THE DOMINION CARTRIDGE COMPANY (DEFENDANTS)..... } APPELLANTS;

AND

JAMES CAIRNS (PLAINTIFF).....RESPONDENT.

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*Feb. 16, 17.

*May 6.

ON APPEAL FROM THE COURT OF QUEEN'S BENCH FOR LOWER CANADA (APPEAL SIDE.)

*Negligence—Fault of fellow servant — Master and servant—Employer's liability—Arts.* 1053, 1056 *C.C.*

The defendants carried on the manufacture of detonating cartridges or caps made by charging copper shells with a composition of fulminate of mercury and chlorate of potash, a highly explosive mixture, requiring great care in manipulation. It is, when dry, liable to explode easily by friction or contact with flame, but has the property of burning slowly without exploding when saturated with moisture. It was the duty of defendants' foreman, twice a day, to provide a sufficient quantity of the mixture for use in his special compartment during the morning and in the afternoon, and to keep it properly dampened with water, for which purpose he was furnished with a sprinkler. It was also the foreman's duty to fill the empty shells with the fulminating mixture as they were handed to him set on end in wooden plates, and then pass them on, properly moistened, through a slot in his compartment, to a shelf whence they were removed by another employee and the charges pressed down to the bottom of the shells by means of a pressing machine worked by C at a table near by. An explosion took place which appeared from the evidence to have originated at the pressing machine, and might have occurred either through the fulminate in the shells having been allowed to become too dry from carelessness in sprinkling, or from an accumulation of the mixture adhering to and drying upon the metal portions of the pressing machine. It was the duty of C, the person operating the pressing machine, to keep it clean and prevent the mixture from accumulating and drying there in dangerous quantities. When the explosion occurred, the foreman and C and another employee were killed, but a fourth employee,

PRESENT :—Taschereau, Gwynne, Sedgewick, King and Girouard JJ.

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who was blown outside the wreck of the building and survived, stated that the first flash appeared to come from the pressing machine, and the explosion followed immediately. The theory propounded by the plaintiff, the father of C, assumed that nothing was known of the actual cause of the explosion, nor where it in point of fact originated, but inferred from a supposed condition of things, that the fulminate had not been sufficiently dampened, and that this indicated carelessness on the part of the foreman and raised a presumption that the explosion originated through his fault. The evidence of the survivor led to the conclusion that the explosion originated through C's neglect to clean the pressing machine. There was evidence to show that the defendant had taken all reasonable precautions to diminish risk of injury to their employees in the event of an explosion, and that conformity with rules prescribed and instructions given by them to their employees for the purpose of securing their safety, would be sufficient to secure them from injury.

*Held*, Taschereau and King JJ. dissenting, that as it appeared under the circumstances of the case, that the cause of the accident was either unknown or else that it could fairly be presumed to have been caused by the negligence of the person injured, whose personal representative brought the action, that there could not be any such fault imputed to the defendants as would render them liable in damages.

APPEAL from the judgment of the Court of Queen's Bench of Lower Canada (appeal side), affirming the judgment of the Superior Court, District of Montreal, which condemned the defendants to pay the plaintiff one thousand dollars damages with costs.

The plaintiff's action was for damages for the death of his son, a minor, caused through alleged negligence of the defendants, in whose service he was employed. The neglect specially charged against the defendants was carelessness on the part of the foreman of the detonating department of their factory in allowing fulminate of mercury, (which it was his duty to place in brass shells), to become so dry that it exploded, whilst the shells were being pressed in a machine operated by the plaintiff's son, and caused his death,

whereas if the fulminate had been kept properly moistened by the foreman the operation of pressing it in the shells could have been carried on with perfect safety. The plaintiff's theory as to the cause of the explosion depended entirely upon inferences to be drawn from testimony as to careless acts of the foreman upon former occasions, the survivor being unable to give any evidence beyond the fact that the first flash was seen by him at the pressing machine operated by the plaintiff's son and the explosion followed immediately. Further particulars, as to the arrangement of the factory and precautions taken for the safety of the employees, are given in the head note and in the judgments reported.

