

1953

# Jack Aldon Hewitt v. The General Tire and Rubber Co. : Brief of Respondent

Utah Supreme Court

Follow this and additional works at: [https://digitalcommons.law.byu.edu/uofu\\_sc1](https://digitalcommons.law.byu.edu/uofu_sc1)



Part of the [Law Commons](#)

Original Brief submitted to the Utah Supreme Court; funding for digitization provided by the Institute of Museum and Library Services through the Library Services and Technology Act, administered by the Utah State Library, and sponsored by the S.J. Quinney Law Library; machine-generated OCR, may contain errors.

Stewart, Cannon & Hanson; Attorneys for Respondent;

---

## Recommended Citation

Brief of Respondent, *Hewitt v. General Tire and Rubber Co.*, No. 8038 (Utah Supreme Court, 1953).  
[https://digitalcommons.law.byu.edu/uofu\\_sc1/2043](https://digitalcommons.law.byu.edu/uofu_sc1/2043)

This Brief of Respondent is brought to you for free and open access by BYU Law Digital Commons. It has been accepted for inclusion in Utah Supreme Court Briefs (pre-1965) by an authorized administrator of BYU Law Digital Commons. For more information, please contact [hunterlawlibrary@byu.edu](mailto:hunterlawlibrary@byu.edu).

ugm

RECEIVED

IN THE SUPREME COURT

APR 12 1954

LAW LIBRARY  
U. of U.

of the

STATE OF UTAH

JACK ALDON HEWITT,  
*Plaintiff and Appellant,*  
— vs. —  
THE GENERAL TIRE AND RUB-  
BER COMPANY, a Corporation,  
*Defendant and Respondent.*

Case No.  
8038

BRIEF OF RESPONDENT

FILED

APR - 12 1954

STEWART, CANNON & HANSON,  
*Attorneys for Respondent.*

Clerk, Supreme Court, Utah

# INDEX

	Page
NATURE OF THE CASE.....	1
STATEMENT OF FACTS.....	3
STATEMENT OF POINTS.....	19
POINT NO. 1. APPELLANT HAS THE BURDEN OF PROVING NEGLIGENCE ON THE PART OF RE- SPONDENT WHICH IS A PROXIMATE CAUSE OF THE INJURIES TO THE APPELLANT.....	19
POINT NO. 2. APPELLANT HAS THE BURDEN OF SHOWING THAT THE NEGLIGENCE OF THE MANUFACTURER WAS THE PROXIMATE CAUSE OF THE EVENT OR ACCIDENT OUT OF WHICH THE INJURIES AROSE .....	19
POINT NO. 3. APPELLANT DID NOT PROVE RE- SPONDENT GUILTY OF NEGLIGENCE WHICH WAS THE PROXIMATE CAUSE OF THE APPEL- LANT'S INJURY .....	19
ARGUMENT .....	19
POINT NO. 1. ....	19
POINT NO. 2. ....	26
POINT NO. 3. ....	29
CONCLUSION .....	34

## INDEX OF CASES

Baker v. B. F. Goodrich Co., 252 Pac. (2d) 24.....	30
Davlin v. Henry Ford & Son, 20 Fed. (2d) 317.....	22
General Motors Corporation v. Johnson, 137 Fed. (2d) 320.....	30
Hooper v. General Motors Corporation, (Utah) 260 Pac. (2d) 549 .....	30
Johnson v. Union Furniture Co., 31 Cal. App. (2d) 234, 87 Pac. (2d) 917 .....	26
MacPherson v. Buick Motor Co., 217 N.Y. 382, 111 N.E. 1050.....	19-30
Poore v. Edgar Bros. Co., (Cal.) 90 Pac. (2d) 808.....	26
Reusch v. Ford Motor Co., 196 Wash. 213, 82 Pac. (2d) 556.....	24
Rotche v. Buick Motor Co., 358 Ill. 507, 193 N.E. 529.....	24
Sheward, et al v. Virtue, 120 Pac. (2d) 142.....	23-33
Spencer v. Madsen, 142 Fed. (2d) 820.....	30
Youtz v. Thompson Tire Co., (Cal.) 116 Pac. (2d) 636.....	27

## TEXTS

Restatement of Torts, Section 395.....	20
164 A.L.R. 599 .....	21

IN THE SUPREME COURT  
of the  
STATE OF UTAH

---

JACK ALDON HEWITT,

*Plaintiff and Appellant,*

— vs. —

THE GENERAL TIRE AND RUB-  
BER COMPANY, a Corporation,

*Defendant and Respondent.*

Case No.  
8038

---

BRIEF OF RESPONDENT

---

NATURE OF THE CASE

This action was brought by the appellant, Jack Aldon Hewitt, against the Wheeler General Tire Company and the General Tire and Rubber Company to recover for injuries alleged to have been received when a tire which was being mounted on a wheel by the appellant exploded. The seller of the tire was the Wheeler General Tire Company and the manufacturer of the tire was the General Tire and Rubber Company.

The complaint alleged in substance that the tire was defective and that the defendants knew, or should have known, of its defective condition and were negligent in

selling or allowing the tire to come into the hands of the appellant in such defective condition (R. 1 and 2).

In the second count of the complaint, appellant alleged that the defendants warranted the tire to be free from latent and hidden defects. This part of the complaint was ordered stricken by the District Court. No appeal was taken from this order (R. 7).

During the course of the trial, the action against the seller, Wheeler General Tire Company, was voluntarily dismissed by appellant.

At the conclusion of the trial, the respondent, General Tire and Rubber Company, moved the court for a directed verdict upon the ground there was no evidence that respondent was guilty of any negligence (R. 444-446). This motion was taken under advisement and the case submitted to the jury.

The jury returned a verdict in favor of the appellant, which was set aside by the trial judge upon the grounds that the "evidence introduced by the plaintiff as a matter of law failed to show that the defendant was guilty of any negligence proximately causing plaintiff's alleged injuries," and, "that the evidence is insufficient to sustain or justify the verdict of the jury." Judgment of no cause of action in favor of the defendant against the plaintiff was then entered in the case (R. 67-68).

