territory and be injured. I think the chances would be favorable to the workman in such a case. The same liability may attach to the employer where he leads the workman to believe by inference that the torpedoes are placed only in a certain locality, and likewise that the track elsewhere is free of them.

In an Indiana case (1914) a track laborer was injured by pushing a car over a track where a torpedo had been placed by the employer or his representatives. The metal part of the torpedo was driven into the plaintiff's leg by the explosion, causing severe injury and greatly lacerating the leg. The plaintiff claimed that his employer had failed to furnish him a safe place in which to work by reason of his failure to instruct him that torpedoes had been placed upon the track or to warn him as to the dangers of their explosion. He stated that he had no knowledge whatever of torpedoes, that he did not know they were upon the track or that they had been used in that vicinity, and that it was not a part of his duty to discover obstructions on the track and remove them; that he was suffering from defective eyesight and could not see small objects more than five feet away from him and that, therefore, he had no means of discovering the torpedo before he pushed his car upon it.

The court held that there could be no presumption that the torpedo had been placed upon the track by a fellow-servant; that the mere fact that it had not been negligently placed there in the first instance did not necessarily follow that it was not negligence to allow it to remain there, and that since the plaintiff had stated that it was not a part of his duty to examine the track and keep it free from obstructions and that by reason of his defective eyesight he could not discover such objects in time to prevent them exploding, such allegations negated the assumption of risk, and that where the employer creates a dangerous situation, it is the latter's duty to warn the servant, otherwise such a failure will render him liable.

In a Kentucky case (1907) a section gang was proceeding along a track to their place of work, under the direction of a foreman. Upon the approach of a train, they took their car off the track and in so doing disabled it so that it would not work, making it necessary for them to push it. While so engaged, they heard a train approaching and the foreman directed his men to hurry to a place where they could remove the car and allow the train to pass. The plaintiff was running along, helping push the car, when it hit a torpedo which had not yet served its purpose. The explosion caused a part of the

torpedo to enter the plaintiff's leg, causing the injury complained of.

The court ruled that the risk of injury from the explosion of a signal torpedo must be held to have been assumed by the plaintiff, as it was a risk incident to the operation of a railroad, and that he was guilty of contributory negligence by failing to discover the torpedo, as it was a part of his duty as well as that of other members of the section crew to discover obstructions upon the track and remove them, and that the act of the company in placing a torpedo upon the track for a proper purpose, which had not yet been served, was not negligent.

In a Texas case (1907) it was shown that a freight train had been standing on a track for the greater part of one day loading cattle and that in such cases the rules of the company required that a flagman should go back a sufficient distance behind the train and place torpedoes upon the track in order to insure safety from other trains and that it was the duty of such flagman to remain near the torpedoes until recalled to the train, this being when the train was ready to proceed again. As soon as the freight had stopped, the conductor went back and placed two torpedoes upon the track, after which he returned to his work.

The plaintiff was a section foreman and he was proceeding along the track, examining it on his car. When he saw the freight standing at the station he had watched the track for torpedoes, but seeing no flagman near, concluded there were none on the track and continued to move his car, watching the banks of the roadbed, as considerable trouble had been experienced with high water.

His legs were hanging over the side of the car when he ran over the torpedoes and received the injuries complained of. He stated that if the flagman had been called in he would have heard the whistle, and would have known torpedoes were on the track; that the flagman was not on the track nor going towards the train; that if the flagman had been there as the rules required the plaintiff would have seen him and been on the lookout for torpedoes and would not have received the injuries; that if no train had been in sight that he would have continued to look for torpedoes until nearer the station. It was further shown that the rules required the flagman to stay near the torpedoes and that in case they failed to explode it was his duty to flag the incoming train to stop it to prevent injury to his own train, and that it was not customary to call in the flagman until the train was ready to proceed. The lower court had directed a verdict for the defendant company, but the supreme court held that the verdict should not have been directed in favor of the company and reversed it and sent the case back.

In the subsequent trial (1908) the plaintiff recovered a verdict of \$14,000 and such verdict was sustained, the court holding that the company had not exerted the proper means of protection against the torpedo—a dangerous explosive. It was further held that the plaintiff had a right to assume that the employees on the train were acting in accordance with the rules of the company, and that since he had been misled by their failure to so act that he was entitled to recover for such damage as their failure to perform their duty had brought upon him. Since it had been necessary to amputate his leg, the court did not deem the recovery excessive.

