This is the authors final peer reviewed version of the item published as:


Copyright : 2002, Elsevier Science Inc.
1. Introduction
A medical witness is supposed to be an independent expert whose specialised knowledge, skill, training, and possibly experience, may assist the court—the judge and jury—in determining the issue of liability. Writing at the turn of the 19th century on the ethics of court testimony in cases of infanticide, Thomas Percival advised medical practitioners in his Medical Ethics:

when it becomes their painful office to deliver evidence, on such occasions, justice and humanity require, that they should scrutinize the whole truth, and nothing extenuate, nor set down aught in malice. [emphasis in original]

This article examines social and medicolegal developments, which have contributed to the evolution of medical and forensic culture in the mid-19th-century England, whereby the ideal of a nonpartisan expert witness would often be honoured more in the breach than in practice. There has been considerable body of literature relating to medical witnesses who appeared in criminal cases;2 this article, however, analyses legal and medical responses to the dramatic upsurge in civil compensation claims for personal injuries occasioned through railway accidents. It looks back to a time before psychiatry became recognised as a discrete branch of medicine, and surgeons as well as physicians treated patients whose condition would today be diagnosed as a severe psychiatric reaction to a traumatic event.3

Fierce medical debates of the 1860s regarding the aetiology of somatic symptoms presented by railway passengers who were involved in train collisions but did not sustain a demonstrable physical injury engendered their own highly emotive vocabulary. Partisan opinions held by medical witnesses adhering to a particular viewpoint or theory found their way into the courtroom and were reported in a series of high-profile cases. The article examines the state of medical knowledge as reflected in the medical controversy that exploded on the pages of The Lancet. This journal, founded by Thomas Wakley in 1823, was at the forefront of legal, ethical, and educational reform of the medical profession in England. The medical background illuminates the law of compensation for pure psychiatric injury as it developed in the second part of the 19th century.

The essay is a study on how perceptions of the role of a medical expert can impact professional practice, how perceptions of the nature of a particular disorder can influence the attitudes of individual doctors towards patients who present with the condition, and finally, how perceptions
created by medical nomenclature regarding the status of a disorder can shape the development of
the law.

2. The dubious practice of ‘medical arbitration’

The advent of railways in the early 1830s brought in its wake an unprecedented toll of injuries
and death. The injured passengers tended to sue the railway companies as

Burns (Ed.), Legacies in Law and Medicine, New York: Science History Publications (1977) 228–238; J.P. Eigen and
G. Andoll ‘From Mad-Doctors to Forensic Witness: The Evolution of Early English Court Psychiatry’ (1986) 9
89–117; S. Landsman ‘One Hundred Years of Rectitude: Medical Witnesses at the Old Bailey, 1717–1817’ (1998) 16
Law and History Review 445–494.

3 My interest in this area of the law was sparked by my husband, Professor George Mendelson, who
introduced me to medical writings on ‘railway injuries’ (as they were called in the mid-19th century), when we
coauthored a paper titled ‘Tortious Liability for Nervous Shock’ (February 1991). See also D. Mendelson, ‘The
Review 16–70.

4 According to A. Moore, A Hand-Book of Railway Law, London: W.H. Smith & Son (1859), at p. xxxii, the 1857
Annual Report of the Board of Trade stated that out of nearly 140 million passengers who travelled by United Kingdom
railways in that year, 236 were killed and 738 were injured ‘from causes beyond their own control’.


common carriers in action on the case in tort rather than in contract. This tendency was reinforced
by the decision in Hadley v. Baxendale, which determined that in ordinary commercial
transactions, recovery was only allowed for damage that ‘may reasonably be supposed to have
been in the contemplation of both parties, at the time they made the contract, as the probable
result of the breach of it’. This meant that compensation for any secondary symptoms caused by
the breach of contract was excluded. Consequently, in cases of vehicular collisions—where the
injury arose from the negligent conduct of the defendant carrier—the plaintiff was able to obtain
more adequate damages in an action on the case for negligence. This cause of action was also the
most appropriate, for as J. Bayley in Ansell v. Waterhouse stated:

actions on the case lie for recovery of damages for consequential wrongs, accruing from
misfeasance or nonfeasance, from negligence or wilful conduct of the party sued, in doing or
omitting to do something, contrary to the duty which the law casts upon him [the common carrier]
in a particular case.

Railway companies were classified as falling into the category of common carriers. They were
thus responsible for any physical injury to the passengers that occurred as a direct result of their
negligence. In England and in the United States, passenger carriers of all kinds were held to a
standard of utmost care and, providing there was no contributory negligence on the part of the
claimant, were often found liable for damages in an action on the case. For example, in 1865 the
railway companies paid out over £300,000 in damages to injured passengers. There appear to be
no reported cases in which mid-19th-century plaintiffs suing a railway company pleaded damage
in the form of such traditional psychiatric conditions as mental alienation or insanity (mania,
melancholia or monomania, dementia, lunacy, or idiocy). Instead, plaintiffs alleged that they
suffered conditions, which today would be considered psychosomatic and posttraumatic
disorders.

Casualties on railways were so high that all major English railway companies employed their own
teams of surgeons and physicians. As a result, from the middle of the 19th century, medical
practitioners became very closely involved with forensic processes in the context of the law of compensation. The interaction between law and medicine was not without

5 Hadley v. Baxendale (1854) 9 Ex 341, at 354, per Alderson B.
6 Other than breach of promise of marriage. See Pollock C.B. in Hamlin v. Great Northern Railway Company (1856) 1 H&N 408, at 411; 156 ER 1261, at 1262.
7 Ansell v. Waterhouse (1817) 105 ER 1286. The case concerned the plaintiff’s wife who was injured while a passenger in a common stagecoach.
8 Railway and Land Traffic Carriers’ Act (An Act for the Better Regulation of the Traffic on Railways and Canals) 1854 (UK), 17 and 18 Vict ch 31.
9 From the 1809 case of Butterfield v. Forrester (1809) 11 East 60; 103 ER 926 until modified by the Law Reform (Contributory Negligence) Act 1945 (UK) (followed in other common law jurisdictions later), a successful plea of contributory negligence had the effect of defeating the plaintiff’s recovery entirely.
11 Term introduced by Philippe Pinel (1745–1826).


professional and ethical dilemmas, particularly in relation to the role of medical witnesses in personal injury litigation occasioned by railway accidents.

