ST. LOUIS & ST. PAUL PACKET CO. *v.* KEOKUK & HAMILTON BRIDGE CO.

Circuit Court, S. D. Iowa. 1887.

1. NAVIGABLE WATERS—OBSTRUCTION—DRAW-BRIDGE.

The "main channel" of a river, within the meaning of the act of eongress authorizing the building of a draw-bridge over the Mississippi river at Keokuk, Iowa, and requiring that the draw shall be over the main channel of the river, and at an accessible and navigable point, is that bed over which the principal volume of water flows.

2. SAME.

The measurement of the length of a draw, within the meaning of the act of congress authorizing the building of a draw-bridge over the Mississippi river at Keokuk, Iowa, and requiring the draw to be 160 feet in length, must be on a line at right angles to the piers, upon the surface of the water at low-water mark.

3. SAME.

Under that section of the act of congress requiring the piers to be built "parallel to the current," the bridge company is required to use only reasonable care and foresight in the location of its piers. If the piers at the time of location are parallel to the current, and by some act of the government subsequent to the erection of the bridge, or by any other means not within the control of the company, the current is so changed as to prevent navigation through the piers, it is incumbent upon the company to conform its piers to the new condition of things. But if the Company has constructed its piers with reference to the subsequent acts of the government, and has used reasonable diligence and skill forming and executing its, plans, and the change is such as, not to unreasonably endanger navigation, negligence is not to be imputed to it.

4. SAME.

Upon the question whether a draw-bridge is a structure dangerous to navigation, in consequence of a failure, to comply with the requirements of the act of congress authorizing its construction, and where there is conflicting testimony as to whether the structure does substantially meet the requirements or not, the jury have a right to consider the actual facts of navigation at the draw in question through the long period during which the draw has been used.

5. SAME.

A pilot, in navigating a stream over which there is a draw-bridge, is only obliged to use ordinary skill and care in passing through the draw; and the question whether he did so, under all the circumstances, is one for the jury.

6. SAME.

In an action for damages growing out Of a steam-boat running into a draw-bridge, the jury will consider, in view of the navigation of a great river by steam, where such navigation meets numerous bridges, that the injury may be the result of purely physical causes, and unavoidable by the intervention of human agency.

7. SAME.

It is not proper to instruct a jury that, if a bridge over a navigable stream is a lawful structure, and a steam-boat is run down against it, injuring one of the piers, the verdict shall be for the bridge company.

Given Campbell and *J. H. Anderson,* for plaintiff.

James Hagerman, A. J. McCrary, and *Frank Hagerman,* for defendant.

LOVE, J., (*charging jury.*) The case before you is of very great importance. In addition to the large pecuniary interests directly involved, it presents questions of importance concerning the bridging and navigation

of the Mississippi river. It therefore demands your most careful consideration. This is not a proceeding to declare the Keokuk and Hamilton bridge an unlawful structure, and to have it as such abated in the interests of the public. It is a, private action for damages, in which the essential charge is negligence on the part of the defendant in the building of the bridge. "Negligence" is the *gravamen* of the action; but this word, in its legal sense, is very different from its received signification in common language. In common speech; the word "negligence" is used as synonymous with "carelessness," but it has a much broader meaning in legal parlance. Thus the failure to exercise proper skill, where the law requires it, is negligence, though ever so much care be used in doing the act required. Any failure to perform a legal duty is negligence. The omission to do what the law requires, or the failure to do anything in the manner prescribed by law, is negligence *per se.* It is in this sense that the plaintiff charges the defendant with negligence in the present case.