*Macmaster* Q.C. and *Fleet* for the appellants. There was no absence of care on the part of the employers; *Parrott* v. *Wells* ("*The Nitro-Glycerine Case*") (1); and nothing done by them could naturally and reasonably be supposed to have caused the injuries; *Victorian Railways Commissioners* v. *Coultas* (2). The presumptions are rebutted and there is evidence to support the theory that the deceased was himself responsible for the accident. See *Montreal Rolling Mills Company* v. *Corcoran* (3) and cases there cited. The appellants should not be condemned upon mere theory, they must be shewn to have committed a fault. *Mercier* v. *Morin* (4); *Judet* v. *Compagnie de Châtillon-Commentry* (5); "*The Nitro-Glycerine Case*" (1). Even if the fulminating mixture had dried prematurely owing to the great heat of the day, that would not be a reason for holding the appellants liable; *The Canadian Pacific Railway Company* v. *Chalifoux* (6). The employers took reasonable precautions, made rules and gave

(1) 15 Wall. 524.
(2) 13 App. Cas. 222.
(3) 26 Can. S.C.R. 595.
(4) Q.R. 1 Q.B. 86.
(5) Dal. '94, 1, 479.
(6) 22 Can. S.C.R. 721.

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instructions which were sufficient to have secured their employees safety, if conformed to by them. An employee neglecting such rules and instructions is barred by his own rashness, *volenti non fit injuria*. See *Paterson* v. *Wallace* (1); *Desroches* v. *Gauthier* (2) per Dorion C. J. at page 28; *The Canada Southern Railway Company* v. *Phelps* per Henry J. at page 148 (3); *Grand Trunk Railway Company* v. *Bourassa* (4); *Tooke* v. *Bergeron* (5).

*Trenholme* Q.C. and *Hutchins* for the respondent. The defendants must be answerable for their foreman's carelessness in allowing the dangerous mixture to become dry and explosive even though there may be no actual proof of the immediate cause of the explosion. *Corner* v. *Bird* (6); 20 Laurent No. 475; 1 Beven on Negligence, 141. The use of rough target paper by the foreman as shewn in evidence may have caused an explosion in his compartment where the larger quantity of the explosive mixture was kept and thus caused the explosion of his supply of fulminate as well as of all the cartridges in course of manufacture. The want of care in using rough paper and in his probable neglect to use the sprinkler were faults in the defendants' system of manufacture. *Res ipsa loquitur*. An undue number of cartridges were allowed to accumulate and become too dry for pressing with safety. The defendants owed their young and inexperienced employees the special duty of protection against injury or loss of life; 1 Beven (2 ed.) 789; *Grizzle* v. *Frost* (7) per Cockburn C.J. at page 625; *O'Brien* v. *Sanford* (8); 22 R. L. Rep. vo. "Responsibilité" nos. 83–84.

(1) 1 Paterson H. L. Cas. 389.
(2) 3 Dor. Q. B. 25.
(3) 14 Can. S.C.R. 132.
(4) Q.R. 4 Q.B. 235.
(5) 27 Can. S.C.R. 567.
(6) M.L.R. 2 Q.B. 262.
(7) 3 F. & F. 622.
(8) 22 O. R. 136.

See also *Robinson* v. *The Canadian Pacific Railway Co.* (1); *St. Lawrence Sugar Refining Co.* v. *Campbell* (2); *Evans et al.* v. *Monette* (3); *Allan et al.* v. *Pratt* (4); *Tremblay* v. *Davidson* (5); *Poitras* v. *The Globe Woollen Mills Co.* (6), and the authorities therein cited; *Calhoun* v. *The Windsor Hotel Co.* (7).

The judgment of the majority of the court was delivered by:

GWYNNE J.—This is an action instituted by a father for damages for the death of his son caused, as is alleged, by the negligence and default of the appellant company in whose service the son was employed.

The material allegation in the plaintiff's statement of claim is that

> On the twenty-first day of June, one thousand eight hundred and ninety-two, through the carelessness and wilful neglect of the company defendant, an explosion took place in the detonating room at their works in Brownburgh aforesaid by which the said James Cairns, junior (the plaintiff's son), lost his life.

