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# Products Liability

An Interactive Qualifying Project

Submitted to the Faculty

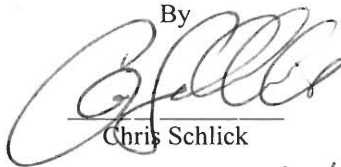
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## **ABSTRACT**

This project shall examine the fundamental principles of products liability law and how it applies to everyday consumer products and industrial equipment. This initially involves learning about the theories and practices of products liability law. Pending lawsuits were then analyzed through the investigation of actual deposition, statements, manuals, standards, and handbooks. Three distinct cases were analyzed throughout the project duration. Each case involved an accident with an allegedly defective product. The final stage of the project was participation in a mock trial, in which each group defended their side on each case. By completing this project, our group developed a deeper appreciation of the scope and applicability of products liability law, in terms of safety, moral principles, and business practices.

## INTRODUCTION

When person feels that a product has contributed to his injury, he has the legal right to sue anyone relater to the product from the manufacturer down to the seller. This is the beginning of the litigation process, which is complicated and expensive.

To fully understand the steps and meaning of words in the litiagion process we were required to read two books. The first book, An Engineer In the Courtroom, explains the litigation process and gives examples of product liabiltiy cases which involved an engineer who was an expert witness. The other book, Products Liability in a Nutshell, explains the defenitions of words used in an product liability cases. We were also required to watch, “The Art of Advocacy Skills in Action,” which shows the real life product liability trial. These books and tapes were helpful in anlyzing and understanding the real-life cases.

This project deals with three product liability cases: Roberto Ortiz vs. B.M. Root Company, Leflamme vs. Daimler – Chrysler, and Michael Heath vs. Vermeer Manufacturing Company. In each case the plaintiff feels that the defendants product contributed to his or her injury and demands retribution.

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**Chapter I:**

**An Engineer In The Courtroom**

By William J Lux

## **1-1. INTRODUCTION**

This book is written to serve as the basic guideline for engineer in the courtroom. It guides the engineer through all the decision-making aspects in the discovery, deposition and trial of the litigation process. Explaining the nature of the accidents and how they are caused. It points out the significance good performance and safe design of a product. This book's general purpose is to recognize that the litigation process is a fair system that helps more people than it hurts and that the engineer's responsibility is to help the system determine the right form wrong.

## **1-2. THE NATURE OF ACCIDENTS:**

Many lawsuits concerning products are generated from accident. In these incidents, someone has suffered injuries or losses and seeks redress for these losses through litigation. Most of the accidents occur outside the control of anyone. The responsibility of the engineer is to determine the cause of the accidents and decide if changes in the design would prevent them from happening. There are different types of accidents that an engineer deals with in the litigation activity, such as:

1. Collision, which occurs when two bodies try to occupy the same space.
2. Slip and Fall, which occurs where the victim of the accident is not involved with anything else but the surface, location, or condition upon which he is moving.



3. Loss of control, which occurs when a person loses control of a machine, activity, or process.
4. Hit by Falling Object, which occurs where a falling object hits a person or machine.
5. Suffocation, which occurs when a person is deprived of oxygen.
6. Electrocution, which occurs when a person receives an electric shock and it may interrupt normal body functions or cause burns.
7. Poisoning, which occurs when a person ingests or contacts with substances which injure or destroy part of the body or its functions.
8. Shock and Vibration, which occurs when effect of sudden changes in forces acting upon the human body may cause injury.
9. Entanglement, which occurs when a person gets some part of his body, clothing, or equipment too close to a moving part of a machine.
10. Cuts and Abrasions, which occur when a person is contacted with a machine.
11. Fire, which is classified as combustion of any sort. It may burn a person's clothing, equipment, and body.
12. Mechanical Failure, which occurs a machine fails and caused an injury to a person.
13. Struck by a Moving Projectile, which occurs when any thing flying in the air hits a person.

14. Natural or Environment Factors, which occur while earthquakes, tornados, cyclones, and other natural phonemes.
15. Homicide is included as a general accident type where the expected result is death.

### **1-3. WHY GO TO COURT?:**

The reason of the litigation process is the right of a person to seek redress for damages in a Court of Law. A person goes to court because he believes that his relationship with someone else has been unbalanced. This can be caused by the changes occurring in the society and different views on situations. There are conducts and laws that guide the requirements of a product. These requirements that apply to the maker and seller are:

- Product must meet the expectations of the buyer and user
- Product must not be unreasonably dangerous.
- Product must not be defective.
- Product must warn of hidden or unexpected dangers.
- Product must be manufactured according to specifications.
- Product must not be misrepresented.
- Proper instructions for safe use and operation must accompany the product.

There are also conditions that apply to the user, such as:

- He must use the product according to instructions and warnings.
- He must not misuse the product.

-He must maintain, repair, and inspect the product according to the instructions.

Person blaming someone else for his or her loss and the other persons right to respond causes lawsuits. At one time, one could not blame another unless he had “privity”, or direct contact, with the other party. The “Strict liability” doctrine, allows the plaintiff to sue the designer and manufacturer who are most able to pay for the accident cost.

#### **1-4. AVOIDING LITIGATION**

The best way to avoid litigation is to avoid the accident. There are series of alternatives to avoid or reduce accidents with machinery, such as:

1. **Avoid the Accident;** the engineer can do this during the designing stage of the product. This means to eliminate the hazard in the design with out excessive compromise in the usefulness of the machine.
2. **Protect from the Accident** this is done when the accident can't be eliminated. Using shields or guards, it becomes impossible for anyone to reach the hazard.
3. **Make the Accidents Safe** this is done if an accident occurs but no one will be hurt. The engineer looks for a way to protect the operator during a roll over by seatbelts. This is a way to forgive the accident if it should happen.
4. **Warn of an Impending Accident** is done by protecting against accidents and to warn of an impending accident. Things like warning

devices such as horn, buzzer, voice, alarm, signal, lights warn of conditions that may lead to trouble.

5. **Warn of the Possibility of an Accident** is done by defending against accidents in which the operator is informed that a hazardous condition can exist under certain circumstances. This uses warning signs, instructions, safety manuals, decals and training sessions.
6. **Protect the Operator (or Other Personnel) form the Accident if it Should Happen** this is done by addition of seat belts, hardhat or other safety devices. Warnings and Safety measures put more responsibility on the operator to obey them.

The engineer has a lot of responsibility when designing a product, with the concern for safety. He also has to design a product that will be balance in the ways of specs, performance, life, reliability, serviceability, costs and safety. It is also important that the designer re-think design processes, simulates the failure, and does field tests. He should share the findings with owner, salesman, and operator by warning labels. If the engineer might consider playing “what if games”, he should consider an outside opinion. There is also the Product Safety Review Team, which is an independent team that inspects the product from the safety viewpoint. The most important factor is that there is no room for falter from anyone of the design, owner, trainer, operator and mechanic.

## **1-5. THE LITIGATION PROCESS**

Engineers responsibility in the court is to obey an attorney's advice and not argue what so ever. When a person has a reason to believe that an injury or other damage has been incurred for some reason, that person may seek to determine if others may be responsible for the loss is the basic reason for lawsuits. The Litigation Process is broken down into several categories. The first one that starts of a lawsuit is the filing out of claims in a complaint along with plaintiff's request to the court for trial and redress for the damages. It gives specific reasons why the defendant is felt to be responsible for the claims. It is very important that the claim should be clear because 85 percent of lawsuits don't go to trial.

Claims generally explain the accident and why the plaintiff believes the defendant is liable for the losses.

The next step is the defendant's response or answer to the claims. The defendant has the option to settle or deny the claims. At this point the defendant will seek out engineers help to defend their product. Then it goes into discovery process, which is apparent that the ideas and believes of the plaintiff and the defendant are sufficiently different and that matter will not be solved quickly or easily. The discovery process consists of interrogatories, requests for production, request for admission, inspection, and finally deposition. The next step is the trial in which each party has the opportunity to present his case, and argument before a judge or a jury. The trial consists of choosing a jury, opening statements by each attorney, presentation on evidence and witnesses for the plaintiff and defense, final argument, the jury charge, the jury deliberation, and the verdict. The trial is

followed by Post-Trial, which is determined if the defendant wants to do a retrial because he felt that the verdict was unjust. The final part of litigation is the settlement, which occurs after the trial and all the appeals have been exhausted.