The question presented by this appeal is: Did the appellant prove by a preponderance of the evidence that the tire was defective at the time it left respondent's factory; that respondent knew, or in the exercise of reasonable care should have known, that the tire was

defective; and, if so, that respondent's negligence was the sole proximate cause of appellant's injuries?

## STATEMENT OF FACTS

The evidence shows that the tire had been purchased from the Wheeler General Tire Company by the Granite Furniture Company in December 1950, about a year and a half prior to the date of the accident (R. 133, R. 1), and that it had been in that company's custody from that time (R. 134). On July 2, 1952, an employee of the Granite Furniture, LeRoy Murphy, delivered the tire to the appellant's service station to have it mounted on the wheel of a truck belonging to that company (R. 139). In mounting the tire, the appellant bounced the tire, inspected it from all angles and cleaned it out with an air hose (R. 172). At that time, he found the tire "was sound and there weren't any appearances of breaks or deviations in the casing." (R. 173). The appellant put the bottom side of the tire on the rim or wheel by forcing the wheel into the tire, or the tire onto the rim with his foot and a rubber mallet. He inserted the tube and pounded the top side on the rim (R. 174). He then proceeded to fill the tire with air whereupon it exploded (R. 180). No soap was used to lubricate the rim, although it is testified that this is a standard procedure which is used to make the bead of a tire slip onto the rim more easily (R. 214-215, 268).

An examination after the tire explosion revealed that the wire strands in the beading of the tire were broken (R. 125-126) (Exhibits 7, 8, 9, 10), and that there was a tear in the side of the tube (Exhibit 17). An



examination of the tube (Exhibit 17) will reveal that there was no valve core in the tube. The tire was filled from an air tank in which the air pressure is maintained automatically at a maximum pressure of 175 pounds. A tire of the same design and construction as Exhibit 7, by experimentation, was found to be capable of resisting an air pressure of 155 pounds before the beading broke (R. 276).

The beading of a tire is that part of the tire which fits next to the rim and goes around the perimeter of the tire and forms the seal between the rim and the tire. The beading contains wires, each with a minimum breakage strength of 290 pounds. The number of wires used depends upon the size of the tire and the type of service for which the tire is designed. This particular tire contained five turns of four wires, making a total of twenty wires. The diameter of the tire at the base of the beading is  $1/32$  of an inch smaller than the flange portion of the rim where the bead is designed to fit. In addition, the beading tapers  $7\frac{1}{2}$  degrees so that when the beading is on the back of the edge of the rim, the rubberized material will compress tightly against the bead seat of the rim to eliminate the possibility of the tire moving on the rim and the tube getting under the beading (R. 322-323). The tube is purely the air container. The tube rim and tire casing constitute a wall which supports the air force inside, which in turn supports the automobile (R. 273).

X-rays of the tire taken by Dr. William R. Christensen, Professor of Radiology at the University of Utah

Medical School, and Director of X-ray of the Salt Lake General Hospital, showed that the wires in the beading of the tire were intact throughout the circumference of the tire, except for the area in which the break occurred (R. 149). At the point where the wires in the beading were broken, there was a necking, or a diminution in the diameter of the bead wires. The X-rays also showed the break in the beading of the tire occurred where the wires in the beading had made a complete circle of the tire and come together and overlapped (R. 150).

William F. Hoelzer, Manager of Technical Service for the General Tire and Rubber Company testified that a tire similar in construction with Exhibit 7 was mounted on a rim in the same manner as the tire in question and filled with air to a point where it exploded. At 80 pounds pressure, the last bead went back into place. At 155 pounds pressure, the beading broke, allowing the tube to come around the edge of the rim, whereupon an explosion occurred (R. 335).

Upon a comparison of the X-rays of both tires, it was found that the beading in the experimental tire broke at approximately the same spot as in Exhibit 7 (R. 338) (Exhibits 14 and 16). In the wire contained in the beading of both tires, there was a necking, or a reduction in the diameter of the tire at the point of the break. Mr. K. D. Smith, Vice-President of National Standards Company, the company which manufactures beading wire for the respondent, testified from tests made upon similar wire, that as pressure is applied to break the wire by pulling it apart, the wire stretches and elongates to the



extent that when it breaks, there is a thinning down, or a reduction in the diameter of the wire at the point of the break (R. 380, 386, 156). This is illustrated by Exhibit 30, which is a photo of wires broken first by pulling the wires apart, and second by air pressure.

Returning for a moment to the experiment performed on a similar tire by Mr. Hoelzer, Mr. Hoelzer testified that after the beading in the experimental tire had been broken, he inserted a new tube in the tire and refilled the broken tire with air. Even though the wires in the beading of the experimental tire were broken, it required 53 pounds of air pressure to force the tire over the rim and cause the tube to blow out (R. 339). Based on these X-rays and experiments, Mr. Hoelzer testified that it was his opinion that the breaking of the wires in the beading of Exhibit 7 was caused by air pressure (R. 340).

An examination of the X-rays of the tire in question disclosed that there was no kinking of the wires in the beading at the point of the break (R. 153-157). Mr. K. D. Smith testified that he had taken pictures of broken beads where the wires had first been bent or kinked. He testified that under such circumstances, the break in the beading did occur before the wires in the beading had been straightened out, and that the wires did return to their former position, "the position of showing the bend," in much the same manner as a spring upon being stretched, returns to its original position. He examined Exhibit 14 and found no evidence of the wires having been kinked (R. 386-388). Mr. Hoelzer reviewed the

method used by the respondent in the manufacture of tires at its plants throughout the country, including the plant in Waco, Texas, where this tire was manufactured (R. 345). Beginning on page 324 of the record, he testified:

