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 BETWEEN :  
 CONSOLIDATED DENISON MINES  
 LIMITED and THE RIO TINTO  
 MINING COMPANY OF CANADA  
 LIMITED *et al.* ..... } APPELLANTS;

AND

THE DEPUTY MINISTER OF NA-  
 TIONAL REVENUE FOR CUSTOMS  
 AND EXCISE ..... } RESPONDENT.

*Revenue—Sales tax—Excise Tax Act, R.S.C. 1952, c. 100, ss. 30, 32, 57, 58, Schedule III—Customs Act R.S.C. 1952, c. 58, s. 45—Exemptions—*

*Safety devices exempt from sales tax—Rock bolts used in mining underground operations for support of ceilings and walls of mine—Jurisdiction in appeals from Tariff Board decisions—Appeal allowed.*

Appellants used bolts of a special type, consisting of several parts, when opening up new underground workings of mines, to prevent the fall of rock by securing rock that might fall from the ceilings and walls to more stable, undisturbed rock strata. These rock bolts had to a considerable extent superseded the use of timbering for the prevention of rock fall. The Tariff Board decided that these rock bolts were not exempt from sales tax under Schedule III of the *Excise Tax Act* as "safety devices and equipment for the prevention of accidents in the manufacturing or production of goods" The majority of the Board found that rock bolts were essentially a structural device rather than a safety device and were comparable to the use of rivets or bolts in the steel beams of a factory building. The appeal comes before this Court pursuant to leave, on a question of law: Did the Tariff Board err as a matter of law in deciding that the rock bolts were subject to sales tax? Expert evidence was heard at the hearing before the Board.

*Held:* That the appeal be allowed.

2. That rock bolts used in underground mining are exempt from sales tax.
3. That the rock bolts are machinery or apparatus according to the dictionary definitions and are, on the evidence, safety devices or equipment for the prevention of accidents.
4. That rock bolts used in underground mining are "safety devices" and both "apparatus" and "machinery" and fall within the exemption provided in s. 32 of the *Excise Tax Act*.
5. That the device had two essential attributes of equal importance, for safety and structural use.
6. That the safety aspect of a device for the purposes of the statute should be related to the distinctive hazards of the particular circumstances rather than to the effect of measurable forces.
7. That the Tariff Board in deciding the issue by the consequences based upon a false analogy fell into an error of law.
8. That the appellants have discharged the onus lying on them to establish that there is error in law in the decision under appeal.
9. That the language of the exemption section is clear and unambiguous and appellants have shown that every constituent element necessary to the exemption is present
10. That the Tariff Board had before it sufficient evidence to decide that rock bolts were also safety as well as structural devices and in deciding as it did, erred in law and an appeal lies to this Court.
11. That the safety aspect or element of the rock bolt was as significant and important as its structural aspect or element, and any decision contrary thereto would be contrary to the weight of evidence.
12. That the first issue in the appeal is not whether rock bolts are a safety device within the meaning of the exemption clause but whether the Tariff Board erred as a matter of law in deciding that they were not and if there was material before the Board from which it could properly decide as it did, this Court should not interfere with its decision even if it might have reached a different conclusion if the matter had been originally put before it.

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APPEAL from a decision of the Tariff Board.

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The appeal was heard before the Honourable Mr. Justice Noël at Ottawa.

*v.*  
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*G. F. Henderson, Q.C.* and *Jean D. Richard* for Consolidated Denison Mines Limited.

*S. Thom, Q.C.* and *J. Goodwin* for The Rio Tinto Mining Company of Canada Limited *et al.*

*G. W. Ainslie* and *D. G. H. Bowman* for respondent.

The facts and questions of law raised are stated in the reasons for judgment.

NOËL J. now (May 23, 1963) delivered the following judgment:

This is an appeal, pursuant to leave, under s. 58 of the *Excise Tax Act*, R.S.C. 1952, c. 100, from the majority declaration of the Tariff Board, dated May 15, 1961, in appeal number 528, that certain articles called "rock bolts" are not exempt under s. 32 of the *Excise Tax Act* and are therefore properly subject to a consumption or sales tax imposed by s. 30 of the Act. This matter came before the Tariff Board by way of a reference under s. 57 of the *Excise Tax Act*.

The sole issue before the Court is whether rock bolts are exempt from an eight per cent consumption or sales tax imposed under s. 30 of the *Excise Tax Act*, R.S.C. 1952, c. 100 by virtue of s. 32 of the same Act which exempts from the said tax "the sale or importation of the following articles mentioned in Schedule III of the Act." The relevant part of Schedule III reads as follows:

MACHINERY AND APPARATUS TO BE USED IN  
MANUFACTURE OR PRODUCTION.

Machinery and apparatus that, in the opinion of the Minister, are to be used directly in the process of manufacture or production of goods, and the following machinery or apparatus:

Coal crushers and stokers;

Structures that are adjuncts to or provide access to the machinery and apparatus mentioned herein;

Repair and maintenance equipment used by manufacturers or producers for servicing their machinery and apparatus mentioned herein;

*Safety devices and equipment for the prevention of accidents in the manufacturing or production of goods;*

Leave under s. 58 of the *Excise Tax Act* to appeal to this Court from the decision of the Tariff Board was obtained on the following question of law:

Did the Tariff Board err as a matter of law in deciding that articles known as "rock bolts" used in underground mining are subject to sales tax under Section 30 of the *Excise Tax Act*, R.S.C. 1952, chapter 100, and are not exempt from sales tax under the schedule of exemptions laid down by Section 32 of the said Act as either safety devices and equipment for the prevention of accidents in the manufacturing or production of goods or as materials consumed or expended directly in the process of manufacture or production of goods.