## **1-6. ENGINEERS AND ENGINEERING INFORMATION**

An engineer has the knowledge of the mechanics, design, materials and failure modes are not usually known by the attorney. This makes the engineer advice critical to the case. An engineer may testify as either a fact witness or as an expert witness. As a fact witness, he testifies to what he knows to be the fact and as an expert witness, he is allowed to testify as to his opinion. The defendant in a lawsuit needs a good engineer to show how his design is proper, that it is safe and how his product has no liability for which the suit was filed. On the other hand the plaintiff wants a good engineer to show how the product failed. The best person or group to explain the engineering information is the one who had responsibility for it or in other words produced and designed it.

## **1-7. HOW THE ENGINEER CAN HELP THE ATTORNEY**

The way for engineer and attorney to be successful is to work together. An engineer deals with physical and number aspects. While the attorney deals with concepts and relationships, all of which are subject to change. Both of them think and reason differently but the attorney needs the engineer for assistance. It is important that the engineer understands he is helping the attorney and he must be honest and tell him whether he is telling the facts or opinions. The engineer knows how the product was designed and built which gives him the knowledge to conduct accident reconstruction.

An engineer can assist the attorney in the examinations, interviews, and depositions of these involved in the case. He is also on top of the new technology and is capable of translating technical information into common language that the attorney and the judge can understand. An Engineer can testify, both in deposition and at trial and he can provide reports and written materials. An engineer's role in a case is definitely the one that can make or break it.

## **1-8. THE DISCOVERY PROCESS**

The discovery process is one of the most important parts of a legitimate process because the attorney can get needed questions to be answered. The engineer can help him prepare these answers under the attorney's guidelines. Sometimes an attorney gets a specific document or information crucial to win the case and he will try to trick the opposition witness with that information or evidence that is called a "smoking gun". The discovery process consist of request for production in which the attorney may ask for a document, such as operator's manual, parts books and other documents, rather than asking questions about it. The other part to the discovery process is request for admission in which the attorney will try the other side to admit to a statement, he has stipulated that the statement is true ad it may be used without further proof. The other part of the discovery process is the deposition and it will be studied in the next chapter.

## **1-9. THE DEPOSITION**

Throughout the deposition an engineer will hear question that are aimed primarily or entirely for the purpose of discovery or obtaining information. Depositions are taken to

establish facts and to determine the origins of bases for those facts. The attorney uses the deposition to determine the opinions and expert witness may offer at trial, and to explore the bases for those opinions. The attorney will seek information and bases to impeach the witness, if such opportunity exists. It may be used to pin down testimony, so it may not be changed at trial. Deposition also, may be used as means of learning the plans or strategy of his or her opponent.

An Engineer can be a fact or an expert witness for both the plaintiff and defendant but he should obey the same general rules. The main rule for the engineer is to tell the truth and say what you think is right. An engineer should think about an answer before actually answering it even if it's an obvious one. Also, he should follow the guidance of his attorney because the litigation is part of a lawyer's game, not an engineer's game. An engineer shouldn't volunteer and if he doesn't know or doesn't recall the answer, he should say so.

## **1-10. THE TRIAL**

The trial is the high point of the litigation process. The trial doesn't happen before the Interrogatories, the various Requests, Depositions, inspections, and all of the pre-trial activities are well concluded.

The trial processes is described in steps that are:

Picking a Jury (six or twelve people)

Opening Statements (Introduction by lawyers)

Plaintiff presents their case (presentation of witness and evidence to jury)

Defense presents their case (refutation of plaintiff's claims)



Final arguments (final statement of plaintiff's and defendant's attorneys)

The Charge to the Jury (judge instructs the jury to deliberate)

The Deliberation (jury discusses evidence and determines their result)

The Verdict (jury announces their decision)

The most important person in the courtroom is the judge because he is in charge and arbitrates between the parties. He also has assistants like the court clerk, reporter, and a marshal. It is very important that everyone's appearance and conduct in the courtroom should be professional. The engineer witness should address the judge as "your honor" and answer with "No, sir" or "Yes, sir".

## **1-11. QUESTIONS**

An engineer's purpose in the court is to answer questions truthfully. The attorney will ask most of these questions when an engineer is on the witness stand. Questions are generally grouped in to specific or general, open or closed, leading or non-leading, formal or casual, polite or serious, rhetorical or interrogating, simple or complex, and probing or outlining. Knowing all of the question variations should have no effect upon the truthfulness of the answer. It is very important to think about the answer before saying it because delicate inflections and voice pitches, and careful wording of question or an answer, may carry far more meaning than the mere words used.

## **1-12. ACCIDENT RECONSTRUCTION**

The purpose of good accident reconstruction is not only to understand what happen but present a case to a jury and that they can see most likely the scenario of the incident. In a usual case there is two scenarios, one from the defendant and the other from the plaintiff. In that case the jury is asked to choose which scenario is more believable. The starting point for the reconstruction is that the reconstructions need to know everything about the accident before it happens. Only then he can accumulate all of the information, testimony and impressions of the people involved and the witnesses.

Good Reconstructionist must make the jury believe that what he says really happen. He must square with the laws of physics and the rules of engineering used in the reconstruction. Blank spots in the information must be kept to a minimum. The reconstruction scenario should have good agreement with the mass of the information and evidence available. The Reconstructionist has to make the reconstruction simple so juror understand all of the science that went into the analysis, and if not the reconstruction may be lost. The reconstruction should not be a surprise and, at the same time, a good reconstruction must be scientifically valid. A good Reconstructionist must stand up to questioning from opposition and can expect to be questioned, argued, and even attacked. The Reconstructionist must be confident that his reconstruction will withstand the attack for him to succeed.

### **1-13. DEFINITIONS AND TECHNIQUES EMPLOYED BY ATTORNEYS**

There are several definitions that are frequently used by attorneys. An engineer has to know these definitions for him to properly assist the attorney. An adverse witness is a witness that has been called to testify by the opposing attorney. When a result of a trial is slow a mediator is called to work with both parties to make a settlement. Also both parties might use an arbitrator whose decision is final. Another definition that should be known is the “balance of the evidences”, which means that the comparative weights of the evidence as the jury see it, on each side. Another term is “bar”, it can mean either location of legal activity, an association of attorneys, or to prevent or keep out. Term such as “care”, which is the engineer’s responsibility to perform according to accepted levels of performance. Another term is “due process” refers to the proper legal steps in a procedure. Also term like “tort”, which means a legal wrong committed against person or other legal entity. A good attorney knows all these terms and the best way to be useful as an expert witness in the court is to familiarize your self with these terms.

### **1-14. WAR STORIES**

War Stories are stories that lawyers tell to each other at a lunch or other events. Most war stories are true but sometimes distorted. Each story has some valuable information to an engineer that he can use in the courtroom. These stories teach expert witnesses about their rights and things that they should or shouldn’t do.

Some of the good lessons that an engineer can learn from this book are: Expert witness can limit the time of his deposition if he wishes. One who takes deposition or provides expert witness has to provide a quiet place for the deposition to take place. “I

don't know" is a good answer if that's the truth. Judges and attorneys don't want to be surprised. A judge has the right to shorten a trial. An expert witness should answer questions short, have a good record and make answers complete. When engineer writes something and its published, it will be used in the court. This means remember what you wrote. Always a good presentation wins and recheck if yare sure that you will win. Also, never give up on a trial and always tell the truth.

### **1-15. TIPS FOR THE ENGINEER INVOLVED IN LITIGATION**

This book gives an engineer a summary list of things to remember and do when involved in litigation. The engineer can only assist and give advice to the attorney and never try to be in charge of the trial. He should be always truthful and not to be afraid to present what he believes is the truth. An engineer should use all his skills that might be useful to win a trial. He should use his judgment when answering trick questions and think about his answer before actually saying it. When an engineer makes a numerical error, he should be honest and admit to it. An engineer should get advice and help when he needs it because he is a part of a team. Most of all an engineer should tell the truth, even if it hurts his client.

## **1-16. SUMMARY**

In this chapter we discussed a book, An Engineer in the Courtroom by William J. Lux. This book explains the steps of the litigation process by an expert witness. It also talks about the nature of accidents and why people go to court. Mr. Lux explains that most of accidents can be easily avoided by careful design of a product.

