

“Sustain the appeal: Recal the interlocutor of the Sheriff-Substitute, dated 23rd December 1891: Find in fact (1) that the ‘Theodor Korner’ arrived at Glasgow on or about 15th May 1891, with the cargo on board referred to on record, of which cargo the defenders M'Donald & Neilson were the consignees; (2) that a berth at Yorkhill was assigned to said vessel by the harbourmaster at Glasgow for the discharge of said cargo there into the water, and that the said defenders or consignees foresaid acquiesced in the discharge of said cargo at said berth into the river Clyde; (3) that the said cargo was damaged by being discharged into the river and remaining there for several days before being removed to the Queen's Dock, and that the damage so sustained was to the extent and value of £40 sterling; (4) that said damage was not occasioned by any fault or breach of contract on the part of the pursuers; and (5) that the balance of freight due to the pursuers in respect of said cargo is £56, 4s. 7d.: Finds in law that the pursuer is not liable to the defenders for the damage sustained by said cargo as aforesaid, and that the defenders are liable to the pursuers in the said sum of £56, 4s. 7d. with interest as concluded for: Therefore decern against the defenders in terms of the prayer of the petition: Find the defenders liable to the pursuers in the expenses of process, both in the Sheriff Court and in this Court, subject to a deduction of £10 sterling from the taxed amount.”

In the action for demurrage the Court pronounced the following interlocutor:—

“Find in fact that there was no undue detention of the pursuers' vessel in the discharge of her cargo, and that any delay which took place in the course of the discharge of said cargo was occasioned by the pursuers and not by the defenders: Find in law that the defenders are not liable in the demurrage sued for: Therefore dismiss the appeal: Recal the interlocutor of the Sheriff-Substitute, dated 23rd December 1891, in so far as it finds the defenders entitled to expenses: *Quoad ultra* affirm the said interlocutor, and decern: Find the defender entitled to expenses both in the Sheriff Court and this Court, except the expenses incurred in connection with the proof led by parties.”

Counsel for the Pursuers—W. Campbell—Salvesen. Agents—J. B. Douglas & Mitchell, W.S.

Counsel for the Defenders—Dickson—Aitken. Agents—Webster, Will, & Ritchie, S.S.C.

Tuesday, March 15.

FIRST DIVISION.

[Lord Kyllachy, Ordinary.]

THE PORT-GLASGOW AND NEWARK SAILCLOTH COMPANY, LIMITED v. THE CALEDONIAN RAILWAY COMPANY.

Railway—Fire Caused by Spark from Engine—Damages—Negligence—Onus of Proof.

The owners of a flax store situated near a railway, which had been set on fire by a spark from a passing engine, sued the railway company for damages, alleging that they had omitted to take proper precautions against the emission of sparks in not fitting the engine with a contrivance known as the “spark-arrester.” The evidence showed that the engine in question was of a new type to which the “spark-arrester” was inapplicable, and that it was fitted with the best known means for preventing the emission of sparks available in engines of that class. It was not proved that the risk of communicating fire had been sensibly increased by the new method of construction. The Court held that the defenders had not been negligent, and therefore *assoluzied* them from the conclusions of the action.

Observations as to the extent to which a railway company may, in improving the general efficiency of its engines, increase the risk of their discharging dangerous sparks, without incurring liability for the damage that may result.

Observed by the Lord President, that it is a rule fixed by a series of decisions, that if a fire is caused by a locomotive the railway company is not liable for the damage done unless they are proved to have been negligent.

Railway—Fire Caused by Spark from Engine—Contributory Negligence.

A flax store situated in close proximity to a railway had no windows, and when light was required it was obtained by opening the doors of the store. On one occasion when two doors were open, one on the side next to, and one on the side away from the railway, a spark from a passing engine was blown in at the former, and falling among some loose flax caused a fire which destroyed the store. In an action by the owners of the store, the Court held that they were not barred by contributory negligence from claiming damages from the railway company.

Damage by Fire—Title to Sue—Insurance.

Held, in an action of damages on account of a fire caused by a spark from a locomotive, that the fact that the pursuers' loss was covered by insurance formed no objection to their title to sue.

The Port-Glasgow and Newark Sailcloth Company brought an action against the Caledonian Railway Company for payment of £12,000 as damages for the destruction by fire of a flax store belonging to them.

The pursuers averred, *inter alia*, that the fire had been caused by a spark from a locomotive engine belonging to the defenders being carried through a door in the store; that the engine in question "was not of proper construction, in respect it was not fitted with what is commonly known as a 'spark-arrester,' or with any efficient mechanical contrivance to prevent sparks being emitted or thrown out therefrom," and that in consequence they had sustained damage to the amount sued for.

The defenders denied these averments, and also averred that in view of the proximity of the store to the railway the pursuers were bound when any of the doors on the side next the railway were opened to have taken precautions to have secured the flax from taking fire, that no such precautions had been taken, that the pursuers' loss was covered by insurance, and that the amount thereof having already been paid to the pursuers they had no interest to maintain the action.

