PRODUCTS LIABILITY

EDITORIAL ADVISORS

ASPEN CASEBOOK SERIES

PRODUCTS LIABILITY

Problems and Process
Ninth Edition

James A. Henderson, Jr.
Late Frank B. Ingersoll Professor of Law
Cornell Law School

Aaron D. Twerski
Irwin and Jill Cohen Professor of Law
Brooklyn Law School

Douglas A. Kysar
Joseph M. Field '55 Professor of Law
Yale Law School

ASPEN PUBLISHING

To contact Customer Service, e-mail customer.service@aspenpublishing.com, call 1-800-950-5259, or mail correspondence to:

Aspen Publishing
Attn: Order Department
PO Box 990
Frederick, MD 21705

Printed in the United States of America.

1 2 3 4 5 6 7 8 9 0

ISBN 978-1-5438-0681-6

Library of Congress Cataloging-in-Publication Data

Names: Henderson, James A., 1938- author. | Twerski, Aaron D., author. | Kysar, Douglas A., author.
Title: Products liability : problems and process / James A. Henderson, Jr., Late Frank B. Ingersoll Professor of Law, Cornell Law School; Aaron D. Twerski, Irwin and Jill Cohen Professor of Law, Brooklyn Law School; Douglas A. Kysar, Joseph M. Field '55 Professor of Law, Yale Law School.
Description: Ninth edition. | Frederick, MD: Aspen Publishing, [2021] | Series: Aspen casebook series | Includes bibliographical references and index. | Summary: “Casebook on products liability for law school courses”—Provided by publisher.
Identifiers: LCCN 2020043224 (print) | LCCN 2020043225 (ebook) | ISBN 9781543806816 (hardcover) | ISBN 9781543831122 (ebook)
Subjects: LCSH: Products liability—United States. | LCGFT: Casebooks (Law)
Classification: LCC KF1296 .H43 2021 (print) | LCC KF1296 (ebook) | DDC 346.7303/8—dc23
LC record available at https://lccn.loc.gov/2020043224
LC ebook record available at https://lccn.loc.gov/2020043225

About Aspen Publishing

Aspen Publishing is a leading provider of educational content and digital learning solutions to law schools in the U.S. and around the world. Aspen provides best-in-class solutions for legal education through authoritative textbooks, written by renowned authors, and breakthrough products such as Connected eBooks, Connected Quizzing, and PracticePerfect.

The Aspen Casebook Series (famously known among law faculty and students as the "red and black" casebooks) encompasses hundreds of highly regarded textbooks in more than eighty disciplines, from large enrollment courses, such as Torts and Contracts to emerging electives such as Sustainability and the Law of Policing. Study aids such as the *Examples & Explanations* and the *Emanuel Law Outlines* series, both highly popular collections, help law students master complex subject matter.

Major products, programs, and initiatives include:

- **Connected eBooks** are enhanced digital textbooks and study aids that come with a suite of online content and learning tools designed to maximize student success. Designed in collaboration with hundreds of faculty and students, the Connected eBook is a significant leap forward in the legal education learning tools available to students.
- **Connected Quizzing** is an easy-to-use formative assessment tool that tests law students' understanding and provides timely feedback to improve learning outcomes. Delivered through CasebookConnect.com, the learning platform already used by students to access their Aspen casebooks, Connected Quizzing is simple to implement and integrates seamlessly with law school course curricula.
- **PracticePerfect** is a visually engaging, interactive study aid to explain commonly encountered legal doctrines through easy-to-understand animated videos, illustrative examples, and numerous practice questions. Developed by a team of experts, PracticePerfect is the ideal study companion for today's law students.
- The **Aspen Learning Library** enables law schools to provide their students with access to the most popular study aids on the market across all of their courses. Available through an annual subscription, the online library consists of study aids in e-book, audio, and video formats with full text search, note-taking, and highlighting capabilities.
- Aspen's **Digital Bookshelf** is an institutional-level online education bookshelf, consolidating everything students and professors need to ensure success. This program ensures that every student has access to affordable course materials from day one.
- **Leading Edge** is a community centered on thinking differently about legal education and putting those thoughts into actionable strategies. At the core of the program is the Leading Edge Conference, an annual gathering of legal education thought leaders looking to pool ideas and identify promising directions of exploration.

To Jim

Summary of Contents

Contents

Preface to the Ninth Edition

The Ninth Edition of *Products Liability: Problems and Process* marks the first edition since the passing of our longtime collaborator, colleague, and friend, James A. Henderson, Jr. Candidly, we find it hard to imagine the field of products liability law, let alone this book, without him. Although we have updated the book throughout with new cases, notes, and authors' dialogues, Jim's influence remains evident on every single page, as it will for all editions to come.

Aaron D. Twerski
Douglas A. Kysar

October 2020

Acknowledgments

The authors wish to thank Joanne Tapia, at Brooklyn, and Jennifer Marshall, at Yale, who helped to prepare this edition of the casebook. Jylanda Diles, at Cornell, and Golda Lawrence, at Brooklyn, provided terrific assistance with prior editions. We are grateful to them all.

Research assistants provided invaluable help in assembling these materials. John Baumann (Cornell '86), Jay Bohn (Cornell '88), and Grace Lee (Brooklyn '87) helped us on the first edition. On the second edition, Ron Jenkins and David Ludwick (Cornell '93), Claire Kelly (Brooklyn '93), and Marni Schlissel (Brooklyn '92) provided invaluable assistance. On the third edition, Jordan Anger (Cornell '98), Hanna Liebman (Brooklyn '98), Allison Sealove (Brooklyn '97), and Victoria Ostrovsky (Brooklyn '97) were all of great help to us. On the fourth edition, Thomas Ciarlone (Cornell '01), Jesse Eggert (Cornell '01), Debbie Sternberg Tyler (Brooklyn '00), Kim Houghton (Brooklyn '01), and Michael Heydrich (Brooklyn '00) helped us meet very tight deadlines. On the fifth edition, Mason Barney (Brooklyn '05), Erez Davy (Brooklyn '05), Jennifer Lee (Brooklyn '05), Daniel London (Brooklyn '05), Carl Berry (Cornell '05), and Katharine Burns (Cornell '05) helped us to complete a very substantial revision of these materials. On the sixth edition, Helder Agostinho (Cornell '09), Daniel Hendrick (Cornell '09), and Michael Siegel (Cornell '09) helped with the revisions. On the seventh edition, Colin Leslie (Cornell '11), Steve Beytenbrod (Brooklyn '11), John-Paul Gonzalez (Brooklyn), Elina Shindelman (Brooklyn '11), Sarah A. Westby (Brooklyn '11), Noor I. Alam (Brooklyn '12), Yonah Jaffe (Brooklyn '12), and Shimon Sternhell (Brooklyn '12), provided valuable research assistance. For the eighth edition, we were aided ably by David Berke (Yale '17), Juliana Brint (Yale '17), Christine Kwon (Yale '17), Andy Mun (Yale '17), Nathan Nash (Yale '17), Paul Nolle (Brooklyn '17), Loren Oumarova (Yale '17), Shahriar Raafi (Brooklyn '17), Joey Samuels (Yale '17), Amanda Weingarten (Yale '16), David Weisner (Brooklyn '17), and Grace Zhang (Yale '16). For the ninth edition, we benefited greatly from research support provided by Taylor Arlack (Brooklyn '22), Prashanta Augustine (Yale '22), Briana Baker (Brooklyn '22), Sammy Bensinger (Yale '22), Justice Forte (Yale '22), Katherine Gutt (Brooklyn '22), Cohl Love (Brooklyn '22), Jacob Madden (Yale '22), Nina Oishi (Yale '22), Leah Rahmani (Brooklyn '22), and Yisroel Wolf (Brooklyn '21). We are grateful to them for their contributions.

Deans Cahill, at Brooklyn, and Gerken, at Yale, also deserve thanks for their generous support.

We would like to thank the authors and publishers of the following works for permitting us to include excerpts from these works:

American Law Institute, Restatement of Torts (Second), §310, §311, §402A, and Comments *b*, *f, i, k,* and *n*; and §402B. Copyright © 1965, 1977 by The American Law Institute. Reprinted with permission.

American Law Institute, Restatement of Torts (Third): Apportionment of Liability §22, §23. Reporters Note to §7, §32. Copyright © 2000 by The American Law Institute. Reprinted with permission. U.C.C. §2-302 and Comment *1*; §2-313 and Comments *3* and *8*; §2-316 and Comment *1*; §2-719 and Comment *3*; §2-725.

Copyright © 1995 by the American Law Institute and the National Conference of Commissioners on Uniform State Laws. Uniform Contribution Among Tortfeasors Act, 1995 and the National Conference of Commissioners on Uniform States Laws. Reprinted with permission.

American Law Institute, Restatement of Torts (Third): Products Liability, §1, §2, and Comments *c, d, e, f, g, i, j, k, m,* and *n*; §3 and Comment *b*; §4 and Comments *d,* and *e*; §5 and Comment *b*; §6 and Comments *b, d, e, f,* and *h*; §7 and Comments *a* and *b*; §8, §9, and Comments *a* and *b*; §10 and Comments *a* and *j*; §15, §16, §17, §18, §19, §20, §21, and Comment *e*. Copyright © 1998 by The American Law Institute. Reprinted with permission.

Henderson & Twerski, Manufacturer's Liability for Defective Product Designs: The Triumph of Risk Utility, 74 Brooklyn L. Rev. 1061, 1077-1099 (2009). Copyright © 2009 by The Brooklyn Law Review. Reprinted by permission of the authors, The Brooklyn Law Review.

Henderson & Twerski, Drug Designs *Are* Different. Copyright © 2001 by The Yale Law Journal Company, Inc. Reprinted by permission of the authors, The Yale Law Journal Company, and Fred B. Rothman & Company from The Yale Law Journal, vol. 111, No. 1, pages 151-153, 155-159, 162-164, 168-169, 171-172, 180-181.

Henderson & Twerski, Closing the American Products Liability Frontier: The Rejection of Liability Without Defect, 66 N.Y.U. L. Rev. 1263, 1298-1300, 1305-1306, 1316-1318. Copyright © 1991 by the New York University Law Review. Reprinted by permission of the New York University Law Review.

Henderson & Twerski, Doctrinal Collapse in Products Liability: The Empty Shell of Failure to Warn, 65 N.Y.U. L. Rev. 265, 292-294. Copyright © 1990 by the New York University Law Review. Reprinted by permission of the New York University Law Review.

Posner, A Theory of Negligence, 1 J. Legal Stud. 29, 32. Copyright © 1972 by the University of Chicago. Reprinted with permission of the author and the publisher.

Ramseyer, Liability For Defective Products: Comparative Hypotheses And Evidence From Japan, 61 Am. J. Comp. L. 617 (2013).

Reimann, Liability for Defective Products at the Beginning of the Twenty-First Century: Emergence of a Worldwide Standard?, 51 Am. J. Comp. L. 751 (Fall 2003)

Uniform Commercial Code Section 2-313, Express Warranties by Affirmation, Promise, Description, Sample. The National Conference of Commissioners on Uniform State Laws. All Rights Reserved.