This book then goes into the role of an engineer in the courtroom. Mr. Lux explains that the engineer is involved in a liability case only to assist the attorney and not to run the trial. An engineer's role in a case is definitely the one that can make or break it. The engineer can help the attorney to prepare questions and answers for himself and for the opposing side under the attorney's guidelines.

Then the book goes into the deposition of an expert witness. Throughout the deposition an engineer will hear question that are aimed primarily or entirely for the purpose of discovery or obtaining information. Depositions are taken to establish facts and to determine the origins of bases for those facts. The attorney uses the deposition to determine the opinions and expert witness may offer at trial, and to explore the bases for those opinions.

The next step of the litigation process is the trial. In the trial and expert witness is expected to answer questions truthfully. The engineer will also be asked to reconstruct the accident. The purpose of good accident reconstruction is not only to understand what happen but to present a case to a jury and that they can see most likely the scenario of the incident.

Finally this book gives the basic tips to an engineer involved as an expert witness. An engineer can only assist and give advice to the attorney and never try to be in charge

of the trial. He should be always truthful and not to be afraid to present what he believes is the truth.

**Chapter II:**  
**“The Art Of Advocacy Skills in Action”**

## **INTRODUCTION**

To learn about the inner workings of a typical court case, we were provided with instructional videos. Typical techniques used during deposition, opening statement, direct examination, and cross-examination were presented. Topics included controlling the pace of verbal exchanges

### **2-1. OPENING STATEMENT**

A major part of your case is the opening statement. In your opening statement, you should try to be apologetic and trite. This helps show that you wish nothing happened, but the fact is that something did; being trite will make it easier to remember the facts you want them to remember. You also have to be somewhat tentative and unimaginative so the jury doesn't have a lot of information that they do not need in their head, so just stick to the facts and that is what they will remember. Some would consider the opening statement the most important part of the case. From a recent case study done in Chicago, it was shown that the Jurors believed more from the opening statement than the evidence.

When developing the opening statement, you must establish a connection with the victim and the jury. You do this by using a narrative story telling technique that helps you build a picture that the jury can develop. Take your time on important issues, use repetition, and be careful with drama. You do not want to be melodramatic or overly sympathetic, and make sure that you ask the questions you know that the jury is wondering. Visual aids can be also used to get your major points across.



The content of your opening statement must contain elements of the case persecution and must provide evidence that the jury must think is important. Make sure that everything is explained to the jury so they understand everything you are talking about; such as will certain things be apart of the case. When you deal with the defenses case, shoot down their key pints only if you can shoot them down.

Another important part in your opening statement is creditably. Creditably should be established as soon as possible and then move right into liability. Tell them who is responsible for this and the issue of damages. In closing your opening statement, you should tell the jury what they should do and return back to your initial theme.

## **2-2. DIRECT EXAMINATION**

The direct examination part of the trial is the hardest part. The jury tends to remember best what is heard first. On the same note, the jury tends to remember longest is what is heard last. When developing the direct examination, we have three main questions to find out: 1. What do we want to get from this witness?, 2. How do we get it?, and 3. How do we conclude the facts given?

First you have to establish any credentials, present any background needed to be known, and provide any relevant information into the case. If you use visual aids, make sure that you do not stand in front of them, make sure that the jury can hear you, and when explaining finances you need to outline each formula and sum up quickly. Give the bottom line and make sure that you do not lose the jury's attention.

When you use the plaintiff as a witness, you must not be to interrogative and let the witness carry the case. Make sure that the evidence is in an orderly manner and lead

up to the occurrence of the accident only after the setting has been made. Your voice volume, pauses, body language, and physical stance are all important in presenting your case. Have the victim talk about his injury but don't let him break down. The last thing you should do is show the injury list.

### **2-3. CROSS EXAMINATION**

In cross-examination, the first thing you should do is introducing the witness to the jury. You should make your case how you want it and reveal facts that make your case. This is where the trial lawyer must establish his presence with the jury. The lawyer must show that he has control of his witness and use the witness to reaffirm your fact of the case. You must adopt the style of interrogation that is best suited for this case and lead the witness into what you want them to say. Open-ended question can be used when getting to know the witness, but be careful when using them in your examination and only use them when you know the answer. You want to find contradicting evidence and exploit it. You want to destroy the witness credibility, point out any information the witness doesn't know, and all this should build to your conclusion.

### **2-4. CROSS EXAMINATION OF NON-MEDICAL WITNESS**

This tape goes a little deeper into the cross-examination part of a nonmedical expert. You must amplify, modify, and destroy the testimony of the witness. You must present contradictory information against the witness. Use deposition like: Is that the truth?, Did you say that?, Did I read this correctly?

There are certain strategies that can be used. You can attack the professional conduct of the witness, why didn't you do things that would of made sense. When you have an evasive witness, you should use simple questions, statements, and utilize expert to draw points that support your theory. Use leading questions rather than open ending questions and a few pithy questions to prove a point.

## **2-5. CONCLUSION**

Your conclusion should contain five or six statements at the end of your closing arguments. Your body language is still important and you need to create images to get your point across. You need to take a familiar situation and give it a new context.

The jury needs to know the pain and disfigurement, but this is hard to describe because you don't know what the jury has been through. You need to figure out how the story will be delivered and the jury's importance is brought out in the end of the conclusion. Do not let your basis interfere with the opportunity in the courtroom.

In your closing statements, you do not want to adopt all of it. You need to find your own mixture of methods. When giving sympathy, you want to make sure that it is given in the right context. Basic principles can be copied and incorporated, but make sure that they are used in the right manner.

## **2-6. SUMMATION**

Your closing argument is about whether the loss of an arm and leg was due to a faulty product. You have to show that the injuries could have been avoidable if the

companies took more safety precautions. They measure profit versus safety, but safety is more important. You have to tell the jury what the project liability laws are.

Nothing is as valuable as your good health, so how do you convert it into dollars. If the liability is found, then compensation should be made. Loss of earnings and present and future medical expenses are pocket losses, but general losses are harder. The victim will no longer be normal. He will not be able to do the same physical things, like running or fishing, and has gone through a lot of pain and suffering.

Overall he wanted the jury to believe that he was a just and responsible person. He stated that he wasn't asking for money or nursing, he just wanted to prove that he was not at fault. When using medical terms they have to be able to relate to the jury.

When closing the case, you have to emphasize the importance of this case. This will be the one and only shot for compensation and it's the jury's job to act as the conscience for the community. It is the jury's obligation and duty and their decision is the final one.

## **2-7. CLASSIC COVER UP**

On July 15, 1970 it was raining and a classic mustang was hit in the rear end. The car went right up in flames and the driver was killed (his name was Harold). Ford says he was killed on impact, but his family says he was burned to death. Ford has been sued more than 50 times for a fire being started after being hit in the rear end.

Ford says this problem is due to speeding, not the make of the car. "The fact that there is so many mustangs, approximately 1.5 million still on the road, it is unassailable

evidence of the design integrity and performance of this car line.” says Ford. The death rate for this car is three times that of any other car built at this time.

Ford says that when this car was made there was not one problem with the gas tanks that was known; but a specialists engineer says to make the car lighter, they put a drop in gas tank and they saw flaws and that all the engineers knew about the flaws. Fords crash test 301 shows problems with the gas tank exploding, soaking the passengers with gasoline and if ignited would kill everyone. But they only used this test to see the passenger movement in a crash.

Thirty years before this July 15 crash, a young engineer named Sherman Henson said, “ ... a fuel tank rupture during a rear end collision would result in gasoline if the mustang.” Back in the 60’s rear end collision safety was not the same as it is now. Harold’s family has not sued Ford, but is on a safety campaigned for people not to use classic mustangs.

**Chapter III:**  
**Products Liability In A Nutshell**

### **3-1. DEFINITION AND SCOPE**

This chapter gives the basic definition and scope of product and defects. A product is a tangible personal property known as “goods.” Over time, products liability has extended to include electricity and natural products (pets), due to the fact of many court battles. The law of products liability should be applied to the fact whether or not the defendant is in the best position to spread the loss and prevent injuries, and to other policy concerns such as freedom of speech and difficulties of proof.

