REASONABLE FORESEEABILITY AND THE STATUTORY DUTY TO FENCE

HIBBERDS FOUNDRY LTD. v. HARDY, [1953] N.Z.L.R. 14.

Whether machinery has been sufficiently fenced in accordance with the law is a very important question, and it arose again for the consideration of the New Zealand Court of Appeal in the recent case of Hibberds Foundry Ltd. v. Hardy, [1953] N.Z.L.R. 14. To determine this question the Court applied the test of reasonable foreseeability.

The plaintiff (respondent) met with an accident during the course of his employment with the defendant company (appellant) in its foundry at Petone. His task was to operate a sand-mill, which consisted of a shallow pan at about ground level out of which rose a vertical rotating shaft surmounted (about six feet from the ground) by a large toothed wheel. This was engaged by a pinion operated by an electric motor. The big wheel used to throw out oil on to his back as he worked below. The foreman knew of this happening and on occasions helped him to remove the oil with the aid of some kerosene. The plaintiff was not at all satisfied with this, and decided to do something himself to abate the nuisance caused by the falling oil. Taking some cotton waste supplied in the foundry and holding it in his gloved hand, he used to clean the cog-wheel as it rotated. On the morning of the accident, he was performing this operation as usual when his gloved hand got caught by the moving large wheel and was badly crushed.

The plaintiff claimed damages on two grounds, namely: (a) that the defendant company was negligent in adopting a dangerous system of work, with the result that he suffered his injuries; and (b) that the large cog-wheel was not securely fenced, in breach of the employer's statutory duty, and in consequence of such breach the accident happened. The jury found in favour of the plaintiff on both issues, and awarded damages reduced by one-third on account of the plaintiff's contributory negligence.

The defendant company moved for an order setting aside the jury's verdict as being against the weight of evidence. The trial judge dismissed the motion. He held that the cause

of action based on breach of statutory duty had been established, and accordingly did not deal with the common law claim. On appeal the Court of Appeal unanimously affirmed the actual decision, but on different grounds. It was held that the plaintiff succeeded on the ground of negligence at common law but not on the basis of breach of statutory duty. All the learned judges held that there was a breach of statutory duty, but only Cooke J. held that there was evidence on which the jury would find that this breach was a substantial cause of the accident.

One of the main points in issue was whether or not the employer had acted in breach of s. 16 (1) of the Inspection of Machinery Act 1928, which provided that:

> The moving parts of all machinery shall be so guarded as to afford adequate protection to all persons working the machinery or in connection therewith, or who may be in the vicinity thereof.

[This section has now been replaced by s. 41 (4) of the Factories Act 1946, which provides:

> All dangerous parts of any machinery shall be securely fenced off or otherwise provided with efficient safeguards.

The decision in Hardy's case appears to be equally applicable to the new terminology, which follows the Factories Act, 1937 (U.K.), by requiring the dangerous parts of any machinery to be "securely fenced."]

The test applied by the Court to determine this question was whether the respondent's injury was reasonably foreseeable - in short, as du Parcq J. said in Walker v. Bletchley Flettons Ltd., [1937] 1 All E.R. 170, at 175, whether there was:

> a possible cause of injury to anybody acting in a way in which a human being may be reasonably expected to act in circumstances which may be reasonably expected to occur.

This test was adopted by Donovan J. in Pugh v. Manchester Dry Docks Co. Ltd., [1954] 1 All E.R. 600 at 601.

The statute imposed an absolute duty to provide "adequate" protection - adequate when tested in the circumstances. There was moving machinery, which is always potentially dangerous, and there was no guard. Was "adequate" protection provided?

It was argued on behalf of the appellant that no employer could be expected to foresee and provide against such folly and recklessness on the part of an employee. The employer was entitled to assume as a reasonable man that a workman, faced with the task of getting rid of oil, would stop the machine, and would not deliberately adopt an unsafe method. Furthermore, the respondent had worked in factories for 14 years, was experienced, and knew how simply the machine could be stopped. He used waste material, which is dangerous, kept his gloves on, and tried to clean the machine at the point which is most dangerous. Such carelessness, it was said, could not be reasonably foreseen.