The Keokuk and Hamilton bridge is an authorized structure. The right to build it was granted by an act of congress. But the plaintiff charges that in several essential particulars the defendant failed to build the bridge as prescribed by the act of congress, and in this committed negligence, causing the injury complained of. The plaintiff in this action is the owner of the steamer War Eagle, employed in the trade of the Mississippi between St. Louis and St. Paul. The defendant corporation is the proprietor of the draw-bridge over that "river between Keokuk and Hamilton. The plaintiff claims damage to the amount of 850,000, resulting from a collision of the steamer with the bridge, by which the vessel was injured, and one span of the bridge destroyed. The bridge was built by authority of an act of congress, which, among other things, provides that, if any bridge built under said act be constructed as a drawbridge, the same shall be erected as a pivot draw-bridge, with a draw over the main channel of the river, at an accessible and navigable point, arid with spans Of not less than 160 feet in length in the clear on each side of the central or pivot pier of the draw; and that the piers of said bridge shall be parallel with the current of the river. The War Eagle was one of the largest and most valuable boats in the navigation. She was thoroughly equipped and manned. The river was at a stage the highest ever known, except in the: floods of 1861. The current at the point of contact with the bridge, about a quarter of a mile below the Des Moines rapids, was swift and strong. The boat was heavy-laden. She held her way along the outer wall of the government canal, which was closed at the time of the accident. This occurred on a night in November, in the year 1881, about 8 o'clock p. M. The night was not dark, but rather moonlight* and quite calm. The boat attempted to pass the draw on the Iowa side, bow foremost. Her bow was caught in an eddy within the draw, which turned her towards the Iowa shore. The pilot, after, vain efforts by the usual and proper means to straighten her, seeing that she would be thrown upon the pier, and destroyed, backed her above the rest pier towards the Illinois shore; but the force

of the current was so great that she could not be controlled. She was carried by the violence of the current against the bridge, east of the draw; one span of which gave way, and was destroyed. The boat floated through the broken span, and sunk a short distance below the bridge.

The plaintiff complains that the injury occurred in consequence of the negligence of the defendant in the construction of the bridge. It is alleged that the defendant, in locating the piers and building the bridge, failed to conform to the act of congress in the following particulars: (1) That the draw is not over the main channel of the river; (2) that it is not at an accessible and navigable point; (3) that the draws are not 160 feet in the clear, within the meaning of the act of congress; (4) that the piers are not placed parallel to the current of the river.

The defendant, upon its part, denies the truth, of these allegations, and takes issue upon the same. And the defendant, by way of cross-claim, sets up that, while the bridge was constructed in all respects as required by the law of congress, the accident and injury were the result of the plaintiff's own negligence and want of skill in the navigation and passage of the draw; and the defendant, therefore, prays judgment for the sum of $100,000, growing out of the injury to the bridge.

The contention of the plaintiff is that the main channel of the river is coincident with the habitual course of navigating vessels, and that the evidence shows that the draw of the bridge is not over the "main channel," as thus indicated. But this argument proceeds upon a mistaken construction of the statute. It is clear that the words "main channel" in the statute do not mean the habitual and best course of navigation, although they may be employed in that sense by pilots and other boatmen. If the words were used to indicate the best course of navigation which is habitually followed by steam-boats and other water-craft, the provision that the draw shall be at a point "accessible and navigable" would be quite superfluous and senseless, since that line of navigation must necessarily be always "accessible and navigable." It would have been most unwise in congress to prescribe so strict a limit for the place of the draw. The deepest water and best currents habitually pursued by steam-boats are sometimes found close to the shore, where it might be difficult or, impossible to place the draw of a bridge. The act of congress is of a general nature, providing for the building of all bridges upon the river. Now, it might be necessary to locate the draw of a bridge with reference to a canal or other work of the government for the improvement of navigation, and this might be difficult or impossible, if it were required absolutely that the draw should be placed over the usual path of steamers and other water-craft. This was the case with the bridge before us. The draw was established with reference to the plan of the government canal, after consulting with the government officials in charge of that work.