The main reason for imposing liability against a product supplier for injuries resulting from a product is because the product is supplied in a defective condition. In a court case *Moning v. Alfonso* (Mich. 1977), which was about negligent supply of slingshot to minor the court found that the supplier might be liable for the negligent entrustment of a sound product. Determining defectiveness is one of the more difficult problems in products liability, particularly in design litigation because it is not predicted how a safe product can fail in the future.

The term “defect” is used to describe generically the kinds and definitions of things that courts find to be actionably wrong with products when they leave the seller’s hands. In some cases courts sometimes distinguish between defectiveness and unreasonable danger. There are four types of defects manufacturing, design, instructions and misrepresentation. A misrepresentation is not clearly distinguishable from other types of product defects because the product itself may carry express representations. Also the defects of inadequate warning and of misrepresentation are often intimately intertwined.

There are ways to test the defectiveness of a product. The first way is the consumer expectations because a consumer can easily determine that ground glass in food does not meet ordinary expectations. Another test of defectiveness is seller's knowledge because would a seller be negligent in placing a product on the market if he had knowledge of its harmful or dangerous conditions. Yet another way is by risk-benefit analysis, which is used in design cases. This means that whether the cost of making a safer product is greater or less than the risk or danger from the product in its present condition cost. If the cost of making the change is greater than the risk created by not making the change, then the benefit of keeping the product as it is outweighs the risk and product is not defective and vice versa. In another case there are unavoidable unsafe products like drugs, which can be classified into unknowable dangers or known but unpreventable dangers.

The Second Restatement of Torts states that one who sells any product "in a defective condition unreasonably dangerous" can be held strictly liable for injuries resulting from the use or consumption of the product. Also the Restatement of Torts 3d position states that strict liability is imposed for manufacturing flaws ("even though all possible care was exercised in the preparation and marketing of the product"), while liability for inadequate designs and warnings is imposed only for ("foreseeable risks of harm").



### **3-2. THE CAUSES OF ACTION AND DAMAGES**

The breakdown of the privity requirement is one of the hallmarks of modern products liability. This occurrence is classic example of the evolutionary nature of the common law, as it develops to meet felt necessities of the time. The main contribution to this fact was the warranty law, such a notice of breach, disclaimer and warranty statute of limitations.

There are a number of reasons that might lead to product defect. The first one is the negligence, which can occur in numerous ways, through inadequate inspection, processing, packaging, warning, marketing, or in any way in which a defendant fails to meet the standard of care of a reasonable person in dealing with a product, there by proximately causing injury to the plaintiff. Negligent handling of a product can result in a product defect. Another is reckless misconduct, concealment and deceit. This brings up the strict liability, which is applied for engaging in abnormally dangerous activities is imposed against business and nonbusiness persons alike for beach of warranty.

In general a plaintiff is usually entitled to recover all foreseeable damages in a product liability suit based on tort. But some courts may restrict consequential damages recoverable in warranty to those within the contemplation of the parties at the time they entered into the contract. Also damages in warranty must be foreseeable. Many courts allow recovery for emotional distress suffered on witnessing the injury of a close relative. The most controversial law is the recoverability of punitive damages, which substantially increased in products liability insurance premiums. Law that helps the defendant is the joint liability in which case the defendant is responsible of less than a certain percent of damages.

### **3-3. THE PARTIES**

The plaintiff may sue any products defendant on any available theory to recover for personal injuries. The plaintiff doesn't need to be a buyer, user or consumer, and foreseeable plaintiff including bystanders can recover. The plaintiff who suffers from witnessing an injury of a close relative might also recover. A professional rescuer generally cannot recover in products liability for a foreseeable risk caused by the product unless the defendant is guilty of willful misconduct.

On the other side the manufacturers can be sued on any of the theories discussed for the plaintiff. The manufacturer can be sued for a defective component that will be dangerous when incorporated into the finished product. The retailer might also be sued for not inspecting, testing, or assemble a product. It cannot be sued for selling a product in a sealed container.

A number of states, by statute or common law, permit an employer action by employee against her employer, outside the exclusivity provisions of workers compensation, where the employer engages in intentional misconduct causing injury to the employee.

### **3-4. FACTORS AFFECTING CHOICE OF REMEDIES, JURISDICTION, AND PROCEDURE**

A remedy factors can be categorized as disclaimers, reliance, damages and immunity limitations. The main factors of remedy like disclaimers, limitations of remedies and notice of breach are often associated whit warranty litigation, as is solely economic loss. The reliance element is associated with misrepresentation. The

government-contractor (defense) with design and warning litigation. The reliance is expressly required as a condition to recovery for conscious misrepresentation, negligent misrepresentation, and innocent victim misrepresentation resulting in personal injury.

Many courts hold that a plaintiff cannot recover when he or she has suffered solely economic loss from defective product. The plaintiff's remedy for solely economic loss is in warranty and the warranty remedy is available only if there is privity of contract. Although some courts make no distinction between solely economic loss and physical injury and allow recover.

A number of state legislature have enacted statutes cutting back on consumer rights in the area of product liability, in an attempt to meet a perceived crisis in the availability and affordability of liability insurance owning. A federal court sitting in diversity jurisdiction, under the Erie doctrine, which states that court never reaches the question how the forum state court would treat the same issue for conflict of law purposes. Instead, it applies its own procedural rule.

### **3-5. PRODUCTION AND DESIGN DEFECTS**

In a production flaw defect cases the plaintiff proves that the product is defective by simply showing that it does not conform to the manufacturer's specifications. The definition of manufacturing defects appears to indicate that the manufacturer can set its own standard of failure and success rate.

A product may be found defective in design if the plaintiff establishes that the product failed to perform, as safely as ordinary consumer would expect when used in an intended or reasonably foreseeable manner. Also if the plaintiff demonstrates the

product's design proximately caused his injury and the defendant fails to establish that the benefits of the challenged design outweigh the risk of danger inherent in such design. Another defect of a product can be defined, as Crashworthiness is a term used to describe the capability of a product to protect against injury from an accident caused by something or someone other than the product.

### **3-6. INADEQUATE WARNINGS AND INSTRUCTIONS, AND MISREPRESENTATION**

In general a plaintiff will allege a failure to warn, along with a design defect count, in a production liability suit. He is not required to make an election between pursuing a case on a strict products liability theory of either design defect or failure to warn. The plaintiff also has the burden of showing that, has a warning been given, it would have caused her to avoid the accident.

A manufacturer should take account of the environment in which its product will be used when fashioning warnings. He may be required to anticipate the foreseeable misuse of its product in warning of dangers associated with product's use. A warning is not required for a danger that is obvious. Generally an expert testimony is required to determine the adequacy of warnings to a specialized group. Where a defendant markets a defective and unreasonably dangerous product, it may have a post sale duty to warn of danger associated with the product. Whether or not a warning might otherwise be adequate, it can be made inadequate by countervailing representations that downplay the danger or mislead the user regarding the nature or extent of the danger.

An action for misrepresentation can arise in a variety of contest. The misrepresentation can be based on deceit, negligence, and strict warranty. No defect

needs to be shown, other than the fact that the misrepresentation was made and proximately caused an injury.

### **3-7. PROBLEMS OF PROOF**

Plaintiff must show not only that the defendant's product was defective and that the defect caused his injury, but he must also show that the defect existed when the product left the defendant's control. This is done by eliminating any alternative causes not attributable to the defendant. The newer the product the easier is this objective for the plaintiff.

One major problem of proof is the misuse of a product. Unforeseeable misuses of a product, whether by the plaintiff or another, are a bar to recovery in strict liability for injuries proximately caused by such misuse. In order to recover from a product manufacturer, the plaintiff must prove that the product was defective and the proximate cause of his injury. A product is defective when it is unreasonably dangerous for normal or foreseeable use.

Another problem of proof is comparative fault. If the plaintiff is permitted to recover, his recovery will be reduced by the percentage of fault. Spoliation can also contribute to problems of proof because the person willfully or negligently disposes of product evidence vital to a litigant's case. The last problem of proof can be expert's testimony, which can go either in plaintiffs or defendants way.

### **3-8. SUMMARY**

In this chapter we discussed the book, Products Liability In A Nutshell by Jerry J. Phillips. This book proved to be helpful reference guide to the product liability cases because it presents each aspect of products liability law in an orderly, well defined fashion. Accordingly, it presents many examples for the various ideas presented. By reading and discussing this book, we were able to develop a solid understanding of the terms and theories pertaining to products liability law. However, the book does not present any information on the manner in which actual litigation is carried out. To learn about the inner workings of typical cases, we were provided with a different book and instructional videos, which were discussed in chapter one and two.