The primary function of railway surgeons and physicians was, naturally, to treat passengers and railway employees injured in train accidents. They would also appear as expert witnesses in any legal proceedings arising out of these accidents. More controversially, however, from the middle of the 1840s, many railway medical officers acted for their respective employers in arranging the amount of compensation that their employer-company would pay to the injured patients. Having diagnosed the patient’s injury, they would then offer him or her an amount in compensation on behalf of the negligent railway company for whom they acted.

This widespread practice of ‘medical arbitration’ was criticised in The Lancet. The editorial of 7 July 1866, having referred to two ‘recent cases’, stated that a medical practitioner employed by a railway company:

should never, if attending the patient on behalf of the company, discuss the amount of compensation with the patient alone; for the paid officer of a company ‘arbitrates’, if acting alone, under suspicion—a suspicion dangerous to his character and derogatory to his professional honour. He should require the presence of a medical man on behalf of the patient, and the patient, so protected, may then consider the question. To attend the patient on behalf of the company, and settle with him without any impartial medical intervention, is a position which he ought not for a moment to accept, for both his own sake and that of his profession.

The Lancet concluded that settling the amount of damages was both a legitimate and beneficial exertion of professional duty by a medical practitioner, providing the patient had the benefit of independent medical advice.

Some patients did not see the matter in quite the same benign light, and sued their ‘medical arbitrators’ for damages. For example, in August 1866, The Lancet reported the case of Cooper v. London & North-Western Railway Company. On 29 September 1865, Miss Cooper, a passenger on the defendant’s train was injured as a result of its negligence. She was taken to a nearby tavern, called Carven Arms, where Dr. Hughes attended her. He ‘subsequently gave her £20 from the company, for which she signed a receipt’. Her injuries turned out to be much more serious than Dr. Hughes’ diagnosis suggested, and despite the ‘settlement’, she sued for damages. The judge strongly condemned Dr. Hughes’ conduct and
the jury awarded her £100 in damages, while expressing their disapprobation of the ‘medical arbitration’ practice.16

The Lancet editorial of 7 July 1866 did not explain why the practice of ‘medical arbitration’ placed the medical practitioner’s character under a dangerous ‘suspicion’ and derogated from his professional honour. The implication was that by serving two masters—the injured patient and the railway company, who was the injurer—medical practitioners placed themselves in a position of professional conflict of interest. Moreover, unless they disclosed their position as servants of the railway company, medical practitioners were liable for misrepresentation, fraud, and, possibly, breach of fiduciary obligations owed to the patient-client.17 Thus, in another unreported case decided in 1867,18 Mr. Acton, who was injured through the negligence of the Midland Railway Company, went to his family physician, Dr. Robertson, who told him that the injury was trifling and would be remedied in a fortnight by a change of air. On the strength of this advice, Mr. Acton accepted £31 and 10s in a private settlement, but soon found that his condition was much worse than he was led to believe by Dr. Robertson. Unbeknown to his patient, this physician also acted for the railway company. Mr. Acton decided to take his case to court, where the jury awarded him £1500. Chief Justice Cockburn of the Queen’s Bench was highly critical of physicians acting for both parties and said that ‘It is no part of the duty of a medical attendant to take part in settlements with patients’.19

The case was digested in The Lancet and The Law Times. The Law Times report concluded that it was ‘in vain for railway companies to attempt to settle claims through a medical officer, who has it in his power to represent to a patient that his condition is not as bad as it really is’.20 In a subsequent ‘Letter to the Editor’ of The Lancet,21 Dr. Robertson wrote that when he first became a railway officer, he followed the example of his predecessor in negotiating settlements between injured patients and the negligent railway companies that employed him. He apparently abandoned this practice after becoming convinced of its impropriety.

12 No statistics were collated for members of the general public who died or were injured in railway collisions and accidents. However, they must have been very high, if only because although railway companies were granted a privilege to bisect districts, cross thoroughfares, and intersect the course of footpaths, until the 1860s they were not compelled by law to make such level crossings safe. Anonymous, ‘Railway Crossings’, The Law Times, 28 September 1867, 369–70.
14 Id., at 16.
16 In Rideal v. Great Western Railway Company (1859) NP 1 F&F 706-7; 95 RR 967-8, in the course of a train collision, the plaintiff, a commercial traveller, suffered severe concussion and bruising. He spent the night at the nearest hotel, where the next day the stationmaster visited him and offered £20 in compensation. The plaintiff agreed and signed a receipt ‘in full satisfaction of injuries arising from the accident . . . and full consequences arising therefrom’. He sued the company when it transpired that he was unable to resume his avocation due to ‘a severe concussion of the spinal cord and of the brain’. In his charge to the jury, Earle J. approached the issue in the strictly contractual terms of the time, asking whether the plaintiff’s mind ‘went with those terms [of the settlement] and he understood their effect when he assented to them’. If he did, he was bound by the agreement and could recover no further compensation, even if at the time he ‘had no idea’ how serious and permanent his injuries were. The jury found for the defendant. By the 1860s, however, cases of this kind were litigated in tort, rather than contract.
17 The medical practitioner’s fiduciary obligations would flow from his or her handling of the patient’s monetary compensation claim.