Nevertheless, as Gresson J. observed in the Court below, it has been recognized time and again in English law that it cannot be assumed that everyone will always be careful. Workers in a foundry, no less than workers generally, may and do act carelessly at times, and their employers must take cognizance of such possible conduct and provide suitable safeguards accordingly. Lord Normand, in a Scottish case in which the law on this point was the same, put the position thus:

> The circumstances which may be reasonably anticipated include a great deal more than the staid, prudent, well-regulated conduct of men diligently attentive to their work, and the occupiers of factories are bound to reckon on the possibility of conduct very different from that. They are bound to take into account the possibility of negligent, ill-advised or indolent conduct on the part of their employees, and even of frivolous conduct especially where young workers are employed. - Lyon v. Don Brothers, Buist and Co. Ltd., [1944] S.C. (J.) 1, 5.

Furthermore the respondent had good reasons of his own for adopting that method of cleaning. It was, he contended, the only reasonable method in the circumstances. The mill stood in a corner and since only about half of the wheel was accessible when the mill was at a stand-still, it was preferable to do the cleaning whilst the wheel was moving rather than to adopt

the course of switching on and off so as to bring successive segments of the wheel opposite him. Even this method would not necessarily bring the uncleaned portion of the cog-wheel to the desired position for cleaning, as it was difficult to stop in the right place. In addition, the employer knew of the necessity for cleaning the machine, yet he left the workman to cope with the nuisance as best he could.

Surely, then, the method of cleaning adopted by the respondent was by no means extraordinary or unpredictable, but rather quite natural and probable in the circumstances. To remove the offending oil was a difficult and awkward task, and one has only to think of the method so frequently employed, of allowing a wheel to spin and have a cloth or cleaner in contact with it, to foresee that this method might have been employed in this case. Any workman who is being spattered with oil might have done the same thing in order to combat the discomfort. It is submitted, therefore, that it was quite competent for the jury to find, as a question of fact, that there was no "adequate" protection within the meaning of the statute. The employer, acting with reasonable diligence for the safety of his workmen, should have foreseen that the annoyance the plaintiff suffered from the falling oil would cause him to do something, and that in doing something he might adopt the course appearing to him to be the easiest, even though hazardous and imprudent. Thus the employer was at fault in not providing "adequate protection" within the meaning of s. 16 (1) of the Inspection of Machinery Act 1928.

What, then, of this doctrine of reasonable foreseeability that was the deciding factor in this case? Is it a valid test? Has it always been applied by the courts in determining whether dangerous machinery has been securely fenced, or is it of comparatively recent origin? Does it, moreover, embrace a larger field than that of statutory duty to fence?

In 1897 the proposition was laid down by Wills J. in Hindle v. Birtwhistle, [1897] 1 Q.B. 192, that machinery was dangerous and therefore to be fenced if, in the ordinary course of human affairs, danger might reasonably be expected from it if it was worked without protection. In this case the occupier of a cotton factory was summoned for neglecting to fence the shuttles of his looms. It appeared that shuttles did occasionally

fly out under circumstances which rendered them dangerous to any persons who happened to be in the line of flight. This tendency to fly out with a certain degree of frequency made the machinery "dangerous" in the circumstances. It was said that in considering whether machinery is dangerous, the contingency of carelessness on the part of the workman in charge of it, the frequency with which such contingency was likely to occur, and all other matters likely to make the machine become dangerous, were to be taken into consideration. If, taking what was reasonably certain to happen, the court thought there was a substantial probability that accidents would result from the machinery, the machinery was dangerous and therefore needed to be fenced. ["Substantial probability" was assumed to involve "reasonable foreseeability".]

This test of Wills J. was elaborated by du Parcq J. in Walker v. Bletchley Flettons Ltd. (supra), when he considered the statutory duty imposed by s. 10 of the Factory and Workshop Act, 1901 (U.K.) to fence "dangerous" machinery securely. The plaintiff was being taught to drive a mechanical excavator. When going, as he was entitled to do, to the tool-box, he slipped and his leg was caught and severely injured by a wheel of the machine which was unfenced. The surface near the excavator was such that there was always the possibility of slipping, added to which was the fact that there might also be (as in this case) a little pool of oil, which would make the probability that someone might slip so much the greater. The Court awarded damages to the plaintiff for breach of statutory duty, on the basis that a part of a machine is "dangerous" if it can be a possible cause of injury to anyone acting in a reasonable manner.