"A The wire comes on large reels, about three feet in diameter, and that is an individual wire, a continuous wire on that reel. And those reels weigh, the wire on the reels weigh between six and seven hundred pounds. Now, depending upon the number of individual strands of wire that we are going to put into the bead, we have the reels spaced so that we can take wires off of each individual reel. Now there are four reels of wire which are all on hubs so that they will turn. Now if we were going to make a bead that had five wires or six wires or seven wires or eight wires we would just take wire off of that many more reels. These wires come from these reels through a guiding die and then pass through, this would be a die opening for these wires and then are parallel and pass through a die which is at the end of a rubber extruding machine. Now a rubber extruding machine is similar to a sausage in which rubber stock is fed and it is forced out through a die which has small openings. The die enlarged would look like this for four strand wire so that the insulation then is placed onto the four strands and then is one solid mass similar to the sample which I passed around. From here—and I am drawing this not exactly in perspective but diagramatic—then it goes onto, goes through a festoon, a festoon keeps the supply of wire on hand before it goes into a winding machine. The diameter of this bead is very important. It depends upon the diameter of this bead as to just how it will fit into

the tire so that it will have its proper compression during the cure around the bead to give it ultimate strength. Now this goes on to a pre-determined diameter form which goes around in this particular case five times, and then is automatically cut off. It starts here and is cut off here so that then we wind up with an uncured tire bead which is, as I hold in my hand here, the top edge of the insulated wire is fastened down with a light piece of friction fabric."

He continued on page 326:

"A Then the next step is to further reinforce the bead with what is known as a flipper strip and in this particular tire the flipper strip is three and one half inches wide and completely surrounds the wrapped, insulated wire bead and the edges have been staggered so that they do not come together at the same point. And this bead is made only in this particular way to demonstrate it because the bead is completely wrapped and this flipper is continuous for the entire length, but for a matter of demonstration I have left this opened.

"Q Now, Mr. Hoelzer, will you tell us just how that bead is integrated into the fabric of the tire?

"A Today all tires are built on what is known as tire building drums. In years gone past tires were built on cores which had the shape of the inside of a tire, but today they are built on flat building drums, of approximately that shape. Now the plies of the tires are first laid onto the building drum and this, I should explain, is barrel-shaped and what I am showing here is only a section of it without completing the other half section. Then—the second ply of the tire is laid on and this

is a six-ply tire similar to the tire in question. The next ply of the tire is put on and hangs down during the process of the building. Now we have four plys which represents the width of the section of the tire and then the bead with this flipper and wrap is placed in this position. Now the wire, the flipper being the outside and the wrap on the inside and in here we have our five turns of four strands of wire. To save a little time I won't complete this other side. But after this is placed on there these plys are brought up around to tie the bead into the tire. Then two more plys are put onto the tire. These plys here hang down a little farther and after putting these points here so you can see where they fit and the six plys more or less meet the first and second plys of the tire. The third and fourth plys of the tire completely surrounding the bead with the flipper reinforcement. Then the next operation is to put a breaker strip onto the tire which is open-weave core fabric which is immediately under the tread of the tire, or when you wear down into the first fabric you usually wear into the breaker strip which is in the tire. Then a piece of square woven fabric which has been rubberized, similar to and the same material as this flipper reinforcement slip is put onto the outside of the tire and brought around where it covers around farther than where the first and second plys end and where the fifth and sixth plys end and then, finally, the uncured shred rubber is placed onto the tire. Now I haven't allowed very much for the width of the tire to show all of these details but that, essentially, is the method of manufacture or the building of the uncured tire."

As to the inspections of the tire which were made by the respondent during the course of the manufacturing

of the tire, Mr. Hoelzer testified on page 327 of the record:

“Q Now, Mr. Hoelzer, I will ask you whether or not any inspection is made of that bead by the company before that flap is placed around it there? Those treads, plys are placed around there, I should say.

“A The beads get an inspection which is after they are wound. They are checked on a gauge for template fit to make sure they are the right diameter, put over a tapered gauge before they are sent to have the bead wrap applied. After the bead wrap has been applied, they are then inspected to make sure that the wrap completely covers the insulated wire and then the flipper is applied on the machine which rolls as it goes around, it just rolls this flipper on and puts this flare-up into it, which is necessary in order that it properly fits over the contour of the building drum.”

He continued on page 344:

“A I will put the tire up here to be more in a position as it is coming along in this slowly moving conveyor and, as I say, as I stated previously there is a hook which is suspended onto the conveyor track in which there is a spool in which this tire sets. The inspector takes this tire with each hand and goes around, like this, to examine the inside of the tire and at the same time puts force on both beads of the tire. The next operation is to go to the outside of the tire and to examine that for defects. Then the sides of the tire are examined all the way around and the inspector then puts his stamp of approval or, if the tire does not pass the inspection, he removes the tire from the hook and puts it onto a pile along side which passes on



to another department for further investigation.”

On page 345 of the record he testified :

“Q When is the wire that goes into this bead first inspected?

“A Every roll that comes into our plant has been tested for our specifications.

“Q In other words, you take a piece of steel from a roll and test that, is that correct?

“A That’s right.

“Q You don’t test the entire roll?

“A No sir.

“Q Is the entire roll examined to see if there are any defects of the wire?

“A There is a supervisory examination of the wire as it leaves the roll by the inspector.

“Q In other words, there is an inspector standing by that observes this wire as it leaves this roll?

“A The man that places the rolls, the rolls of wire on to the stand, observes that.”

On page 356 of the record he testified :

“A After the bag has been removed the tire is then trimmed of the various overflow vents and at the point of register of the halves of the mold placed on a hook and sent to the final, to the painting and final inspection departments.

“Q And the tire there is painted?

“A The tire is inspected and then painted, labeled and sent to the warehouse.”

As to the manner in which the wire which goes into

the heading, is manufactured, Mr. K. D. Smith testified beginning on page 376:

"A The high points of this specification covers size, method of testing, the wire is not to be less than .037 in diameter. All tests on this wire are made on specimens which have been heated for one hour at three hundred degrees Fahrenheit. The individual wires must have a minimum strength of two hundred and ninety pounds, which is total tensile strength of two hundred and seventy thousand pounds per square inch.

"Q What do you mean by 'tensile strength'? Can you elaborate on that for the benefit of all of us?