What is the "main channel" of a river? It may be difficult to define it with precision, but I think it sufficient to say, that the main channel is that bed of a river over which the principal volume of water flows. Many great rivers discharge themselves into the sea through more than

one channel. This is true of the Nile, the Ganges, the Indus, the, Volga, the Danube, the Amazon, the Mississippi, and many others. They all, however, have a main channel, through which the principal volume of water passes. So, in their upper course, great rivers are at many places broken into; different channels by interposed islands, but there is generally a channel where the principal river flows. Now, it was the manifest purpose of congress that the draw of a bridge should not be placed over any of the smaller or inferior channels, but over the principal river, where boats would have most room to maneuver in passing the structure; and it was an adequate limitation that the draw should be at a point "accessible and navigable." If this was accomplished, what more could be desired?

Again, it is insisted that the open spaces between the draw-piers must be 160 feet at right angles with the current, and that, if the bridge was built not parallel to the current, so that the flow of the water is diagonally through the draw, forming a cross-current, then the measurement must be at right angles across the current, and not at right angles to the walls of the draw-piers. I cannot recognize this doctrine as sound. If it be true that the draw-piers stand not parallel to the current, and that a cross-current exists within them, resulting from the fact that they were so built, it may be that negligence may be justly imputed to the defendant in failing to construct its bridge in conformity to the law. But this furnishes no Sufficient ground for the mode of measurement claimed by the plaintiff. There is nothing whatever in the statute limiting the space to be measured, by the current within the piers. That rule of measurement seems to my mind artificial and impracticable. The plain interpretation Of the statute is that the space between the draw-piers shall be 160 feet in the clear, measured by a line at right angles to the piers, upon the surface of the water, at low-water mark.

The defendant's counsel contend that the spaces between the draw-piers should bee measured, not at low-water mark, but by the line of the spans of the bridge. I cannot concur in this proposition. The statute must receive a Construction consistent with the reason of the law. The width of 160 feet, required for the safety of navigation; is at the line where the boats float, and not at the top of the coping of the bridge, where no boat can ever be.

But the ground of action upon which the plaintiff apparently relies with most confidence, is that the piers at the draw are not parallel to the current of the river, and that the bridge is therefore an unlawful structure. Counsel contend that the current flows diagonally into the draw, creating the eddy, which Was the direct and immediate cause of the injury to the boat. To this view the defendant's counsel answers that; if the fact be as-alleged, the defendant is not responsible, because the goverment of the United States, some time after the bridge was built, Caused an excavation of several feet in depth to be made in the rock bed of the river between the lower lock and the draw of the bridge, and

that the evidence shows that the natural consequence was that the current was Changed from its original direction to the draw. In reply, the plaintiff's counsel

insist that the answer of defendant is untenable and insufficient; that the act of congress imperatively requires, in the interest of navigation, that the piers shall be parallel to the current; that even, therefore, if the current should be changed by a convulsion of nature, so as to prevent navigation through the draw, the defendant would be required either to change the pier or remove the bridge; that the same is true of a similar obstruction to the navigation caused by an erection in the river by the government, changing the direction of the current; and that in such case the defendant would be compelled to conform the piers of the bridge to the changed current, and look for indemnity to the government.