**Chapter IV:**

**Roberto Ortiz vs. B.M Root Company, Diehl Machines  
and Boshco Inc.**

#### **4-1. INTRODUCTION**

Roberto Ortiz vs. B.M. Root Company, Diehl Machines and Boshco Inc. The plaintiff in this case is Mr. Roberto Ortiz. In an accident with a B.M. Root borer machine, Mr. Ortiz's lost his middle finger on his right hand. It has been claimed that the accident occurred because the B.M. Root borer machine was a defective and unfit for the market.



## 4-2. BACKGROUND

Roberto Ortiz on September 7, 1993 had an unfortunate accident, which caused him the loss of his middle finger on his right dominant hand. This happen while he was an employee of the Kimbel Company in Lowell, Massachusetts and at that time he was operating a vertical borer machine (Model C 311).



Figure 4-1. Unguarded Vertical Borer Machine (Model C 311).

The vertical borer machines were first manufactured by B.M. Root Company in early 1940 and stopped on March 9, 1990. In 1992 B.M. Root had sold its line production to Delhi Company. The vertical borer machine is now widely in use. Mr. Ortiz is suing the manufacturer and sellers of the Boring Machine on the basis that the product is unfit for the market. He also demands retribution for loss of his finger and suffering.

### **4-3. GENERAL ACCIDENT DESCRIPTION**

Robert Ortiz was injured around 3:00 P.M. on September 7, 1993 while operating Vertical Borer Machine. He was drilling holes in four by two inches black of wood and after few uses a large amount of saw dust accumulated on the table of the machine. Then he left the machine in a no cycling mode, which means that the spindles were turning but the table was lowered. To clean off the sawdust Mr. Ortiz used an air hose, which was a common procedure at Kimbel Company. Mr. Ortiz claims that the lever on the air hose nozzle was broken so he had to put on gloves to make the air hose work. He then moved up closer to the spindles to clear the saw dust but while trying to push the lever on the nozzle, he then lost balance and his hand slipped and caught the spindles of the borer machine. This act instantly caused his middle finger to be ripped off. Mr. Ortiz's coworkers drove him immediately following the accident to the near by hospital.

### **4-4. INVESTIGATION AND ANALYSSIS**

In 1986 B.M. Root Company had manuals and safety information send out to all of its dealers. It also produced a wire mesh safety guard to protect the operator from injury.

The first major cause of the accident was that in 1987, the Kimbel Company had installed that safety guard on to its machine but few years later it was removed. The Department of Labor (Occupation Safety and Health Administration) has requirements that apply to the safety guard. In section C (2), it states that boring bits should be provided with a guard that will enclose all portions of the bit above the material being worked. Also section C (5), states that universal joints on spindles of boring machines

shall be completely enclosed in such a way as to prevent accidental contact by the operator. It is also stated in section 5.1 that it's the employer's responsibility to provide and ensure of a safety guard to protect the operator. The Kimbel Company's plant manager Gerard Desjardins claims that the guard was more of a hazard than a safety to the operator. He claims that when the table was raised up to drill holes in the wood, it caused the attachments of the safety guard to brake off, which could have caused an injury. He also claims that there was only 50% visibility through the wire mesh. There were no actual injuries that had accrued at the time the mesh was in place and also there isn't any record of the repair that was done to the safety guard. Mr. Desjardins had never consulted the B.M. Root Company about the safety guard problems. It wasn't till after Mr. Ortiz was injured that the Kimbel Company had modified the original safety guard and once again attached it to the machine.

An expert witness for the plaintiff, Igor L. Paul has concluded that the wire mesh guard was obstructing the operators view and it caused more harm than safety. He also concluded that the wire mesh guard needed at least 4 inches of space below spindles. Igor Paul has approved the safety guard made by the Kimbel Company because it provided Plexiglas and four inches of space. Also, he approves a lip safety-interlocking switch installed by Kimbel Company, which would turn off the machine if the operator puts his hand under the safety guard.

This brings us to the second major cause of this accident, which deals with the directions and safety rules provided by the Root Company. In the American National Standard in section 3.2.1, it mentions that the manufacturer shall eliminate hazard by designing, where practical or provide protection against the hazard. Where the hazard

cannot be eliminated by the design or protection the manufacturer shall warn against the hazard by affixing a sign or tag. There were three major safety rules that were issued by the B.M. Root Company and are posted on the machine at this time. First one is not to operate the machine with gloves. This is the only safety rule that Mr. Ortiz remembers being posted on the machine while he was operating it. This is contradicted by the plant manager and woodcutting group leader who say that these safety rules were on the machine while Mr. Ortiz was injured.

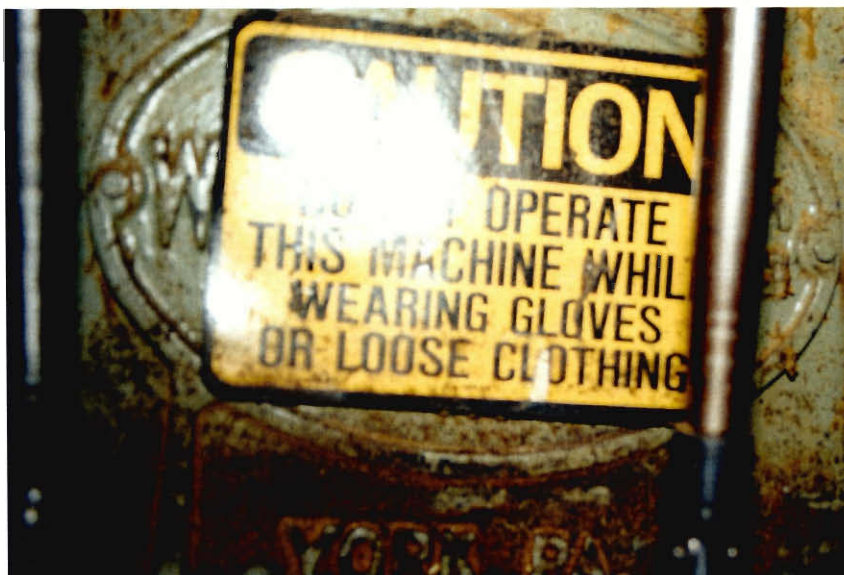


Figure 4-2. Safety Warning on the B.M. Root Borer Machine

The other safety rule that was issued by the B.M. Root Company was not to operate the machine without all guards and covers in position. The Kimbel Company directly violated this when the safety guard was removed. According to Mr. Ortiz this warning was never mentioned to him. Also he was hired after the wire mesh safety guard was removed so he had no previous knowledge of the safety guard. The final safety rule was to stop the machine before making adjustments or cleaning chips from work area.

Mr. Ortiz was trained to leave the machine in non-cycle mode before cleaning it so he never turned it off. Mr. Ortiz or the Kimbel Company disregarded all three of these safety warnings.

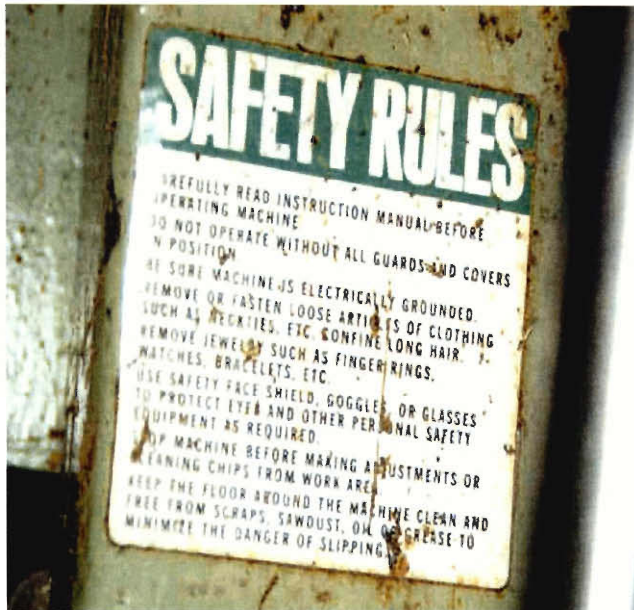


Figure 4-3. List Of Safety Warnings On The B.M. Root Borer Machine.