Uniform Commercial Code Section 2-316, 2-302, 2-719. The National Conference of Commissioners on Uniform State Laws. All Rights Reserved.

Uniform Law Commission, Uniform Contribution Among Tortfeasors Act. Copyright © 1939 and 1955 by The National Conference of Commissioners on Uniform State Laws. All Rights Reserved.

Wertheimer, The Smoke Gets in Their Eyes: Product Category Liability and Alternative Feasible Designs in the Third Restatement, 61 Tenn. L. Rev. 1429. Copyright © 1994 by The Tennessee Law Review Association, Inc. Reprinted by permission of the Tennessee Law Review Association, Inc.

Wolfram, Modern Legal Ethics 594-596, 653-657. Copyright © 1986 by West Publishing Co. Reprinted with permission of the author and the West Group.

PRODUCTS LIABILITY

PART I

Liability for Manufacturing Defects

Part I serves two purposes. First, it sets forth the law governing the liability of manufacturers for harm caused by manufacturing defects. And second, it introduces basic subjects, such as allocation of responsibility among potential defendants (Chapter One), causation (Chapter Two), and affirmative defenses (Chapter Three), that cut across the entirety of American products liability. Although most of the materials in Part I involve manufacturing defects, not all of them do. Because some of the important doctrinal issues to be addressed in this part — for example, issues of causation — can best be illustrated by cases and problems involving generically defective products, some of the materials in this part involve such alternative examples of defectiveness. Consistent with our basic plan of attack, however, whenever the defectiveness issue is central to the analysis we will limit ourselves in this part to manufacturing defects. In those instances involving generically defective products we will assume away the problems of defining "defectiveness" and focus instead on other issues of doctrine and policy concerning how courts do, and should, deal generally with questions of liability for defective products. We will wait to wrestle with the conceptual problems of generic defectiveness — defective design and failure-to-warn — until Part II.

CHAPTER ONE

Product Distributor's Strict Liability for Defect-Caused Harm

To recover for harm (personal injury and property damage) caused by a defective product, American tort law demands that the plaintiff establish: (1) that the plaintiff's harm results from a product defect; and (2) that the defect existed when the product left the hands of the defendant. Before the onset of the products liability revolution in the early 1960s, it was also necessary to establish that the defendant-distributor of the defective product had been negligent in either manufacturing or distributing the defective product. As we shall see shortly, courts have dispensed with the need to prove negligence in at least one significant category of products liability cases. When the plaintiff can establish a manufacturing defect — that the product unit does not conform to the manufacturer's own intended design — the plaintiff is no longer required to prove that the distributor was at fault. It is sufficient to prove that the product was defective and that the defect caused the plaintiff's harm.

In this chapter we will briefly (very briefly) review the basic principles of negligence from first-year torts and then turn our attention to a problem that continues to haunt both litigants and courts in seeking to fairly adjudicate products liability claims. When products cause harm, victims often suspect that a product defect was the culprit. Let us assume that the plaintiff is correct. The product that caused the injury was indeed defective at the time of the accident. Plaintiff is only halfway home. The plaintiff must also establish that the product was defective when it left the hands of the defendant. Surely a defendant who distributed a perfectly good product that was rendered defective by someone else afterwards does not bear legal responsibility for the plaintiff's harm.

One's first impression may be that proving that the defect originated at the time of distribution is not likely to be a problem. To the contrary, we assure you that the problem is most serious. Once the distributor lets a product out of its hands, the product is at the mercy of a host of people. Consumers can be counted on to abuse and misuse products. Merchants and repairers have access to the innards of a product. Age and heavy use can take a serious toll on product integrity. As you will see, proving that a defect originated at the time of sale may at times be even more difficult than proving that a product defect caused the accident.

This chapter also considers the boundaries of strict liability, how liability gets allocated among members of the distributive chain, and how products liability interfaces with workers' compensation.

A. THE ROLE OF NEGLIGENCE IN THE FORMATIVE PERIOD

1. Negligence from First-Year Torts

These materials assume that you have taken the basic first-year torts course and that you are generally familiar with the principles governing liability for negligent conduct. You will recall that Judge Learned Hand articulated a classic formulation of the negligence standard in United States v. Carroll Towing Co., 159 F.2d 169 (2d Cir. 1947). Judge Hand took the position that whether an actor's injury-causing conduct was negligent depended on three variables: (1) the probability that injury would result from the actor's conduct; (2) the gravity of the harm that could be expected to result should injury occur; and (3) the burden of adequate precautions to avoid or minimize injury. In one of the most famous (or infamous, depending on your philosophical outlook) tort quotes, Hand suggested that his test could be reduced to algebraic terms: "If the probability be called P; the injury L [loss]; and the burden B [i.e., the burden of precaution to avoid the risk of loss]; liability depends upon whether B is less than L multiplied by P: i.e., whether $B < PL$." Id. at 173.

After *Carroll Towing*, a quarter of a century passed before Professor (now Judge) Richard Posner pointed out that the Learned Hand negligence tort formula was in lockstep with an economic test of negligence. In what has come to be recognized as a landmark article expressing the law-and-economics perspective on the subject, Posner argued that the Learned Hand formula stood for the following proposition:

> Discounting (multiplying) the cost of an accident if it occurs by the probability of occurrence yields a measure of the economic benefit to be anticipated from incurring the costs necessary to prevent the accident. The cost of prevention is what Hand meant by the burden of taking precautions against the accident. It may be the cost of installing safety equipment or otherwise making the activity safer, or the benefit forgone by curtailing or eliminating the activity. If the cost of safety measures or of curtailment — whichever cost is lower — exceeds the benefit in accident avoidance to be gained by incurring that cost, society would be better off, in economic terms, to forgo accident prevention. A rule making the enterprise liable for the accidents that occur in such cases cannot be justified on the ground that it will induce the enterprise to increase the safety of its operations. When the cost of accidents is less than the cost of prevention, a rational profit-maximizing enterprise will pay tort judgments to the accident victims rather than incur the larger cost of avoiding liability. Furthermore, overall economic value or welfare would be diminished rather than increased by incurring a higher accident-prevention cost in order to avoid a lower accident cost. If, on the other hand, the benefits in accident avoidance exceed the costs of prevention, society is better off if those costs are incurred and the accident averted, and so in this case the enterprise is made liable, in the expectation that self-interest will lead it to adopt the precautions in order to avoid a greater cost in tort judgments. [Posner, A Theory of Negligence, 1 J. Legal Stud. 29, 32 (1972).]

Hand's notion that a reasonable manufacturer would not invest unlimited resources in preventing defects, even if it were to bear all defect-related costs, may seem a bit heartless to some of you. If a manufacturer could eliminate even more defects, together with the accident costs those defects cause, shouldn't the manufacturer spend additional money on quality control even if the savings in accident costs prevented by further spending are less than the costs of preventing them? We defer this and related

questions until we reach the section below on strict liability. For now, let us consider negligence for what it is, even if some of you harbor doubts about its ethical adequacy as a liability standard.

Some writers who agree generally that negligence is an appropriate liability standard insist that Learned Hand's approach in *Carroll Towing* rests on unrealistic assumptions about the rationality of human decision making. See generally Gregory C. Keating, Reasonableness and Rationality in Negligence Theory, 48 Stan. L. Rev. 311 (1996). For a comprehensive survey of the literature, reaching the conclusion that some Learned Hand critics have overstated the case against rational choice, see Jeffrey J. Rachlinski, The Uncertain Psychological Case for Paternalism, 97 Nw. U. L. Rev. 1165, 1168 (2003) ("[T]he primary lesson that legal scholars have taken from the cognitive psychology of judgment and choice, the notion that people make systematically erroneous choices, is mistaken."). See also Benjamin C. Zipursky, Law and Morality: Tort Law: Sleight of Hand, 48 Wm. & Mary L. Rev. 1999 (2007) (breach in negligence is to be judged by ordinary care standard; no evidence that negligence decisions are based on the Learned Hand formula). In any event, Judge Hand himself expressed doubt over the wisdom of trying to reduce the negligence concept to precise mathematical formulas. See Moisan v. Loftus, 178 F.2d 148 (2d Cir. 1949). But the basic idea that Hand tried to capture with his "B < PL" formulation has come to be recognized as an appropriate way of expressing the basis for liability for negligently caused harm. See Restatement (Third) of Torts: Liability for Physical and Emotional Harm §3 (2010). Although some judges prefer to express the negligence test in the more humanistic terms of "what a reasonable person would have done," even that formulation is consistent with the notion that reasonable persons weigh the costs of activities against their benefits in deciding upon courses of action.

From whatever perspective one measures the interests at stake in making the necessary cost-benefit trade-offs, this much is clear: If a manufacturer fails to invest in quality control at least to the point where the next incremental investment in safety would not save more than it would cost to make it — if the manufacturer fails to take all cost-effective safety measures — the manufacturer is negligent and is liable for all of the harm that its defective products cause. Concomitantly, if the manufacturer takes all cost-effective quality control measures, the injured plaintiff will not be able to point to a further safety measure that the manufacturer could have taken where "B < PL," and the manufacturer is not negligent (and thus is not liable to the injured plaintiff). This will result even if a considerable number of victims, like the plaintiff, are being harmed because of product defects. The negligence system leaves it to the victims, themselves, to insure against the defect-related accident costs that are not worth preventing. These so-called "residual accident costs" remain where they have fallen — on the accident victims and their casualty loss insurers. Thus, the only accident-related costs that reasonable manufacturers bear under a negligence regime are the costs of the quality control measures that they must take to avoid being negligent. (Defect-related accidents also hurt their reputations in the market; but the market imposes those costs, not the tort system.)

Strictly speaking, these costs of quality control are not "insurance" costs but rather "prevention" costs. As Posner's excerpt, above, explains, one incurs prevention costs in trying to stop accidents from happening. In contrast, casualty loss insurance serves to spread the costs of accidents that are cheaper to incur than to prevent. Those who may suffer loss transfer the risks to commercial insurers, who aggregate, or "pool," similar risks of loss, charging an appropriate premium, thereby spreading the high

costs of individual losses among all the insureds in the relevant risk pool. Spreading such "primary accident costs" lowers the social dislocations, or "secondary costs," of the residual accidents that are not worth preventing. Under negligence, manufacturers engage in accident prevention and accident victims insure against the residual accident losses that are too costly for the manufacturer to prevent by the exercise of care. Of course, victims also play a role in accident prevention under the rules governing contributory negligence; we will address that aspect at the end of Part I.

Why would a rational tort system adopt negligence as the basis of manufacturers' liability for manufacturing defects? Traditional notions of fairness play an important role. Certainly it is fair to impose liability on manufacturers who unreasonably expose users and consumers to risks of harm. Likewise, it is only fair, the supporters of traditional negligence will argue, that a manufacturer who does all that a reasonable person would do to prevent defects should not be held liable for accidents that it is in the best interests of society, including product users and consumers, to allow to happen. People who purchase and use products have a right to expect that manufacturers will behave reasonably. But purchasers know that some defects are unavoidable and should take that possibility into account in deciding whether to purchase and use such products. Moreover, each individual purchaser understands better than anyone else his or her own tolerance toward risk and is in the best position to know how much dislocation costs a defect-related accident will cause and thus how much casualty loss insurance coverage to obtain. Thus, each consumer pays her own premiums for her own insurance covering the residual costs not worth trying to prevent — a rock star who wants 50 million dollars coverage should pay her own premiums and not expect law students who buy the same products she does to help pay her insurance costs. Thus, it can be argued that a system of negligence-based liability is not only fair to everyone involved but is also efficient, in that it achieves the proper levels of both accident prevention and casualty loss insurance.