As noted above, the July 1866 editorial on ‘medical arbitration’ also stated that, provided the patient’s own physician was present, settling the amount of damages was both a ‘legitimate and beneficial exertion of professional duty’ by the railway medical officers. The claims to beneficence and legitimacy were open to objections. Medically, the haste associated with medical arbitration meant that compensation was paid before the true extent of the injury, both physical and psychological, could be discovered and assessed. Yet, the issue of misdiagnosis in the context of medical arbitration was not discussed in the editorial. Ethically, the unequal power relationship between doctors and injured railway passengers meant that many arrangements with unrepresented patients did not provide them with just compensation. Finally, in law, ‘settlement’ of an action refers to the voluntary compromise or resolution of a claim by the parties to civil litigation. Legal settlements can be made at any stage of the proceedings before final judgment and are enforceable by the court, unless one of the parties has acted improperly.

The 1867 case of Hand & Wife v. Midland Railway Company, abstracted in The Lancet involved an allegation of impropriety and absence of bona fide by a surgeon, who was a party to the medical arbitration settlement. Mrs. Hand sustained injuries through the admitted negligence of the defendant railway company. Mr. Day, a surgeon to the defendant’s company, assured Mrs. Hand shortly after the accident that she would soon be well and gave her a cheque for £211 to remunerate her for loss of business and medical expenses. Her own medical practitioner witnessed the receipt given to Mrs. Hand. The latter deposed that he did not advise the patient to settle, but merely signed his name as a witness to the receipt, though, apparently, even at the time, he expressed doubts as to the period of her recovery. Subsequently, she became very ill and ‘was on the verge of paralysis’. She sued the surgeon, Mr. Day, for fraud and misrepresentation. The jury awarded her £300 in damages against the surgeon, in addition to the £211 already paid. The judge commented that ‘as a general rule, it was most objectionable that medical men should engage in making compromises. If such a compromise was to be made, it was better that it should be in the hands of the professional legal advisers than in those of medical men’.

Ethical issues relating to the patient–doctor relationship and the locus of professional duty became a major topic of articles and editorials in medical journals of the late 1840s. The ‘once for all’ rule of compensation was articulated in Fetter v. Beal (1701) 1 Ld Raym 339, 692; 91 ER 1122. Hand and Wife v. Midland Railway Company (1867) (unreported, Bristol County Court) digested in The Lancet, 24 August 1867, at 243. Ethical codes for medical conduct, modelled on Percival’s Medical Ethics (1803), the third edition of which was published in England in 1849. The American Medical Association adopted the Code of Medical Ethics in 1846–1847.

greater emphasis on adherence to ethical norms of professional conduct, together with a number of well-publicised cases, contributed to the decline of ‘medical arbitration’. However, not all
medical practitioners were happy to abandon this practice. Dr. John Charles Hall, a Senior Physician to the Sheffield Public Hospital and Physician to the Midland Railway Company, wrote in 1875:

So far as I know, railway companies are ever ready to deal with all who may have suffered, fairly and most liberally. How much, then, of pain, sorrow, and anxiety would be saved, if the claimants would at once grasp the friendly hand held out to them, instead of enduring for months the anguish inseparable from anticipation of the day on which they will have to appear as witnesses in a court of law: the trial over, then only to discover beyond doubt that, had they accepted the offer made to them, in every sense, pecuniary included, they would indeed have been gainers.28

As the term ‘medical arbitration’ implies, doctors who were involved in it took on the role of advocates for one of the parties who were engaged in an essentially legal dispute about compensation for negligently occasioned injury. Though the practice eventually disappeared, it left a long-lasting legacy. Throughout the 19th century, doctors—including most of the contributors to the railway injuries debates—would continue to hold an office of a surgeon or physician to a railway company as part of their specialist practice. Though of itself the holding of such office presented no ethical or professional dilemmas, it became an issue in cases where its holders appeared as expert witnesses in court. The ethical position of such medical practitioners, who, having been involved in the patient’s treatment—on the witness stand effectively assumed the role of an advocate for the defendant railway companies—was not unlike that of railway surgeons who engaged in the practice of medical arbitration. In both cases, they failed to resolve professional conflict of interests.

3. Medical controversies regarding the nature of railway injuries in the 1860s

The great majority of passengers involved in railway collisions sustained demonstrable wounds and lesions, but some victims of these accidents suffered severely disabling symptoms that followed either a relatively minor or no apparent physical injury. The symptoms manifested by patients who were only slightly physically injured in railway accidents included extreme tenderness of skin, sensitivity to light, sleep disturbance, nominal dysphasia, mutism, stuttering, uncontrollable movements in limbs (choreas), and different forms of paralysis. The nature of these injuries and symptoms became a topic of medical as well as sociopolitical debate that continues to this day.30


John Eric Erichsen, Holmer Professor of Surgery at University College Hospital London,31 published a book called Railway Injuries, containing a series of lectures he delivered at the University College Hospital London in spring of 1866.32 In the book, he observed that severely disabling symptoms, which followed relatively minor accidental injury, had become ‘a most important branch of medico-legal investigation’33 when sustained as a result of railway collisions. At the same time, he argued that severe sequelae that followed trivial physical trauma were neither a new phenomenon created by the advent of railways,34 nor confined to persons involved in litigation.35 Erichsen was genuinely surprised that his views on the nature of these injuries, which eventually would acquire the appellation of ‘nervous shock’, were considered controversial.36 They were opposed on the pages of medical journals and books,37 and on the witness stand in court. The debate involved some of the most celebrated and respected medical
practitioners of the 19th century. Among Erichsen’s supporters were Sir William Ferguson, who was a professor of Surgery at King’s College London, and Dr. Russell Reynolds, a Professor of Medicine at University College London. Sir John Eric Erichsen Baronet (1818–1896) was educated at University College London and then in Paris. In 1850, he became Holmer Professor of Surgery at University College Hospital London and eventually, the President of the Council of University College. By the time he published On Railway and Other Injuries of the Nervous System, Erichsen was already well known and respected for The Science and Art of Surgery: A Treatise on Surgical Injuries, Diseases and Operations (1853), which appeared in 10 editions, and was translated into German, Italian, and Spanish. He became the 37th President of the Royal Society of Medicine (1879–1881), as well as the president of the College of Surgeons (1880). In 1887, Erichsen was appointed surgeon-extraordinary to Queen Victoria and created a Baronet. J.E. Erichsen, On Railway and Other Injuries of the Nervous System, London: Walton & Maberly (1866).