The pursuers pleaded, *inter alia*—" (2) The fire in question having been occasioned by the failure on the part of the defenders to use reasonable and proper appliances, precaution, and skill, in the use of their railway, the defenders are liable for the loss, injury, and damage thereby sustained."

The defenders pleaded, *inter alia*—" (1) The said insurance companies having the chief interest in the subject-matter of this action, and control over the proceedings therein, ought to be ordered to sist themselves as pursuers. (4) Any loss which the pursuers may have sustained not having been occasioned by the fault of the defenders, they are not liable in any portion of the sum concluded for. (5) The said fire having been caused or materially contributed to by the negligence of the pursuers, they are not entitled to recover damages from the defenders."

On 6th December 1890 the Lord Ordinary (KYLACHY) repelled the first plea-in-law stated for the defenders, and allowed the parties a proof of their averments.

From the proof it appeared that the pursuers' store was situated on the north side of the defenders' railway from Glasgow to Greenock, at a distance of 29 feet 6 inches from the centre of the nearest line of rails. On the morning of 5th June 1890 the pursuers' foreman John Webster went into the upper storey of the store to sort flax. This storey was only a few feet above the level of the rails, and was not lighted by any windows. In order to get light for his work Webster opened a door on the side next the railway. He also left open a door on the other side of the store by which he had entered. While engaged in his work Webster heard a train pass, and almost immediately afterwards he observed that some loose flax which was lying near the door on the side next the railway was on

fire. Attempts were made to extinguish the fire, but without success. The result of the evidence on this part of the case satisfied the Court that the flax had been set on fire by a spark or cinder from the defenders' engine No. 85.

On the question whether the defenders had failed to take proper precautions to obviate the danger of fire from the emission of sparks, the evidence showed that engines of the older types were generally fitted with a "grid" or netting of iron, known as a "spark-arrester," which was inserted in the smoke-box below the chimney, and that No. 85 was furnished with no contrivance of this kind.

The engine in question was of a new type, having been designed in 1885 and built in 1888. It was not disputed by the pursuers that it was a thoroughly efficient engine, both as to power and speed, but they maintained that in leaving it without a "spark-arrester" the defenders had neglected to take what was a proper precaution against the emission of dangerous sparks. The mechanical arrangements adopted in No. 85 in order to promote perfect combustion were these—The fire-box, which was larger than in engines of an older pattern, was surmounted by a brick arch, and was furnished with a deflecting door-plate to deflect the air admitted by the door down into the fire. The ash-pan was fitted tight to the bottom of the boiler, and furnished with air-tight doors, in order that the admission of air into the furnace might be entirely under the control of the driver. The engine was also fitted with the then recently invented contrivance known as the "vortex blast," the principle of which may be shortly explained. When locomotive engines were first invented it was found difficult to get a fire of sufficient power to burn in a small enough space, and to obviate this difficulty each locomotive was provided with a fanner. In process of time it was discovered that the work done by the fanner in creating a draught could be more effectively performed by discharging the waste steam into the smoke-box, a mechanical arrangement known as "the blast." The jet of steam puffed into the smoke-box left a vacuum behind it, and so induced a draught from the furnace which carried the gaseous products of combustion from the smoke-box up the chimney. In the earliest form of "the blast" the exhaust steam was brought from the cylinders in a pipe, and was discharged into the smoke-box in a solid jet. In the improved form known as the "vortex blast," the steam was discharged into the smoke-box through an annular opening, and it was found that this form of blast induced a much more effective draught, and kept the lower boiler tubes free from ashes, whereas with the solid blast these tubes generally got choked in the course of a long run. In the form of the "vortex blast," with which No. 85 was fitted, the exhaust steam after issuing from the cylinders was introduced into a wide chamber, and was then discharged

through an annular opening into the smoke-box.

Several skilled engineers, called by the pursuers, gave it as their opinion that the vortex blast accelerated the draught and increased the chance of an engine emitting dangerous sparks; that it was all the more necessary that engines fitted with it should have spark-arresters, and that there was no difficulty in using a spark-arrester in an engine such as No. 85. They admitted, however, that they had never seen a spark-arrester used in an engine of the same pattern, and there was evidence to show that spark-arresters had been given up by most of the great railway companies in England. No evidence was adduced to show that since they had been given up more fires had been caused by sparks from engines.

For the defenders, Mr Drummond, who had been locomotive superintendent of the Caledonian Railway from 1882 to 1890, and had designed engine No. 85, deponed that the mechanical arrangements with which it was fitted were the best known means of promoting complete consumption of smoke and preventing the emission of sparks. In particular, he explained that the brick arch over the furnace stopped and threw back the larger embers which might be carried up in the flame, and burnt up the smaller ones, and that the combined effect of the wide chamber for the reception of the exhaust steam and the vortex blast was to produce a more equable and constant draught, and that the fire was in this way less disturbed, and the embers less drawn, than by the more intermittent action of the solid blast. He gave it as his opinion that engines of the pattern of No. 85 emitted sparks fewer in number and not larger in size than engines of the older type fitted with spark-arresters, and he had tested this opinion by examining the cinders left in the smoke-boxes of engines of both patterns. Mr Drummond also expressed the opinion that spark-arresters would, by their resistance to the draught, impair the efficiency of the new engines, and would at the same time rather increase than diminish the danger arising from the emission of sparks, because the increased resistance would necessitate a sharper blast, which would in turn lead to a greater disturbance of the fire. Corroborative evidence was given by a number of skilled engineers, including the locomotive superintendents of the London and South-Western, Midland, Great-Western, North British, and Caledonian Railways, and the assistant locomotive superintendent of the London and North-Western Railway.