"A Tensile strength is the strength it would take to break after the wire is placed in jaws. It is tested, the individual wires are tested on a Scott machine with the jaws moving apart about one inch, one to two inches a minute. We have to regulate the speed so that each test is identical.

"Q That is per square inch of wire, is that right?

"A No. We test one piece of wire having a .037 inch diameter and then reducing it to square inches. It gives us the minimum per square inch tensile strength. In other words per square inch, when we speak of tensile strength we mean per square inch. When we speak of pounds pull we mean per individual wire."

On page 378, he testified:

"Q Now with that I will again ask you to describe the tests which were made on the wire which you shipped to the Akron plant in 1950?

"A We first test, as I have already stated,



for tensile strength and the wire, in order to pass our inspection, each reel is inspected both at the beginning of the reel and the end of the reel; it is about six hundred pounds per reel. The beginning of each reel is tested for tensile strength, for elongation, for twist, its ability to withstand bumping and twisting, and also tested for its plating. The plating is a very important part of it."

As to the force applied on the interior of the tire by an air pressure in the tire of 35 to 155 pounds of air, Dr. Linford testified: (R. 284)

"A If we take a look at a tire and rim in cross section — I am not particularly a good artist — on cross section of any standard tire it will look about like that and we have a situation in which we have a rim then inside of that. I will just dot the inner tube and, as I have previously testified, the only purpose of that innertube is to act as an air seal. The entire, practically the entire force must be withheld by the rim and the casing. You can inflate an innertube so that it will more than fill this with one pound per square inch and you are dealing with thirty-five to one hundred pounds. Now when you inflate any object, and if you will excuse me for just a minute for a demonstration I will inflate this. We have air pressure in here and there is no tendency for that to go up or down or to the side. The reason is that for every square inch on this side you have got a square inch opposite here and if there were, say, one pound per square inch in this balloon, which there isn't, I'm not that good a blow-hard, a square inch would be pushed here with a force of one pound. This would be pushed this way with a force of one pound. The same all across. Now in the case of this particular tire, as it was mounted,

the distance from there to there is about three inches when mounted on the rim which was measured at the same time. Now this means that for every inch around the tube, the tire this way, there are three square inches where the air is pushing down on the rim and so there is a corresponding three square inches where the air is pushing on the casing. In case the pressure was, say thirty-five pounds per square inch, then there would be three times thirty-five or one hundred and five pounds on every inch of the bead around here, or on the pair of beads tending to lift them off the surface of the rim. Now in addition to that you have other forces involved. If you take a look at the tire this way, let's say, that is the inside of the bead and here is the outside, and then this is the thing that is done in mechanical problems all the time. Make an imaginary cut across there. Now let's see what has happened. Air is pushing down there, tending to tear that tire apart in that fashion. The actual transmission of most of the forces is actually from here on the diagonal down to the bead and on the bead must withstand that. All right, how much will that force be? Again that will be about thirty-five pounds per square inch, and for every square inch in the cross section of that tire. A rough estimate of that indicates that the inside diameter of the tire when inflated will be about six inches in diameter and so an area of twenty-eight inches. Now there is another problem, the detail proof of which—

“MR. WHITE: When you say twenty-eight, Doctor, how did you arrive at the twenty-eight?

“A Well it is just the ordinary formula. Point R square over four, point times square the radius or point times the square of the diameter over four. Now let's see what this totals. We

have just figures there is one hundred and five pounds pulling up on this. This hundred and five pounds over here is pulling mainly over that way, only a little up, and then down and it can be shown by mathematics that if you add this up all the way around that it will be just the same as though you considered a strip three inches wide across this diameter and so if it is three inches, it has a diameter of sixteen inches. Three times sixteen is forty-eight so we have twenty-eight inches here. Twenty-eight square inches here and forty-eight square inches across here which will give a total of a hundred and four square inches of effective area on which forces might be applied to this bead. Now let's go on from there. Now let's assume that we place about a hundred and fifty-five pounds pressure per square inch in the casing and one hundred and four square inches, four five are twenty and it turns out to be approximately sixteen thousand pounds. Now that tension is being held by four pegs, primarily two on this side and two on this side, and we divide that by four and it comes out about four thousand pounds is the breaking strength at one hundred and fifty-five, which I conclude is a reasonable check. This should correspond to the fifty-six hundred pounds proposed in the stipulation. At thirty-five pounds, which is less than one-fourth of this, there should be less than one thousand on each of the bead cables. That is the reason for my conclusion."

Allowing a factor of error of  $1\frac{1}{2}$ , which Dr. Linford testified should be allowed (R. 287), the pressure of 4,000 pounds at 155 pounds per square inch would compare with the 5,600 pounds per square inch required to break the bead in the experimental tire at 155 pounds per square inch, and the tensile strength of 290 pounds for each of

the 20 wires making up the beading of the tire.

A tube in use has a tendency to stretch and after it has been used, is larger in diameter than a new tube. Because of this, a used tube, when being mounted in a tire, has a tendency to kink or to become pinched between the beading of the tire and the rim (R. 229, 341). Appellant admitted that the tube might have been pinched at the time he mounted the tire (R. 219) and the witness, Dr. William Hoelzer, from his examination of the tube (Exhibit 17) was of the opinion that the tube had definitely been pinched in the mounting (R. 341).

When the tube is pinched between the rim and beading of a tire, it is naturally extremely difficult to get the beading of the tire over onto the flange of the rim, since the beading of the tire is already of a smaller diameter than the rim. As the pressure applied to get the beading onto the flange of the rim is the air pressure in the tire itself, a much greater air pressure is required than would normally be required to force the beading over onto the flange (R. 342). As to the effect the pinching of the tube has on the pressure within the tire, S. S. Taylor, a professional engineer, and the Traffic Engineer for Salt Lake City Corporation, testified on page 396 of the record:

“Q Now, Mr. Taylor, assuming that when this tire was mounted a part of the tube was pinched between the bead and the shelf of the rim and in that position when the air was being inflated up to, oh, around thirty-five pounds or perhaps forty pounds — I think he said thirty-five or forty — what effect would that have on the bead on the



opposite side where this pinch was? What sort of action would take place against that bead."