At the hearing, counsel for the appellants stated that for the purpose of the present appeal, they were confining their submissions on the point of law as propounded in respect of safety devices and equipment for the prevention of accidents in the manufacturing or production of goods and abandoned that in respect of materials consumed or expended directly in the process of manufacture or production of goods.

Before setting out the main issues in this appeal I should give a brief description of the activities of the mining companies involved and of rock bolts and explain the manner in which and the purpose for which the latter are used.

The mining companies here are all involved in the production of ore by underground operations. The evidence discloses that when one starts constructing a mine, the first thing to do is to build a shaft and some rock bolts are used here. Then, haulageways are built which are low tunnels and rock bolts are not used here unless they are more than 22 feet in width; then from the tunnels, which run in parallel series, pilot raises are excavated; these are small secondary tunnels. As soon as the pilot raise is driven it is bolted and the ore is slashed out.

In the Consolidated Denison Mines it has become the practice to use rock bolts in all overhead backs. In the Rio Tinto Mines, rock bolts were used where, in the opinion of the supervisors, it was necessary for the protection of the miners and to prevent the fall of rocks after a blast has been completed and the miners are operating at the ore face. In the Hollinger Mines, where mining is conducted on a vertical plane, we have a different kind of operation; it is the cut and fill method which is

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used, which builds up from below. It is the practice here to use rock bolts even more sparingly than in the Rio Tinto Mines, in cases, however, where, again in the opinion of the supervisor, the pressure of the surrounding rock is such as to impose a threat of rock bursting or sprawling or ravelling.

The evidence further indicates that when an underground aperture is blasted or when a slice is taken from the mine's face, the first step after the dust is settled is to hose down the area to lay the dust and bring down what is termed as small loose. Then a man goes in with a scaler, which is a long prodding and cutting instrument, and scales down the back and the walls. Then there is still rock which might fall if further steps are not taken. Indeed, before the miners are permitted to go the next four or five feet towards the rock face, they are required to drill holes up and out depending upon the mine and insert rock bolts and tighten them with a special torsional wrench which shows when the required amount of pressure has been extended and only when that has been done to the satisfaction of the supervisors in the case of all the mines where rock fall is feared are the miners then allowed to proceed about their business in the mines. However, no drilling is done in any stope until the area is rock bolted to within five feet of the face because blasting operations are going to take place adjacent thereto. A next slice is then taken, holes are drilled, dynamite is placed therein, the fuses are set, the miners retire again and the mining process goes on. The miners bolt as they go and the bolting is therefore a progressive operation. As the work progresses, a tunnel is created which, after being used to break up the ore, is then used to haul it to the surface.

The basic principle of rock bolting is to try to achieve back, and in some cases wall control, by maintaining existing stresses in the rock, preventing the release of latent energy and limiting the movement of the rock strata. According to Ex. D-6, in rock bolting two basic theories are involved: (1) to tie enough stratified formation together to form something resembling a beam that will support itself by anchoring one end of a bolt in a hole drilled in the rock and tightening a nut against a bearing plate on the other end. This compresses the layers of rock so that no lateral or horizontal shearing action is possible

between the bedding planes and (2) to tie a weak or loose formation to the solid formation above it, or to the self-supporting rock above the natural arch or "cave line" of the excavation.

There are two main types of rock bolts. The most common, Ex. A-2, is the split rod and wedge type which is driven to a seat and has a nut tightened on the exposed end. The second type, Ex. A-1, known as the expansion shell type of rock bolt, is not driven but is inserted in the hole and turned to the desired tightness.

These rock bolts consist of three parts, namely the bolt proper, the expansion shell and the washer plate. Rock bolts come in various lengths and range from two to eight feet, the five and six foot sizes being most popular.

The split rod and wedge type of rock bolt (Ex. A-2) is installed by drilling a hole in the rock to a depth about four inches less than the length of the bolt. The wedge is started into the slot of the bolt and the bolt is then inserted in the hole. A threaded or cup-shaped driving dolly is inserted in the stopper chuck and the bolt is then driven to refusal. The final operation is tightening the nut with an impact wrench.

In installing a shell type bolt (Ex. A-1), the bearing plate and the nut are put on and the expansion cone is then expanded sufficiently so the bolt may just enter the hole. The bolt head is then pushed to the collar of the hole and tightening is done with an impact wrench.

In the case of both types of rock bolts, the expansion shells or wings go out and compress the surrounding rock or earth radially.

When a rock bolt is properly installed and there is no slipping in the anchorage, the actual tension around the axis of the bolt amounts to six, seven or even eight tons. It also had a radial influence of  $2\frac{1}{2}$  feet.