The court, however, cannot give its assent to this extreme doctrine. If, by the act of the government, subsequent to the building of the bridge, or by any other means not within the defendant's control, the currents were so radically changed as to materially obstruct the navigation, and make the passage of the draw dangerous, it would have been incumbent on the defendant to change the piers in conformity to the new condition of things; because all private interests must be subservient to the public: good and in no event could a material obstruction to the navigation be maintained to subserve any private interest whatever. But if the jury find that the change in the current to the draw by the excavation was slight, being only a few degrees, and not such as to make the passage of the draw dangerous, the law did not impose upon the defendant the extreme measure of changing the direction of the draw-piers. Reasonable safety to navigation is what the law was intended to secure, and when this purpose is secured the law will not impose upon bridge-owners the extreme and ruinous expense of changing the direction of the piers, in :order to make them conform literally and exactly to the currents, whenever by causes not within their control some, slight variation from the original flow of the water is produced. It was competent for the government to authorize both of the improvements,—the bridge and the canal; and if, before the bridge was built, the canal was ordered to be constructed by the government, it became the duty of the bridge company to plan and build their bridge with reference to the canal, since they must have known that the principal traffic of the river would pass through it. But the bridge company were, in so doing, required to use only reasonable diligence and skill in forming and executing their plans. They could not be required to foresee and absolutely anticipate the effect upon the current of the river of a factor not yet in existence; and if you find that the defendant used all reasonable care, skill, and diligence to ascertain the plans of the government officers with reference to the canal, and to conform to the same in the location and erection of the bridge, and if you find the result to be that the piers of the bridge were made parallel, as far as possible, with the currents of the river and the necessities of the canal, with the further result that the passage of the draw is reasonably safe, then nothing more could be required of the bridge company, and negligence cannot be imputed to them in that behalf.

The defendant asks the court to instruct the jury that, "if the bridge was a lawful structure, built according to the limitations of the act of

congress, and that the War Eagle was ran down against the defendant's bridge, and damaged the same by knocking out and sinking one of its spans, the verdict should be for the defendant on its counter-claim." The court refuses to give this instruction, because it excludes the proposition that the accident may have been purely fortuitous, and without any negligence Whatever on the part of the plaintiff's servants in charge of the boat. In order to make the plaintiff liable, the element of negligence is indispensable.

Again, the defendant maintains that, "if there were two ways for the War Eagle to have gone through the west side of the pivot-pier,—one head on, and the other by backing through,—arid if backing through was the safer way, under all circumstances, surroundings, and conditions, then it was the duty of the officers in charge of the boat to have adopted the safer way, and the failure to do so was negligence." This is denied by the court, because, although one way of accomplishing a given result may be safer than another, both may be reasonably safe, and it may be entirely consistent with the exercise of ordinary care and skill to adopt either way. The pilot in charge of the boat was not required to exercise the highest degree of care and skill, or even extraordinary care and skill. All that his duty demanded was that he should use ordinary skill and care; and the jury must determine Whether or not in attempting to pass the draw as he did, heading down the river, he came up to this requirement.

It is manifest that the principal and controlling question in the case is whether or not the piers Were placed substantially parallel to the current of the river, and whether, if they were not so placed, that fact caused the eddy by which the head of the boat was caught and turned to the Iowa shore. The jury is called upon to decide this question by the fair preponderance of evidence, the burden of proof being upon the plaintiff. Now, the testimony upon this question is very conflicting; so conflicting indeed, that it cannot be harmonized. The jury may not, from this conflicting evidence, be able to reach any satisfactory conclusion. The jury have the testimony of experts on both sides, apparently competent, and of numerous observers who watched the currents with reference to the piers, and noticed the course of the ice, drift-wood, etc., and saw how these floats strike the piers of the bridge. These witnesses give testimony diametrically opposed to each other, and if the jury find it a vain task to attempt to reconcile their evidence, or determine the preponderance, it will be necessary to resort to other well-established facts in the case to determine the question at issue.

Now, the whole scope and purpose of the plaintiff's testimony is to show that, in consequence of the failure to comply with the requirements of the law of congress, the bridge is a structure dangerous to navigation; that the passage of the draw is perilous to boats; and that it cannot be passed with reasonable safety. This is not only the inference from, but the direct tendency of, the plaintiff's evidence. It is competent for the jury, in order to

test the truth of the plaintiff's allegations and proofs in this regard, to consider the actual facts of navigation at