We will return to reconsider the merits of this assessment when we reach the subject of strict tort liability.

2. The Fall of the Privity Rule

An interesting chapter in the development of negligence-based liability for defective products, now chiefly of historical interest, involved the question of whether the negligent manufacturer of a defective product could be held liable to an injured person with whom the manufacturer had not directly contracted. The question should seem odd to you. *Of course* a negligent manufacturer's responsibility extends beyond its immediate buyers. Indeed, under traditional principles of proximate cause a negligent manufacturer should be liable for all the harms that a reasonable person would have foreseen at the time of original sale of the defective product. But what seems clear to us today was not always so clear. Beginning in England in the first half of the nineteenth century, courts adopted a general rule that the negligent supplier of a defective product was liable only to those with whom he had directly dealt in the supply contract; anyone not in "privity of contract" with the supplier could not recover for the supplier's negligence no matter how directly and foreseeably his injuries were causally linked to that negligence.

This rule limiting a product supplier's tort liability is generally referred to as the "privity rule." By common consent, its origins are traced to the opinion of Lord

Abinger, C.B., in Winterbottom v. Wright, 10 M. & W. 109 (Exch. 1842), in which the plaintiff sought to recover in negligence for injuries suffered when a horse-drawn mail coach collapsed while plaintiff was driving it. The defendant had supplied the coach in question, along with others, to the Postmaster General pursuant to a contract that called for the defendant to keep the coach in good repair. The plaintiff alleged that the defendant negligently failed to fulfill his contractual promise to keep the coach in repair, causing it to collapse and injure the plaintiff.

In granting judgment for defendant, the English court concluded that, given the absence of any contractual relationship between the defendant and the plaintiff, no recovery could be had in negligence. Refusing to permit the contract between the defendant and the Postmaster General to be turned into a tort, Lord Abinger observed:

> There is no privity of contract between [the plaintiff and the defendant]; and if the plaintiff can sue, every passenger, or even any person passing along the road, who was injured by the upsetting of the coach, might bring a similar action. Unless we confine the operation of such contracts as this to the parties who entered into them, the most absurd and outrageous consequences, as to which I can see no limit, would ensue. [10 M. & W. at 114.]

Although the privity rule in *Winterbottom* came generally to be recognized by American courts, by the end of the nineteenth century a number of exceptions were developed judicially. In an early New York case, Thomas v. Winchester, 6 N.Y. 307 (1852), falsely labeled poison was sold to a druggist, who in turn sold it to a customer. The customer, who was seriously injured due to the mislabeling, recovered damages from the defendant who had affixed the erroneous label even though the injured plaintiff had no direct privity relationship with the defendant. The defendant's negligence, the court said, "put human life in imminent danger." Once the privity barrier had been overcome for products that created "imminent danger," injured plaintiffs besieged courts with claims against remote manufacturers, contending that, indeed, their injuries were brought about by products whose danger levels were very high and thus met the threshold test for bypassing the privity rule.

The seeming arbitrariness of the privity rule, together with the conceptual confusion surrounding exceptions to the rule, finally came to an end with the decision of the New York Court of Appeals in MacPherson v. Buick Motor Co., 111 N.E. 1050 (N.Y. 1916). The case involved an allegedly defective wooden wheel on a 1911 Buick Runabout automobile that collapsed and caused an accident that injured the plaintiff. The plaintiff's negligence-based complaint against Buick was dismissed for lack of privity, whereupon the intermediate appellate court remanded for trial, holding that the privity rule did not bar plaintiff's claim. On remand, the jury found for the plaintiff on the grounds that Buick had been negligent in failing to inspect the wheel for defects and a manufacturing defect had caused the accident. The trial court entered judgment for the plaintiff. The intermediate court affirmed, and Buick appealed to the Court of Appeals, New York's highest court. Judge Benjamin N. Cardozo, one of America's greatest appellate judges and the author of a number of famous opinions on the subject of tort law, wrote for the majority in affirming the judgment below.

The holding in MacPherson v. Buick eventually gained widespread acceptance and is now universally recognized. See generally W. Prosser & P. Keeton, Law of Torts 683 (5th ed. 1984); Restatement (Second) of Torts §395, Comment *a* (1965). For scholarly

commentary on the significance and legacy of the case, see Anita Bernstein, The Reciprocal of *MacPherson v. Buick Motor Company*, 9 J. Tort L. 5 (2016); John C.P. Goldberg & Benjamin C. Zipursky, The Myths of *MacPherson*, 9 J. Tort L. 91 (2016); James A. Henderson, Jr., *MacPherson v. Buick Motor Co.*: Simplifying the Facts While Reshaping the Law, in Tort Stories 41 (Robert L. Rabin & Stephen D. Sugarman eds. 2003). Today, lack of privity is not a bar to negligence-based recovery for personal injuries against suppliers of defective products. The privity doctrine does, however, retain considerable vitality in products liability cases when recovery is sought for economic harm, reflecting the fact that plaintiffs in those cases must base their claims on contract, rather than tort.

3. The Rise of Res Ipsa Loquitur

During the period following the fall of the privity rule, American courts increasingly relied on the doctrine of res ipsa loquitur in negligence-based manufacturing defect cases. Res ipsa loquitur ("the thing speaks for itself") allows an inference of negligence to be drawn from the occurrence of an accident involving an instrumentality (in a products liability case, the product itself) within the defendant's control under circumstances where such an accident would not ordinarily occur in the absence of negligence.

Thus, from the fact that a defective product failed in use and caused an accident, courts allowed triers of fact to infer that the manufacturer of the product negligently caused the defect to occur. One difficulty with res ipsa loquitur from the plaintiff's perspective was proving that the defect was present when the product left the hands of the manufacturer — that is, that the product was in the defendant's control when it became defective. Direct proof was sometimes available, but not always. In these latter instances, if the product failed immediately after first distribution, when practically new, and if the product was being used normally, the inference could be drawn that the defect originated with the manufacturer. But if the product was not new or had been subjected to rough handling after purchase, or if the plaintiff could not account for what had happened between distribution of the product and its subsequent failure in use, then the plaintiff faced more substantial difficulties in proving that a defect at the original time of sale — an "original defect" — caused his injuries.

One aspect of the res ipsa doctrine that has caused confusion over the years is the frequently repeated statement that the accident must be an event that does not ordinarily happen if the defendant is exercising due care. Some plaintiffs have sought to prove this by demonstrating that when an actor in the same position as was the defendant exercises care, the event rarely happens — for example, only once in a thousand times — whereas when actors behave negligently the event occurs only once in a hundred times. In theory, this ought not to be sufficient to reach the jury, because although the event occurs more frequently when the actor is negligent, there is no indication regarding the relative frequency with which the actor behaves negligently. If negligence only rarely is present, then in any given instance an absence of negligence may be the more likely explanation. Thus, in the words of the Oregon Supreme Court's opinion in Brannon v. Wood, 444 P.2d 558, 562 (Or. 1968) (a medical malpractice case), "[t]he test is not whether a particular injury rarely occurs, but rather, when it occurs, is it ordinarily the result of negligence." See generally David Kaye, Probability Theory Meets Res Ipsa Loquitur, 77 Mich. L. Rev. 1456 (1979).

Escola v. Coca-Cola Bottling Co.
150 P.2d 436 (Cal. 1944)

GIBSON, C.J.

Plaintiff, a waitress in a restaurant, was injured when a bottle of Coca-Cola broke in her hand. She alleged that defendant company, which had bottled and delivered the alleged defective bottle to her employer, was negligent in selling "bottles containing said beverage which on account of excessive pressure of gas or by reason of some defect in the bottle was dangerous . . . and likely to explode." This appeal is from a judgment upon a jury verdict in favor of plaintiff. . . .

. . . [B]eing unable to show any specific acts of negligence [plaintiff] relied completely on the doctrine of res ipsa loquitur.

Defendant contends that the doctrine of res ipsa loquitur does not apply in this case, and that the evidence is insufficient to support the judgment. . . .

Res ipsa loquitur does not apply unless (1) defendant had exclusive control of the thing causing the injury and (2) the accident is of such a nature that it ordinarily would not occur in the absence of negligence by the defendant.

Many authorities state that the happening of the accident does not speak for itself where it took place some time after defendant had relinquished control of the instrumentality causing the injury. Under the more logical view, however, the doctrine may be applied upon the theory that defendant had control at the time of the alleged negligent act, although not at the time of the accident, *provided* plaintiff first proves that the condition of the instrumentality had not been changed after it left the defendant's possession. As said in Dunn v. Hoffman Beverage Co., 126 N.J.L. 556 [20 A.2d 352, 354], "defendant is not charged with the duty of showing affirmatively that something happened to the bottle after it left its control or management; . . . to get to the jury the plaintiff must show that there was due care during that period." Plaintiff must also prove that she handled the bottle carefully. The reason for this prerequisite is set forth in Prosser on Torts [1941], at page 300, where the author states:

> Allied to the condition of exclusive control in the defendant is that of absence of any action on the part of the plaintiff contributing to the accident. Its purpose, of course, is to eliminate the possibility that it was the plaintiff who was responsible. If the boiler of a locomotive explodes while the plaintiff engineer is operating it, the inference of his own negligence is at least as great as that of the defendant, and res ipsa loquitur will not apply until he has accounted for his own conduct.

It is not necessary, of course, that plaintiff eliminate every remote possibility of injury to the bottle after defendant lost control, and the requirement is satisfied if there is evidence permitting a reasonable inference that it was not accessible to extraneous harmful forces and that it was carefully handled by plaintiff or any third person who may have moved or touched it. If such evidence is presented, the question becomes one for the trier of fact and, accordingly, the issue should be submitted to the jury under proper instructions.

In the present case no instructions were requested or given on this phase of the case, although general instructions upon res ipsa loquitur were given. Defendant, however, has made no claim of error with reference thereto on this appeal.

Upon an examination of the record, the evidence appears sufficient to support a reasonable inference that the bottle here involved was not damaged by any extraneous force after delivery to the restaurant by defendant. It follows, therefore, that the bottle was in some manner defective at the time defendant relinquished control because sound and properly prepared bottles of carbonated liquids do not ordinarily explode when carefully handled.

The next question, then, is whether plaintiff may rely upon the doctrine of res ipsa loquitur to supply an inference that defendant's negligence was responsible for the defective condition of the bottle at the time it was delivered to the restaurant. Under the general rules pertaining to the doctrine, as set forth above, it must appear that bottles of carbonated liquid are not ordinarily defective without negligence by the bottling company. . . .

An explosion such as took place here might have been caused by an excessive internal pressure in a sound bottle, by a defect in the glass of a bottle containing a safe pressure, or by a combination of these two possible causes. The question is whether under the evidence there was a probability that defendant was negligent in any of these respects. If so, the doctrine of res ipsa loquitur applies.