In some mines bolts alone are not sufficient and it is necessary to run metal bands from one bolt to another or to use metal mesh or fences. Rock bolts are used in the mines in patterns which must not exceed five feet but which may go down to three or two and this pattern is established by the supervisor of the mine.

The main disadvantage in the use of rock bolts is that there is no visual indication of rock bolt failure; with

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timber it can be discerned that it is taking weight by posts squeezing up into the timber they support and long before these horizontal members supported by posts will fall, remedial measures can be taken.

However, in some stopes wood is placed under most of the rock bolts. The reason for this, according to one witness (Mr. Perry, p. 202 of the transcript) "is that the rock bolt here only holds superficial incipient loose ground and by placing the wooden bloc underneath it we can watch to see if ground started to move a little bit by the crushing of the washer into the wood. If it does that, proper action can be taken to correct the situation."

The expert witnesses agreed that mining geologists today are not completely sure just what exactly is being done in rock bolting. They do know that certain actions will have certain results but exactly what happens when they put the rock bolt into the back or wall of a mine is to a considerable extent theoretical. What they hope to do is to drive the shaft of this device hard enough to reach undisturbed rock and hold the rock that might fall in place. Professor Rice, one of the expert witnesses, stated that a rock bolt had two effects, one of compression and the other of friction and both assist in effecting its purpose.

Rock bolts became of a fairly general use shortly after World War II; they had an expanding and accelerating acceptance which has now grown to a point where it is very unlikely there is an underground operation in Canada which does not use them. Indeed, according to the Ingersoll-Rand booklet on rock bolting (Ex. D-6) "rock bolting came into its own in 1948, when the coal mines and the United States Bureau of Mines undertook an extensive program for safety and economy in mine mechanization." Since 1948 rock bolting has become almost universal in mines and, according to Professor Rice, rock bolts have to a considerable extent superseded the use of timbering.

Now the right of appeal conferred by s. 58 of the *Excise Tax Act* is not an appeal *de plano* and is confined to an appeal upon leave being obtained from this Court or a judge thereof upon a question that in the opinion of the Court or judge is a question of law and in the present case, as we have seen, it is limited to one of the questions stated only. Indeed, the jurisdiction of this Court is

restricted to determining whether the Tariff Board erred as a matter of law in holding as it did.

The nature of the right of appeal conferred by s. 45 of the *Customs Act* was considered in an unreported case bearing number 134640 of this Court, *The Dentists' Supply Company of New York v. The Deputy Minister of National Revenue (Customs and Excise)*. At p. 5 Thorson P. stated:

If the decision of the Tariff Board was a finding of fact, and there was material before it on which it could reasonably have based its finding, it is not within the competence of this Court to interfere with it, no matter what its conclusion might have been if a right of appeal *de plano* from the decision had been conferred by the *Customs Act*. There is no right of appeal from the decision of the Tariff Board on findings of fact and it seems to me that the same is true in respect of findings of mixed law and fact. The only right of appeal conferred by s. 45 of the *Customs Act* is an appeal upon a question that in the opinion of this Court or a judge thereof is a question of law and even in such a case, only after leave to appeal on such question has been obtained. Thus to the extent that the declaration of the Tariff Board in the case was a finding of fact, this Court has no right to interfere with it unless it was so unreasonable as to amount to error as a matter of law. But it cannot be too strongly stressed that this does not mean that there was an error in the finding of fact merely because the Court might have found otherwise if a full right of appeal had been conferred. Thus, this Court has no right to substitute its own conclusion for the finding of the Tariff Board if there was material before it from which it could reasonably have found as it did.

However, in *Canadian Lift Truck Co. Ltd. v. Deputy Minister of National Revenue for Customs and Excise*<sup>1</sup> the Supreme Court, by Kellock J. dealt with this right of appeal in a somewhat different manner at p. 498 when referring to *Edwards v. Bairstow*<sup>2</sup>. He said:

While the construction of a statutory enactment is a question of law, and the question as to whether a particular matter or thing is of such a nature or kind as to fall within the legal definition is a question of fact nevertheless if it appears to the appellate Court that the tribunal of fact had acted either without any evidence or that no person, properly instructed as to the law and acting judicially, could have reached the particular determination, the Court may proceed on the assumption that a misconception of law has been responsible for the determination;

The onus of proof necessary to establish the right of appeal lies on the appellants and it is now necessary to examine whether this onus has been discharged.

The decision of the Tariff Board expressed by way of a declaration, dated May 15, 1961, is a majority decision, Mr. Gerry, one of the members, dissenting.

<sup>1</sup> [1956] 1 D.L.R. (2d) 497.

<sup>2</sup> [1955] 3 All E.R. 48.



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The majority decision found that rock bolts are not safety devices nor equipment for the prevention of accidents in the manufacturing or production of goods within the meaning of the schedule of exemption, and this decision can be summarized as follows:

The basic purpose of rock bolts is the prevention of rock or earth fall which is inimical to human safety and even to the preservation of equipment or inanimate things and when rock or earth falls it is an accident.