After some discussion of an objection, the witness continued on page 397 of the record:

"A Well, if there were anything, a tube for example, under one or other sides of this bead which would prohibit that bead from coming up and actually seating on this ledge, which is provided for it, there will be what we might term a wedge action there because of that obstruction and a tendency to lift, to lift it over that obstruction in order to get it up on the ledge.

"Q What effect would that wedge action have upon the ability of the bead to resist breakage, the wires of the bead?

"A Well, anything that would tend to stretch, it would have to stretch over, if it has got to get up over, any kind of an obstruction it would take a greater force at that point to do it than if it were normally, more than if it did normally if it were more easily accessible to it."

Upon the same point, Dr. William Hoelzer testified (R. 341):

"A This, the tube in question, was a crude tube. It had previously been run and the tube has been stretched, making it larger than a new tube. The fact that the tube has several patches on it indicates that it had been a used tube. In mounting the tire and tube onto the rim it is evident, in my opinion, that the tube was pinched between the bead and the rim flange at the point opposite the valve stem.

"Q What significance, if any would that have, or what effect would that have on the bead

in the tire after the air was introduced and the tire inflated?

\* \* \*

"A The tube being pinched between the bead in the rim flange would cause the balance of the bead to be very difficult in getting up onto the ledge of the rim. Great force would then be required to try to get it onto the ledge.

"Q And do you have an opinion as to whether or not that force would be sufficient to break the bead at the place where the bead was trying to get up on the ledge?

\* \* \*

"A Sufficient force could be applied to break the bead."

The principal injury complained of by the appellant was an injury to his right hand and wrist. He testified that because of the injury to his wrist, he was greatly handicapped in his work by reason of the fact that he is unable to use his right hand to do any task which requires wrist motion or a strong grasp (R. 191-195). He claimed to have lost income from the operation of his service station because it was necessary for him to hire more help to do things he was previously capable of doing himself. During the month of March following the accident, motion pictures of the appellant at his work were taken without the appellant's knowledge (R. 403 (Exhibit 31), and examination of these pictures will reveal that the appellant was at that time fully capable of using his right hand and, in fact, did use his hand in and about his work to change tires, grease cars, fill gas tanks and other tasks about the service station, and that he at that time evidenced no disability whatsoever in his right hand.

## STATEMENT OF POINTS

POINT NO. 1. APPELLANT HAS THE BURDEN OF PROVING NEGLIGENCE ON THE PART OF RESPONDENT WHICH IS A PROXIMATE CAUSE OF THE INJURIES TO THE APPELLANT.

POINT NO. 2. APPELLANT HAS THE BURDEN OF SHOWING THAT THE NEGLIGENCE OF THE MANUFACTURER WAS THE PROXIMATE CAUSE OF THE EVENT OR ACCIDENT OUT OF WHICH THE INJURIES AROSE.

POINT NO. 3. APPELLANT DID NOT PROVE RESPONDENT GUILTY OF NEGLIGENCE WHICH WAS THE PROXIMATE CAUSE OF THE APPELLANT'S INJURY.

## ARGUMENT

POINT NO. 1. APPELLANT HAS THE BURDEN OF PROVING NEGLIGENCE ON THE PART OF RESPONDENT WHICH IS A PROXIMATE CAUSE OF THE INJURIES TO THE APPELLANT.

In approaching this case, it is perhaps well to review the history of the litigation from which a manufacturer's liability to the persons using the manufactured product arose. In its inception, the doctrine was based on the implied warranty arising out of the sales contract under which the product was sold. However, in recent years, liability has been extended to those using the product, although there is no privity of contract between the manufacturer and the consumer. Perhaps the most famous of these more recent decisions is *MacPherson v. Buick Motor Co.*, 217 N.Y. 382, 111 N.E. 1050, set out in plaintiff's brief.

In that case while the plaintiff was in an automobile manufactured by the defendant and sold to the plaintiff by a retail dealer, the car suddenly collapsed and plaintiff



was thrown out and injured. It developed that one of the wheels was made of defective wood, and its spokes had crumpled into fragments. Defendant had bought the wheel from another manufacturer, but had omitted to inspect the wheel before placing it upon the car. The court held:

“If the nature of the thing is such that it is reasonably certain to place life and limb in peril when negligently made, it is then a thing of danger. Its nature gives warning of the consequences to be expected. If to the element of danger, there is added knowledge that the thing will be used by persons other than the purchaser, and used without new tests, then, irrespective of contract, the manufacturer of this thing of danger is under duty to make it carefully.”

The Restatement of Torts makes a distinction between chattels known to be dangerous for intended use and chattels which are dangerous unless carefully made. Since a rubber tire is not in and of itself inherently dangerous, but only so if it is not carefully made, this case would probably be governed by the rule set out in *Section 395 of the Restatement of the Law of Torts*.

“The manufacturer who fails to exercise reasonable care in the manufacture of a chattel which, unless carefully made, he should recognize as involving an unreasonable risk of causing substantial bodily harm of those who lawfully use it for the purpose for which it is manufactured and to those whom the supplier should expect to be in the vicinity of its probable use, is subject to liability for bodily harm caused to them by its lawful use in a manner and for a purpose for which it is manufactured.”

However, while the doctrine of the manufacturer's liability has been extended beyond the field of contract liability and into the field of tort liability, the cases do not stand for the proposition that the manufacturer is an insurer of the products which it sells. An excellent discussion of the developments in this field of law is found in *164 A.L.R.*, beginning on page 569. The following is taken from that annotation on page 599:

“Even if the old ‘general rule’ is repudiated, and a manufacturer’s liability or non-liability for negligence is predicated purely and simply on the law of torts, dispelling any notions about necessity of privity of contract, it is obvious that in a great many instances the manufacturer will not be held to be liable. But if he is excused from liability, he will be excused because there was no case against him under the law of negligence—a result which is fair, logical and compatible with modern social and economic relationships.