In a Michigan case (1905) a workman was repairing a car and threw down a wrench upon the body thereof, which exploded a torpedo lying there, causing the damage complained of. The plaintiff testified that he recognized the torpedo as such, but that he did not know how it came to be on the car he was repairing. The court held

that the court had erred in failing to direct the verdict for the defendant company.

In a Texas case (1915) the plaintiff was employed as a gardener about the station of the defendant company and it was his duty to gather up rubbish and burn it in the furnace or stoves in the station. While so engaged at various times he had found torpedoes in the rubbish and had called the attention of his superior to them. At the time of the injury he testified that he did not know whether there were two torpedoes in the rubbish or not, and that he was putting the rubbish into a stove with a shovel when his superior came along and took the shovel away from him, directing him to put the material into the stove with his hands. While putting in an armful with his face close to the door, he claimed to have heard a slight noise like "chooh" and that a flame shot out into his face and eyes, badly burning them.

Others about testified that they saw the flame shoot out of the stove, but that they did not hear any noise. It was further brought out that there was no evidence that the employees had at any time put torpedoes in the rubbish and that the company kept them under lock and key 200 ft. away.

Said the court: "If we give full credence to the statement of the plaintiff that he found torpedoes and told his superior about it, he likewise says that he knew that they were dangerous, and so refused to obey orders by throwing them into the fire. He was in a better position to know what was in the trash than anyone else, for it was his business to gather it up and burn it or put it in the place provided. If he did not know that such things were in the trash, that he was expected to burn them, and did not quit, but went ahead with the same work, after, as he says, his superior told him it was the order of the 'big boss' that he burn them, it looks like he assumed the risk.

"Facts may be established by circumstantial evidence, it is true, but where such testimony is relied on it should be much more cogent than that contained in this record. . . . But plaintiff invokes the doctrine symbolized by the maxim, *res ipsa loquitur*, which we understand means that the thing speaks for itself, or is a short way of saying that the circumstances attendant upon an accident are, of themselves, of such a character as to justify a jury in inferring negligence as a cause of the accident. . . . If it were proved that there was a torpedo in the furnace, it would still be necessary to show that the negligence of the defendant's employees caused it to be there. It occurs to us that the evidence is totally insufficient to support the judgment." At another time, in considering this same case, the court said: "Negligence of the master must be proved by direct or circumstantial evidence." And the court also held that "it could not go to the extent of holding that a gardener employed by a railroad company engaged in interstate commerce, to cultivate the yard about one of its stations, and gather trash and burn it, is engaged in interstate commerce. The state law is applicable under the facts in this case."

In another Kentucky case, decided in 1915, it was held that it was not negligence *per se* for a railroad company to place a signal torpedo upon a track, and that if the section foreman was guilty of gross negligence in failing to discover a torpedo upon a track over which he is proceeding with his crew on a car, that a workman injured by the explosion of such torpedo is entitled to recover damages for said injury. It was also held that the rules applicable to the handling, storage and care of explosives does not apply to the case of signal torpedoes, when placed upon the track for signaling purposes.

It was also held to be a proper instruction to say that

the company was not negligent in placing the torpedo on the track, that the danger therefrom was one of the risks ordinarily incident to the plaintiff's employment, that he assumed all the risks ordinarily incident thereto, and that, unless the section foreman was guilty of gross negligence in failing to observe torpedo, plaintiff could not recover.

### THE NATIONAL RAILWAY APPLIANCES ASSOCIATION

**I**N connection with the National Railway Appliances exhibit, to be held at the Coliseum in Chicago next month, up to January 29 space had been allotted to 146 companies. One hundred eighteen companies had been allotted space last November (page 386 of the December number of the *Railway Signal Engineer*). Twenty-eight additional companies have since arranged for exhibits. These companies are listed below:

- Alger Supply Co.
- American Railway Bridges and Building Assn.
- American Kron Scale Co.
- American Vulcanized Fibre Co.
- Barrett Co., The.
- Boss Nut Co.
- Clark Car Co.
- Detroit Graphite Co.
- Eymon Continuous Crossing Co., The.
- Ferguson Co., The.
- Gould Storage Battery Co.
- Gilbert & Barker Mfg. Co.
- International Steel Tie Co., The.
- Joyce-Cridland Co., The.
- Lehon Co., The.
- Lufkin Rule Co., The.
- National Concrete Machinery Co.
- North American Engine Co.
- P. & M. Co.
- Patterson Co., W. W.
- Richards-Wilcox Mfg. Co.
- Road Masters and Maintenance of Way Assn.
- Safe Lock Switch Machine Co.
- Sellers Mfg. Co.
- Stuebing Lift Truck Co., The.
- Train Control Appliance Co.
- United States Switch Co.
- West Coast Lumbermen's Assn.
- Woolery Machine Co.