The result of the evidence on this part of the case was that the defenders satisfied the Court that engine No. 85 was fitted with the best known appliances available in engines of that type for preventing the emission of sparks, while the pursuers failed to show that there was any sensible increase in the number or size of sparks emitted from engines of this class as compared with engines of the older pattern in which spark-arresters were used.

On 13th August 1891 the Lord Ordinary found that the fire in question was due to the fault of the defenders, and that the defenders were liable for the damage thereby caused, and in respect that parties were agreed that the damage should be assessed by an accountant, remitted to Mr J. M. Macleod, C.A., Glasgow, and granted leave to reclaim.

Opinion.—In this case I had an impression at the close of the proof that the weight of the evidence was, on the several points of controversy, in favour of the pursuers. But there being a good deal of complication, and also some conflict of testimony, I desired to have an opportunity of reading the printed proof. I have now done so, and the result is to confirm my original impression. I have therefore found that the fire in question was due to the fault of the defenders, and that they are therefore liable in damages, the amount of the damage being to be ascertained, if the parties fail to adjust it, by a remit to an accountant.

“I do not think it necessary to go into details, but I may indicate shortly the view which I take of the evidence.

“The parties were not at issue as to the law. Assuming that the damage was caused by sparks discharged from one of the defenders’ engines, it was agreed that the defenders were liable, unless it appeared that they had used the best means known and practicable for obviating the danger; or otherwise, that the pursuers were (in the requisite sense) guilty of contributory negligence.

“The first question, accordingly, is, whether the pursuers have proved that the fire was, as they allege, kindled by a spark from one of the defenders’ engines. I am of opinion that they have. The evidence, I think, leaves little doubt that the flax in the pursuers’ store was ignited by a spark from the defenders’ engine No. 85, which passed the store about 11:51 a.m. on the morning in question, drawing the 11:20 express from Glasgow to Greenock. The defenders’ case is, that the store was observed to be on fire at 11:48 before the engine in question passed, and also before the passage of another engine (No. 237) which figured a good deal in the evidence. And if this had been made out, the defenders must, I think, have succeeded; because the only other engine which passed at all near to the time of the fire was the engine No. 82, and it passed about 11:40, which is admittedly too soon for the occurrence. But I am satisfied that on this matter the two witnesses Neill and Stone, on whom the defenders rely, were mistaken. The evidence of the pursuers’ witnesses Webster and Denholm makes it, I think, certain that the origin of the fire was not earlier than 11:50; and, moreover, if the store had been visibly on fire at 11:48, as Neill and Stone say, the fire could hardly, I think, have escaped the notice of the driver and stoker of the engine of No. 237, and of the guard and driver and passengers of the train drawn by engine No. 85.

"I must, therefore, hold it proved that the engine No. 85 did, on the occasion in question, discharge dangerous sparks, which reached the flax in the pursuers' store at a distance of about 29 feet from the rails; and I am further obliged to hold upon the evidence that that engine was and is in the habit of discharging dangerous sparks. There is a concurrence of testimony to that effect which cannot, I think, be explained away.

"Now, that being so, a considerable *onus* is thrown on the defenders, and I am afraid they hardly discharge themselves of that *onus* by leading evidence to the effect that the engine in question was of the newest and best construction, and that its arrangements for complete combustion were so perfect that if sparks came from it which reached the ground aglow, 'either the engine-driver was very much at fault, or the coals were very bad.' That view is the view of Mr Drummond, the defenders' late locomotive superintendent, a gentleman of the highest skill and a most excellent and candid witness. It is also the view of Mr Adams, the patentee of the vortex blast, which was the leading feature of this class of engine. But the observation at once occurs that the defenders are as much responsible for the fault of the engine-driver as for defects in the construction of the engine. And accordingly the pursuers very naturally urge that the dilemma thus suggested is quite enough for them.

"Apart, however, from any *argumentum ad hominem*, I confess I am not satisfied on the evidence that the engine No. 85 and the other engines of its class are so constructed as to contain the best-known and practicable arrangements for preventing the emission of sparks. Differing in this respect from the older class of engines, they contain no 'spark-arrester' in their smoke-box; and assuming in their favour (what, however, is matter of dispute) that their vortex blast arrangement does not tend to increase the risk of sparks, or even that its associated arrangements tend to diminish that risk—still the sparks *ex hypothesi* issue, and issue of such size as to be dangerous; and that being so, I am not, I confess, satisfied upon the evidence that the spark-arrester if used would not at least have reduced that risk. Neither have I been convinced that its introduction would have materially interfered with the working of the engine or been in any other respect injurious. It is true that a majority of the great railway companies in England have ceased to use 'spark-arresters.' But they are still largely used; and having given my best attention to the views of the defenders' witnesses, I have been unable to see sufficient reason why they should not continue to be used, or why, if used, they should not go at least a considerable way to obviate the risk of fire.