the draw in question through the long period during which the bridge draw has been used. What is the best test of those machines and structures which are used in the practical arts? Is it not the actual experience of their use, rather than the opinion and judgment of mere experts? If a railroad bridge has long borne its burden, and carried over passengers and freight in safety, do you not conclude, even against the adverse judgment of experts, that it is a firm and solid structure? If a machine has long worked well and duly performed its proper functions, would you condemn it as a bad or imperfect machine because experts should give their opinions that it could not possibly do good work? If a house should stand firm against storm and tempest, for a quarter of a century, would you tear it down in deference to the judgment of some wise architect who should declare that it was built upon false principles, and must, therefore, be an unsafe structure?. In all such cases, would you not apply the test of experience, and govern yourself by that test rather than by mere opinion? Now, apply that test to the structure before you. You have abundant evidence of the results of the passage of boats and other water-craft through the draw of the bridge, from the time of its opening, in 1871, to the present time. It is in evidence that steam-boats land water-craft of various kinds, to the number, in the aggregate, of 50,000 and more, have passed through the draw during the intervening period. It is in evidence, further, that very few accidents have happened in the passage of the draw; so few, indeed, as hardly to be worth mentioning. It is true that many, probably the most, of these boats, vessels, rafts, etc., came through the canal, and many of them, doubtless, were small steamers; but the number has been so great, and the period of time so considerable, that I submit it to the jury to say whether, with all possible abatement, the test of practical use has not been sufficient; and whether the number of accidents is any greater than might have been expected at any bridge, however well constructed. One pilot testified that he had passed the draw 500 times in a single year, without accident; and although it may be that he was, in most of these passages, in charge of small steamers, yet, in view of their great number, the test cannot be set aside as worthless. It is not by the passage of large steamers alone that the safety of the draw may be tested, though it is beyond doubt that a very great number of large steamers have passed the draw, in the time mentioned, with perfect safety. The War Eagle herself has accomplished the passage safely for about 150 times. I therefore submit it to the jury to say whether or not it is probable that, if the bridge were faulty as claimed and represented, so great a number of boats and water-craft, through so long a time, would have been able to make the passage in safety, and whether or not the accident to the War Eagle was not a casualty purely fortuitous and unavoidable.

The jury may solve the questions in the case upon three different hypotheses depending upon the evidence:

First. That the construction of the bridge was faulty, and not in compliance with the law, and that the accident occurred from this cause,

without fault or negligence in the navigation of the boat. If this view is sustained by the evidence, the verdict must be for the plaintiff.

Secondly. That the bridge was well constructed, substantially according to law; but that the accident occurred in consequence of the failure of the plaintiffs servants to use ordinary and reasonable care and skill in the management and navigation of the boat. If the jury shall reach this conclusion from the evidence, the verdict must be for the defendant on its cross-claim, for its loss in the destruction of a span of the bridge.

Thirdly and lastly, the jury may find, if the evidence in their view requires it, that the accident was without fault by any human agent; without negligence in the structure of the bridge; and without any want of care and skill in the navigation* If the jury so find, then their conclusion must be that the accident was the result of causes purely physical, that no human agency was to blame for it, and that the injury was the result of a casualty of navigation purely fortuitous and unavoidable. If the jury reach this conclusion, they will find two verdicts,—one against the plaintiff on its petition, and one against the defendant on its cross-demand.

Of course, the jury will not fail to consider that accidents will sometimes unavoidably happen in the navigation of a great river by the powerful agency of Steam, propelling vast and somewhat unwieldy machines; and when such a navigation meets numerous bridges in its way, however Well constructed, it would be almost a miracle if accidents did not sometimes happen, especially in seasons of extreme high water, in spite of all reasonable efforts for the safety of navigation. Bridges and boats alike must, under such circumstances, sometimes suffer from such casualties; and, when they do, the men who build for their profit structures so exposed to danger, or use vessels in such perilous service, must bear the consequences which they have good reason to foresee and anticipate.

NOTE. The jury found against the plaintiff on its claim, and against the defendant on its counter-claim. Plaintiff moved for a new trial, which, after a hearing by the court, was refused. Judgment on the verdict was, that defendant recover all costs on the hearing of claim for damages, and plaintiff recover all the costs on hearing of counter-claim.