However, mining operations become impossible if the underground operations are not kept structurally intact by means of pit props, steel arches, cement walls or rock bolts. When so used, the rock bolt becomes akin to a beam supporting the roof or ceiling of a building on the surface of the earth or like the arch supporting a viaduct or overpass. These structural devices undoubtedly contribute to safety because there is real hazard and peril in a collapsing building or viaduct. However, such beams and arches are essentially structural devices and not safety devices; they contribute to safety because they contribute to structural soundness. This is also true of rock bolts. The majority decision then stated that:

The rock bolt's function extends well beyond the mere preservation of life and limb by the prevention of the hazard of rock fall; it preserves in existence the underground aperture without which there is no access to the ore for man, beast or machine, no space for the many phases of the mining operation and indeed no mine itself.

The majority then refused to accept the proposition that if the rock bolt had as a real purpose safety, even though safety is not its sole purpose, it should qualify under the safety clause, on the basis that "such a broad interpretation of the safety clause would bring within its ambit every apparatus, device or equipment used in building construction to prevent the collapse of a factory building" such as "the bolts used to hold together the steel beams or girders in the factory;" that in mining it would apply to "the hoisting cable in the elevator which contributes to safety by preserving the life and limb of the elevator's occupants;" that, "however, the cable is not safety equipment in the same sense as the safety dogs that arrest a fall of the elevator should the cable fail; instead of being safety equipment it is of the very essence of the elevator—without these there simply is no elevator."

The dissenting member's opinion that rock bolts should fall within the exemption clause is based on the fact that he attached considerably more weight to that part of the evidence dealing with the true place and purpose of the installation of rock bolts than that dealing with their use in maintaining a structure of any permanence. He believes "that the intention of Parliament in providing exemption for safety devices and equipment for the prevention of accidents in the manufacturing or production of goods, was in respect to the accidents peculiar to the particular manufacturing or production processes involved" rather than those common to all occupations.

He added that:

If it is necessary that a process be carried out in proximity to high pressure steam or air units, the devices designed to minimize the danger of explosion of the various production units could be deemed safety devices for the prevention of accidents in the manufacturing or production of goods; in the production of ore it is necessary that the process be carried on at the location of the ore and, in most underground mines, the danger of accidental fall of rock from ceilings and wall including, in some cases, the ore body yet to be excavated, creates the greatest single hazard in the process of production.

He was of the opinion that the evidence showed clearly

that the greatest danger from rock fall is in the area most recently opened; it also shows that safety measures, including in many cases rock bolting, are applied immediately after an area has been opened. Subsequent additional precautions may be taken in areas which appear to have become unsafe even with the precautions taken at the time the area is opened. These additional precautions may also include rock bolting.

And finally that

mine openings, be they working stopes or passageways, are only of value during the time that ore is available from the working surfaces in the area serviced by the openings.

Now, as we have seen, the first issue in this appeal is not whether rock bolts are a safety device within the meaning of the exemption clause but whether the Tariff Board erred as a matter of law in deciding that they were not. If there was material before the Board from which it could properly decide as it did, this Court should not tamper with its decision even if it might have reached a different conclusion if the matter had been originally put before it.

At the hearing before the Tariff Board, several expert witnesses were called on behalf of all parties and we may

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now examine this evidence and see whether it supports the Board's finding that rock bolts are essentially a structural device.

Mr. H. R. Rice, of the University of Toronto, a mining professor, although stating that rock bolts in his opinion are safety devices, as we shall see later, admitted that rock bolts are also used as support and that it would be virtually impossible to work in an underground aperture thirty feet wide without some support in the roof. He also admitted that if rock bolts were not used something else, such as timber, would have to be used for support. Rock bolts, according to Professor Rice, have to a considerable extent superseded the use of timbering. He declared that since 1948 rock bolting as a means of support in mines has become almost universal and that at the present time there are few mines on the continent where rock bolting does not find a place in the supporting picture. In answer to a question by the Chairman he agreed that the maintenance and position of the ceiling has more than safety considerations attached to it and that if the ceiling keeps falling to the floor, the stope will become unworkable.

Mr. Sullivan, underground superintendent for the Rio Algoma Mines Limited and the Panel Mine, although also stating that in his opinion rock bolts are safety devices, admitted that rock bolts in patterns would give a more competent and more homogenous structure immediately above the back than would a post. In cross-examination he admitted that in certain of the mines, bolts are not sufficient and that in order to prevent either dilution or rock coming down, it is necessary in addition to the bolts to run metal bands from one bolt to another bolt, and in other mines it is necessary to run underneath the bolts a metal mesh or fence. He agreed with Mr. Glass, Vice-chairman of the Board, that rock bolting was done to keep the roof from falling down and that at the Denison Mine, where Mr. Sullivan is employed, rock bolts are used to keep the roof up.

Mr. P. G. Forsyth, safety director for Denison Mines Limited also stated that in his opinion the primary purpose of a rock bolt was as a safety device. He however admitted that rock bolt support is in fact put into effect throughout the Denison Mine. In cross-examination he agreed that

a method of support aside from rock bolting would be to widen the width of the pillars and to increase their number.