The third major cause of this accident is the air hose. Mr. Ortiz claims that the air hose lever was broken and that he had complained to Daniel MacKenzie (the woodcutting group leader). Mr. MacKenzie claims that he was not aware of the air hose problem and that he never heard Mr. Ortiz complaint. He also doesn't remember if the air hose lever was broken. Also Robert Dialessi (the wood department production manager) claims that he was not aware of the hose problem. The expert witness, Igor L. Paul approves the use of air hose to clean wood chips of the table.

The final cause of this accident is the question if Mr. Ortiz was well trained by the Kimbel Company to operate the Vertical Borer Machine. In the American National Standard in section 4.1.1, it states that employer shall provide training that will ensure the original and continuing competence of maintenance personnel. This training shall

include making maintenance personnel familiar with the portions of this standard related to their work. Also in section 6.1.1 it states that employer shall ensure that all setup men, setup operators and helpers are adequately trained and competent to safely perform the function for which they are responsible. Mr. Ortiz claims that he never saw an instruction sheet on how to operate the machine but was told verbally the SOP (Standard Operating Procedures). Also Mr. Dialessi confirms this, by claiming that SOP was a standard procedure on how to instruct the operators. By verbally instructing on how to use the machine there was a chance that the instructor skipped some of the safety warning.

#### **4-5. FINAL STATMENT**

Our group came to a decision that Mr. Ortiz should receive no compensation from the B.M. Root Company. This is concluded on the basis that Mr. Ortiz was found liable for plaintiff misconduct, which is divided into three basic areas contributory negligent, assumption of the risk and plaintiffs misuse.

Contributory negligence is defined as the failure of the plaintiff responsible care for his or her own safety. This form of negligence is based on a reasonable person standard, which means the manner in which a typical, rational individual would handle a given product. In this case Mr. Ortiz contributed to his own injury by trying to using a broken air hose nozzle while a new nozzle was just couple of feet away. He was also negligent by not following warning signs, especially the one that required him not to wear gloves around that machine. Based on these facts we find Mr. Ortiz guilty of contributory negligence.

Assumption of the risk is a knowing and voluntary acceptance of an appreciated or understood risk. In this case Mr. Ortiz had known that the machine was dangerous and risky to his health. One of the warning signs specified for the operator of the borer machine to turn off the machine before cleaning any woodchips. Mr. Ortiz ignored that warning and left the machine running. Then he proceeded on moving closer to the machine trying to clean off sawdust and caught his middle finger on rotating spindles.

Misuse is defined as wrong or improper use of a product. In this case the Kimbel Company removed the safety guard, which was the only safety feature on the borer machine. Mr. Ortiz is at fault for misuse of the machine because the machine should have had the safety guard installed while he was using it. If the safety guard was on the machine, Mr. Ortiz would still have his middle finger.

## 4-6. SUMMARY

In this chapter we investigated the case of Roberto Ortiz vs. B.M. Root Company, Diehl Machines and Boshco Inc. Mr. Ortiz had an accident in which he lost his middle finger on his right hand while operating a vertical borer machine produced by B.M. Root Company. Mr. Ortiz has claimed that the accident occurred because the B.M. Root borer machine was a defective and unfit for the market.

We were able to determine four major causes of the accident, which contributed to Mr. Ortiz's injury. The first cause was that Mr. Ortiz's employer uninstalled a B.M. Root safety guard. The second cause of the accident was that Mr. Ortiz ignored all the warning signs posted on the borer machine. The third cause was that Mr. Ortiz out of his own laziness decided to use a broken air hose nozzle while a replacement nozzle was just few feet away. The final cause of the accident was that Mr. Ortiz wasn't properly trained by his employer to operate the borer machine as it was stated in the B.M. Root Company manual.

In conclusion we found Mr. Ortiz guilty of contributory negligence, assumption of the risk, and misuse. Our group came to a decision that Mr. Ortiz should receive no compensation from the B.M. Root Company. Although we later learned that this case was settled before going to a trial by B.M. Root Company for 80,000 dollars.

In the next chapter we will investigate a more day-to-day case, which involves a defective car seat. This case involves slightly larger corporation with more experience in product liability cases



**Chapter V:**

**Laflamme Vs. Maine Line Auto Center, Inc. and Daimler  
Chrysler Corporation**

## **5-1. Introduction**

Robin Laflamme Vs. Maine Line Auto Center, Inc. and Daimler Chrysler Corporation. The plaintiff in this case Mrs. Robin Laflamme. In an accident while driving a 1994 Plymouth mini-van, Mrs. Laflamme hurt her upper neck, shoulder and back. Mrs. Laflamme is claiming that the seat in the 1994 Plymouth mini-van is defective and unsafe.

## 5-2. BACKGROUND

On the date of October 29, 1995 there was an accident involving two cars, one being driven by Teresa Bootter in a 1995 Geo and the other being driven by Robin Laflamme in a 1994 Plymouth mini-van. Prior to the accident Mrs. Laflamme went three times to the Main Line Auto Center and complained about her seat slipping all the way back when she applied pressure to the brake. Eventually the mechanic was able to find the root of the problem and fix it according to the Daimler Chrysler Corporation standards. Later that day when her car was fixed, unfortunately the seats slipped back again and cause an accident. Mrs. Laflamme is suing Maine Line Auto Center, Inc. and Daimler Chrysler Corporation for selling a defective product.



Figure 5-1. 1994 Plymouth Mini-Van Seat.

## 5-3. GENERAL ACCIDENT DESCRIPTION

On early afternoon on October 29, 1995 there was an accident involving two cars, one being driven by Teresa Bootter in a 1995 Geo and the other being driven by Robin Laflamme in a 1994 Plymouth mini-van. This was a rear end accident, in which Bootter came to a stop at a rotary and was struck from behind by Mrs. Laflamme. Mrs.

Laflamme claims that when she went to step on the brake that the seat slipped in on the track and went all the way to the back of the track, causing her to release pressure on the brake and therefore resulted in Mrs. Laflamme rear ending the car in front of her. After the accident on November 2, 1995 she went to the emergency room and complained of the upper neck, shoulder pain and back pains and was prescribed Valium and Motrin.

#### **5-4. INVESTIGATION AND ANALYSIS**

Before the accident on October 5, 1995, Robin Laflamme went to the hospital complaining of upper neck and shoulder pain. What happened was that she claimed that every so often the seat would slip back like a recliner all of a sudden. After being examined she had full range of motion but had some spasms in her cervical and upper dorsal area. She was diagnosed with somatic dysfunction cervical and upper dorsal area. She was told to take Aleve or Advil. After the accident on November 2, 1995 she went to the emergency room and complained of the same injuries but also down her back and was prescribed Valium and Motrin.

This problem with the seat had happened a couple of times and on October 2, 1995 Robin's husband Kevin had brought the van to the dealership where the van was bought and explained what was wrong with the seat. A mechanic at the dealership named Dirk looked at the van. He looked at the seat and could not duplicate the problem. According to the Dialmer-Chrysler Company's policy, that if the problem with the car cannot be duplicated by the fixer, then nothing shall be done to the vehicle. In this situation, Dirk could not get the seat to just slip in its tracks so nothing was done to repair it.

A second time this van was brought to the dealership and the seat slipping in its tracks could be duplicated and the seat was fixed according to the specifications in the Technical Service Bulletin (TSB) number 23-23-94. These TSB reports are sent to the dealerships when a default is found and they explain how to fix it. The procedure on how to fix this problem is simple and only takes about a half hour. First you remove the nuts that the seat adjusters to the seat riser assemblies. Then you have to elongate the rear hole, but be careful not to enlarge the hole side to side. Inspect the adjusters and make sure that both sides are in the same tooth position. Put the seat back in and adjust to the right torque, 250 in./lbs. Finally make sure problem does not exist anymore.

According to the deposition of Gerald Byron, he claims that there was flex in the risers and the seat did not lock. He was stated at saying that the seat did not latch all of the time and after examining the van after the accident that the seat did in fact slip in its tracks. Benjamin Ross looked at the van's tracking system and had a detailed report on it. He said that the front seat to floor fasteners were loose and spun at "0" torque.



Figure 5-2. Unlatched Seat In 1994 Plymouth Mini-Van.