Erichsen’s most prominent opponent was James Syme, a Professor of Clinical Surgery at the University of Edinburgh. The debate between Erichsen and Syme on the nature of railway injuries in the 1860s formed part of a complex pattern of change from pre-modern to modern medical understanding of illness and disorder. The doctrine developed by William Cullen in the 18th century that all normal and abnormal processes in the body were influenced by the nervous system was still very influential and it was accepted that ‘nervous power’ (also called ‘nervous energy’) was instrumental in transmission of physical sensations to the brain and of motor impulses to the muscles. The notion of ‘animal spirits’ renamed as ‘nerve force’, ‘nervous power’, or ‘nervous energy’ persisted throughout the 19th century. In the 1860s, though the importance of the brain function was acknowledged, less was known about the brain than about the anatomy and pathology of the spine and the autonomic nervous system. Consequently, although both the spine and brain were seen as the nerve
Nerves, and Their Appendages, London: J. Churchill (1855) and A System of Medicine, which he edited, Philadelphia: H.C. Lea (1879–80).

40 James Syme (1799–1870) was Surgeon to the Queen in Scotland. In his Excision of Diseased Joints (1831), Syme demonstrated that excision is usually preferable to amputation. This principle was further developed by William Ferguson. In 1867, Syme supported the antiseptic method of surgery introduced by his pupil and son-in-law, Sir Joseph Lister (who studied under Erichsen in London before coming to Edinburgh. Erichsen was openly sceptical about antisepsis). Syme has been described as ‘one of the most celebrated surgeons of his day’ by J. Oppenheim, ‘Shattered Nerves’: Doctors, Patients, and Depression in Victorian England, New York: Oxford University Press (1991), at 60; and as ‘the litigious surgeon’ by M.A. Crowther, ‘Forensic Medicine and Medical Ethics in Britain’, in R. Baker (Ed.), The Codification of Medical Morality, Dordrecht: Kluwer Academic Publishers (1995), at 184.

41 William Cullen (1710–1790) in his First Lines of the Practice of Physic (1777) suggested that disease was the result of disturbances in the nervous system. He identified neuroses as one of the four classes of disease (the other three being fevers, cachexias, and local disorders). According to Cullen, the characteristic feature of neuroses was the absence of structural or topical change in the body. The category included epilepsy, chorea, insanity, apoplexy, paraplegia, and syncope.

42 This notion had its origins in the Galenian theory of pneumatic forces. Galen (130–c200 CE), an adherent of humoral medicine, defined human physiology in terms of fluids, solids, and three kinds of pneuma or spirits: ‘physical spirits’ that were derived from venous blood; ‘vital spirits’ that formed in the heart by the interaction of the breathed in air; and ‘animal’ or ‘psychical spirits’ that regulated the brain, nerves, and feelings.

43 This ‘nervous power’ was interpreted by medical physiologists of the time as an integral part of the nervous system of impulses modelled on the concept of the electrical circuit.

44 In 1826, physiologist Johannes Müller (1801–1858) published the theory of ‘specific nerve energies’, which suggested that sensory nerves could only interpret an impulse in one way.

45 Erichsen, who had close links with France, may have been aware of the 1862 demonstration by Dr. Paul Broca (1824–1880) of the relationship between a brain lesion and motor aphasia (aphemie). However, he does not refer to Broca in On Railway and Other Injuries of the Nervous System (1866).


centres, there was a tendency to explain nervous disorders, which resulted in the loss of function in terms of physical malfunction of the nervous system by reference to the spine alone. Moreover, when medical practitioners of the 1860s referred to any kind of ‘functional nervous disorders’ they meant literally a loss or impairment of function, usually the result of a physiological disease or disorder of the nervous system, but not its structure.

This understanding of nervous disorders also explains why some of the main proponents and opponents of Erichsen’s views were surgeons.

Originally, the term ‘nervous shock’ referred to a physical shock to the nervous system, as it was then understood. This meant that no matter how cognitively disabling or psychologically bizarre the secondary symptoms might be, the focus on the spine as the cause of nervous shock precluded the diagnosis of ‘insanity’ or ‘mental alienation’ in the assessment of railway accident victims. For although in the 1860s ‘insanity’ or ‘mental alienation’ were regarded as organic diseases, they were taken to be ‘diseases of the mind’. Since the Cartesian doctrine of mind and body dualism was still strong, diseases of the mind were considered separate from nervous disorders that may follow physical malfunctions of the spine. Baron Ernst von Feuchtersleben’s theory that psychic and somatic disorders were aspects of the same reality was translated into English in 1847, but did not find wide acceptance at the time. Russell Reynolds’ seminal ‘Remarks on Paralysis and Other Disorders of Motion and Sensation, Dependent on Idea’, in which he demonstrated that patients could develop an illness that corresponded to their idea of physical disturbance, was yet to be published. In a way, surgeons and physicians who tried to understand and treat

47 See, for example, C. Handfield Jones, ‘Pathology and Treatment of Functional Nervous Disorders’, The Lancet, 6 July 1867, pp. 6–9.
48 Likewise, the available data show that between 1826 and 1843, surgeons appeared as expert witnesses in 66% of criminal trials in which insanity was in issue. Physicians participated in 22% of such trials. J.P. Eigen and G. Andoll ‘From Mad-Doctors to Forensic Witness: the Evolution of Early English Court Psychiatry’ (1986) 9 International Journal of Law and Psychiatry 159–169, at 165.
49 Marshall Hall (1790–1857) is credited with coining the term ‘spinal shock’ in 1850. William Cox in ‘Case of Excessive Nervous Shock Following Delivery’ (1853) 1 The Lancet 556–7 described the collapse of a patient following a relatively easy/uneventful labour of a healthy 24-year-old woman. Cox noted that the source of the condition (‘exhaustion of the nervous centres’) was ‘purely physical, not psychical’. Id., at 557.
51 The publication in 1858 by Rudolf Virchow of Cellular Pathology Based on Physiological and Pathological Histology (Die Cellular—pathologie in ihrer Begrundung auf physiologische und pathologische Gewebelehre), in which he advanced scientific arguments to challenge the Cartesian mind–body dualism would eventually lead to the most profound transformation in medical weltanschauung. But at the time, Virchow’s psychological insight into the nature of illness did not receive much attention from medical practitioners.