Mr. Herbert H. Cox was called on behalf of the respondent. He is a consulting mining engineer. Prior thereto, however, he was surveyor and later chief engineer at Stirling Mines, Cape Breton, Nova Scotia. He then went to Malartic Mines and was supervisor and later engineer. In 1939 he went to the Malartic Gold Fields and stayed there until 1956 serving as chief engineer and then line superintendent and assistant manager, manager and general manager and vice-president. He also did some consulting work for the Underwriters of Stanleigh Uranium Mines and Stanrock. He assimilated rock bolts used in patterns to a beam of one inch boards one on top of the other, supported close to the ends by two supporting points; he suggested that if a load is applied to the center of these boards you immediately see the bowing effect or sagging; however, if these bolts are bolted together or if they are glued together as is the case with laminated wood structures, they would immediately form a rigid member; a beam was thereby created out of the boards. In his opinion it is possible for a system or pattern of rock bolting to have so created the effect of a beam and if that is so, then it is not necessary for the ends of these bolts to be seated in rock above the intra-dosal area or up in the solid part of the rock above. In cross-examination, he however agreed that you do not get a beam effect if you rock bolt at random. He also admitted that by rock bolting in mines you are preventing an area around the opening from becoming loose and falling and that the prevention of that fall is for the purpose of making that opening safe for working; he agreed that that was one of the purposes. He also agreed that the safety factor by virtue of the prevention of rock fall was a real purpose in mining.

There is no doubt that there was sufficient material in the evidence for the Board to decide that rock bolts are structural devices and that their structural aspect was important.

However, whether they are essentially structural devices is another matter. Indeed, the adverb "essentially", if one goes to the dictionary (cf. Webster's Third International Dictionary) means "the most significant element, attribute, quality, property or aspect of a thing".

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If one could say without going any further that the evidence supports the Board's finding that rock bolts are essentially structural devices and that they have no other essential properties, the matter might end there and the appeal be rejected.

However, it is not as simple as that due to the fact that the Board did state that rock bolts were devices and implied from a number of assertions that these devices were undoubtedly related to safety, which of course would make them safety devices, and it is now necessary to consider whether these rock bolts are essentially structural or essential safety devices or even both structural and safety devices.

In their declaration the Board found that "rock bolts prevent rock or earth fall" and that the latter "is inimical to human safety and even to the preservation of equipment or inanimate things which may at any time be in the area of such potential fall" and that "the rock bolt's function extends well beyond the mere preservation of life and limb by the prevention of the hazard of rock fall."

Indeed, how can the Board make such statements unless it had implicitly decided that rock bolts were used for the protection and safety of animate and inanimate things by the prevention of the hazard of rock fall. Any doubts in this regard could be easily dispelled by an examination of the evidence and if the latter indicated that these devices were safety devices, then we may well be faced with a device which could have two essential properties one structural and the other safety.

Let us now examine the evidence with regard to the safety aspects of rock bolts and see if it supports the above assumption.

Professor Rice, who described the suspensory and frictional effects of rock bolts stated that because of these effects rock bolts prevented the fall or sloughing or ravelling of portions and particles from the roof or back from falling upon the workmen who happen to be underneath and thereby rendered the area where the workmen are working safe from the hazards which otherwise might be there and that, therefore, the hazards are reduced to a minimum that the skill and will of man can devise. He affirmed that rock bolts are safety devices and that they make the working areas safer for utilization.

In cross-examination when asked as to whether one of the primary things for a person in charge of a mine to do was to conduct the operations in such a way that as little rock as possible is mixed with the ore (this is called dilution) he stated that that was really a secondary consideration to the safety consideration of holding all of the particles of rock represented on the walls of that stope from falling and injuring men who are passing along the floor. His answer as to why there has been an acceleration in the use of rock bolts since World War II was that he could not suggest one except that there was a growing and wider appreciation of their utility as a safety measure.

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In answer to Mr. Gerry, a member of the Board, to a question regarding rock bolts being described as for safety purposes and also as an aid to mechanization of the mine and to some extent as an economy and to place the emphasis on these three factors he stated at p. 94:

Well, of course, it is primarily there as a safety measure to prevent the fall of ground—it is primarily there. The ease which it lends to the adaptability of mechanization is also a factor; but the prime consideration is always safety. It is the first rule in the devising of any mining operation—safety. Also, these bolts are out of the way, which is perfectly apparent and obvious, of mechanical devices for the removal of the broken ore. If we had a situation where these requirements were so perfectly combined as not to require support, this same condition would obtain as well: there would be no obstruction placed in the way of the mechanization of the ore removal process. But we still use these primarily as a safety measure.

The other point that has been raised is, is it an advantage of also a matter of dilution? It does have an economic effect which operates to a great or lesser extent depending upon many things, primarily the grade of the ore itself. A low grade mine cannot afford much dilution and that sort of thing. That is the kind of consideration I am introducing here. So, that again is a factor, but I hold that they are contributory factors, and that the main and predominantly important factor is the use of a rock bolt as a safety measure.

And, to a question by the Chairman of the Board that a mine would cease to be a mine without the preservation of the ceiling, he answered: "Oh yes, but we preserve it as a safety measure."