The bottle was admittedly charged with gas under pressure, and the charging of the bottle was within the exclusive control of defendant. As it is a matter of common knowledge that an overcharge would not ordinarily result without negligence, it follows under the doctrine of res ipsa loquitur that if the bottle was in fact excessively charged an inference of defendant's negligence would arise. If the explosion resulted from a defective bottle containing a safe pressure, the defendant would be liable if it negligently failed to discover such flaw. If the defect were visible, an inference of negligence would arise from the failure of defendant to discover it. Where defects are discoverable, it may be assumed that they will not ordinarily escape detection if a reasonable inspection is made, and if such a defect is overlooked an inference arises that a proper inspection was not made. A difficult problem is presented where the defect is unknown and consequently might have been one not discoverable by a reasonable, practicable inspection. In [an earlier] case we refused to take judicial notice of the technical practices and information available to the bottling industry for finding defects which cannot be seen. In the present case, however, we are supplied with evidence of the standard methods used for testing bottles.

A chemical engineer for the Owens-Illinois Glass Company and its Pacific Coast subsidiary, maker of Coca-Cola bottles, explained how glass is manufactured and the methods used in testing and inspecting bottles. He testified that his company is the largest manufacturer of glass containers in the United States, and that it uses the standard methods for testing bottles recommended by the glass containers association. A pressure test is made by taking a sample from each mold every three hours — approximately one out of every 600 bottles — and subjecting the sample to an internal pressure of 450 pounds per square inch, which is sustained for one minute. (The normal pressure in Coca-Cola bottles is less than 50 pounds per square inch.) The sample bottles are also subjected to the standard thermal shock test. The witness stated that these tests are "pretty near" infallible.

It thus appears that there is available to the industry, a commonly-used method of testing bottles for defects not apparent to the eye, which is almost infallible. Since Coca-Cola bottles are subjected to these tests by the manufacturer, it is not likely that they contain defects when delivered to the bottler which are not discoverable by visual inspection. Both new and used bottles are filled and distributed by defendant. The used

bottles are not again subjected to the tests referred to above, and it may be inferred that defects not discoverable by visual inspection do not develop in bottles after they are manufactured. Obviously, if such defects do occur in used bottles there is a duty upon the bottler to make appropriate tests before they are refilled, and if such tests are not commercially practicable the bottles should not be re-used. This would seem to be particularly true where a charged liquid is placed in the bottle. It follows that a defect which would make the bottle unsound could be discovered by reasonable and practicable tests.

Although it is not clear in this case whether the explosion was caused by an excessive charge or a defect in the glass, there is a sufficient showing that neither cause would ordinarily have been present if due care had been used. Further, defendant had exclusive control over both the charging and inspection of the bottles. Accordingly, all the requirements necessary to entitle plaintiff to rely on the doctrine of res ipsa loquitur to supply an inference of negligence are present.

It is true that defendant presented evidence tending to show that it exercised considerable precaution by carefully regulating and checking the pressure in the bottles and by making visual inspections for defects in the glass at several stages during the bottling process. It is well settled, however, that when a defendant produces evidence to rebut the inference of negligence which arises upon application of the doctrine of res ipsa loquitur, it is ordinarily a question of fact for the jury to determine whether the inference has been dispelled.

The judgment is affirmed.

SHENK, J., CURTIS, J., CARTER, J., and SCHAUER, J., concurred.

TRAYNOR, J.

I concur in the judgment, but I believe the manufacturer's negligence should no longer be singled out as the basis of a plaintiff's right to recover in cases like the present one. In my opinion it should now be recognized that a manufacturer incurs an absolute liability when an article that he has placed on the market, knowing that it is to be used without inspection, proves to have a defect that causes injury to human beings. MacPherson v. Buick Motor Co., 217 N.Y. 382 [111 N.E. 1050], established the principle, recognized by this court, that irrespective of privity of contract, the manufacturer is responsible for an injury caused by such an article to any person who comes in lawful contact with it.

. . . Even if there is no negligence, however, public policy demands that responsibility be fixed wherever it will most effectively reduce the hazards to life and health inherent in defective products that reach the market. It is evident that the manufacturer can anticipate some hazards and guard against the recurrence of others, as the public cannot. Those who suffer injury from defective products are unprepared to meet its consequences. The cost of an injury and the loss of time or health may be an overwhelming misfortune to the person injured, and a needless one, for the risk of injury can be insured by the manufacturer and distributed among the public as a cost of doing business. It is to the public interest to discourage the marketing of products having defects that are a menace to the public. If such products nevertheless find their way into the market it is to the public interest to place the responsibility for whatever injury they may cause upon the manufacturer, who, even if he is not negligent in the manufacture of the product, is responsible for its reaching the market. However intermittently such injuries may occur and however haphazardly they may strike, the risk of their occurrence is a constant risk and a general one. Against such a risk there should

authors' dialogue 1

JIM: You know, the thing that bugs me about *Escola* is how the plaintiff got away with her claim that the bottle was defective when it was delivered to the restaurant. I buy Traynor's point about applying strict liability instead of negligence. But how can he and the rest of the court practically assume away the defect issue?

AARON: I'm not sure they did that, Jim. The plaintiff introduced proof that the bottle had been handled normally, including when she retrieved it, herself, from the cooler. Why shouldn't that suffice?

JIM: It's proving a negative, Aaron. In effect, the court in *Escola* not only allows a presumption of manufacturer's negligence, but also a presumption of original defect. And *Escola* isn't the only case we've considered thus far that's done that.

AARON: What do you mean?

JIM: I wrote a "tort story" about *MacPherson*,[1] and I read the trial transcript in that case.

AARON: And?

JIM: Cardozo says in his opinion in *MacPherson* that the plaintiff was driving his nearly new Buick down the road when all of a sudden the wheel collapsed due to defective wooden spokes. He assumes a manufacturing defect and goes on to demolish the privity defense.

AARON: That makes sense to me. I assume plaintiff's experts examined the spokes and found them to be defective, and the jury bought their story. What's the problem?

JIM: The problem is that the car was more than a year old when the accident happened; had been driven safely many miles on rough country roads, hauling heavy gravestones (MacPherson was a stone carver); and had hit a telephone pole at fairly high speed when the wheel collapsed. The likelihood of the wheel actually being rotten when MacPherson originally bought the car was very low.

AARON: What's your point in telling me this? It doesn't change the law in either *MacPherson* or *Escola*, does it?

JIM: No, it doesn't. Cardozo and Traynor seem to have been so bent on changing the law that they winked at the facts. But the defect issue will come back to haunt them, mark my words.

AARON: Get down off the soapbox, Jim, before it collapses under you. We'll get to the defect issue soon enough. (See Section C, infra.)

---

1. See James A. Henderson, Jr., *MacPherson v. Buick Motor Co.*: Simplifying the Facts While Reshaping the Law, in Tort Stories 41 (Robert L. Rabin & Stephen D. Sugarman eds. 2003).

be general and constant protection and the manufacturer is best situated to afford such protection.

The injury from a defective product does not become a matter of indifference because the defect arises from causes other than the negligence of the manufacturer, such as negligence of a submanufacturer, of a component part whose defects could not be revealed by inspection or unknown causes that even by the device of res ipsa loquitur cannot be classified as negligence of the manufacturer. The inference of negligence may be dispelled by an affirmative showing of proper care. . . . An injured person, however, is not ordinarily in a position to refute such evidence or identify the cause of the defect, for he can hardly be familiar with the manufacturing process as the manufacturer himself is. In leaving it to the jury to decide whether the inference has been dispelled, regardless of the evidence against it, the negligence rule approaches the rule of strict liability. It is needlessly circuitous to make negligence the basis of recovery and impose what is in reality liability without negligence. If public policy demands that a manufacturer of goods be responsible for their quality regardless of negligence there is no reason not to fix that responsibility openly. . . .

As handicrafts have been replaced by mass production with its great markets and transportation facilities, the close relationship between the producer and consumer of a product has been altered. Manufacturing processes, frequently valuable secrets, are ordinarily either inaccessible to or beyond the ken of the general public. The consumer no longer has means or skill enough to investigate for himself the soundness of a product, even when it is not contained in a sealed package, and his erstwhile vigilance has been lulled by the steady efforts of manufacturers to build up confidence by advertising and marketing devices such as trademarks. Consumers no longer approach products warily but accept them on faith, relying on the reputation of the manufacturer or the trademark. Manufacturers have sought to justify that faith by increasingly high standards of inspection and a readiness to make good on defective products by way of replacements and refunds. The manufacturer's obligation to the consumer must keep pace with the changing relationship between them. . . .

B. THE MODERN RULE OF STRICT LIABILITY IN TORT

Strict products liability is liability in tort for harm caused by defective products without any necessity for the plaintiff to show negligence on the part of the defendant. Although it was many decades in the making, it finally came into American products liability law in the early 1960s. We shall consider, in Section D, the categories of commercial product suppliers to whom strict tort liability applies. In the discussions that follow we will assume that it applies to product manufacturers, wholesalers, and retailers. We shall also consider in Chapter Eight the elements of harm that may, and may not, be recovered under strict liability. For the purposes of this chapter, we will assume that the elements of harm for which plaintiffs may recover include personal injuries and property damage.

1. Implied Warranty as a Bridge to Strict Liability in the 1950s and Early 1960s

Strict products liability evolved out of two different bases of liability: negligence and implied warranty. Prior to recognition of strict products liability by American courts in the 1960s, each of these theories of liability had a "good news, bad news" quality for products plaintiffs. Thus, while the privity requirement had been eliminated in negligence cases by the 1940s, due mainly to Cardozo's opinion in MacPherson v. Buick Motor Co., discussed in Section A, supra, it remained necessary for plaintiffs to prove negligence. Res ipsa loquitur was frequently available, as in Escola v. Coca-Cola Bottling Co., reprinted in the preceding section. But even there the jury could, in any given instance, refuse to draw an inference of negligence from the mere fact of a product defect. Historically, an alternative method of recovery that required the plaintiff to establish only defect (not fault) was available. Plaintiff could bring an action for breach of the implied warranty of merchantability. Under the Uniform Sales Act and later under the U.C.C. §2-314(2)(c), accompanying every sale of goods (unless disclaimed) is a warranty that the product is "reasonably fit for the ordinary purposes for which such goods are used." Defective products satisfy the statutory definition of unmerchantability and provide a predicate for a cause of action. Very simply, the implied warranty of merchantability can be characterized as "strict liability in contract."

But along with the "good news" that accompanied Code warranties, the "bad news" was quite substantial. First, because the cause of action was contractual, privity between the parties was required. *MacPherson*, supra, dealt the death blow to privity in causes of action based on negligence. The privity doctrine remained very much alive, however, in cases involving implied warranties. Admittedly, plaintiffs could sue immediate sellers with whom they were in privity, such as retailers, for breach of implied warranty. However, this right was often a mirage. Retail sellers were often judgment-proof. In some cases they disclaimed liability as allowed by the U.C.C. §2-316. Furthermore, the U.C.C. statute of limitations provides for a maximum of four years from tender of delivery (sale), U.C.C. §2-725. By contrast, a tort statute of limitations generally runs from the time of injury, thus in many cases providing a longer time to bring suit.