these ‘nervous’ disorders were not only precursors of modern neurology but also of psychosomatic psychiatry.54

It was only in the late 1870s and, in particular, in the 1880s that a distinction was drawn between symptoms that had ‘organic’, that is physical, cause, and ‘functional’ disorders where there was no organic explanation for the disturbance of or inability to carry out previously normal activities.55 The aetiology of the latter conditions or illnesses would eventually be ascribed to purely mental trauma. However, in the early 1860s, those archetypal signposts of modern psychiatry—‘neurosis’ and ‘neurasthenia’—were still unknown.56 Medical terminology of the mid-19th century period suggests that while medicine did not regard a strictly neurophysiological model of human homeostasis as entirely adequate, systematic scientific endeavour to conceptualise the interrelation between mind and body and its psychosomatic manifestations was yet to begin.

Relying on the then current understanding of neurology and anatomy, Erichsen argued that the ‘secondary symptoms’ suffered by many of the victims of railway collisions were due to ‘twists and wrenches of the spine’. According to Erichsen:

In Railway Collisions, when a person is violently and suddenly jolted from one side of the carriage to the other, the head is frequently forcibly thrown forwards and backwards, moving as it were by its own weight, the patient having momentarily lost control over the muscular structures of the neck.57

He theorised that a relatively minor physical injury that occurs in traumatic circumstances may lead to ‘concussion from railway shock’ resulting in pathologic changes to the spinal cord and the brain stem.58 Erichsen postulated that pathological changes could be attributed, amongst other possible causes, to an inflammation of the spinal cord through ‘vibratory jarring’ of the nervous system causing a ‘molecular derangement’. He noted that there existed a close connection between nonimpact environmental trauma and organic injury. While representing the frontiers of technology, the railways, with their big locomotives reaching the

54 The first chair of psychiatry was established in Leipzig, Germany in 1811. However, until the 1870s, in Leipzig, Vienna, and Berlin, nonpsychiatrists occupied these chairs. F. Schiller, A Mobius Strip Fin de Siecle Neuropsychiatry and Paul Mo‘bius, Berkeley: University of California Press (1982).
56 Beard claimed to have coined the word neurasthenia (nervous exhaustion), which he described as a ‘functional
disease of the nervous system’ in 1868 when he presented a study of 30 cases before the New York Medical Journal
23. Some 30 years later, Erichsen would point this out in a Letter to the Editor of the Texas Sanitarian (1894), vol. 3,
58 Id., at 64–77. Erichsen regarded labelling these symptoms as ‘railway spine’, absurd. Id., at 10.


The incredible speed of 20–30 mph, epitomised the new and inherently dangerous force of
mechanical power:

In no ordinary accident can the shock be so great as in those that occur on Railways. The rapidity
of movement, the momentum of the person injured, the suddenness of its arrest, the helplessness
of the sufferers, and the natural perturbation of mind that must disturb the bravest, are all
circumstances that of necessity increase the severity of the resulting injury to the nervous system,
and justly cause these cases to be considered as somewhat exceptional from ordinary accidents.59

There were other medical practitioners who agreed with Erichsen’s analysis.60 In 1867, The
Lancet61 commissioned Dr. Thomas Buzzard to analyse case histories provided by medical
practitioners from all over the United Kingdom. Dr. Buzzard published his findings in a series of
articles called ‘Cases of Injury from Railway Accidents; Their Influence upon the Nervous
System and Results’.62 He observed that patients involved in railway collisions were often unable
to say how and where they were hurt. Although some had bruises indicating blows, their
symptoms ‘were referable to the effects of general concussion or shock’.63 Others, who claimed to
have received a severe blow, presented with no perceptible trace of injury. Buzzard warned that
complaints of such patients should not be dismissed. He provided an example of a healthy 27-
year-old woman who, as a result of a railway collision, was thrown forwards then backwards
against the side of carriage in which she was travelling. She was ‘stunned’, and lay on the bank
for some time. She was then sent, presumably by the railway company, on the rest of her journey,
accompanied by a friend. When the injured woman arrived at her original destination some 15
hours after the accident:

[s]he seemed dazed, but managed to walk from the station to her home, about 400 yards. She then
went up to the third story, sank upon the floor, and had to be lifted into bed; vomited, said her
head was very bad, and she only wanted to sleep.64

In the evening, the attending physician found her ‘greatly excited, wanting to get up, incoherent
in talk, complaining that she saw the engine coming in at the window, and laughing hysterically’.
She grew steadily worse, was treated by three medical attendants with

blisters and morphia, but died 29 days after the accident. Following the autopsy, the physicians
concluded that the patient

59 Id., at 9.
62 T. Buzzard, ‘Cases of Injury from Railway Accidents; Their Influence upon the Nervous System, and Results’, The
63 T. Buzzard, ‘Cases of Injury from Railway Accidents; Their Influence upon the Nervous System, and Results’, The
Lancet, 27 April 1867, pp. 453–6, at 454.
64 Ibid.
sank, not from direct surgical shock, limited by the expression ‘concussion’ of brain or cord, but from a general shake of the nervous system, associated with fright.\textsuperscript{65}

4. Maligners or genuine victims of railway collisions?

While Erichsen’s book on Railway Injuries was in the tradition of the 18th century measured scientific discourse,\textsuperscript{66} the reaction to his views was far from dispassionate or strictly medical. The debates were not doctrinal, for it was accepted that the railway injuries, if genuine, were of physical origin. Rather, the issue on which the opinions of medical experts diverged involved the medicosocial validity of the diagnosis relating to the adverse sequelae. The debates provide a classic example of the importance of contextual framing in relation to questions of medical aetiology.\textsuperscript{67} Erichsen framed the inquiry into the causes of adverse sequelae that may follow upon a relatively trivial physical impact in terms of the then current medical theory. His basic presumption was that the severe symptoms exacerbating the original railway injuries were due partly to physical causes such as concussion of the spine leading to the irritation or chronic inflammation of membranes of the spinal cord and partly to the emotional trauma, particularly fear and the feeling of helplessness, which accompanied a railway collision.