"It only remains to consider the question of contributory negligence, and here I am bound to say that the situation of the pursuers' store, and the arrangements of the building, were certainly not such as to

minimise the risks arising from sparks thrown by passing engines. The store was only 29 feet from the railway. There were doors on the side next the railway, and there being no window in the roof (as there might have been) it was sometimes necessary (as on the occasion in question) to open one of these doors for the purpose of obtaining light. All this was certainly the reverse of cautious. But, on the other hand, I do not know that the pursuers were bound—because of the risk of the negligent discharge of sparks from the defenders' engines—to forego the full use of their ground, or to depart from what they considered the most convenient arrangements for obtaining access to and for lighting their flax store. In other words, I doubt whether it can be imputed to them as fault that they took their chance of the defenders doing their duty. But in any case, the law—as I understand it—is, that in questions of contributory negligence *causa proxima non et remota spectatur*, and it is impossible to say that the position or arrangements of the pursuers' store formed in any proper sense the direct or proximate cause of this fire. The defenders could certainly, if I am right, have by ordinary care avoided inflicting the injury to which the pursuers, perhaps somewhat rashly, exposed themselves, and, according to the authorities, it is sufficient. See *Radley v. L. & N.-W. Ry. Co.*, L.R., 1 App. Cases, 754, 759; *Rooney v. Allans*, 10 R. 1224; *Florence v. Mann*, 18 R. 247.

"On the whole, therefore, I consider that my judgment must be for the pursuers, and I have only to add that I am not able to see that the fact of the pursuers being covered, or nearly covered, by insurance makes any difference in their position. It may be that they are really suing on behalf of the insurance companies, but that is after all merely matter of process, and in the present case, where there is no question of responsibility for costs, I do not see that anything could be gained by sisting the insurance companies as pursuers.

"On the whole, therefore, I find, as I have said, for the pursuers; and as the parties are agreed that the amount of the damages shall be settled by a remit to an accountant, I shall make the necessary remit to Mr J. M. Macleod, C.A., Glasgow, whose report will no doubt be presented early in the ensuing session."

The defenders reclaimed, and argued—(1) It was not proved that the fire had been caused by a spark from one of the defenders' engines. (2) Assuming that to be proved, the defenders were not liable, as they were not proved to have been in any way negligent. Railway companies had authority to bring fire into the neighbourhood of combustible articles, and they were not liable for any damage which resulted from the exercise of their statutory power, unless it was proved that the damage was due to their having neglected some reasonable precaution—*Aldridge v. Great Western Railway Company*, 1841, 3 Manning & Grainger, 515, per Chief-Justice Tindal. The precautions de-

manded of them must be consistent with their carrying on their business in a reasonable way, and hence in improving their engines railway companies were not bound by the condition that the improved engines must be equally safe in the matter of sparks as the less efficient engines in use—*Rex v. Pease*, 1832, 4 B. & A. 30; *Jones v. Festiniog Railway Company*, 1868, L.R., 3 Q.B.D. 773; *Vaughan v. Taff Vale Railway Company*, 1863, 5 H. & N. 679; *Smith*, 1870, L.R., 5 C.P. 98, *aff.* 6 C.P. 14; *Murdoch v. Glasgow and South-Western Railway Company*, May 17, 1870, 8 Macph. 763. The fact that the defenders had constructed engine No. 85 without a spark-arrester was no proof of negligence on their part, as that appliance had gone generally out of use—*Wisely v. Aberdeen Harbour Commissioners*, February 2, 1887, 14 R. 445. It was not proved, moreover, that engines of the new type threw more sparks than the older engines which were furnished with spark-arresters. The negligence of which the pursuers complained was that engine No. 85 had no spark-arrester, but they had failed to prove that a spark-arrester was necessary or advantageous in an engine of that type, or that it could be used without impairing the efficiency of the engine. The weight of the evidence supported the defenders' case that it was neither necessary, advantageous, or practicable. (3) Assuming the defenders' case to have failed on both the points already argued the pursuers could not recover damages as they had been guilty of contributory negligence. A person who possessed property of a highly combustible character in close proximity to a railway was bound to take ordinary precautions against fire, or at all events to use his property in such a way as not to increase the danger of fire, but the pursuers had done just the reverse. They had created a cross draught by opening doors on each side of the store, and had carelessly left loose flax lying near the open door on the side next the railway. In order to get the benefit of the cases quoted in the Lord Ordinary's note the pursuers must show that the danger was known to and disregarded by the defenders. (4) The pursuers had been already indemnified, and therefore had no title as they had no interest to sue—*Bradburn v. Great Western Railway Company*, 1874, L.R., 10 Exch. 1.