It appeared in evidence that four persons worked in the building which was wholly blown up and destroyed by an explosion which took place in it whereby three of the persons employed therein, namely, Gunn, Curran and Cairns, were instantly killed, the fourth, named Bourck, being the sole survivor. The building so destroyed was used as a "detonating-room," that is to say, as a room in which copper shells were charged with fulminate of mercury and chlorate of potash.

The building was described as being a perfectly safe building for the purpose of the operations which were carried on in it. It was built, as the evidence discloses, of the very best materials, but purposely

(1) [1892] A. C. 481.
(2) M. L. R. 1 Q. B. 290.
(3) M. L. R. 2 Q. B. 243.
(4) M. L. R. 3 Q. B. 7, 322.
(5) Q. R. 5 S. C. 405.
(6) Q. R. 5 S. C. 391.
(7) Q. R. 4 S. C. 471.

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slight, for the express purpose of diminishing the risk of damage to the persons employed, in the event of an explosion taking place; and in fact that, great as the explosive power of the mixture used undoubtedly is, conformity with the rules prescribed by the company and the instructions given by them to their employees for the purpose of securing their safety, would be abundantly sufficient to secure immunity from all risk of injury.

To supply the evidence of a witness since deceased whose testimony, after having been taken down in writing had been lost, the plaintiff admitted as a fact which that witness had testified unto, that in the management of their factory "all possible care and diligence had been used by the defendants."

The work in the building was conducted as follows: Copper shells were brought from an outbuilding in boxes and placed upon a table on one side of the building where Gunn and Bourck worked; a hard-wood plate, with two hundred holes in it nearly pierced through, was then filled by Gunn and Bourck with copper shells which stuck up about the one-eighth of an inch; these plates when so filled, were one by one, taken by Bourck across the room to a place partitioned off where Curran, who was foreman in control of all the other persons employed in the room, worked. Bourck passed the plates filled with shells through a hole in the partition, facing where Gunn worked, to Curran to be charged by him with the explosive mixture and he pushed each plate, as charged with the fulminate mixture, through a sliding opening in another partition of his, Curran's, department, at right angles with that through which he had received the plates from Bourck and facing the place where Cairns worked a pressing machine, to be there pressed. These plates Cairns took from the sill

on which they were so placed by Curran and pressed the fulminate in the shells at the press worked by him, and when so pressed, Bourck took the plates of shells as pressed back to the table where Gunn and he worked and thence they were taken to a drying house outside of and some distance from the detonating building.

A theory was propounded by a witness on behalf of the plaintiff as to how the explosion, in his opinion, might possibly have taken place. He admitted, however, that as to the actual cause of the explosion he knew nothing. That in point of fact he did not know where the explosion had originated, and that his opinion was not based upon any facts shown to have existed when the explosion took place, but wholly upon the supposition of the existence of certain conditions which he mentioned, and which, assuming them to have existed, the explosion, in his opinion, could have originated, and in his opinion probably did originate where Curran worked and by reason of carelessness on his part.

There was evidence utterly denying that some of the conditions upon which that witness proceeded as constituting negligence did, assuming them to have existed, constitute any carelessness whatever or anything at all improper in the performance of the work entrusted to him; but it is unnecessary to decide on this, for we have the evidence of Bourck, the sole survivor of the disaster, who speaks to facts observed by him which make it quite impossible to say that the explosion originated in or at the place where Curran worked.

The only evidence of any fact pointing to the origin of the explosion is that given by Bourck, the sole survivor of the catastrophy. He had just returned to his seat at the table where he and Gunn worked from the

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table where Cairns worked whither he had gone in the expectation of receiving an empty plate from Cairns, but found him pressing the shells with the plate fully half full before him, that is, with still one hundred loaded shells upon it. He returned to his seat across the room, immediately behind Cairns and sat watching him at work and waiting for him to complete the pressing of the shells in the plate for which he was waiting. In a short time he observed a flash of fire issue from the press machine which was instantaneously followed by the explosion which destroyed the building, killed the three other persons employed in it and blew Bourck outside of the wreck.