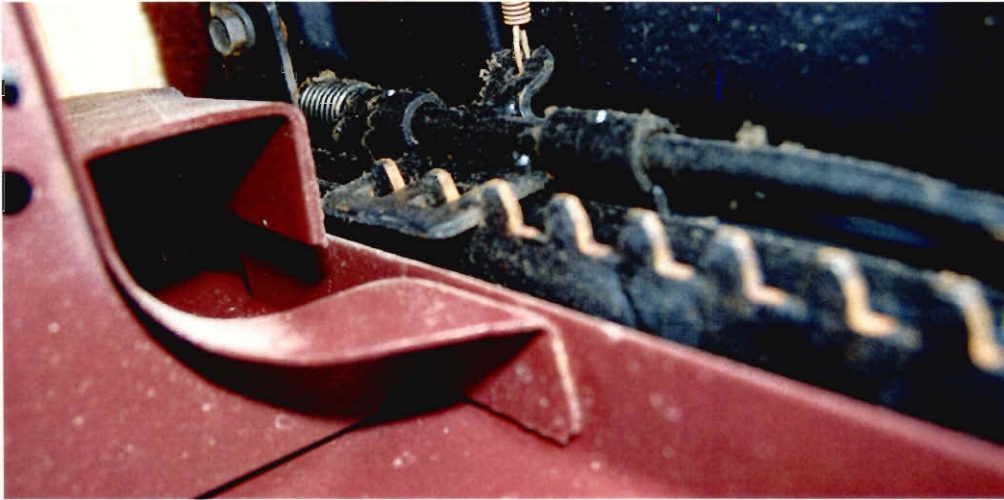


Figure 5-3. Latched Seat In 1994 Plymouth Mini-Van.

In the deposition of Mark Crossman, who from 1990-1993 was a safety development engineer on the Chrysler mini-van platform and then in 1994 became the product development specialists, he said that there was a problem in the front driver seat. During the crash tests is when he became aware of the seat slipping and that is when the TSB report came out.

The Performance Standard Seat Adjuster has several standards that have to be applied. They are as followed:

1. The mechanical adjuster anchors the seat in the vehicle and provides for its movement.
2. The adjuster must be able to withstand a static load of twenty times the weight of the seat.
3. The adjuster must move smoothly and uniformly.
4. The latching mechanism must engage positively with out hesitation and in a consistent manner with out any external force other than the latch return spring.

Now that we have confirmed that there was something wrong with the seat adjuster, we have to determine whose fault it is, whether it is Daimler Chrysler, the manufacture, or the dealership, where the van was fixed.

According to the deposition of Joseph Ozdowy, who is the manufacturing director at a plant in Cordoba, Argentina, worked at a Windsor assembly plant as a Resident Engineering manager. He recalled that one side of the mini-van driver seat would latch before the other. From the MITS report 86818, “ the manual adjuster drivers seat does not engage fully when adjusted forward. The seat ratchets backward when the helical is moving forward.” He believes the root of the cause would be that one side of the seat would latch and you would have to rock it back and forth to get the latch in the hole, which therefore causes the hole to lose square.

In the deposition of Eric Clark, who used to work in the “ loud seat engineering group” for Daimler Chrysler, was in charge of the major redesign of the mini-van seat. Although he did not finish it because he left, he still knows a lot about the defect in the seat. Clark believes the root of the problem with the seats is in the machine at the Windsor factory not being adjustable and piercing hole out of a square. This is the reason for the TSB 23-32-98 report which lists the corrective measures to fix the problem. When Clark left the group he had no responsibility put on him.

In the deposition of Dan Dammar, who is a mechanical engineer employed by Daimler Chrysler for nine years, said that there was a known problem with the seat. According to the MITS report, the driver seat manual adjuster does not fully engage when being adjusted forward. The seat ratchets backward when the van is moving forward until it either gets to the end or the latch catches a hole. When the seat holes are

not square this causes problems latching. Dammar was asked if there should have been a recall, he just kept avoiding the issue and said I do not know the criteria.

Kenneth Martin's deposition, which is a tech. advisor for Chrysler Corp., says that he receives information when someone requests a TSB report. Martin says that if the TSB 23-23-94 was read before installation they could of done the repair on the seats before it was sold.

The only expert witness in this case who is convinced that the seat is working properly is John McKibben's, who is a mechanical automotive engineer. He claims that Chrysler was not negligent in the design and manufacture of the latch mechanism in any way contributes to the accident.

## **5-5. FINAL ASSESSMENT**

Our group came to a decision that in this case Daimler Chrysler is fully at fault for manufacturing an unsafe latching mechanism. We concluded this on the basis that all expert witnesses except for one agree that the latching mechanism doesn't perform properly on many of Chrysler's vans. This is proven by a crash test and an investigation by Daimler Chrysler expert witnesses. This proves the plaintiff shows clearly that the defect existed when the product left the defendant's control.

This also means that Daimler Chrysler didn't meet their standard seat specification, which says, "The latching mechanism must engage positively with out hesitation and in a consistent manner with out any external force other than the latch return spring." Daimler Chrysler was negligent in manufacturing their product because they issued the TSB 23-23-94 report in 1993 while it continued to produce unsafe seats.



We think that Daimler Chrysler is fully responsible for this accident because it didn't recall its product while knowing the danger that it might cause.

## **5-6. SUMMARY**

In this chapter we investigated the case of Laflamme Vs. Maine Line Auto Center, Inc. and Daimler Chrysler Corporation. Mrs. Laflamme while driving her 1994 Plymouth mini-van had an accident in which her seat slipped back, when she stepped on her brake. This accident caused Mrs. Laflamme neck and back pains. She is suing the Maine Line Auto Center, Inc. and Daimler Chrysler Corporation for producing a defective product.

After our investigation we were able to determine that the cause of the accident was the latching mechanism on the Plymouth mini-van seat. This was proven by crash tests done on dummies by the Daimler Chrysler Corporation and the investigation of their expert witnesses. We were also amazed by the inefficiency of the Daimler Chrysler Corporation due to the fact that knowingly they kept on producing defective seat. Rather than fixing the problem before manufacturing the vehicle the Daimler Chrysler Corporation send out TSB reports to fix the problem when the vehicle was manufactured and sold.

In conclusion we found Daimler Chrysler Corporation fully responsible for Mrs. Laflamme's injuries. This is based on the fact that they knowingly produced a defective seat. We were later informed that this case was settled before the trial and the amount of this settlement was not revealed.

In the next chapter we will investigate a similar case that was presented in the chapter four. Although in that case the plaintiff is more interesting due to the fact that his testimony makes a large mystery.

**Chapter VI:**  
**Michael Heath vs. Vermeer Manufacturing Company**

## **6-1. INTRODUCTION**

Michael Heath vs. Vermeer Manufacturing Company. The plaintiff in this case is Mr. Michael Heath. In an accident with a Vermeer Tree Spade Model Ts-40s, Mr. Heath's left hand was partially amputated. Mr. Heath is claiming that the Vermeer Tree Spade is carelessly designed and therefore is defective.

## 6-2. BACKGROUND

Michael Heath was a 30-year-old laborer for a landscaping company. The company that he worked for was Stewards Nursery in Turner Falls, MA. He was with that company for four days prior to the accident. On April 1, 1996 Michael was using a power tree spade machine in Deerfield, MA. The operator of the machine was Jay Stafford who worked for the nursery for three weeks prior to the accident. The Vermeer tree spade model Ts-40s was designed in 1984-1985. Ivan Brand, John Macht, and Tom Chesser designed it. This model was manufactured, from start to finish respectively, between 1985-1989. The tree spade, serial number 110, was sold to Vermeer Sales and Service Inc. of Castleton, New York on September 19, 1985. The machine was also fully assembled.

Mr. Heath was severely injured, with a portion of his left hand traumatically amputated when it got caught in the nip point at the top of the tree spade. Mr. Heath is suing the Stewards Nursery for loss of his hand and suffering. He says that the defendant was careless in the design and manufacturing. The tree spade was defective and the defendant should have known that this would result in a dangerous product. The plaintiff demands damages and judgment against the defendant in double and triple its amount of \$5,000,000.



Figure 6-1. Front View Of Tree Spade Machine.