Mr. R. L. Smith, assistant chief engineer of mines for the Province of Ontario, with prior experience in the safety aspects of mines and who visited the Rio Tinto and the Consolidated Denison Mines agreed that rock bolts are to be used where the enclosing rock is not safe and that rock bolts prevent accidents. He stated that the greatest functional hazard in underground mining operations, one of the

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largest causes of accidents in the province of Ontario, had been due to falling ground. In cross-examination he stated that according to his records, seventy-two accidents occurred in Ontario during the period 1954 to 1960 from fall of ground and that none of them occurred where there were rock bolts. Mr. Sullivan stated that rock bolts were used in the Panel Mine operations for the purpose of preventing falls of ground and that they were 100 per cent effective. In answer to Mr. Glass, who queried whether it would be a fair conclusion to say that rock bolts are not safety devices but something essential to the operation of the mine, he answered that he could not see how they would be anything but a safety device in their application. Mr. Forsyth who agreed that all parts of the mine at Denison are bolted explained this by saying "We have found at Denison that we can't safely mine without the use of these bolts." Asked by the Chairman as to whether as safety director he would accept timber if the height were less, as being a reasonable and proper substitute for rock bolting he said he would not because he believed it would not give the results required. Asked by the Chairman as to whether there are other reasons, he answered: "From my point of view there are no other reasons because I deal primarily with safety of people and I have no other reasons." (cf. p. 165 of the transcript).

THE CHAIRMAN: Your basic reason, then would be . . . ?

THE WITNESS: Safety.

THE CHAIRMAN: That timber does not keep the roof in place as well as the rock bolt?

THE WITNESS: I believe you have stated my thinking correctly.

Asked in cross-examination by counsel for the respondent if in an area where you feel the rock is perhaps not as strong or weaker, he would use another method of support by putting in additional pillars in addition to rock bolts, he stated that it was possible that he might by widening the width of the pillars or increasing its number.

Mr. E. A. Perry, a graduate engineer, manager of Hollinger Consolidated Gold Mines, who has been in the mining field since 1934, at p. 211 of the transcript when asked whether at Hollinger Consolidated Gold Mines one of the purposes of putting the rock bolts would be to stabilize the wall rock answered "No, no, it just keeps the loose pieces from coming off as a matter of safety practice" and that it is not required to stabilize the wall back. He also added that

rock bolts are put into solid ground and that timber support was used in ground that was not solid. He described solid ground as ground that is not drumming and that you can always detect ground that is loose by tapping it with a steel bar, and if it is drumming, then that ground is loose and that has to come down or else be supported with timber. He stated, at p. 216 of the transcript, that at Hollinger they did not try to hold ground that they knew was "badly faulted with cracks in it with rock bolts but that they used rock bolts where they felt that rock bolts can serve a purpose where they have a great deal of advantages in that they can supply the limited amount of . . . it is not support—it is corrective action, I suppose. We do not put them in broken ground, but we put them in ground so that it won't break and we put them in the kind of ground where we know we are not going to be caught by trying to support more weight than a rock bolt will stand."

Mr. Cox cross-examined by one of the appellant's counsel agreed that by the tendency of nature to close in an opening one had constant hazard in mind, the fall of earth or rock and that the prevention of that fall is for the purpose of making that opening safe for working.

It will be readily seen that if there was sufficient material for the Board to decide as they did that rock bolts are structural devices, there was also sufficient and abundant material in the evidence to decide that they are also safety devices, and may I add that the safety property or quality or attribute or aspect or element of the rock bolt is as significant as its structural property, quality, attribute, aspect or element and any decision contrary thereto would, in my opinion, be perverse and contrary to the weight of the evidence.

Counsel for the respondent's argument to the effect that a tunnel, stope, raise or adit rock bolted gives a cathedral-like quality or a permanent building-like quality to the ceiling or walls of a mine is not in my opinion supported by the evidence. Indeed, the evidence appears to be to the effect that for a period of time a rock bolt, or rock bolting, may keep a situation in hand for the protection of the miners who break down and haul out the ore, i.e. during the period of production, and once the operation is terminated, the ceiling and walls would probably give in due to the imponderables in underground operations and the tendency

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of nature to close in man-made underground apertures. Whatever structural properties rock bolting may have would therefore at the most be of a temporary nature.

We are therefore faced with a device which has two essential attributes, aspects or uses and both of these are of equal importance.

In *Javex Company Limited and Oppenheimer v. The Deputy Minister of National Revenue for Customs and Excise*<sup>1</sup> a very similar situation was dealt with by Cameron J. In this case, although a product called "Clorox" was found by the Tariff Board to be used primarily as a bleach and secondarily as a disinfectant, it was still held to be admissible under a tariff item covering disinfectants only although it performed more important functions (bleaching) at the same time.

Cameron J. at p. 448 stated:

The meaning to be placed on Tariff Item 219a is clear. If the product named is for disinfecting, and this has been found as a fact, the product is properly classified under this Item. If Parliament had intended that such product should be classified under that Item only if the sole and primary use were "for disinfecting" it would have been a simple matter to have so provided.

This decision was confirmed by the Supreme Court<sup>2</sup>.

This, in my opinion, is sufficient authority to apply the same reasoning to the present case where instead of having a primary and secondary use, we have two important and real uses.

Now, if rock bolts have two important uses, and we believe that it is so, on what legal basis could the Board disregard one real important use because of the existence of another real important use.

It appears from the analogy used by the Board, i.e. by comparing rock bolting in mines to structural beams and pillars in buildings on the surface, that it arrived at the conclusion that to accept rock bolts as safety devices within the exemption would bring within its ambit "every apparatus, device or equipment used in building construction to prevent the collapse of a factory building upon the heads of its unsuspecting occupants" and that it would even include "the bolts used to hold together the steel beams or girders in the factory."