The landmark decision that stripped the implied warranty action of its contractual impediments involved an action for breach of the implied warranty of merchantability. In Henningsen v. Bloomfield Motors, Inc., 161 A.2d 69 (N.J. 1960), plaintiff brought suit for injuries sustained when a new Plymouth that her husband had purchased two weeks earlier went out of control. Mrs. Henningsen was driving when she heard a loud noise "from the bottom, by the hood." It "felt as if something cracked." The steering wheel spun in her hands; the car veered sharply to the right and crashed into a highway sign and a brick wall. The trial judge dismissed negligence counts against Chrysler, the manufacturer of the car. The judge submitted the issue of breach of implied warranty of merchantability to the jury, which found against both the retailer and the manufacturer.

The auto manufacturer, Chrysler, appealed the verdict against it on the grounds that it was not in privity with the injured plaintiff. In striking down the privity defense the court said:

> Under modern conditions the ordinary layman, on responding to the importuning of colorful advertising, has neither the opportunity nor the capacity to inspect or to determine the fitness of an automobile for use; he must rely on the manufacturer who has control of

> its construction, and to some degree on the dealer who, to the limited extent called for by the manufacturer's instructions, inspects and services it before delivery. In such a marketing milieu his remedies and those of persons who properly claim through him should not depend "upon the intricacies of the law of sales. The obligation of the manufacturer should not be based alone on privity of contract. It should rest, as was once said, upon 'the demands of social justice.' " . . .
>
> Accordingly, we hold that under modern marketing conditions, when a manufacturer puts a new automobile in the stream of trade and promotes its purchase by the public, an implied warranty that it is reasonably suitable for use as such accompanies it into the hands of the ultimate purchaser. Absence of agency between the manufacturer and the dealer who makes the ultimate sale is immaterial. [161 A.2d at 83-84.]

We are pleased to report that either by judicial decision or through legislative enactment[2] lack of privity is no longer a viable defense in personal injury litigation. As we shall see in a later chapter, in cases involving pure economic loss the privity defense retains considerable vitality.

After clearing the way for plaintiff's recovery by eliminating privity as a requirement for suit, the *Henningsen* court went on to invalidate the disclaimer of tort liability that was part of the standard automobile contract of sale. We defer discussion of the efficacy of disclaimers to later in this book.

The *Henningsen* decision, as important as it was, sought to impose strict liability against manufacturers within the terminology framework of the Uniform Commercial Code. Only a short time elapsed before American courts recognized that the language used by the U.C.C. to talk about liability provided a clumsy tool to utilize for prosecuting personal injury cases. Only two years after *Henningsen*, the time had come to announce that strict liability was a purely tort doctrine. See Greenman v. Yuba Power Products, Inc., 377 P.2d 897 (Cal. 1962). As fate would have it, the task of authoring the landmark opinion accomplishing this change fell to Justice Traynor, whose concurrence in *Escola* earlier had urged the replacement of res ipsa loquitur with strict liability in tort:

> Although in these cases strict liability has usually been based on the theory of an express or implied warranty running from the manufacturer to the plaintiff, the abandonment of the requirement of a contract between them, the recognition that the liability is not assumed by agreement but imposed by law, and the refusal to permit the manufacturer to define the scope of its own responsibility for defective products make clear that the liability is not one governed by the law of contract warranties but by the law of strict liability in tort. Accordingly, rules defining and governing warranties that were developed to meet the needs of commercial transactions cannot properly be invoked to govern the manufacturer's liability to those injured by its defective products unless those rules also serve the purposes for which such liability is imposed.
>
> We need not recanvass the reasons for imposing strict liability on the manufacturer. They have been fully articulated in the cases cited above. The purpose of such liability is to insure that the costs of injuries resulting from defective products are borne by the manufacturers that put such products on the market rather than by the injured persons who are powerless to protect themselves. [Id. at 901.]

---

2. U.C.C. §2-318 (Alternative C) provides that both express and implied warranties extend "to any person who may reasonably be expected to use, consume, or be affected by the goods and who is injured in person by breach of the warranty."

2. *Adoption of §402A of the Restatement (Second) of Torts in 1965*

Rarely has a single provision of any Restatement of the law had a greater impact on courts than did the adoption in 1965 of the strict liability rule in §402A. And rarely has a single individual been so closely associated with the development of a legal doctrine as was Professor William Prosser with the development of strict products liability. In what are perhaps the two best-known law review articles on the subject, Prosser developed the reasoning leading up to, and immediately following, judicial recognition of strict privity-free liability. See William L. Prosser, The Assault upon the Citadel (Strict Liability to the Consumer), 69 Yale L.J. 1099 (1960); William L. Prosser, The Fall of the Citadel (Strict Liability to the Consumer), 50 Minn. L. Rev. 791 (1966). Prosser was in a unique position to predict the future path of American products liability law. As Reporter for the Restatement (Second) of Torts he played a leadership role in getting the American Law Institute to include a general strict products liability provision in its restatement of tort law. Based primarily on the *Greenman* decision, supra, and designated §402A, the new rule of strict tort liability was destined to dominate, and in some instances to confuse and confound, the law of products liability to the present day. See Kenneth S. Abraham, Prosser's *The Fall of the Citadel*, 100 Minn. L. Rev. 1823 (2016).

Restatement (Second) of Torts
(1965)

§402A. Special Liability of Seller of Product for Physical Harm to User or Consumer

(1) One who sells any product in a defective condition unreasonably dangerous to the user or consumer or to his property is subject to liability for physical harm thereby caused to the ultimate user or consumer, or to his property, if

(a) the seller is engaged in the business of selling such a product, and

(b) it is expected to and does reach the user or consumer without substantial change in the condition in which it is sold.

(2) The rule stated in Subsection (1) applies although

(a) the seller has exercised all possible care in the preparation and sale of his product, and

(b) the user or consumer has not bought the product from or entered into any contractual relation with the seller.

In Pulley v. Pacific Coca-Cola Bottling Co., 415 P.2d 636 (Wash. 1966), the plaintiff found a slimy cigarette in a new bottle of coke and became upset upon drinking it prior to that discovery. In her strict liability claim that followed, defendant Coca-Cola attempted to introduce evidence of their extreme care in trying to avoid such contamination, implying the cigarette must have entered the bottle post-sale. The trial court disallowed the evidence and the trial court entered judgment for plaintiff on a jury verdict. The Supreme Court of Washington affirmed, concluding that defendant's proof of due care was irrelevant and prejudicial in a strict liability.

3. Codification of the Strict Liability Rule in the Restatement (Third) of Torts in 1998

In 1992 the American Law Institute began the task of revising §402A by commissioning a project to write the Restatement (Third) of Torts: Products Liability. Two of the authors of this casebook were Reporters for the project, which was finally approved and promulgated in 1998. It provides a systematic formulation of American products liability in the familiar "black letter/comment" format. Courts have been reacting to the new Restatement since the late 1990s, for the most part favorably. It covers quite a bit more ground than §402A, and no court will adopt all of its provisions at once. Moreover, some of its provisions are controversial, and courts will differ in their reactions. We will include portions of it, where relevant, throughout these materials. Here are the first two sections, which serve as the linchpins for the entire Products Liability Restatement project.

Restatement (Third) of Torts: Products Liability
(1998)

---

§1. Liability of Commercial Seller or Distributor for Harm Caused by Defective Products

One engaged in the business of selling or otherwise distributing products who sells or distributes a defective product is subject to liability for harm to persons or property caused by the defect.

§2. Categories of Product Defect

A product is defective when, at the time of sale or distribution, it contains a manufacturing defect, is defective in design, or is defective because of inadequate instructions or warnings. A product:

(a) contains a manufacturing defect when the product departs from its intended design even though all possible care was exercised in the preparation and marketing of the product;

(b) is defective in design when the foreseeable risks of harm posed by the product could have been reduced or avoided by the adoption of a reasonable alternative design by the seller or other distributor, or a predecessor in the commercial chain of distribution, and the omission of the alternative design renders the product not reasonably safe;

(c) is defective because of inadequate instructions or warnings when the foreseeable risks of harm posed by the product could have been reduced or avoided by the provision of reasonable instructions or warnings by the seller or other distributor, or a predecessor in the commercial chain of distribution, and the omission of the instructions or warnings renders the product not reasonably safe.

COMMENT:

c. Manufacturing defects. As stated in Subsection (a), a manufacturing defect is a departure from a product unit's design specifications. More distinctly than any other type of defect, manufacturing defects disappoint consumer expectations. Common examples

of manufacturing defects are products that are physically flawed, damaged, or incorrectly assembled. In actions against the manufacturer, under prevailing rules concerning allocation of burdens of proof, plaintiff ordinarily bears the burden of establishing that such a defect existed in the product when it left the hands of the manufacturer.

Occasionally a defect may arise after manufacture, for example, during shipment or while in storage. Since the product, as sold to the consumer, has a defect that is a departure from the product unit's design specifications, a commercial seller or distributor down the chain of distribution is liable as if the product were defectively manufactured. As long as the plaintiff establishes that the product was defective when it left the hands of a given seller in the distributive chain, liability will attach to that seller. Such defects are referred to in this Restatement as "manufacturing defects" even when they occur after manufacture.

PROBLEM ONE

Your firm represents Hilda Brooks, age 58, in a products liability action against Zonar Manufacturing Co. Zonar manufactures surgical implants. Ms. Brooks underwent surgery on her leg about a year ago, during which her doctor implanted a surgical pin known as a Schneider intramedullary rod into her fractured bone to provide support and stabilization during the healing process. Ms. Brooks remained in a wheelchair for approximately six months after surgery and was then permitted to place partial weight on the affected leg, first while using a single crutch and later a cane. Several months after she began walking on the leg a routine X-ray revealed a break in the rod, which, according to one of the doctors, had probably occurred several days earlier.

Because of the breaking of the intramedullary rod, Ms. Brooks's doctors recommended surgery to correct the situation. As it turned out the breaking of the rod led the doctors to perform two separate operations. The first operation was not wholly successful and a second surgical intervention was necessary.

The case is in the midst of trial. Plaintiff presented the testimony of two metallurgists and a mechanical engineer. The metallurgists' analyses revealed the presence of various imperfections in the rod, including a small crack about a quarter-inch from the break, pitting on the surface of the rod, and inclusions (foreign objects in the steel). Their testimony indicated that any of these imperfections could have existed at the time the rod left the manufacturer and that their presence could initiate a crack in the metal and create areas of stress concentration, weakening the metal so that fatigue failure would occur at a stage considerably below the ordinary anticipated endurance level. It was the opinion of both metallurgists that, if the rod was properly designed for implantation in the human body and not bent prior to use, the failure resulted from a defect that existed at the time of manufacture. The mechanical engineer took measurements of the rod and of plaintiff, ascertained weight distribution, and determined the stress placed upon the rod in walking and in rising from a sitting position. Given the tensile strength of the rod and its endurance limit, the rod, in his opinion, could not have fractured unless a defect existed.