Upon the evidence it must be held that the explosion originated at the press at which Cairns was at the time pressing cartridges. There were on the table in front of him one hundred loaded cartridges and one hundred more which had been pressed and dropped into a box on the floor under the table. All these exploded. There was evidence that the explosion of the two hundred cartridges was alone sufficient to blow up and destroy the building, and there were three several causes for the explosion originating at the press machine mentioned, which, assuming them to have existed, would naturally account for the catastrophy and be due to carelessness on the part of Cairns, who had been cautioned as to them and instructed how to prevent their occurrence.

Bourck also testified that upon the sill outside of the window in the partition through which Curran was in the habit of passing the plates of shells for Cairns to press, there were two plates of shells—four hundred in all. It may be that, and very probably it was, negligence in Curran to place these two loaded plates so near the machine at which Cairns was working before he was prepared to take them away, but this

negligence did not form any part of the theory upon which the plaintiff rested his claim. There is no doubt that not only these shells but also all the explosive matter in Curran's compartment were exploded together. As, however, the whole went off in one explosion which originated at the press which was being worked by Cairns, it is unnecessary, as it is impossible, to attempt to determine to what extent the effect of the explosion may have been increased by the proximity of the loaded plates, at the window in the partition in Curran's compartment, to the pressing machine where the explosion originated. For the determination of the present case it is sufficient to say, that the evidence shows that the explosion originated at the press which was at the time being worked by Cairns; and that the evidence not only does not warrant an adjudication that the explosion was not caused by any negligence on the part of Cairns, but on the contrary does warrant the fair presumption that it was caused by his negligence. If not caused by his negligence the evidence fails to show what did in fact cause it, and it cannot therefore be imputed to the defendants. The appeal must therefore, in my opinion, be allowed with costs, and the action dismissed in the court below with costs.

TASCHEREAU J. dissented, but gave no written reasons for judgment.

KING J. dissenting.—I think that there is evidence of negligence in this case sufficient to support the judgments below. Assuming the contention of appellants to be correct, that the explosion originated at the pressing machine worked by the deceased lad Cairns, the proper conclusion, from the evidence of the witness Flood, is that no explosion causing serious or at least fatal injury could be expected to result from it if the ful-

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minate was sufficiently moist. According to him and according to Howard, a man of great experience, the working in these high explosives is made practically possible and safe upon condition, and only upon condition, that the proper degree of moisture is maintained; and while, with this, there might be minor and inconsiderable explosions, there could not be any involving serious damage to life or approaching in its effects what is here proved to have taken place.

Flood is described in his deposition as a fulminate maker in the employ of defendants, and at the time of giving his evidence was their foreman in this branch of their work. His capacity and experience and his fairness towards them is therefore unquestioned, and he says that the failure to keep the fulminate properly moist is the only source of danger of explosion; and he also says, what the whole evidence shows, that the duty of keeping it properly moist was upon the foreman, for whose neglect, if any, the company would, according to the law of Quebec, as I understand it, be responsible to Cairns.

Flood's evidence is as follows:

Q. Now, you are working at a very dangerous business, are you not?—A. I do not know, if I go according to orders, that it is very dangerous.

Q. You do not consider it dangerous, what you are doing?—A. Not if I go according to the orders.

Q. You think it can be run safely, do you?—A. I think so.

Q. Wherein consists the danger in working that business? How is there danger?—A. If you let your powder get too dry; that is the principal danger, I guess.

Q. If the powder is kept moist then there is no danger, is there?—A. No, sir.

Q. You mean by powder, the fulminate you put into these detonators?—If that is kept properly moist, you say there is no danger in the business?—A. No, sir.

Q. But if it is allowed to get dry there is danger, is there not?—A. Yes, sir.

Q. Because when it gets dry it will explode ?—A. If it gets any cause.

Q. Will it very easily explode ?—A. Yes, sir.

Q. Now, in running that business, you have said if it is kept properly moist there is no danger. Now, do you see that it is kept properly moist yourself ?—A. Yes, sir.