His opponents framed the causal question in terms of sociolegal context. They asserted that his theory, while pertinent to a few ‘genuine cases’, could not be used as a general rule because the self-interest of many patients engaged in personal injury litigation led them to either exaggerate or to simulate the incapacitating symptoms in the hope of obtaining greater compensation.\textsuperscript{68} Thus, the editor of the British Medical Journal (BMJ),\textsuperscript{69}

\textsuperscript{65} Ibid. Another illustration provided by Buzzard was that of two persons in Liverpool who, while walking along the railway line, were struck by an engine moving at the rate of 7 mph. They were instantly killed. On examination, it was found that the skin on their bodies was almost unbroken, even though ‘their flesh and bones were smashed’.

\textsuperscript{66} Exemplified in contributions to the Society of Physicians in London (1757), Medical Observations and Inquiries, William Johnston, London.

\textsuperscript{67} See P. Greenberg, ‘The Cause of Disease and Illness: Medical Views and Uncertainties’, in I. Freckelton and D. Mendelson (Eds.), Causation in Law and Medicine, Ashgate Dartmouth (The International Library of Medicine, Ethics and Law Series) (2001), at 38–58.

\textsuperscript{68} In 1595, J.B. Sylvaticus published a treatise on simulation. Since that time malingering or feigning of diseases became a great preoccupation of writers on medical jurisprudence, and the subject of frequent letters to medical and surgical journals. The work of Zacchiai Pauli (1584–1659), Qvaestiones Medico-Legales. In Quibus eae Materiae Medicae, quae Ad Legales Facultates Videntur Pertinere, Propununtur, Pertractantur, Resolvuntur (1621) was probably the most influential. Thodoric R. Beck cites at length from a later edition of Zacchias (Questionum Medico-Legalium, Francofurti at Maenum, 1688) in his Elements of Medical Jurisprudence, Albany: Websters & Skinners (1823), vol. 1, pp. 1–30.

\textsuperscript{69} Editorial, British Medical Journal, 1 December 1866, at 612–13.


denounced Erichsen’s Railway Injuries book on the basis that the main difference between ‘railway nervous injuries’ and other kinds of injuries turned on the legal aspect of the former:

A man whose spine is concussed on a railway brings an action against the company, and does or does not get heavy damages. A man, who falls from an apple tree and concusses his spine, has—worse luck for him—no railway to bring an action against.

For Erichsen, the possibility of excessive litigation by people who suffered from what today is called psychogenic injury,\textsuperscript{70} following nonimpact trauma, was not a major issue. However, the discussion of compensable and noncompensable injuries among the medical profession of the time nearly always involved the question of whether patients claiming compensation were genuinely injured or maligners. Professor Syme, who in 1867 attacked Erichsen’s book in The Lancet,\textsuperscript{71} wrote that:
... any man who travels by railway may easily obtain a competency [sic] by stumbling on the platform after the door of his carriage has been opened by a servant of the company, but before the train has ceased to move. He has then merely to go to bed, call in a couple of sympathizing doctors, diligently peruse Mr. Erichsen’s lately published work on Railway Injuries, go into court on crutches, and give a doleful account of the distress experienced by his wife and children through his personal sufferings, which have resulted from the culpable negligence that allowed him to leave his seat prematurely.

Also in 1867, Edwin Morris, another railway surgeon who was an enthusiastic supporter of the BMJ’s editor and an admirer of Professor Syme, published a little book,72 in which he attempted to refute Erichsen’s theories and thereby ‘assist in unravelling those intricate cases in which there is every reason to believe the symptoms are simulated, and at the same time to put medical men on their guard against such cases’.73 Morris quoted a letter from a certain Dr. Cooper, surgeon to the Great Western Railway Company, who asserted that ‘injuries to the spine, as promulgated in courts of law, are a very different disease to that taught in the schools of anatomy and physiology, and are always cured by golden blisters’.74 Morris himself declared that ‘shock to, and alleged injury to the nervous system . . . form a class of injuries which designing and unscrupulous people do not hesitate to take shelter under for the purpose of exacting, through legal or other channels, compensation for such simulated injuries’.75

70 The term ‘psychogenic’ is used to indicate that certain life events have played an important role in the genesis of the person’s psychiatric disorder.

71 J. Syme, ‘On Compensation for Railway Injuries’, The Lancet, 5 January 1867, 2–3, at 2. The article, which described cases that in his opinion involved malingering on the part of successful claimants, gave rise to vigorous correspondence in the Letters to the Editor column of 1867.