### **6-3. GENERAL ACCIDENT DESCRIPTION**

On April 1, 1996 Michael was using a power tree spade machine for Stewards Nursery. The way the accident happened is a little difficult to understand. Michael and his co-workers centered the base of the tree on the center of the platform. The operator, Jay Stafford, made the hole in the ground and then moved the machine a few feet forward to put the tree in the wire basket. As the tree was being put in the basket the operator raised the blades and that's when Michael's hand got caught in the pinch point. When this happened, Michael started to scream and wave his hands to get the operators attention. Finally he did and the blades were lowered; then they brought Michael to the Franklin Medical Center in Greenfield, MA.



Figure 6-2. Pinch Point On The Tree Spade Machine.

### **6-4. INVESTIGATION AND ANALYSIS**

We were able to closely investigate this case from actual videotapes and depositions. This case can be only based on the credibility of Michael's Heath testimony as we later discuss and his character. From Michael Heath's deposition, we got some general information on him. Some facts on Michael Heath are that he lost his license

twice due to the fact that he said he did not pay a speeding ticket. He was also convicted for the possession and distribution of cocaine.

Dr. Thomas S. Echeverria, the medical expert in this case, says as a result of the injury on April 1, 1996, the plaintiff is left with a significant functional and sensory loss of the left hand. Now this injury also left him with significant scarring and disfigurement, which is also permanent. His grip strength in his good hand, his right, was at about 120. The grip strength in his bad hand, his left, was at about 45. The medical expense from the Franklin Medical Center was at about \$31,611.57. The medical expense from the Franklin Orthopedic Group was at about \$5,613.00.

Michael learned how to operate the tree spade by the word of mouth and hands-on visual instructions. When he was being taught, at no time was he taught to put his hand on the tree blade. The machine operator, Jay Stafford, only had three weeks experience on the Vermeer Tree Spade.

The platform of the tree spade was about two to two and a half feet off the ground. When the hand was pinched it was at about his forehead height, which is at about 5` 7`` to 5` 8`` from his feet.

Michael knows that while he holding the tree that the blades of the tree spade will be moving up. Michael claims that he did not put his hand on the blade of the tree spade. He says that he does not know how his hand got there.

The plaintiff contracted Wilson Dobson on January of 1998. He was brought in to inspect the tree spade. While Dobson was inspecting the tree spade he had to keep several things in mind that Heath told him about the accident. They are that Heath was standing on the ground while he was steadying the tree in the center of the tree spade.

After inspecting the tree spade, he came to the following conclusions. First of all the platform could have been anywhere from ground level to two feet above the ground. The blades were being moved one at a time at the time of the accident. When the blade of the tree spade is full retracted, it forms a nip point with the frame of the machine. This nip point is what is considered to be the design defect, regardless of whom is using it and where they are standing.

Heath is 5' 10'', so by Dobson's calculations he can reach to about 91'' to 92''. After being evaluated, it was known that Heath could reach 94'' flat footed. This serves as a problem because the tip of the blade is only 92'' off the ground.



Figure 6-3. Prof. Hagglund Trying To Reach The Pinch Point.

There is a pinch point area on the tree spade, which to Dobson is a defect because it was unprotected and there were no guards to protect this area of danger. Dobson mentioned a few ways to fix this defect: 1. Limit the retraction of the spade so that it



cannot come up to form a pinch point, 2. Design the tree spade so there is always an opening between the top of the blade and the top of the tower.

There were no test results of the tree spade machine, as well as no complaints. There were also no previous or similar injuries caused by this machine, which means there was no similar hand suits versus the Vermeer Manufacturing Company. The defense made a statement that said the following, the Vermeer Manufacturing Company could not foresee the combination of concurrent actions required to bring about a hand injury at the top of the tree spade.

Ivan R. Brand's deposition helps the defense with their case. Brand is employed by the Vermeer Manufacturing Company and has been within the company since 1976. He is a product safety manager and is not licensed as a professional engineer in any capacity.

In the manual, there is a statement that tells you to keep hands and feet away from any moving or power-driven parts. Brand does admit that there is a nip point between the top of the blade and the frame of the machine, but also claims that it is out of reach. The top of the tower is out of reach during any kind of work at the tree spade where two people can be anticipated and thus it is guarded by a safety distance guard. You cannot reach that spot unless you are on top of the machine. At no time is it required to get on top of the machine while it is being used as it was intended for.

There are some warning signs on this piece of equipment. One says crushing injury or death possible if tree spade drops. Never work or stand under raised tree spade. Another sign and one that is important to this case is as followed, for your protection,

keep all shields in place and secured while machine is operating. Moving within can cause severe personal injury.



Figure 6-4. Safety Warnings On The Tree Spade.

## 6-5. FINAL ASSESSMENT

Our group came to a decision that Mr. Heath should receive no compensation from the Stewards Nursery. This is based on that Mr. Heath deposition is not truthful and it doesn't make sense. We concluded that Mr. Heath was found liable for plaintiff misconduct, which is divided into three basic areas contributory negligent, assumption of the risk and plaintiffs misuse.

Contributory negligence is defined as the failure of the plaintiff responsible care for his or her own safety. This form of negligence is based on a reasonable person standard, which means the manner in which a typical, rational individual would handle a given product. Mr. Heath worked with the tree spade long enough to understand the danger of that machine. There were specific warnings on the machine that said to stay

away from the machine when it's in use but Mr. Heath ignored these warnings and caused his injury. We find Mr. Heath guilty of contributory negligence.

Assumption of the risk is a knowing and voluntary acceptance of an appreciated or understood risk. Mr. Heath had to know that the machine was dangerous just by looking at it. One of the warnings on the machine specified to stay away from any moving parts but Mr. Heath ignored that risk and stuck his hand in a pinch point. This eventually caused an injury to his hand. We find Mr. Heath guilty of assumption of the risk.

Misuse is defined as wrong or improper use of a product. Mr. Heath knew that this product was dangerous and could easily cause an injury. He should have stayed away from the moving parts of the machine as it was specified in the warnings and Mr. Heath would still have his hand healthy.

## **6-6. SUMMARY**

In this chapter we investigated the case of Michael Heath vs. Vermeer Manufacturing Company. Mr. Heath had an accident in which he partially lost his left hand while operating a tree spade produced by Vermeer Company. Mr. Heath has claimed that the accident occurred because the Vermeer Company tree spade was carelessly designed.

The cause of this case is hard to determine do to the fact that the evidence doesn't support what the plaintiff's recollection was of the accident. Mr. Heath claimed that he was standing on the ground when the accident happen while the evidence showed that it would be impossible for him to reach the pinch point and thus cause the accident. In fact our group is certain that Mr. Heath was standing on the frame of the machine when the accident occurred. This action would violate the warning signs on the machine that state that the operator of the tree spade should stay away from all moving parts.

In conclusion we found Mr. Heath guilt of contributory negligence, assumption of the risk, and misuse. Our group came to a decision that Mr. Heath should receive no compensation from the Vermeer Company. We were later informed that this case settled before the trial for 80,000 dollars.

**Chapter VII:**  
**Mock Trial and Conclusion**

The mock jury was held on Sunday, April 29 at Higgins Labs. During that time each case was presented by a group of students who supported the plaintiff or the defendant. Then the jury had about a half hour to make their decision on who was at fault in each case.

In the case Roberto Ortiz vs. B.M. Root Company the jury decided that Mr. Ortiz was responsible for his own injury and he should not receive any compensation. My group feels that this decision was just because Mr. Ortiz was negligent while operating the borer machine.

The next case presented was the Laflamme Vs. Maine Line Auto Center, Inc. and Daimler Chrysler Corporation. In this case the jury found that the defendant was responsible for producing unsafe product. The mock jury awarded Mrs. Laflamme with 70,000 dollars. My group feels that decision was just but Mrs. Laflamme should have received more money due to the fact that Daimler Chrysler Corporation is a large company who kept on producing unsafe product.

The final case was Michael Heath vs. Vermeer Manufacturing Company. In this case the jury decided that Mr. Heath is responsible for his own injury and the mock jury awarded the plaintiff no money. My group feels that the decision was just because Mr. Heath was negligent while operating the tree spade and he also lied about how the accident happened.

This concludes the three cases that we discussed during this project. We learned from this project how the real life products liability lawsuits work and the amount of time and money it takes for someone to present their case before a jury. We also learned that

in many cases companies rather settle a lawsuit before a trial rather than paying for the expenses to win a trial. Since most of the students that were involved in this project are engineers, it will help us in the future to be properly prepared as an expert witness.