<sup>1</sup> [1959] Ex. C.R. 439.

<sup>2</sup> [1961] S.C.R. 170.

Now, although this analogy has some resemblance to the situation created by rock bolting in some cases in mines, it is not entirely true as we shall now see. Indeed, in buildings, the stress and strain which must be carefully calculated in order to provide adequate structural beams, posts or pillars can be so calculated to a point where the structure erected is a building which is entirely safe for those who are called upon to use it. Although the beams in this building and its structural parts prevent the building and its posts from falling on the heads of its users and in that sense contribute to its safeness, the resemblance with the situation found in mines stops there. Indeed, there is no specific hazard here as found in mines where the evidence abundantly shows that the great single hazard there is rock or earth fall nor are the imponderables found in underground mines existent in ordinary surface buildings, which imponderables are due to the fact, as explained by all the expert witnesses, of the tendency for nature to close any underground opening no matter what means are used to prevent this be they pillars, wood props or even rock bolts, and in the case of rock bolts, as we have seen, even the geologists are not too sure what they are doing when they rock bolt.

It seems to me that the proper way to interpret this exemption clause is to take it, not piecemeal, but in its entirety and when that is done it appears that the safety device or equipment which must also be either machinery or apparatus, is directed at those accidental happenings which are peculiar to the industry or manufacture involved due to the existence of some distinctive important hazard particular to the process of manufacture or production involved.

If this exemption clause is so limited there is no possibility nor necessity of extending the clause to the building industry in general as the Board did. Indeed, its limitations are well within what Parliament may have contemplated.

The use of the above analogy by the Board indicates clearly that the majority of the Board read into the exemption clause an intent broader than the words themselves permitted and through a consideration of the consequences of doing this took rock bolts out of the exemption clause.

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Indeed, the majority decision of the Board can be summarized as follows:

Rock bolts do not come within the exemption clause because, although they are devices with safety aspects, properties or characteristics and are directed at protecting human beings or inanimate things from the danger of rock fall, they have essential structural properties and because of these properties, one would have to include within the exemption the beams and bolts which support the roof or ceiling of surface buildings which would, in the mind of the Board, be too broad an interpretation.

Now, to decide by the consequences, as the Board did, and in this case, as we shall see, by the consequences of a misconception is, in my opinion, a serious error in law.

Indeed, where the words are clear they must be given effect to unless, of course, they would lead to absurdity.

In *The Commissioner of Patents v. Winthrop Chemical Company Incorporated*<sup>1</sup> Rand J. said:

... What has been called the Golden Rule of construction is that the language of a statute should be given its grammatical and ordinary sense unless that would lead to absurdity, repugnancy or inconsistency, in which case that sense may be modified so as to avoid the absurdity or inconsistency but no further;

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... But the intention of a legislature must be gathered from the language it has used and the task of construing that language is not to satisfy ourselves that as used it is adequate to an intention drawn from general considerations or to a purpose which might seem to be more reasonable or equitable than what the language in its ordinary or primary sense indicates.

In the interpretation of a statute no other consideration should move a court than that of giving effect to the intention of Parliament as that intention is expressed from the language employed.

In *Attorney-General v. Carlton Bank*<sup>2</sup> Russel C.J. stated:

The Duty of the Court is, in my opinion, in all cases the same, whether the Act to be construed relates to taxation or to any other subject, namely to give effect to the intention of the Legislature as that intention is to be gathered from the language employed having regard to the context in connection with which it is employed. The Court must no doubt ascertain the subject matter to which the particular tax is by the statute intended to be applied, but when once that is ascertained, it is not open to the Court to narrow or whittle down the operation of the Act by seeming considerations of hardship or of business convenience or the like. Courts have to give effect to what the Legislature has said.

<sup>1</sup> [1948] S.C.R. 46.

<sup>2</sup> (1899) 2 Q.B. 164.

Due to this serious misconception there would appear to be no question here that no person properly instructed as to the law and acting judicially could have reached the decision reached or could have so construed the exemption clause.

This misconception of the Board appears more so if, when bearing in mind both the structural and safety aspects of the rock bolt, one considers that in order to take the rock bolt out of the exemption section the words "solely" and "exclusively" had to be added to this section. Such a proposition was advanced by the respondent at p. 10 of a brief presented to the Tariff Board where it is stated:

"Equipment for the prevention of accidents in the manufacturing or production of goods" to be found in Schedule III of the Act includes only that equipment whose sole function as it is then being used is to prevent damage or harm to persons or property.

This, of course, is contrary to the proper interpretation of the statute and to the authorities.

In *Timkan v. Perry*<sup>1</sup> Sir Raymond Eversher, M.R. stated that:

. . . Words plainly should not be added by implication into the language of a statute unless it is necessary to do so to give the paragraph sense and meaning in its context. In this case I cannot see any need to read the words in other than their ordinary sense.

And at p. 93:

I fully accept the force of those considerations, and indeed it looks as though Parliament may not have chosen its language with all its customary care, but the fact is that sense can perfectly well be given to this paragraph by reading the words as they are written and according to their ordinary context . . . I agree with the Judge that we cannot introduce into this paragraph the words which Mr. Blundell asks should be inserted.