“Thus, a manufacturer will not be held liable, applying ordinary rules of the law of torts and negligence, where the evidence fails to make out a case of negligence against him or that any injury or damage was caused by the manufacturer’s negligence in the manner in which he produced the alleged defective article, chattel or commodity; where the accident happened, and the injuries were occasioned, upon causal analysis, not by negligence or defects in the manufacture of an article, or by failure of the manufacturer to have inspected properly before putting it on the market, but by improper operation or use of the contrivance \* \* \*”

Thus, it is seen that the appellant has the burden of

proving negligence on the part of the respondent, which was a proximate cause of the injuries of which he complains.

In *Darlin v. Henry Ford & Son*, 20 Fed. (2d) 317, the seat of a tractor fell while the purchaser was driving it, causing injuries which resulted in his death. In affirming the directed verdict in favor of the defendant, the court said:

"The defendant could not be held, in putting out the tractor in question, as an insurer of its safety under all the circumstances to which the machine might be subjected. Its duty was to use reasonable care in employing designs, selecting materials, and making assemblies in the construction of a tractor, which would fairly meet any emergency of use which could reasonably be anticipated. \* \* \* Before the plaintiff was entitled to a submission of the case to the jury, the nature of the use to which the machinery was subjected and the cause of the fracture of the cap screw should have been reasonably indicated in the testimony. \* \* \* Here the evidence does not substantially tend to show that there was a lack of care in the selection and testing of materials, or in the designing or assembly of parts, or of the weakness in the cap screw due to deficiencies of substance, which the defendant, in the exercise of diligence charged to it should have apprehended; it does not fairly permit an inference that defendant's liability is reasonably probable, and distinctly more probable than any other suggested explanation. Reflection upon the record produces several independent theories explanatory of the results and its causes, each having some support from the evidence, but none of more consequence than speculation."

In *Sheward, et al. v. Virtue*, 120 Pac. (2d) 142, plaintiff's wife, while sitting in a metal chair in a beauty parlor owned by one of the defendants, fell to the floor when the chair broke. In a suit to recover damages for injuries sustained as a result of the accident, the jury returned verdicts against the owner of the beauty parlor and the manufacturer of the chair. The evidence showed that the owner of the beauty parlor, upon receipt of the chair, some nine months before the accident, carefully inspected the chair and periodically thereafter washed, oiled and inspected the same. An order granting the owner a new trial was affirmed. On appeal, the court held that this defendant exercised the requisite degree of care. Plaintiff's cause of action against the manufacturer was based on the alleged negligence in the manufacturing and assembling of the cast iron chair. The court reversed a judgment against the manufacturer in the absence of any proof by the plaintiff as to the customary standard of care exercised by manufacturers of like chairs. In its opinion the court said :

“If the manufacturer employs a formula calculated to result in a finished product safe for its proposed uses, intentionally selects a material with sufficient technical knowledge, inspects them during the course of their fabrication and assembly and on completion, with a care in proportion to the extent of the risk to be involved in using the chattel, if made without such precautions, he has by such care, method and process fulfilled his obligation to the vendee and to all users of such chattel.”

Nor can negligence be predicated upon the mere happening of the accident.

In *Reusch v. Ford Motor Co.*, 196 Wash. 213, 82 Pac. (2d) 556, suit was brought against the manufacturer of a truck for personal injuries suffered when plaintiff was escaping from a burning truck which had allegedly caught fire because the gas tank and the muffler or exhaust pipe was negligently placed. After discussing the evidence and deciding that there was no evidence of negligence, the court quoted *Rotche v. Buick Motor Co.*, 358 Ill. 507, 193 N. E. 529, with approval:

"The mere fact that an accident resulting in an injury to a person or in damage to property has occurred does not authorize a presumption or inference that the defendant was negligent. The burden was upon the defendant in error to prove by competent evidence, direct or circumstantial, that the plaintiff in error was guilty of negligence in the manufacture or assemblage of the automobile in question."

Nor is the condition of the tire by itself after the explosion evidence of its condition at the time of its manufacture.

In *Rotche v. Buick Motor Co.*, 358 Ill. 507, 193 N. E. 529, it appeared that plaintiff had bought a five-passenger Buick car from one of the defendants and that twenty-six days later, while accompanied by his son in returning home from a twenty-five mile journey at a speed of thirty miles an hour, the car left the roadway. Plaintiff was injured and brought this action to recover for his injuries. Testimony of witnesses was to the effect that the cable leading to the arm, extending from the left front shoe-brake was found to be hanging down and that certain



cotter pins were missing. Evidence was also introduced to show the inspections to which Buick cars were subjected during the course of their construction. Motions by the Buick Motor Company for the arrest of judgment were denied and the judgment was entered against the company for \$17,500.00. The Illinois appellate court affirmed the judgment and, upon appeal, the Supreme Court reversed both the Appellate and Superior Courts and said:

“The burden was upon the defendant in error to prove by competent evidence, direct or circumstantial, that the plaintiff in error was guilty of negligence in the manufacture or assemblage of the automobile in question. Testimony concerning the condition of cotter pins in the brake mechanism several weeks after the accident occurred, without proof that the condition of the pins remained unchanged, was inadmissible and should have been excluded. Such testimony was not responsive to the allegations of the declaration, and could not subject the plaintiff in error to liability.

\* \* \* Whether there was negligence in the assembly of the parts of the automobile owned by the defendant in error, as a result of which the accident occurred, depends almost wholly upon the condition of the cotter pins previous to the sale of the car. With the incompetent testimony excluded, the competent evidence is not sufficiently definite to justify the conclusion that the automobile remained in the same condition from the date of the accident until it was examined by persons who testified that some of the cotter pins were unspread two weeks or more after the accident occurred.”

POINT NO. 2. APPELLANT HAS THE BURDEN OF SHOWING THAT THE NEGLIGENCE OF THE MANUFACTURER WAS THE PROXIMATE CAUSE OF THE EVENT OR ACCIDENT OUT OF WHICH THE INJURIES AROSE.