Q. You make a point yourself of attending to that ?—A. Yes, sir.

Q. Who has the watching of that ?—A. I have.

Q. It is your duty to moisten that, is it not ?—A. Yes, sir.

Q. The man who charges these detonators, it is his duty to keep that properly moist, is it not ?—A. Yes, sir.

Q. And that his failure to do that is the only source you know of danger of explosion ?—A. That is all.

Q. The only one ?—A. Yes, sir.

Q. Now, is that very dangerous work the boy is put to, the boy running the pressing machine—is that not very dangerous work ?—A. No, I do not consider that it is.

Q. You do not consider that it is dangerous at all ?—A. No, sir.

Q. Why ?—A. If the powder is damp enough, there is no danger.

Q. That is, if the plates, as passed to him, are damp enough, there is no danger of explosion ?—A. No.

*By the Court :*

Q. So that the explosion would not take place there, at the pressing machine ?—A. Not if the powder was damp enough.

Q. Did you ever know one of these detonators to go off in the machine ?—A. I have.

Q. What was the cause of that ?—A. Of course, if the boy that was running the machine allowed powder to gather around the point of the punch, it might explode in that way—that is, the punch that presses the shell.

Q. Did you ever know a detonator to explode there ?—A. Through that ? Yes, sir ; in that way.

Q. And what was the result ? Did it hurt the boy ?—A. No, sir.

Q. Why did it not hurt the boy ?—A. There was a guard on the machine for one thing.

Q. He is protected against an explosion in that way, is he ?—A. Yes, sir.

Q. That was the same as in the old building, supposing he was protected ?—A. Yes, sir.

Q. So that if an occasional detonator went off in a machine, it would not hurt the boy, would it ?—A. No, sir.

Q. The boy has not been hurt since you have been there, by any of those explosions, has he ?—A. No.

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In the absence therefore of proof of other cause, *res ipsa loquitur* and points to a deficiency of moisture in the fulminate mixture as the efficient cause.

A circumstance pointing to the same conclusion exists in the fact that the foreman was charging the shells unnecessarily long before the time when the pressing could be undertaken. Two plates of 200 detonators each were charged in advance and lying on the sill prepared for Cairns to press them on completion of the plate he was working at. The day is proved to have been one of the hottest of the season, and in such a slight and small structure as that in which the operations were carried on, it is manifest that the process of evaporation would go on rapidly, and there is no evidence to warrant the suggestion that the shells were sprayed after they were charged and, in the nature of things, it is quite unlikely.

It is said that Cairns was negligent, but any neglect on his part could not reasonably result in any serious injury providing that the mixture was in the proper condition he had a right to expect it to be in, and besides there is really no proof of neglect at all on his part. Bourck speaks of having previously seen particles of the fulminate on the top of the dial of Cairns' machine, but he saw nothing of this sort when at the machine just before the accident took place. According to the rules the foreman was to see to the taking apart and cleaning of the machine every two hours.

In the operation of pressing from 14,000 to 15,000 caps per day slight slips would be unavoidable and were to be expected, and this, consistently with reasonable care on the part of the person so employed considered in his relation to the employer. Indeed slight accidents at the machine from one cause or another seem to have been calculated upon as likely

to occur as a steel shield was placed in front of the operator to protect him from their effects.

The courts below were not required to adopt the strained theories of the president of the company, who seems to have very different notions from Flood and Howard as to the protective value of moisture in ensuring safety. As for the boy Bourck, he manifestly had no experience that would warrant confident statements by him as to modes and causes of explosions. Besides, his evidence is affected by his admission that he had declined to give information to the plaintiff's solicitor on the ground that he was going to give evidence for the defence.

At all events the courts below have not adopted the theories of these witnesses, and in the evidence of Flood, already alluded to, they had sufficient upon which to base a judgment for the plaintiff. I therefore think that the appeal should be dismissed.

*Appeal allowed with costs.*

Solicitors for the appellants: *Robertson, Fleet & Falconer.*

Solicitors for the respondent: *Stephens & Hutchins.*