### STATED MEETING OF THE R. S. A.

**T**HE stated March meeting of the Railway Signal Association will be held at the Auditorium Hotel, Chicago, March 17, 1919. In view of the importance and number of subjects to be presented the sessions will be held from 9:30 a. m. to 12:30 p. m.; 1:45 p. m. to 6:00 p. m. The following subjects will be presented by the committees:

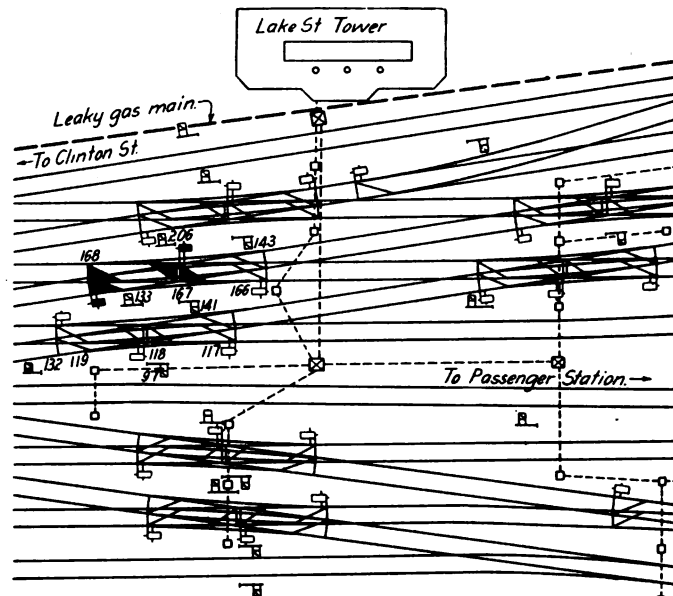
- Committee II—Mechanical Interlocking.
  - Unit specification for mechanical interlocking machine, having improved S. & F. locking.
- Committee III—Power Interlocking.
  - Specification for electric motor, switch operating and locking mechanism, first and second range voltage.
  - Specification for Power Interlocking Machine.
- Committee X—Signal Practice.
  - Report on the problem of signaling railroads with reference to the effect of signaling and proper location of passing sidings on the capacity of the line.
  - Report on automatic train control. Summaries of the following systems will be presented: American Train Control System; Shadle Automatic Train Control; National Safety Appliance Company; Schweyer Automatic Train Control.
- Committee XII—Contracts.
  - Form of contract for block signal and interlocking work.

A paper will be presented on concrete trunking by B. A. Lundy, assistant signal engineer, New York Central. Kirk C. Barth of the Barrett Company will present a paper on treated trunking.

### A PECULIAR ACCIDENT

**A** PECULIAR accident happened at the Lake Street Terminal of the Chicago & North Western in Chicago on January 3, when two electric switch machines and one dwarf signal mechanism case blew up. The explosions occurred about 4:30 a. m. and took place about three minutes apart. The switch machines on the plant are the General Railway Signals Company's model 4 and the dwarf signal is their model 2-A with 110-volt mechanisms.

Pintsch gas pipe mains are brought up from the California Street yards of the North Western along the outer edge of the elevation and in front of the Lake Street tower for use in charging the gas drums on coaches in the terminal. A break at some point in the gas mains near the interlocking tower allowed the gas to leak out and at the time there was a coating of ice and snow over the top of the ground and ballast. As a consequence, this gas was retained below the surface of the ground and working through the ballast entered the trunking, where it was carried into the switch and signal



Track Layout. Damaged Mechanisms Shown in Black

mechanism cases. A spark from the pole changers or commutators ignited the gas and as the mechanisms were tightly enclosed in the cases the action was similar to a gas engine explosion.

The covers of the switch machine cases were thrown about 50 ft. by the explosion, the sides of the cases blown out and considerable damage done to the mechanisms. After the second explosion occurred the gas on the surface of the ground ignited and it was necessary for the city fire department to respond to a fire alarm. The burning gas on the surface of the ground, however, did no damage. The gas was shut off at the Clinton Street interlocking plant and all the switch machine cases and signal cases were aired out. On the arrival of the men who maintain the gas line the gas was again turned on and a short time afterward the case of signal No. 132 was blown off. The location of the gas line, which is approximately 18 in. under the surface of the ground, and the two switches and signal affected by the explosion, are shown in the accompanying illustration.