In *Poore v. Edgar Bros. Co.*, (Cal.) 90 Pac. (2d) 808, a dealer replaced a shatter-proof glass in a second hand automobile with other glass of inferior grade. The car was in a collision and an occupant injured by flying glass. The occupant brought an action against the dealer to recover for his injuries. In deciding the case, the court quoted *Johnson v. Union Furniture Co.*, 31 Cal. App. (2d) 234, 87 Pac. (2d) 917, 919 as follows:

"It is well settled that in order to maintain an action for damages based on the wrongful act or negligence of another, a plaintiff must allege and prove that the wrongful act of the defendant was a direct and proximate cause of the injury. \* \* \* And in this connection, it is generally held that the word 'proximate' is intended to mean direct or immediate, as opposed to remote (*Straten v. Spencer*, 52 Cal. App. 98, 197 P. 540); and that negligence requiring the interposition of new and independent agencies to cause injury is remote (*Oakland Bank of Savings v. Murfey*, 68 Cal. 455, 9 Pac. 843). Moreover in determining the question of proximate cause, care must be taken to avoid confusing two elements which are separate and distinct, namely, that which causes the injury and that without which the injury would not have happened. For the former, the defendant may be liable, for the latter, he may not; that is to say, in order to make a defendant liable his wrongful act must be the *causa causans*, and not merely the *causa sine quo non*. \* \* \* Furthermore, if, subsequent to the initial cause, a new efficient cause



intervenes to affect the injury, having its origin independent of the initial cause, or having its origin therein could not reasonably have been foreseen by a person of ordinary intelligence and prudence as a natural and probable result thereof, it supersedes the initial cause, breaks the connection between the initial cause and the effect, and becomes a proximate cause of the injury rendering the initial cause remote.

"The appellant argues that whether or not the negligence on the part of the respondent was the proximate cause of his injuries, and whether or not there was an intervening cause without which the injury would not have happened, are questions of fact which should have been submitted as such to the court or a jury. If we assume, however, that appellant's injuries would not have been sustained if safety glass had been installed in this door, the fact remains that such injuries were immediately and directly caused by an outside source, with which the respondent had no connection, rather than by an inherent defect in the glass."

In *Youtz v. Thompson Tire Co.*, (Cal.) 116 Pac. (2d) 636, a rim on an inflated tire allegedly repaired by the tire company's employee was not properly locked and a truck driver, in attempting to properly lock the rim so that it could be placed on the truck wheel, struck a hammer held by the plaintiff on the edge of the rim, as a result of which the rim was violently thrown out of the tire, causing injuries to the plaintiff. The trial court granted defendant's motion for a non-suit and the plaintiff appealed. The court sustained the judgment and said:

"The appeal rests upon the single question of

proximate cause, and we will confine the discussion to that issue with the observation that though appellant contends that respondents had knowledge of the defective condition of the tire, he does not direct our attention to any portion of the record which tends to prove that fact. We know of no presumption that the respondents should be deemed to have wilfully and knowingly delivered a defective tire, which they must have known was not usable. It is more reasonable to infer that the defect arose from the careless and negligent manner of assembling it, but with no facts of any kind tending to prove respondent's knowledge, there is no room for an inference that such knowledge was had.

\* \* \*

"Assuming, therefore, that the same rule of liability applies to a repairman as applies to a manufacturer, it is appropriate at this time to state that rule, which is given with its exceptions and limitations in 45 C. J. p. 892 as follows: 'A manufacturer or seller of an article which is not inherently dangerous, but which is rendered dangerous by a defect therein, is liable for an injury to a third person arising from the defect, where he had knowledge of the defect and of the danger, and failed to give notice or warning thereof to the purchaser, or concealed the defect, or represented the article to be safe and sound, or, in other words, was guilty of fraud or deceit. Conversely, the manufacturer or seller is not liable where he had no knowledge of the defect or danger, and made no false representations, or where he gave notice of the defect to the purchaser, or the purchaser had knowledge thereof before the injury. \* \* \*'"

So we see from the foregoing cases that the appel-

lant had the burden of proving by direct evidence that the respondent was guilty of negligence in the manufacture and selling of the tire, which negligence was the proximate cause of the injury of which the appellant complains. This negligence cannot be inferred from the mere happening of the accident, nor the condition of the tire after the explosion, but there must be a causal connection between some act of negligence on the part of the respondent and the injuries claimed to have been received by the appellant.

POINT NO. 3. APPELLANT DID NOT PROVE RESPONDENT GUILTY OF NEGLIGENCE WHICH WAS THE PROXIMATE CAUSE OF THE APPELLANT'S INJURY.

The most that can be said for appellant's evidence is that after the explosion occurred, an examination of the tire disclosed that the wires in the bead of the tire were broken. On the basis of this the appellant asked the court to render a verdict in his favor and cites a number of cases which it is claimed would support such a conclusion. However, the appellant has failed to show any act of negligence on the part of the respondent which was either a proximate cause of the defect in the tire or that there was a defect in the tire at the time it left the respondent's plant. In fact, the appellant himself testified that prior to mounting the tire, he dusted the tire off and went over it thoroughly and failed to find any evidence of a defect in the tire. All of the cases cited by the appellant may be distinguished from the case at bar in that in each of the cases cited there was definite proof of negligence on the part of the manufacturer and a causal connection

between that negligence and the injuries complained of. Thus, in *MacPherson v. Buick*, 111 N. E. 1050, a wheel on the automobile manufactured by the defendant disintegrated and it was found that the wood in the wheel was defective. It was also the evidence in that case that the defendant had failed to make any inspection of the wheel prior to placing it upon the automobile in which the plaintiff was later injured.

In the case of *Baker v. B. F. Goodrich Co.*, 252 Pac. (2d) 24, which involved an explosion of a tire, the bead in the tire was found to be kinked, according to the experts, this indicated a defect in the tire which pre-existed the explosion.

In the case of *General Motors Corporation v. Johnson*, 137 Fed. (2d) 320, involving a defective axle housing that caused a wreck in which two men were killed, the evidence sustained the finding that the opening to the axle housing which should have been a bit larger than the opening to the differential housing was in fact a bit smaller.