73 Id., at v–vi.

74 Id., at 63.

75 Ibid.


In his Lancet articles, Thomas Buzzard, MD indirectly alluded to observations by Syme and Morris that many symptoms relating to mental incapacity suffered by victims of railway collisions were ‘subjective’ and difficult to verify. While recognizing that complaints of changes from normal function and sensation were indeed subjective, Buzzard suggested that patients’ assertions could be tested ‘by the consistency of the alleged symptoms’ and the physician’s estimate of the patient’s veracity.76 He then challenged the allegation that recovery following settlement of a claim for damages provides incontrovertible proof that the patient must have been simulating or exaggerating the symptoms. Buzzard offered the following explanation:

It happens not infrequently, that patients exhibiting psychical phenomena . . . improve very rapidly when the question of compensation has been decided; and it is often argued that this circumstance furnishes decisive proof that the alleged symptoms were factitious. This is doubtless sometimes the case; but I apprehend that quite as frequently the true explanation lies in the fact that the settlement of the claim at issue leaves the patient for the first time in a condition favourable to recovery. It is a fact that mental anxiety alone is often sufficient to give rise to these phenomena, where the condition of the nervous system is favourable to their production . . . It is scarcely reasonable, therefore, to look for much improvement in the condition of a patient who is placed in exactly the worst condition for recovery. He is perhaps attended by one or more medical men, who are constantly directing his attention to his symptoms; visited by others, who frequently do not hide their disbelief in his statements; and awaiting in trepidation the ordeal of an examination in a court of law, where his claim is likely to be stoutly contested. He is placed,
indeed, under circumstances which medical advice would caution him to avoid, as directly tending to increase the nervous exhaustion from which he is suffering.77

Like Erichsen, Buzzard discussed case reports—obtained from other physicians—of patients who, following railway accidents, suffered what would now be termed chronic psychiatric disorders even though they were never involved in litigation, or had their cases settled long before.78

A legal system that practically presupposed that any passenger involved in a railway collision was physically injured whether such injury was demonstrable or not, and which left only the quantum of damages to be litigated, inevitably lent itself to abuse. Some plaintiffs, aided and abetted by their medical and legal advisers, exploited the system, but so did, as the Chief Justice Cockburn of the Queen’s Bench in the Acton’s case pointed out, some railway companies. Judging by the volume of case reports sent to Thomas Buzzard, most physicians accepted their patients’ words and symptoms in good faith irrespective of their involvement or otherwise in personal injury litigation. Few physicians may have

76 T. Buzzard, ‘Cases of Injury from Railway Accidents; Their Influence upon the Nervous System, and Results’, The Lancet, 25 May 1867, at 623.
77 Id., at 623–4.


encouraged their patients in the belief that they were suffering from an organic illness even in the absence of any signs to substantiate such diagnosis. At the same time, there was also a group of medical practitioners who adhered to a theory that patients involved in personal injury litigation were, until proven otherwise, malingerers,79 whose complaints were primarily motivated by the lure of pecuniary damages. Writing in 1881, but familiar with the medicolegal scene of the 1860s, Dr. Russell Reynolds would observe that:

There are some members of our profession, who have become specialists in this direction [medico-legal practice], who seem to think that everything that a man tells them of his subjective symptoms are matters of fact and of great importance; and on the other hand, there are those who regard every plaintiff as either a knave or a fool, and most probably a combination of the two, but who never believe that any man is injured in a railway accident unless he has broken his neck, or has a compound fracture of his thigh.80

The latter would invariably appear as expert witnesses for the defence. Thus, polarization of opinions on the nature of railway injuries became reflected in courts, where each party to litigation would consult or hire a sympathetic expert medical practitioner.

5. Secondary symptoms of railway injuries and the function of medical witnesses in the 1860s

One of the many cases in which Professor Erichsen was called as an expert witness for the plaintiff, while Professor Syme testified for the defendant, was Denham v. the Great Northern Railway Company,81 which came before the Court of Common Pleas at Guildhall. In his Railway Injuries book, Erichsen provided a detailed background to Denham’s case. On 1 March 1865, Mr. D, a healthy, 33-year-old man was ‘thrown violently against the opposite side of the carriage, and then fell on the floor as a result of a train collision’.82 Two months later, the patient described his initial symptoms as
a swelling the size of an egg over the sacrum, severe pain in the lower part of the spine, which, . . .
had extended up the whole back and into the head, producing giddiness and dimness of sight.
These, with tingling feelings in the limbs (particularly, the left), great pain in the back, and
tenderness to the touch, sickness in the mornings, and lameness, continued for the first fortnight.83

It appears that initially Mr. D did not see a doctor, but applied popular remedies of the time, such
as blisters and hot fomentations to his spine. Although he seemed to improve, Mr. D consulted
‘an eminent surgeon [Syme], who ordered him to go about as much as possible, but to avoid
cold’. He followed this advice, but his symptoms ‘much increased, with prostration and
lameness’.84 Indeed, when seen by Erichsen and a surgeon, Mr. Hewer, the patient presented with
‘the most intense stutter’. His spine was rigid, and when touched lightly on the back, the patient
would:

Start forwards as if he had been touched with a red-hot iron . . . the muscles are thrown into
violent contraction so as to become rigid, and to be raised in strong relief, their outlines becoming
clearly defined.85

Mr. D’s gait consisted of shuffling his legs sideways. He would alternate the action of the legs,
but could not ‘bring one leg in front of the other without twisting the whole body and turning, as
on a pivot, on the leg that supports him’.86 Not unlike medicolegal patients of today, Mr. D saw a
whole battery of doctors on behalf of both parties. When the trial began in December 1865, the
plaintiff called four expert witnesses, including Erichsen, Sir William Ferguson, and Russell
Reynolds.87 They testified that he was suffering from ‘concussion of the spine’ and that his
recovery was ‘uncertain’. Five expert witnesses for the defence, including Professor Syme and
Dr. Dunsmure, the then president of the Edinburgh College of Surgeons, ‘expressed the
conviction that there was no organic disease whatsoever, and no reason why the claimant should
not enjoy good health’.88 The jury was not persuaded and awarded the plaintiff £4750 in damages.
According to Erichsen, who remained Mr. D’s treating medical practitioner, 6 months after the
trial, the patient’s condition was considerably improved in so far as he stammered ‘less
vehemently’ and the sensibility of his back was lessened. However, he still had ‘considerable
rigidity about the spine’, could walk only with an aid of a stick, and retained ‘that peculiar
careworn, anxious and aged look that is so very characteristic of those who suffered from those
injuries’.89