Defendant's expert, qualified both in the fields of metallurgy and mechanical engineering, testified that fracture of the rod occurred as a result of fatigue failure. Her extensive research in the field of implants had shown that because maximum stress occurs at the point of non-union of the bone, fatigue failure of the implant commonly occurs at that same point. It was this witness's opinion that the computations of

plaintiff's expert were inaccurate because, in determining the endurance limit of the implanted rod, consideration had not been afforded the additional stresses brought by muscle pull, which, in her experience, can surpass the stresses of bodily weight. She further testified that no defect existed in the rod; its failure, rather, resulted from the stress of a cyclic load over an extended period of time in the area of non-union of the bone.

Defendant's counsel, Robert Best, is seeking to bolster his expert's opinion by introducing the testimony of Allen Franklin, the director of quality control at Zonar. The trial judge excused the jury and heard Best's offer of proof. Best told the court that Franklin will testify that, unlike most quality control procedures that merely test random samples of the product to assure quality, Zonar submits every surgical implant to rigorous inspection which, Franklin insists, would have caught any defect.

Defendant's attempt to introduce this testimony came late this afternoon. Judge Moses decided to recess for the day and has requested both sides to brief the issue and to present her with memos in the morning.

The State of New California has adopted strict liability in tort. It has not specifically ruled on the issue of the admissibility of quality control techniques in a strict liability case. Mr. Young, the partner who is trying the case, has asked you to prepare a memo arguing against the admissibility of Franklin's testimony. Young also wants you to anticipate Best's arguments and prepare rebuttals to them.

4. Policy Objectives Supporting Strict Liability in Tort

The place to begin the analysis is with Justice Roger Traynor's concurrence in *Escola*, supra, the exploding Coke bottle case from California decided in 1944. You will recall that Traynor urged his colleagues to stop relying on res ipsa loquitur in favor of adopting strict liability in tort. It is worth setting forth his reasoning verbatim:

> . . . Even if there is no negligence, however, public policy demands that responsibility be fixed wherever it will most effectively reduce the hazards to life and health inherent in defective products that reach the market. It is evident that the manufacturer can anticipate some hazards and guard against the recurrence of others, as the public cannot. Those who suffer injury from defective products are unprepared to meet its consequences. The cost of an injury and the loss of time or health may be an overwhelming misfortune to the person injured, and a needless one, for the risk of injury can be insured by the manufacturer and distributed among the public as a cost of doing business. It is to the public interest to discourage the marketing of products having defects that are a menace to the public. If such products nevertheless find their way into the market it is to the public interest to place the responsibility for whatever injury they may cause upon the manufacturer, who, even if he is not negligent in the manufacture of the product, is responsible for its reaching the market. However intermittently such injuries may occur and however haphazardly they may strike, the risk of their occurrence is a constant risk and a general one. Against such a risk there should be general and constant protection and the manufacturer is best situated to afford such protection. [150 P.2d at 462.]

Several aspects of Justice Traynor's analysis may seem, at least at first glance, somewhat puzzling. First, he says responsibility should be fixed wherever it will reduce the hazards inherent in defective products. But doesn't a negligence rule, properly administered, achieve that risk-reduction objective? That is, doesn't the traditional negligence

rule require manufacturers to prevent all the defects that are worth preventing? How will strict liability improve on that situation? Another potential puzzlement arises in connection with Traynor's observation that, with respect to defects that do reach the market and cause harm despite the manufacturer's reasonable efforts at quality control, "the manufacturer is best situated to afford general and constant protection." What sort of protection does strict liability in tort afford the product purchaser who, on Traynor's assumption, has already been injured by the product defect?

PROBLEM TWO

Assume that a manufacturer distributes products that occasionally contain defects that cause injury. Quality control measures in the form of inspection for defects are available by which to reduce the incidence of defects, each successive measure costing more than the last. Without any inspection (quality control), 10 defect-caused accidents will occur per 100,000 product units, at an expected cost of $1,000/accident. Assume that the manufacturer's costs of investments in quality control and the corresponding reductions in accidents are reflected in the chart set forth in Table 1. Assume further that the only costs associated with manufacturing defects are those included in the chart and that negligent manufacturers are liable for "residual accident costs." How far would a rational manufacturer invest in quality control under a negligence rule perfectly and costlessly applied? How far, under strict liability? See if you can answer these questions using the data given in the chart in Table 1. Then fill in columns (6), (7), and (8), either to help reach the answers or to confirm their validity. Surprised? Might there even be an argument that a manufacturer will provide greater quality control under a negligence regime than under strict liability?

It is useful to consider the fairness implications of the move from negligence to strict liability. Under negligence, it will be recalled, accident victims bear the burden of insuring against the residual accident losses that are not worth avoiding. Under strict liability, manufacturers insure against those residual losses and pass on the insurance costs to purchasers as part of the prices paid for the products. Observe that the premiums charged for the insurance are priced on a pro-rata, per product basis. A rock star who buys a bottle of soda pays the same loss insurance premium as does a law student. And yet the loss insurance is worth much, much more to the rock star than to the typical law student. (Do you see why?) Under negligence, where each would-be victim buys his own insurance, the rock star pays much more in premiums, reflecting the fact that the rock star's insurance is worth much more. But under strict liability, both the rock star and the law student pay the same premium. In effect, under strict liability the law student subsidizes the rock star. Is this fair?

Table 1

reduction in flaw-caused accidents (per 100K prod's)	*(1) marginal accident cost reduction (per unit quality control)*	*(2) total accident cost reduction (cumulative)*	*(3) total residual accident costs (per 100K prod's)*	*(4) marginal costs of quality control (per unit quality control)*	*(5) total costs quality control (cumulative)*	*(6) total social costs of quality control and accidents*	*(7) total producer's cost (quality control and liability) under negligence*	*(8) total producer's costs (quality control and liability) under strict liability*
10 → 9	1,000	1,000	9,000	100	100			
9 → 8	1,000	2,000	8,000	300	400			
8 → 7	1,000	3,000	7,000	700	1,100			
7 → 6	1,000	4,000	6,000	1,200	2,300			
6 → 5	1,000	5,000	5,000	1,900	4,200			
5 → 4	1,000	6,000	4,000	2,800	7,000			
4 → 3	1,000	7,000	3,000	5,400	12,400			
3 → 2	1,000	8,000	2,000	11,000	23,400			

C. DEFECT AS THE LINCHPIN OF STRICT PRODUCTS LIABILITY

Strict liability for manufacturing defects is settled law in every jurisdiction in this country. This might lead you to think that products liability plaintiffs harmed by manufacturing defects "have got it made in the shade." Well, think again. While courts no longer require plaintiffs to show that a manufacturer was negligent in allowing a defect to escape into the stream of commerce, they continue to require plaintiffs to prove that a defect caused the accident and that the defect existed when the defendant sold or otherwise commercially distributed the product. Proving an "original defect" (a defect that existed at the time of original distribution) is as difficult now as it was back in Judge Traynor's day. To understand the role of defect as the linchpin of strict products liability, two questions must be answered: (1) What, exactly, makes a product defective? and (2) How does the plaintiff prove original defect? This section seeks to answer these questions.

1. What Makes a Product Defective? (The Conceptual Dimension)

Without defining the term "defect," §402A of the Restatement (Second) of Torts (1965) refers to "any product in a defective condition unreasonably dangerous to the user or consumer." What purpose does the "unreasonably dangerous" modifier serve? Consider the following case.

Cronin v. J.B.E. Olson Corp.
501 P.2d 1153 (Cal. 1972)

SULLIVAN, J.

In this products liability case, the principal question which we face is whether the injured plaintiff seeking recovery upon the theory of strict liability in tort must establish, among other facts, not only that the product contained a defect which proximately caused his injuries but also that such defective condition made the product unreasonably dangerous to the user or consumer. We have concluded that he need not do so. Accordingly, we find no error in the trial court's refusal to so instruct the jury. Rejecting as without merit various challenges to the sufficiency of the evidence, we affirm the judgment.

On October 3, 1966, plaintiff, a route salesman for Gravem-Inglis Bakery Co. (Gravem) of Stockton, was driving a bread delivery truck along a rural road in San Joaquin County. While plaintiff was attempting to pass a pick-up truck ahead of him, its driver made a sudden left turn, causing the pick-up to collide with the plaintiff's truck and forcing the latter off the road and into a ditch. As a result, plaintiff was propelled through the windshield and landed on the ground. The impact broke an aluminum safety hasp which was located just behind the driver's seat and designed to hold the bread trays in place. The loaded trays, driven forward by the abrupt stop and impact of the truck, struck plaintiff in the back and hurled him through the windshield. He sustained serious personal injuries.

The truck, a one-ton Chevrolet stepvan with built-in bread racks, was one of several trucks sold to Gravem in 1957 by defendant Chase Chevrolet Company (Chase), not a party to this appeal. Upon receipt of Gravem's order, Chase purchased the trucks from defendant J.B.E. Olson Corporation (Olson), which acted as sales agent for the assembled vehicle, the chassis, body, and racks of which were manufactured by three subcontractors. The body of the van contained three aisles along which there were welded runners extending from the front to the rear of the truck. Each rack held ten bread trays from top to bottom and five trays deep; the trays slid forward into the cab or back through the rear door to facilitate deliveries.

Plaintiff brought the present action against Chase, Olson and General Motors Corporation[3] alleging that the truck was unsafe for its intended use because of defects in its manufacture, in that the metal hasp was exceedingly porous, contained holes, pits and voids, and lacked sufficient tensile strength to withstand the impact. Defendants' answers denied the material allegations of the complaint and asserted the affirmative defense of contributory negligence. Subsequently, upon leave of court, the additional defense of assumption of the risk was asserted.

At the trial, plaintiff's expert testified, in substance, that the metal hasp broke, releasing the bread trays, because it was extremely porous and had a significantly lower tolerance to force than a non-flawed aluminum hasp would have had. The jury returned a verdict in favor of plaintiff and against Olson in the sum of $45,000 but in favor of defendant Chase and against plaintiff. Judgment was entered accordingly. This appeal by Olson followed.

Defendant attacks the sufficiency of the evidence to support the verdict and the trial court's instruction on strict liability. The challenge to the evidence is multi-pronged, claiming in effect that plaintiff produced no evidence on several essential issues. We first turn to this challenge, considering defendant's arguments in the order presented.

[The court concludes that the plaintiff introduced sufficient evidence to support the conclusion that the hasp was defective when originally supplied by the defendant. A collision of the sort involved here is reasonably foreseeable, and the hasp was intended to prevent what happened here. Plaintiff's expert testified that if the hasp had not been weak and porous, it would have prevented the plaintiff's injuries. The court next turns to the question of whether the trial judge erred in instructing the jury that it might find the hasp defective, and the defendant liable, without finding the hasp to have been unreasonably dangerous.]

The history of strict liability in California indicates that the requirement that the defect made the product "unreasonably dangerous" crept into our jurisprudence without fanfare after its inclusion in section 402A of the Restatement (Second) of Torts in 1965. The question raised in the instant matter as to whether the requirement is an essential part of the plaintiff's case is one of first impression.