It would therefore appear that the Board by finding a broader interpretation than the words permitted and by falling into the error of a false analogy committed an error in law.

Such an error of interpretation should be sufficient to allow the granting of this appeal providing, however, that rock bolts are machinery or apparatus, device or equipment within the wording of the exemption schedule.

Now admittedly we have here either device and/or equipment; we also have a safety device for the prevention of

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accidents in mining. Indeed, one cannot read the language of the Board's declaration other than as a finding of fact with regard to the safety characteristics of the rock bolt.

At p. 3 the Board states:

The evidence shows clearly that the basic purpose of the rock bolt is the prevention of rock or earth fall.

There is no doubt that rock fall is inimical to human safety and even to the preservation of equipment or inanimate things which may at any time be in the area of such potential fall.

There is no doubt either that the rock fall of which we speak is an accident in the sense that it is an unintended contingency and unforeseen in its timing.

All this is supported by the language that follows in the third paragraph that:

The rock bolt's function extends well beyond the mere preservation of life and limb.

Counsel for the respondent argued at length that reading from the supplementary volume to the full Oxford Dictionary the words "safety device" would have a certain circumscribed significance, namely that the safety device contemplated must prevent harm or injuries arising from the malfunctioning of some other piece of machinery or equipment such as a safety catch on a gun, or a safety dog on an elevator, to ensure safety from falling in case the mechanism fails to operate, or a safety guard on a piece of jewelry in case the clasp fails.

I cannot agree with this interpretation. Indeed, in the examples given in the same dictionary cited by the respondent of what is a safety device, are also included such things as a safety paper, on which one can write cheques that cannot be erased, safety zone, a place where a pedestrian can stand safely as he crosses a busy street, a safety glass in an automobile, or used by workmen on their glasses and a safety curtain, the fire curtain in a theatre. None of these relate to the malfunctioning of another piece of equipment nor are within that suggested circumscribed ambit of a safety device.

They are, however, for the prevention of accidents of various sorts in the same manner as rock bolts prevent accidents from rock or earth fall in mines.

As a matter of fact, the dictionary ascribes a very wide meaning to the words "safety device" and I believe it is well

within the purview of this Court to decide whether rock bolts are safety devices or not bearing in mind the context of the exemption schedule and the industry concerned. On that basis it would appear to me that there is no question but that rock bolts are safety devices.

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This, however, does not end the matter as in order to be a safety device within the meaning of the exemption it must be shown that the safety device is either a machinery or apparatus.

According to Webster's International Dictionary, second edition, p. 129, the word apparatus in its second sense is:

A collection or set of materials, implements or utensils for a given work, experimental or operative.

It is also, according to the same dictionary:

Any complex instrument or appliance, mechanical or chemical for a specific action or operation, machinery, mechanism

Funk and Wagnalls' New Practical Dictionary at p. 68 defines apparatus as:

a complex device or machine or a set of tools, appliances, etc.

According to the dictionary, the word "complex" does not necessarily mean that a thing is complicated, but that it consists of parts and it appears to me that both rock bolts produced as exhibits and which I have carefully examined, are apparatus. They are as well, in my opinion, "machinery" if one should take the meaning of "machinery" in Webster's International Dictionary, second edition, p. 1474 (fourth sense):

any device consisting of two or more resistant relatively restrained parts which by a certain predetermined inter motion may seem to transmit and modify force and motion so as to produce some given effect or to do some desired kind of work.

The rock bolt has three different parts, it transmits and modifies force and motion and produces a given effect, that of maintaining existing stresses in the rock and preventing the release of latent energy and limiting the movement of the rock strata.

I have, therefore, come to the conclusion that the appellants have discharged the onus lying on them to establish that there is error in law in the decision under appeal.

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With respect to the interpretation of an exemption clause, I am familiar with the rule that the intention to exempt must be expressed in clear unambiguous language, that taxation is the rule and exemption the exception and that it should be strictly construed. cf. *Wylie v. The City of Montreal*.<sup>1</sup>

However, the language of this exemption section here is clear and unambiguous and the appellants have shown that every constituent element necessary to the exemption is present in this case.

In view of this there is no alternative but to give effect to the clear expression of the law.

As Fitzgerald J. in *Canadian Northern R. Co. v. City of Winnipeg*<sup>2</sup> said:

Although a statute is to be construed according to the intent of them that made it, if the language admits of no doubt or secondary meaning it is simply to be obeyed. As Lord Watson said in *Salomon v. Salomon & Co.* [1897] A.C. 22, at p. 38:

“In a Court of law or equity what a legislature intended to be done or not to be done can only be legitimately ascertained from that which it has chosen to enact either in express words or by reasonable and necessary implication.”

I therefore reach the conclusion that rock bolts used in underground mining fall within the exemption provided in s. 32 of the *Excise Tax Act* and the present appeal is therefore allowed with costs but with one set of counsel fee at the hearing only as agreed upon by counsel for the appellants.

*Judgment accordingly.*

<sup>1</sup> (1885) 12 Can. S.C.R. 384 at 386.      <sup>2</sup> 36 D.L.R. 222.