Similarly, in the case of a claim based on the provisions of s. 14 (1) of the Factories Act, 1937 (U.K.) in which the question was whether certain machinery was "securely fenced" within the meaning of those provisions, Lord Normand adopted the test of reasonable foreseeability; a view with which Lord Fleming and Lord Carmont agreed: Lyon v. Don Brothers, Buist and Co. Ltd. (supra). Again, in Burns v. Joseph Terry and Sons Ltd., [1950] 2 All E.R. 987, the Court of Appeal held, in regard to the obligation to fence imposed by the Factories Act, 1937 (U.K.), s. 13 (1), that the test whether machinery was securely fenced was whether it was so fenced as to give security from such dangers as might be reasonably expected.

This view of the law seems to be consistent with the three principal reported cases where it has been held that there had been no breach of the statutory duty to fence securely, and that the injured party was not entitled to recover. In Higgins v. Harrison (1932), 25 B.W.C.C. 113, an unfortunate accident happened to a young girl who had gone groping about on the floor, quite unnecessarily, near part of a machine to which nobody could possibly contemplate, by the wildest stretch of imagination, anyone would go. In Wood v. London County Council, [1941] 2 K.B. 232, the plaintiff forced her hand through a small aperture into the depths of an electric mincing machine with the result, foreseeable by the meanest intelligence, that her hand was crushed. In Carr v. Mercantile Produce Co. Ltd., [1949] 2 K.B. 601; [1949] 2 All E.R. 531, a girl put her hand right into the interior of a machine used for making macaroni, and her fingers were injured. To put her hand inside, she had to force it through a narrow opening.

It seems that, implicit in these cases, there was a finding of fact that the injured person behaved not only with complete folly, but also, and this is the crux of the problem, in a manner which no reasonable employer could expect in the circumstances. In Carr's case (supra), for example, there were these special circumstances which excused the employer from liability under the statute - the girl had been working the machine for five weeks before the accident, the machine itself had been used for three years without mishap, and no complaint had ever been made about it by the factory inspector who had visited the factory while it was installed.

The question therefore is whether or not the conduct causing injury could reasonably be expected. This is a question of fact and each case must be decided in the light of its own particular circumstances. If, taking what can reasonably be foreseen as likely to happen, there is substantial foreseeability that injury will be caused an employer will be liable if he fails to provide adequate safeguards. (A mere possibility of injury is not enough: see p. 75 infra.) Careless, imprudent, foolhardy and unreasonable conduct on the part of a workman must be guarded against because it is known that they have frequently acted in that way in the past, and an employer is not entitled to assume that there will be any sudden change in human conduct.

Nevertheless, an employer is not bound to provide against every casualty that may befall an employee in the vicinity of moving machinery. The extent of his duty is confined to providing "adequate" protection against reasonably foreseeable conduct. There is no duty to provide against conduct which is highly improbable in the circumstances. Thus no liability, it is submitted, would attach to an employer if his employee were pushed onto the machine by someone wanting to kill him. Likewise, a plaintiff cannot as a general rule plead his own criminal act as an essential part of his cause of action. (Workers' Compensation claims are an important exception: Workers' Compensation Act 1922, s. 15.) Then, too, the statute does not in terms create a statutory cause of action. It does not, for instance, make the employer an insurer. The person who is injured must show not only a breach of duty but that his hurt was due to the breach. Although the Court of Appeal in Hardy's case (supra), were divided on this question of causation, they recognized that if the damage is due entirely to the workman's own wilful act, no cause of action arises; as, for example, if out of sheer bravado he wilfully puts his hand into moving machinery or attempts to leap over an unguarded cavity. In these cases the injury has not been caused by the defendant's omission, but by the plaintiff's own conduct. Such conduct may possibly occur, but it is treated as being beyond the realms of reasonable foreseeability as applied to the statutory duty to fence.