In *Spencer v. Madsen*, 142 Fed. (2d) 820, which involved a defective axle on a semi-trailer designed to transport gasoline, the evidence showed that the axle had not been inspected by the manufacturer at the time it was installed.

In *Hooper v. General Motors Corporation*, (Utah) 260 Pac. (2d) 549, which was decided by this Court, the Court will recall that the wheel on a relatively new automobile came apart, the spider, or spokes of the wheel remaining on the car, and the rim and tire coming off. The

court will also recall that there was evidence to sustain the finding that some of the rivets which held the wheel together were broken prior to the disintegration of the wheel, and that, in fact, this condition was the cause of the wheel coming apart. As the court said in that case:

“Thus, to impose liability on the assembler of an automobile, certain necessary elements must be made out. Plaintiff is required to show (1) A defective wheel at the time of the automobile assembly; (2) Such defect being discoverable by reasonable inspection; (3) Injuries caused by failure of the wheel due to its defective condition.”

In each of the cases cited, the evidence meets this test. In the case at bar, it does not. We have no evidence that the tire was defective at the time it left respondent's plant, or at the time it was received by the appellant for mounting; nor do we have any evidence that the injuries of the plaintiff were caused by any defect in the tire which pre-existed the explosion. The evidence will sustain any number of inferences which are more reasonable than the inference that appellant asks us to make in this case. The first and most obvious is that the appellant himself proximately caused his own injuries. The evidence was that he was filling a tire without the valve core in the tube from a tank containing 175 pounds pressure. The tire was only designed to carry a pressure of 35 to 40 pounds and had a bursting point of about 155 pounds. It is entirely conceivable that the proximate cause of this accident was simply that the defendant exceeded the 155 pound limit in filling the tire.

The evidence further shows that the appellant in-



serted an old tube into the tire and that innertubes which have been previously used have become stretched, making them more difficult to handle, with the result that the innertube may become pinched under some part of the casing. Evidence was presented which showed this to be a fact, which evidence was not refuted. When this happens, the air pressure within the tire exerts a terrific force in an effort to push the tire casing up onto the edge of the rim, which may very well explain how the pressure within the tube reached a point where it caused the wires in the beading to break. That the explosion could not have occurred but for the excessive pressure within the tire is illustrated by the evidence that when the experimental tire which had been broken in a test conducted by the witness, Dr. Hoelzer, was put back on a wheel and refilled with air, even with a bead which was known to be completely broken, the tire withstood a pressure of 53 pounds before allowing the tube to come out over the edge of the wheel.

Another inference which is as reasonable is that the negligence of the respondent was responsible for the occurrence, i.e. that the respondent in mounting the tire damaged the same in a manner which caused the wires in the bead of the tire to become weakened.

Lastly, assuming that there was a defect in the tire at the time it was delivered to the appellant for mounting, there was no evidence that such defect was discoverable by reasonable inspection. In fact, as has been stated, the appellant himself made an inspection of the tire which, under the evidence, should have disclosed the pres-

ence of a defect, if in fact such defect existed, and found the tire to be in sound and good condition.

As was stated in the case of *Sheward v. Virtue*, supra, the respondent is not an insurer. His duty is to employ a formula in the manufacture of tires calculated to result in a finished product safe for its proposed use, to intelligently select his material with sufficient technical knowledge, inspect them during the course of their fabrication and assembly and on completion, with a care in proportion to the extent of the risk to be involved in using the tire. The evidence in this case shows that the respondent exercised the required degree of care in the manufacture of its product. The wire was secured from the National Standards Company, where it had been manufactured to specifications far in excess of the requirements which might reasonably be foreseen in the use of the tire and where it had been inspected and tested to determine that it met those specifications.

But the respondent did not rely alone on the National Standards Company, but itself inspected the wire to determine that it came up to the required specifications. During the course of the tire's manufacture, the tire, and particularly the bead, underwent several inspections at different stages of its manufacture, including a final inspection upon completion to determine whether or not there was any defect in the tire. It is evident, therefore, that the defendant in the manufacture of the tire exercised the highest degree of care to insure a safe product for the use for which it was designed.



## CONCLUSION

A review of the recent litigation in the field of the manufacturer's responsibility to consumer leads us to the conclusion that the courts no longer require privity of contract between the manufacturer and the injured party to recover for injuries sustained as a result of some defect in the manufactured product. The modern rule is that the manufacturer who fails to exercise reasonable care in the manufacture of an article which, unless carefully made, he should recognize as involving an unreasonable risk of causing substantial bodily harm to those who use it for the purpose for which it is manufactured, is subject to liability caused to them by its lawful use in a manner and for the purpose for which it is manufactured.

The District Court, then, is governed by tort law, rather than as was formerly the case, by contract. This being the case, the plaintiff has the same burden in a case against a manufacturer as in any other tort action based on negligence, that is, himself show that the negligence of the manufacturer was the proximate cause of injuries to the plaintiff. He might do this by proving either that the manufacturer did not follow a formula in the manufacture of its products designed to produce reasonably safe products for the purpose for which they were intended, or that the manufactured product contained defects which were the proximate cause of the injuries complained of and which should have been discovered by the manufacturer upon reasonable inspection.

The evidence in the case did not meet those require-

ments. The appellant showed merely the exploding of the tire. From this he asks the Court to assume that the tire exploded by reason of some negligence on the part of the respondent. Such a conclusion is, to say the least, highly conjectural.

A number of inferences as to the cause of the explosion, particularly that it was due to the acts of the appellant himself, is much more reasonable. At any rate, a jury, or the court, should not engage in speculation as to whether the negligence of the respondent was the responsible factor in the absence of any proof of negligence or any proof of any causal connection between any act of the respondent and the appellant's injuries.

In fact, the evidence in the case affirmatively sustains the conclusion that the respondent exercised the highest degree of care to insure the safety of its products for the purpose for which they were manufactured.

It is, therefore, submitted that the action of the court in setting aside the verdict of the jury and entering a judgment in favor of the respondent should be sustained.

Respectfully submitted,

STEWART, CANNON & HANSON  
*Attorneys for Respondent*