We begin with section 402A itself. According to the official comment to the section, a "defective condition" is one "not contemplated by the ultimate consumer, which will be unreasonably dangerous to him." (Rest. 2d Torts, §402A, com. *g*.) Comment *i*, defining "unreasonably dangerous," states, "The article sold must be dangerous to an extent beyond that which would be contemplated by the ordinary consumer who purchases it, with the ordinary knowledge common to the community

3. Defendant General Motors Corporation, manufacturer of the chassis, was voluntarily dismissed by plaintiff prior to trial.

as to its characteristics." Examples given in comment *i* make it clear that such innocuous products as sugar and butter, unless contaminated, would not give rise to a strict liability claim merely because the former may be harmful to a diabetic or the latter may aggravate the blood cholesterol level of a person with heart disease. Presumably such dangers are squarely within the contemplation of the ordinary consumer. Prosser, the reporter for the Restatement, suggests that the "unreasonably dangerous" qualification was added to foreclose the possibility that the manufacturer of a product with inherent possibilities for harm (for example, butter, drugs, whiskey and automobiles) would become "automatically responsible for all the harm that such things do in the world." (Prosser, Strict Liability to the Consumer in California (1966) 18 Hastings L.J. 9, 23.)

The result of the limitation, however, has not been merely to prevent the seller from becoming an insurer of his products with respect to all harm generated by their use. Rather, it has burdened the injured plaintiff with proof of an element which rings of negligence. As a result, if, in the view of the trier of fact, the "ordinary consumer" would have expected the defective condition of a product, the seller is not strictly liable regardless of the expectations of the injured plaintiff. If, for example, the "ordinary consumer" would have contemplated that Shopsmiths posed a risk of loosening their grip and letting the wood strike the operator, another Greenman might be denied recovery. In fact, it has been observed that the Restatement formulation of strict liability in practice rarely leads to a different conclusion than would have been reached under laws of negligence.

Of particular concern is the susceptibility of Restatement section 402A to a literal reading which would require the finder of fact to conclude that the product is, first, defective and, second, unreasonably dangerous. A bifurcated standard is of necessity more difficult to prove than a unitary one. But merely proclaiming that the phrase "defective condition unreasonably dangerous" requires only a single finding would not purge that phrase of its negligence complexion. We think that a requirement that a plaintiff also prove that the defect made the product "unreasonably dangerous" places upon him a significantly increased burden and represents a step backward in the area pioneered by this court.

We recognize that the words "unreasonably dangerous" may also serve the beneficial purpose of preventing the seller from being treated as the insurer of its products. However, we think that such protective end is attained by the necessity of proving that there was a defect in the manufacture or design of the product and that such defect was a proximate cause of the injuries. Although the seller should not be responsible for all injuries involving the use of its products, it should be liable for all injuries proximately caused by any of its products which are adjudged "defective."

We can see no difficulty in applying [this] formulation to the full range of products liability situations, including those involving "design defects." A defect may emerge from the mind of the designer as well as from the hand of the workman.

Although it is easier to see the "defect" in a single imperfectly fashioned product than in an entire line badly conceived, a distinction between manufacture and design defects is not tenable.

The most obvious problem we perceive in creating any such distinction is that thereafter it would be advantageous to characterize a defect in one rather than the other category. It is difficult to prove that a product ultimately caused injury because a widget was poorly welded — a defect in manufacture — rather than because it was made of inexpensive metal difficult to weld, chosen by a designer concerned with

economy — a defect in design. The proof problem would, of course, be magnified when the article in question was either old or unique, with no easily available basis for comparison. We wish to avoid providing such a battleground for clever counsel. Furthermore, we find no reason why a different standard, and one harder to meet, should apply to defects which plague entire product lines. We recognize that it is more damaging to a manufacturer to have an entire line condemned, so to speak, for a defect in design, than a single product for a defect in manufacture. But the potential economic loss to a manufacturer should not be reflected in a different standard of proof for an injured consumer.

In summary, we have concluded that to require an injured plaintiff to prove not only that the product contained a defect but also that such defect made the product unreasonably dangerous to the user or consumer would place a considerably greater burden upon him than that articulated in *Greenman*. We believe the *Greenman* formulation is consonant with the rationale and development of products liability law in California because it provides a clear and simple test for determining whether the injured plaintiff is entitled to recovery. We are not persuaded to the contrary by the formulation of section 402A which inserts the factor of an "unreasonably dangerous" condition into the equation of products liability.

We conclude that the trial court did not err by refusing to instruct the jury that plaintiff must establish that the defective condition of the product made it unreasonably dangerous to the user or consumer.

The judgment is affirmed.

WRIGHT, C.J., MCCOMB, J., PETERS, J., TOBRINER, J., MOSK, J., and BURKE, J., concurred.

Some of the *Cronin* court's confidence that "unreasonably dangerous" is not necessary may lie in the relative ease with which manufacturing defects may be conceptualized. As reflected in all of the materials considered up to this point, manufacturing defects are imperfections in a few product units out of many, which cause the few units to fail dangerously during use. As we shall discover in later chapters dealing with liability for defective product design, courts encounter conceptual difficulties trying to construct objective legal standards of reasonableness with which to determine the adequacy of product designs.

The simple "imperfectly fashioned" and "departure from the intended design" definitions of "manufacturing defect" in *Cronin* and §2(a) of the Restatement (Third), respectively, raise interesting questions. For example, an anonymous critic of the Products Liability Restatement noted that liability would ensue under §2(a) if a defective connection of a wire in a car radio caused static and diverted the attention of the driver to fiddle with the dial, thus taking the driver's eye off the road and resulting in an accident. Was the critic right? Why were the Reporters so bullheaded in their insistence, with regard to manufacturing defects, that there be no requirement that the defect render the product "not reasonably safe?" And what about the buyer who finds a minor imperfection in the paint of his new automobile? Does he have a tort claim for having received a less-than-perfect, and therefore legally defective, product? Would a "not reasonably safe" requirement help sort out such claims?

2. *How Does the Plaintiff Prove Original Defect? (The Practical Dimension)*

One obvious way for a plaintiff to prove an original product defect is through the testimony of an expert who has examined the product and is able to opine that a defect at time of sale caused the accident. *Cronin*, supra, involved such testimony in connection with the failure of a metal hasp in a bread truck. Experts in that case examined the hasp and found the metal to be dangerously porous. This sort of direct evidence of original defect appears in many of the reported decisions in this and subsequent chapters. Even more important to plaintiffs is circumstantial proof of defect. Typically, the product malfunctions under circumstances that support an inference of original defect. The Products Liability Restatement addresses this phenomenon in the following way:

Restatement (Third) of Torts: Products Liability
(1998)

§3. Circumstantial Evidence Supporting Inference of Product Defect

It may be inferred that the harm sustained by the plaintiff was caused by a product defect existing at the time of sale or distribution, without proof of a specific defect, when the incident that harmed the plaintiff:

(a) was of a kind that ordinarily occurs as a result of product defect; and

(b) was not, in the particular case, solely the result of causes other than product defect existing at the time of sale or distribution.

COMMENT:

b. Requirement that the [harmful incident] be of a kind that ordinarily occurs as a result of product defect. The most frequent application of this Section is to cases involving manufacturing defects. When a product unit contains such a defect, and the defect affects product performance so as to cause a harmful incident, in most instances it will cause the product to malfunction in such a way that the inference of product defect is clear. From this perspective, manufacturing defects cause products to fail to perform their manifestly intended functions. Frequently, the plaintiff is able to establish specifically the nature and identity of the defect and may proceed directly under §2(a). But when the product unit involved in the harm-causing incident is lost or destroyed in the accident, direct evidence of specific defect may not be available. Under that circumstance, this Section may offer the plaintiff the only fair opportunity to recover.

When examination of the product unit is impossible because the unit is lost or destroyed after the harm-causing incident, a somewhat different issue may be presented. Responsibility for spoliation of evidence may be relevant to the fairness of allowing the inference set forth in this Section. In any event, the issues of evidence spoliation and any sanctions that might be imposed for such conduct are beyond the scope of this Restatement, Third, Torts: Products Liability. . . .

ILLUSTRATIONS:

1. John purchased a new electric blender. John used the blender approximately 10 times exclusively for making milkshakes. While he was making a milkshake, the blender suddenly shattered. A piece of glass struck John's eye, causing harm. The incident resulting in harm is of a kind that ordinarily occurs as a result of product defect.
2. Same facts as Illustration 1, except that John accidentally dropped the blender, causing the glass to shatter. The product did not fail to function in a manner supporting an inference of defect. Whether liability can be established depends on whether the plaintiff can prove a cause of action under §§1 and 2 [based on direct proof of defect].

c. No requirement that plaintiff prove what aspect of the product was defective. The inference of defect may be drawn under this Section without proof of the specific defect. Furthermore, quite apart from the question of what type of defect was involved, the plaintiff need not explain specifically what constituent part of the product failed. For example, if an inference of defect can be appropriately drawn in connection with the catastrophic failure of an airplane, the plaintiff need not establish whether the failure is attributable to fuel-tank explosion or engine malfunction.

d. Requirement that the incident that harmed the plaintiff was not, in the particular case, solely the result of causes other than product defect existing at the time of sale. To allow the trier of fact to conclude that a product defect caused the plaintiff's harm under this Section, the plaintiff must establish by a preponderance of the evidence that the incident was not solely the result of causal factors other than defect at time of sale. The defect need not be the only cause of the incident; if the plaintiff can prove that the most likely explanation of the harm involves the causal contribution of a product defect, the fact that there may be other concurrent causes of the harm does not preclude liability under this Section. But when the harmful incident can be attributed solely to causes other than original defect, including the conduct of others, an inference of defect under this Section cannot be drawn.

Evidence may permit the inference that a defect in the product at the time of the harm-causing incident caused the product to malfunction, but not the inference that the defect existed at the time of sale or distribution. Such factors as the age of the product, possible alteration by repairers or others, and misuse by the plaintiff or third parties may have introduced the defect that causes harm.

ILLUSTRATION:

6. While driving a new automobile at high speed one night, Driver drove off the highway and crashed into a tree. Driver suffered harm. Driver cannot remember the circumstances surrounding the accident. Driver has brought an action against ABC Company, the manufacturer of the automobile. Driver presents no evidence of a specific defect. However, Driver's qualified expert presents credible testimony that a defect in the automobile must have caused the accident. ABC's qualified expert presents credible testimony that it is equally likely that, independent of any defect, Driver lost control while speeding on the highway. If the trier of fact believes the testimony of Driver's expert, then an inference of defect may be established under this Section. If, however, ABC's expert is believed, an inference of product defect may not be drawn

under this Section because Driver has failed to establish by a preponderance of the evidence that the harm did not result solely from Driver's independent loss of control at high speed.

Speller v. Sears, Roebuck & Co.
790 N.E.2d 252 (N.Y. 2003)

GRAFFEO, J.

In this products liability case, [the trial court denied defendants' motion for summary judgment and defendants brought an interlocutory appeal to the Appellate Division, which reversed and] granted summary judgment dismissing plaintiffs' complaint. Because we conclude that plaintiffs raised a triable issue of fact concerning whether a defective refrigerator caused the fire that resulted in plaintiffs' injuries, we reverse and reinstate the complaint against these defendants.