The pursuers argued—(1) The cause of the fire was a spark from the defenders' engine No. 85. (2) The duty of a railway company was to take the best known and practicable means of obviating the danger of fire—*Ford v. London and South-Western Railway Company*, 1862, 2 F. & F. 730; *Vaughan v. Taff Vale Railway Company*, *supra*; *Murdoch v. Glasgow and South-Western Railway Company*, *supra*, *per* Lord Neaves. This the defenders had failed to do, as they had neglected to furnish engine No. 85 with a spark-arrester. For twenty years that appliance had been looked upon as the best means of obviating the danger of fire from sparks,

and there was accordingly a heavy *onus* upon the defenders to show that it was not necessary, or was unworkable in engines of the new type—*Freemantle v. London and North-Western Railway Company*, 1861, 2 F. & F. 337, and 31 L.J., C.P. 12; *Piggott v. Eastern Counties Railway Company*, 1864, 3 C.B. 229. That *onus* had not been discharged, but the balance of evidence favoured the view that the spark-arrester was necessary in engines of the type of No. 85, and could be used without impairing their efficiency. (3) The pursuer had been guilty of no contributory negligence. They had been using their property in the ordinary way, and were entitled to rely on the defenders taking all the precautions in their power to obviate the danger of fire—*Radley v. London and North-Western Railway Company*, 1876, L.R., 1 App. Cas. 754, *per* Lord Penzance, 759. It was not enough for the defenders to show that the pursuers knew of the danger, they must also show that they had taken the risk of it—*Smith v. Baker & Sons*, L.R., App. Cas. 1891, 325. (4) The fact that the pursuers' loss was covered in whole or in part by insurance in no way barred the present action—*Delaurier v. Wyllie*, November 30, 1889, 17 R. 167; *Simpson v. Thomson*, December 13, 1877, 5 R. (H. of L.) 40, *per* Lord Chancellor Cairns, 42.

At advising—

LORD M'LAREN—This is an action instituted for the recovery of damages from the railway company on the alleged ground that the pursuers' flax store was destroyed by fire caused by a spark from a locomotive engine. Two questions were argued; the first, whether the fire was in fact caused by a spark from the defenders' engine, and secondly, whether in the circumstances the defenders are liable to make compensation for the damage caused by their involuntary act.

On the first question I believe that your Lordships are in agreement with the Lord Ordinary that the pursuers' store was set on fire by a spark from the engine No. 85, which passed the store about 11.51 on the morning of 5th June 1890, drawing the 11.20 passenger express from Glasgow to Greenock.

The evidence is partly direct and partly circumstantial. The direct evidence is that of John Webster, foreman flax-dresser, who was engaged in the store at the time in sorting flax. While so engaged, he, as I think properly (at all events without negligence), left open the door which looks towards the railway for the purpose of getting light, and looking round he saw the flax on fire and immediately sent for assistance. Webster says that he did not set the flax on fire, that he carried no light and no matches, and that there was no person in the store at this time but himself. Webster heard a train pass, as he says, a few seconds before he saw the fire. The fire originated in the loose flax near the open door, and if Webster's evidence be true, it must have been caused by a spark

from some external source. Here we have a cause adequate to account for the fire—I mean a passing engine—and no other cause suggested which is reconcilable with the evidence. By comparing different time observations the engine is identified by the Lord Ordinary as the engine No. 85 attached to the 11:20 express. I do not think it necessary to analyse the evidence on this point, because I agree with his Lordship in holding the identification to be complete. Indeed it is no part of the defenders' case that the fire was caused by a different engine. Their best witnesses on this subject are the two signalmen, Neill and Watson, who say they saw fire proceeding from the store before the express train had passed. But these men were doubtless fully occupied with their duties, which include making entries of the times when each train passes the signal-boxes, as well as the actual working of the signals, and there is nothing antecedently improbable in the supposition that they may be in error as to the time when the fire was first observed, because there is nothing in the circumstances of seeing a fire which should connect it in their minds with the passing of one train rather than another. On this subject I adopt the observations of the Lord Ordinary, that the evidence of Webster and Denholm makes it certain that the origin of the fire was not earlier than 11:50, and that if the store had been visibly on fire at 11:48, as Neill and Watson say it was, the fire could not have escaped the notice of the four railway servants who accompanied the trains drawn by engines 85 and 237. On the matter of fact I may say that the cause of the fire appears to me to be as well proved as such a thing can be, and even if the evidence had been weaker I should not have been disposed to interfere with the decision of the Judge who tried the case on a question which resolves itself into one of credibility.