Indeed, the striking features of the doctrine of reasonable foreseeability are its elasticity and scope of application. Not only has the doctrine been applied to the field of breach of statutory duty, but it has been used by the courts in a variety of different circumstances as a test for negligence generally. It is not difficult to support the application of the doctrine of reasonable foreseeability in circumstances, for example, where a Water Board takes no steps to warn domestic consumers that the water, if passed through lead pipes, is liable to be dangerous to health, it being proved that various occupiers of premises in the locality have already suffered from lead poisoning: Barnes v. Irwell Valley Water Board, [1939] 1 K.B. 21; [1938] 2 All E.R. 650; or where a motor-cyclist, having offered to lead another motor-cyclist along a road with which he alone was familiar, carelessly drives into a ditch, luring his follower to a similar fate and injuring the follower's pillion-rider: Sharp v. Avery, [1938] 4 All E.R. 85. The same test was adopted by the Court of

Appeal in England in deciding that the proprietor of a zoological garden was not liable for failing to foresee that his camel would have been ungrateful enough to eat, not only the plaintiff's apple, but his hand as well: McQuaker v. Goddard, [1940] 1 K.B. 687; [1940] 1 All E.R. 471. On the other hand, a Canadian court has held that the Governors of the University of Alberta, upon the test of reasonable foreseeability, are under a duty to take reasonable care to protect freshmen from injuries at initiation ceremonies: Pawlett v. Alberta University, [1934] 2 W.W.R. 209. Although there may appear to be a certain similarity between students at initiation ceremonies and animals ferae naturae, it is submitted that the doctrine of reasonable foreseeability was misapplied in Pawlett's case. The duty of care must be clearly owed before an injured party can recover, and, it is submitted, there was no such duty of care in Pawlett's case. Such a duty, though difficult to establish in cases between University Councils and students at initiation ceremonies, is undoubtedly present in relations between employers and employees; and where, as in our present case, a statute increases this duty of care by imposing a duty to provide "adequate" protection, the question of liability will turn on the reasonable foreseeability of injury to the employee in the circumstances.

In the recent English case of Bolton v. Stone, [1951] A.C. 850, [1951] 1 All E.R. 1078, the House of Lords added an important qualification to this test that we are discussing. In formulating the doctrine of reasonable foreseeability, their Lordships held that it is not enough that the happening should be such as can reasonably be foreseen. There must also be a substantial risk of injury being caused.

Miss Stone was injured by a cricket ball while she was standing on the highway outside her house. The ball was hit by a batsman playing in a match on the cricket ground, which was adjacent to the highway. It was found that balls had been previously driven into the public road, but not more than about 6 times in 30 years. Furthermore, since the road was an ordinary side road with no great traffic, the chance of a pedestrian's being struck by a ball falling on the road was extremely small: therefore the cricket club was not liable.

The basis of their Lordships' decision was that the injury to Miss Stone could not reasonably be assumed to be likely to happen. As Lord Oaksey observed (A.C. at 863; All E.R. at 1083):

> The standard of care in the law of negligence is the standard of an ordinary careful man, but in my opinion an ordinarily careful man does not take precautions against every foreseeable risk. He can, of course, foresee the possibility of many risks, but life would be almost impossible if he were to attempt to take precautions against every risk which he can foresee. He takes precautions against risks which are reasonably likely to happen.

For this reason, their Lordships all distinguished Castle v. St. Augustine's Links Ltd. (1922), 38 T.L.R. 615, in which a succession of players driving off alongside the road might be reasonably expected from time to time to slice a ball over or along the road; and thus there was a greater likelihood of danger to those using the highway there.

These decisions and observations of the courts on the doctrine of reasonable foreseeability, applicable as they are to questions of negligence generally, apply equally as much to questions of breach of statutory duty to fence securely. Thus, from the decision of the House of Lords in Bolton v. Stone (supra), we can see that an employer, although he must be careful and prudent, need not take precautions against every foreseeable risk. To do so would be to make the management of factories almost impossible. An employer need take precautions only against those risks which he can reasonably foresee are reasonably likely to cause injury to his employee.

In the last analysis, therefore, each case must depend upon its own circumstances and the degree of probability of an accident occurring. If, taking what is reasonably likely to happen, there is a substantial probability that an accident will result from the use of the machinery without protection, the employer is bound to fence securely. In other words, the true criterion for determining the employer's liability under the statute is that, wherever there is a substantial risk of injury, the employer is bound to provide "adequate" safeguards.

Note: This article was written before the report of a pertinent decision of the House of Lords was available. This was the decision in John Summers and Son Ltd. v. Frost, [1955] 1 All E.R. 870 (H.L.); [1955] 2 W.L.R. 825.