Plaintiffs' decedent Sandra Speller died in a house fire that also injured her seven-year-old son. It is undisputed that the fire originated in the kitchen. Plaintiffs commenced this action against Sears, Roebuck and Co., Whirlpool Corporation and the property owner alleging negligence, strict products liability and breach of warranty. Relevant to this appeal, plaintiffs asserted that the fire was caused by defective wiring in the refrigerator, a product manufactured by Whirlpool and sold by Sears. After discovery, defendants Sears and Whirlpool moved for summary judgment seeking dismissal of the complaint. Relying principally on a report issued by the New York City Fire Marshal, defendants rejected the refrigerator as the source of the fire, instead contending that a stovetop grease fire was the cause of the conflagration. Thus, they argued that their product was outside the chain of causation that resulted in plaintiffs' damages.

In opposition to defendants' motion for summary judgment, plaintiffs submitted excerpts from the depositions of two experts and an affidavit from a third, as well as other materials. Plaintiffs' experts refuted the conclusions reached in the Fire Marshal's report, opining that the fire started in the upper right quadrant of the refrigerator, an area with a concentration of electrical wiring. All three rejected the stove as the source of the fire. Plaintiffs also submitted portions of the deposition of a Whirlpool engineer retained as an expert by defendants. Although the engineer disputed that the fire originated in the refrigerator, he acknowledged that a fire would not occur in a refrigerator unless the product was defective.

Supreme Court denied defendants' request for summary judgment, holding that plaintiffs' submissions raised a triable issue of fact as to whether the fire was caused by a defect in the refrigerator. The Appellate Division reversed and granted the motion, dismissing the complaint as against Sears and Whirlpool. The Court reasoned that defendants' evidence suggesting an alternative cause of the fire shifted the burden to plaintiffs to come forward with specific evidence of a defect. Characterizing the submissions of plaintiffs' experts as "equivocal," the Court concluded that plaintiffs failed to satisfy their burden of proof to withstand summary judgment. (294 A.D.2d 349, 350 [2002].) This Court granted plaintiffs leave to appeal. . . .

In this case, plaintiffs' theory was that the wiring in the upper right quadrant of the refrigerator was faulty, causing an electrical fire which then spread to other areas of the kitchen and residence. Because that part of the refrigerator had been consumed

in the fire, plaintiffs noted that it was impossible to examine or test the wiring to determine the precise nature of the defect. Thus, plaintiffs sought to prove their claim circumstantially by establishing that the refrigerator caused the house fire and therefore did not perform as intended.

New York has long recognized the viability of this circumstantial approach in products liability cases. . . . In order to proceed in the absence of evidence identifying a specific flaw, a plaintiff must prove that the product did not perform as intended and exclude all other causes for the product's failure that are not attributable to defendants. . . . In this regard, New York law is consistent with the Restatement, which reads: [The court sets out §3, supra.]

Here, in their motion for summary judgment, defendants focused on the second prong of the circumstantial inquiry, offering evidence that the injuries were not caused by their product but by an entirely different instrumentality — a grease fire that began on top of the stove. This was the conclusion of the Fire Marshal who stated during deposition testimony that his opinion was based on his interpretation of the burn patterns in the kitchen, his observation that one of the burner knobs on the stove was in the "on" position, and his conversation with a resident of the home who apparently advised him that the oven was on when the resident placed some food on the stovetop a few hours before the fire.

In order to withstand summary judgment, plaintiffs were required to come forward with competent evidence excluding the stove as the origin of the fire. To meet that burden, plaintiffs offered three expert opinions: the depositions of an electrical engineer and a fire investigator, and the affidavit of a former Deputy Chief of the New York City Fire Department. Each concluded that the fire originated in the refrigerator and not on the stove.

In his extensive deposition testimony, the electrical engineer opined that the fire started in the top-right-rear corner of the refrigerator, an area that housed the air balancing unit, thermostat, moisture control and light control. He stated that the wiring in this part of the appliance had been destroyed in the fire, making it impossible to identify the precise mechanical failure and, thus, he could only speculate as to the specific nature of the defect. He testified that the "most logical probability" was that a bad connection or bad splice to one of the components in that portion of the unit caused the wire to become "red hot" and to ignite the adjacent plastic. He tested the combustibility of the plastic and confirmed that the "plastic lights up very easily, with a single match" and continues to burn like candle wax. The engineer observed that the doors of the refrigerator were "slightly bellied out," indicating they were blown out from the expanding hot gases inside the refrigerator. The wall behind the refrigerator was significantly damaged and the upper right quadrant was burned to such a degree that it was not likely to have been caused by an external fire. Interpreting the burn patterns differently from the Fire Marshal, the electrical engineer found that the cabinets above the stove, although damaged, were not destroyed to the extent he expected to find if there had been a stovetop grease fire.

Plaintiffs' fire investigator similarly opined that the fire originated in the refrigerator's upper right corner, in part basing his conclusion on his observations of the scene three days after the fire and his examination of the appliances. He also interviewed a witness to the fire. He testified that he eliminated the stove as the source of the fire after his examination of that appliance and the cabinets above it. Contrary to the testimony of the Fire Marshal, he observed that all of the burner knobs on the stove were in the same position, either all "off" or all "on." He further examined the burn patterns,

noting that if the blaze had been caused by a grease fire on the stove, the cabinets directly above would have been consumed in the fire. Instead, they were merely damaged. He acknowledged that he did not know exactly how the fire started inside the refrigerator but indicated he suspected there had been a poor connection in the wiring that caused the wire to smolder until it ignited the highly combustible foam insulation inside the unit.

The former Deputy Chief of the New York City Fire Department asserted in his affidavit that the "fire damage to the area around the refrigerator when compared to that of the stove clearly shows the longer and heavier burn at the refrigerator," indicating the fire originated there. He also stated that he had ruled out all other possible origins of the fire. Upon review of these expert depositions and affidavit, we conclude that plaintiffs raised a triable question of fact by offering competent evidence which, if credited by the jury, was sufficient to rebut defendants' alternative cause evidence. In other words, based on plaintiffs' proof, a reasonable jury could conclude that plaintiffs excluded all other causes of the fire.

We therefore disagree with the Appellate Division's characterization of plaintiffs' submissions as equivocal. Plaintiffs' experts consistently asserted that the fire originated in the upper right quadrant of the refrigerator and each contended the stove was not the source of the blaze. Both parties supported their positions with detailed, nonconclusory expert depositions and other submissions which explained the bases for the opinions.

Defendants contend that after they came forward with evidence suggesting an alternative cause of the fire, plaintiffs were foreclosed from establishing a product defect circumstantially but were then required to produce evidence of a specific defect to survive summary judgment. We reject this approach for two reasons. First, such an analysis would allow a defendant who offered minimally sufficient alternative cause evidence in a products liability case to foreclose a plaintiff from proceeding circumstantially without a jury having determined whether defendant's evidence should be credited. Second, it misinterprets the court's role in adjudicating a motion for summary judgment, which is issue identification, not issue resolution. Where causation is disputed, summary judgment is not appropriate unless "only one conclusion may be drawn from the established facts" (Kriz v. Schum, 75 N.Y.2d 25, 34 [1989]). That is not the case here where plaintiffs directly rebutted defendants' submissions with competent proof specifically ruling out the stove as the source of the blaze. Because a reasonable jury could credit this proof and find that plaintiffs excluded all other causes of the fire not attributable to defendants, this case presents material issues of fact requiring a trial.

Accordingly, the order of the Appellate Division should be reversed, with costs, and the motion of defendants Sears, Roebuck and Co. and Whirlpool Corporation for summary judgment denied.

. . .

Chief Judge KAYE and Judges SMITH, CIPARICK, WESLEY, ROSENBLATT and READ concur.

Order reversed, etc.

The issue of circumstantial proof in *Speller* continues to arise in products litigation. In Bradley v. Earl B. Feiden, Inc., 864 N.E.2d 600 (N.Y. 2007), the plaintiff offered expert testimony to prove that a kitchen fire originated in his three-week-old refrigerator and that, specifically, a defective defrost timer in the refrigerator caused the fire. The defendant's experts excluded the defrost timer as the cause and suggested that an electric can opener started the blaze. The plaintiff's experts ruled out the can opener theory. In response to special interrogatories, the jury found that the fire started in the refrigerator and not the can opener, but also found that, although the defrost timer did not cause the refrigerator fire, some other defect in the refrigerator did cause it. After judgment on the jury verdict for the plaintiff, the defendant appealed, arguing, in part, insufficiency of plaintiff's proof. The New York Court of Appeals affirmed the judgment for plaintiff. Even though the jury rejected the specific defrost timer claim, a reasonable jury could still have found that the fire started in the refrigerator and that an unspecified defect in the refrigerator must have caused the fire.

In Z.C. v. Wal-Mart Stores, Inc., 574 F. App'x 52 (2d Cir. 2014), the young plaintiff dropped a BB gun that discharged and caused harm to his right eye. After the accident, plaintiff's father destroyed the gun, and another BB gun that plaintiff also was playing with, preventing experts from determining which gun had discharged or what defect caused the discharge. The trial court granted summary judgment for the defendant seller and the court of appeals affirmed. Evidence that the guns were not new and had been used roughly prior to the accident undermined plaintiff's attempt to argue that the defect originated at the time of original sale by defendant. See also Farkas v. Addition Manufacturing Technologies, LLC, 952 F.3d 944, 947 (8th Cir. 2020) (plaintiff's strict liability claim against machine manufacturer fails: "During the machine's life, the original guard was lost. Without proof of the sufficiency of the original guard, [plaintiff] cannot show that it was defective at the time of sale.").

A plaintiff may introduce evidence of similar product failures in other product units as probative of the alleged manufacturing defect in the product in question. In deciding whether to admit evidence of other accidents, trial courts consider the degree of similarity between the accidents and the potential for undue prejudice and jury confusion. See Nissan Motor Co. v. Armstrong, 145 S.W.3d 131 (Tex. 2004). In *Armstrong*, the plaintiff alleged that a throttle defect caused an accident. The trial court admitted into evidence Nissan's database of 757 customer complaints involving unintended acceleration of its ZX sports cars and entered judgment on a plaintiff's verdict. The intermediate court affirmed, deeming the evidence probative of the throttle defect alleged by plaintiff. The Supreme Court of Texas reversed, ruling that the unsworn, unsubstantiated records of similar but not identical incidents were of limited probative value and unduly prejudicial. Accord Achtar v. Toyota Motor Corp., 2008 WL 1919573 (Ky. Ct. App. 2008). Courts are more likely to admit evidence of other incidents that involve equivalent circumstances. See Nelson v. Stanley Works, No. C902436, 2004 WL 2094374, at *5 (Minn. Ct. App. 2004) (testimony regarding a second tool of the same model, used in the same manner, manufactured at the same plant, and broken in a similar manner to an allegedly defective power tool was relevant and admissible to show a manufacturing flaw); Sparks v. Mena, 294 S.W.3d 156 (Tenn. Ct. App. 2008) (evidence of failure of safety shield on surgical knife was supported by 18 similar failures when safety shield failed to close and thus caused injury to surgical patients; that the manufacturer found no defect when the surgical knives were returned for inspection does not bar their use as evidence).