The next question in the case is the criterion of liability or responsibility on the part of the company. The Lord Ordinary puts it that the defenders are liable, unless it appears that they had used the best means known and practicable for obviating the danger. This definition is in accordance with the authorities on this subject, but like many legal propositions it needs explanation with reference to the facts of the case which I am about to state. It is in evidence that with the view of lessening the risk of fire it was at one time usual to put into the smoke-box of the locomotive below the chimney a netting or "grid" of iron, which was called a spark-arrester, and in engines of the older type this appliance is still in use. The spark-arrester would of course have the effect of intercepting such sparks or cinders (I shall term them) as were too large to pass through the grating. It was not a complete protection against fire, and it is the case of the company that the ejection of sparks is more effectually prevented by improved methods of regulating the draught from the furnace than by the cruder mechanical method formerly in use. There

can be no doubt that very great attention and skill has been directed to the object of the production of an equable draught in the engine, and there is a very strong body of evidence to the effect that while the chief object of such improvements is the attainment of high speed, they also have the effect of leaving the furnace comparatively undisturbed, and thereby reducing the quantity of solid material which is carried up the chimney. It is also the opinion of all the witnesses who have experience in the construction of engines of the best modern construction, that the introduction of a grid into the chimney or smoke-box would nullify or most seriously interfere with the efficiency of the draught arrangements. For this reason it appears that in engines of the new type the grid has been discarded, not only by the Caledonian, but by all the great railway companies of England. The opinion of the companies' engineers is that the arresting of sparks is better accomplished by providing an equable draught through the engine than by trying to stop the cinders in their passage, and they are all agreed that the old spark-arrester cannot be applied to engines of the new type. Their opinion is so far verified by this consideration that while it is the fact that the so-called "spark-arrester" has for some years gone almost entirely out of use, there is no evidence, and no suggestion that in consequence of its disuse fires have become more frequent.

I shall consider the evidence on this subject a little more in detail, but before doing so, let me ask, supposing the case of the company on this head to be well founded, what is the bearing of these facts and opinions on the liability of the Caledonian Company? Is the company, these facts and opinions notwithstanding, bound to go on using the old spark-arrester, or to pay for the fire damage which it may be supposed will sometimes occur even when all practicable means are used to prevent it?

The argument for the pursuers was to this effect. Admitting that by the new construction of furnaces, and the introduction of the vortex-blast, the engines are greatly improved as engines, and their speed and efficiency increased, they say that one effect of these improvements is to increase the quantity of sparks ejected by the engine, and therefore the company is liable. One difficulty which the argument immediately suggests consists in the absence of any standard of frequency of spark-emission to which the company is to conform. It is tacitly assumed that under no circumstances of speed, or weight to be carried, is an engine to be permitted to send out a greater quantity of sparks than were emitted by the smaller and slower and less efficient engines that were in use in the infancy of the railway system. But then the theory of the decisions is that the Legislature by authorising the use of steam-power without limitation as to the power of the engines or the speed of locomotion has impliedly indemnified the company

against the consequences of the use of such engines, provided they are of the best construction, and that the proper safeguards are used for minimising the risk of fire-damage. These safeguards may be different according to the type of engine in question, and I cannot hold, consistently with the decisions, that railway companies are under a legal disability to improve the efficiency of their engines, because such improvement may in some small degree tend to increase the risk of setting fire to adjacent property. Nor would a company, in my opinion, be bound to reduce the speed of its trains if some-one should discover a better mode of arresting sparks, which could only be used with a speed of say twenty miles an hour. On the other hand, it may be fairly enough maintained that considerations of safety to landowners are not to be sacrificed altogether to the demand of the travelling public for express speed. The question is one of degree, in which common sense rather than legal refinement must be the guide. It is certainly most legitimate to refer to past experience, and to known appliances such as the old spark-arrester, but not as constituting an absolute standard to which the railway companies are bound to conform. It has not been shown that the quantity of sparks emitted by engines of the new type is sensibly greater, or that the risk of fire from them is of a different order of magnitude from the risk which existed when engines of the old type were alone used. If such a case could be established it might be necessary to consider what are the limits of the exemption from pecuniary responsibility which is claimed by railway companies under the decisions referred to by the Lord Ordinary. But for the purposes of the present case it may be sufficient to say that the company is within the exemption where these two conditions concur—first, that the means used for preventing the communication of fire are the best known and attainable with reference to the class of engine in use; second, that the risk of fire from such engines is not of a different order from that attending the use of engines of the class employed when the railway companies got authority from Parliament to use locomotive power.

I will now briefly indicate what I understand to be the means used in the engine No. 85 for obviating the emission of sparks. These, as I collect from the evidence, are substantially identical with the means and construction which are used by the leading railway companies in England. The furnace is surmounted by a brick arch, and the supply of air which feeds the furnace is regulated by a deflector. The gases or fumes from the furnace are led through a very large number of tubes, which are all kept clean and efficient throughout the journey, and the exhaust steam passes into a wide chamber, and is there sent into the chimney through an annular opening, while the products of combustion are led into the centre of the chimney by a tube placed inside the annular tube, which

carries away the exhaust steam. It is explained by Mr Drummond, formerly the locomotive superintendent of the Caledonian Company and the designer of this engine, that each and all of these mechanical arrangements tend to lessen the production of sparks. The object in view is, as far as possible, to avoid disturbing the cinders in the furnace by the effect of pulsations or an intermitting draught. The air is supplied to the furnace through a regulated opening, and is partially heated before mixing with the flame. The brick arch stops and throws down the larger cinders that may be carried up in the flame, and attracts and burns up the smaller ones. By the combined effect of the wide chamber for the reception of the exhaust steam, and of the vortex-blast arrangement, by which the steam and the gases are carried in separate currents into the chimney, the flame is said to be carried through the tubes and up the chimney in a continuous equable current, and the cinders in the furnace are not disturbed by the pulsations attending the escape of steam as was the case in the engines of the old pattern. In engines of the old pattern by the effect of these pulsations such a quantity of ash was driven through the tubes that at the end of a long journey as many as one-fourth of the tubes of the tubular boiler were found to be completely choked by the accumulation of ash, and this irregularity again rendered necessary a sharper blast, thereby increasing the emission of sparks. In the new engines the tubes do not get choked with ashes. The pursuers say that this is because the ashes are carried up the chimney; but it is not easy to see why this should be the result of the more equable blast which is admittedly obtained in engines of the improved construction. The corroborative evidence includes that of the locomotive superintendents of the London and South-Western, the Midland, the Great Western, the London and North-Western, the Caledonian, and the North British Railways. These are men with whom the designing and working of locomotives is the business of their lives. The improvements to which they speak were not made for the special purpose of lessening the risk of fire, but it is impossible to read their evidence without seeing that the means which have been devised for ensuring more perfect combustion and more equable draught with a view to efficiency of speed and economy of fuel, are also the best known and practicable means of preventing the discharge of solid particles through the chimney of the engine. These gentlemen are all of opinion that the grid cannot be used with the present type of engine, because of its tending to interfere with the regular and steady current of flame which is a necessary accompaniment of the new system. Against such evidence, there is the opinion of more than one witness of ability and science, but on such a subject I think the opinion of practical engineers is the best opinion. It may be said that the practical witnesses are all railway men,

but then it is their interest to make these engines as perfect as possible; they say that the escape of sparks cannot be altogether prevented, and that their way is the best way. No one has come forward to show a better way; and while the pursuers' witnesses say that there is no mechanical difficulty in introducing a grid into the new type of engine, they do not satisfactorily meet the defenders' evidence, which is to the effect that the grid would render useless the other arrangements which in a different way tend to the same result of preventing sparks.

My opinion on this engineering question is, that the defenders have proved that they use the best known and practicable means available in engines of the type of No. 85 for preventing the emission of sparks. I am satisfied that in fact the engine 85 was not so constructed as to send forth sparks in excess of what are usually and unavoidably produced by engines running at a high speed. For these reasons I propose that the interlocutor should be recalled, and the defenders assolized from the action.

LORDS ADAM and KINNEAR concurred.

LORD PRESIDENT—Were it not for the importance of this case and the anxiety with which it has been argued I should have said no more than to express my concurrence, being well content with Lord M'Laren's exposition of our judgment.

On the question of fact as to the cause of fire the only difficulty arises from the two signalmen Neill and Watson. The very direct and precise evidence of Webster, and the exceeding weakness of the competing theories (about matches and pipes) make the conclusion almost irresistible that some locomotive engine caused the accident, and the time is sufficiently well fixed as that when engine No. 85 passed. The testimony of the signalmen is certainly striking, but its importance all depends on the accuracy of the memories of those witnesses in connecting what they saw with the particular train in question, and their evidence does not seem to have had that cogency which would carry conviction to the mind of the Lord Ordinary who saw and heard them, and could overcome in his Lordship's mind the inference to be drawn from the rest of the evidence.

On the more generally important question which arises, assuming engine No. 85 to have caused the fire, the Lord Ordinary has not explicitly formulated what he takes to be the issue to be tried, but he says several things which indicate that he has considered the question from a standpoint different from that which is adopted by your Lordships.

He begins by holding, upon the evidence, that No. 85 "was and is in the habit of discharging dangerous sparks," and he goes on to say, "Now that being so, a considerable *onus* is thrown on the defenders." If this means that this particular engine differs for the worse from other engines in regard to the sparks it throws, I think this is not made out. There is nothing substantial to show

that the observers who noted the proceedings of No. 85 would not have seen just the same things if they had watched any other engine with or without a spark-arrester. If, on the other hand, the Lord Ordinary means that if any engine or all engines be in the habit of discharging dangerous sparks (meaning thereby sparks which do not go out on the way to the ground), then the *onus* is on the company. I think that proposition is irreconcilable with the law as it is now settled.

This question of *onus* is highly important to the stability of the interlocutor, for the Lord Ordinary ultimately decides against the defenders on the ground that they have not convinced him that the type of engine which is prevalent on most of the principal English and Scottish railways is so constructed as to contain the best known and practicable arrangements for preventing the emission of sparks. And what this means is made more manifest when his Lordship says in the last sentence relating to this subject, "I have been unable to see sufficient reason why spark-arresters should not continue to be used, or why if used they should not go at least a considerable way to obviate the risk of fire." From this I gather that the Lord Ordinary does not pronounce either upon the question (unsolved by experience) whether the spark-arrester is practicable in the new engines or on the other question (which is equally problematical) whether, if it could be so combined, it would do much or any good. Nothing therefore but the initial *onus* has led to his Lordship's decision.

Now, I must say that I cannot see how this can be supported. I do not think that our duty is to discuss these complicated questions of mechanism as if we had now to construct a safe engine, and to conjecture whether combinations, hitherto untried, would or would not be better than those in use. We have got to say whether the pursuers have proved that the defenders are negligent because they use this type of engine.

I take the broad facts of the case. This type of engine (of which No. 85 is simply a specimen) is, as I have said, prevalent on most of the principal lines. It has been in use for many years, and there has been abundant opportunity of judging whether more fires occur where it is used than where the spark-arrester is in vogue. There is no evidence whatever of the affirmative. Therefore when the defenders got this engine they were simply getting the best engine to be had without anything to suggest that it was dangerous. If, going further back, we ask whether the question of safety was considered by the constructors of these engines, I say the evidence shows that it was considered and decided in favour of the new system, and we find that the skilful mechanics who advised the company and are examined as witnesses give strong reasons for their choice. It may be that ingenuity may in the future combine the spark-arrester with the new system without spoiling the efficiency of engines; all I can say is, that this has not

yet been done, and it forms no part of the existing knowledge available to railway companies. At present it is, to say the least, a moot point whether the thing is practicable. Because the defenders have not demonstrated it to be impracticable, the Lord Ordinary has found them liable.

I deem this quite inconsistent with the series of decisions, of which *The King v. Pease and Vaughan v. The Taff Vale Railway Company* are leading instances, approved by the House of Lords in *Hammer-smith v. Brand*. The consequences of these decisions are no doubt serious and striking, but the rule fixed by them is that if locomotives set fire to property, the railway company are not liable unless they are proved to have been negligent. It is true that such negligence may be in the construction or the furniture or the conduct of the engine—*Freemantle v. London and North-Western Railway Company*, 31 L.J. C.P. 12—and this opens responsibilities which would not be discharged by a facile acceptance of any engine proposed by advisers who necessarily are not stimulated by any independent regard to the safety of the property of third parties. Still, negligence there must be, in a fair sense of the term. The facts of this case seem to me to disclose none.

I have only to add that I understand we all agree with the Lord Ordinary in rejecting the arguments founded on account of contributory negligence and on the insurance of the premises which were destroyed. The latter contention is not formulated in a plea.

The Court recalled the interlocutor of the Lord Ordinary and assoilzied the defenders.

Counsel for the Pursuers—Ure—Salvesen.
Agent—W. B. Rainnie, S.S.C.

Counsel for the Defenders—D. F. Balfour,
Q.C.—Guthrie. Agents—Hope, Mann, & Kirk, W.S.

Thursday, March 17.

FIRST DIVISION.

[Lord Low, Ordinary.

SIM v. ROBINOW.

Jurisdiction—Forum non conveniens.

S. and R. being both in business in Cape Colony entered into a joint speculation in the shares of a South African Mining Company. Some years afterwards, S., being then resident in England, raised an action of count, reckoning, and payment against R. in the Court of Session, averring that he had realised the shares and failed to account for the proceeds. At the date of service the defender had been resident in Scotland for more than 40 days. He stated that in the absence of his books and papers he could not give the details of the transaction referred to

by the pursuer, but that the whole accounts connected therewith had long ago been settled, that his visit to Scotland was merely temporary, and that he was about to return to his business in South Africa. He pleaded *forum non conveniens*. The Court repelled the plea.

Patrick Sim, residing at 4 Hanover Street, Hanover Square, London, brought two actions against Henry Robinow, presently residing at Braemar. Both actions related to certain joint speculations in mining and other shares entered into by the parties in South Africa. At the date of service the defender had been resident for more than 40 days in Braemar.

In the first action the pursuer sought to have the defender ordained to count and reckon with him in regard to the proceeds of certain shares in the Kimberley Central Diamond Mining Company.

The pursuer averred that he and the defender, until recently, had both done business in South Africa; that while there they had become interested, as joint adventurers, in a number of investments, including the shares mentioned in the summons; that the share certificates and other documents had been entrusted to the defender, who had full power to dispose of them; that except as regarded the shares specified in the summons the parties had adjusted their accounts in 1887; that the said shares had been realised in 1888, and the defender had failed to account for the proceeds. The pursuer produced a copy of an account dated in 1887, to which was appended a docket signed by the defender, bearing that these shares were not included in the adjusted account.

On the merits the defender answered that after such a lapse of time, and in the absence of all his books, papers, &c., he was "not in a position to state accurately the details of the transaction set forth in the condescendence. The whole accounts in connection therewith were long ago squared up, paid, and settled by the parties, and there is no sum due by the defender to the pursuer in connection therewith."

In the second action the pursuer sued the defender for payment of £710, 18s. 5d. and interest, alleging that the defender had been indebted to him in that sum on 13th April 1889, "conform to statement of accounts extracted from the defenders' books, and signed by his clerk, Mr A. Rodger."

On the merits the defender answered that it was impossible for him "to check or verify the 'statement of account' produced by the pursuer. The books and papers, as well as the witnesses necessary for doing so, are all in South Africa." He further averred that any sum due by him to the pursuer was more than counter-balanced by a claim which he had against the pursuer for a number of cases of dynamite, for which pursuer had failed to account while managing on behalf of the defender a magazine for storing dynamite in South Africa.

The defender also in both actions made