In December 1867, commenting on cases such as Denham, The Lancet observed that
[n]othing has a greater tendency in the public mind to weaken the confidence in Medicine as an
exact science than the medical evidence given at trials for compensation for railway injuries.90
The commentator was particularly critical of contradictory testimony adduced on the part of the plaintiff and defendant by medical experts of equal standing and eminence in the profession:

The witnesses on the side of the plaintiff invariably regarded the injuries sustained as of a very serious character; whilst the witnesses for the defendant as invariably appeared to regard them as far less important, and less permanent in their effects.91

Having noted that ‘trials of this kind rarely involve any important question of law, the railway directors usually admitting liability’, the commentator called for parliamentary intervention to establish a medical tribunal for the purposes of settling the questions of injury and compensation in such cases:

Two or three competent [medical] practitioners appointed by Government as arbitrators would be able to satisfactorily test the evidence of medical witnesses, and arrive, in almost every instance, . . . at a fair conclusion on the matter at issue.92

Some 18 months earlier, another Lancet editorial titled on ‘Railway Compensation Cases’93 floated a similar idea. The editorial writer defined the role of medical witnesses in railway compensation trials as

a scientific body, . . . invested with a duty which embraces the interests of the general public, including railway shareholders, as well as of those members of the community who allege injury from the accident.

It was possibly the failure to totally repudiate the acceptability of the practice of ‘medical arbitration’ that led to a misunderstanding of the role of medical experts in civil litigation. The proposed role for medical witnesses was akin to the institution of court assessors who were appointed by the Admiralty and Patent Courts to act as coadjudicators.94 However, although the tradition of nautical and patent court assessors went back to the 14th century, their adjudicative role began to be questioned in the middle of the 19th century.95 Unlike the expert court assessors, the function of the expert medical witness in injury compensation proceedings was not to determine matters at issue, but to assist the court with information within the area of his or her expertise. This would have included an assessment of the injured plaintiff’s impairment, that is, ‘any loss or abnormality of psychological, physiological, or anatomical structure or function’.96 The function of the court was to assess the plaintiff’s disability, in the sense of the deleterious consequences and effects resulting from impairment on his or her

ability to perform an activity in the manner or within the range considered normal for human beings.97 In its determination, the court had to consider not only medical opinions regarding diagnosis and prognosis, but also the degree of the plaintiff’s capacity to obtain employment, the nature of future employment, the level of remuneration, the vagaries of inflation, other positive and negative contingencies, as well as questions of normative standards and deterrence. In other words, the determination of disability would involve a review not only of medical factors, but

---

91 Ibid.
92 Ibid.
95 The Ann and Mary (1843) 2 Wm & Rob 189, 166 ER 725; The Beryl (1884) 9 PD 4, at 137. For a discussion, see C.A. Jones, Expert Witnesses; Science, Medicine and the Practice of Law, Oxford: Clarendon Press (1994), at 38–55.
also of legal, social, and financial considerations. Therefore, whereas it is appropriate for medical expert witnesses or medical panels to provide opinion on questions relating to the nature of injury and assess the patient’s impairment, the assessment of damages has been, invariably, the function of the courts. Not surprisingly, the legislature ignored The Lancet’s proposal for expert medical witnesses acting as arbitrators.

6. An epistolary controversy regarding the case of a commercial traveller

Perhaps the most vigorous intraprofessional debate on the nature of railway injuries with no physical lesions was triggered in 1867 by the publication by The Lancet of Professor Syme’s medicolegal case report titled ‘Compensation for Railway Injuries’. The report elicited a response from Dr. Patrick Heron Watson. The case involved a compensation claim for ‘a severe wrench of the spine’.

It seems that neither the law of defamation nor the disciplinary powers of the British General Medical Council operated to prevent medical practitioners of the time from expressing robust opinions about motives and conduct of their colleagues. The two documents provide a fascinating insight into clinical and medicolegal practice of the mid-19th century, when ‘nervous disease was but little understood’. They also illustrate how a commitment to a particular medical approach and theory may affect doctors’ perceptions of events and patients.

Professor Syme wrote that, on 27 April 1865, he saw a commercial traveller who told him that he was ‘shaken’ when the train on the Great Northern Railway Company line of which he was a passenger collided with another. According to Syme, following the collision the man walked a mile and a half to see Dr. Maclagan, who assured him that there was no local injury or occasion for complaint. Nevertheless, on the following day, the patient went to Edinburgh, to consult Syme. The surgeon found no ‘local complaint’, but asked the patient to come back. At a subsequent consultation, Syme observed that the patient ‘[exhibited] the most perfect freedom in all his movements, without any sign of local injury’. Syme told the patient that ‘if he felt any uneasiness, it must be more mental than bodily’. But:

On the same day, the 28th of April, it appears that this person, having procured an accomplished agent, applied to a surgeon of experience in cases like his own, who discovered that he sustained a ‘severe wrench of the spine and sacroiliac synchondrosis’ put him to bed, called in a trustworthy coadjutor, and visited his interesting patient at least once a day for months. On the 12th of June Dr. Dunsmure [an employee medical officer of the Great Northern Railway Company] requested me to see the claimant, as he had now become. We found him lying upon a sofa, from which he...
rose and walked with vigour and flexibility of body. There was not the slightest swelling, discoloration, or rigidity of the spine, and, on the contrary, every appearance of good health so far as we could judge from our own observations.105

The nature of the relationship between the commercial traveller and Professor Syme changed over time from one of a treating doctor and a patient to that of a medicolegal assessor and a claimant. However, the shift in the patient’s status probably did not influence the surgeon’s professional practice. Syme’s medical approach to diagnosis was to look for objective signs. Without denying the possibility of injury by way of ‘a severe wrench of the spine’, Syme eliminated such diagnosis in this case on the basis that the patient did not have any bruises or lesions and his apparent mobility militated against the presence of an internal injury. Hence, the initial observation that the patient’s complaint was ‘more mental than bodily’. Nevertheless, Syme’s recommendation that the patient apply hot fomentation106 suggests that he did not ignore the possibility of an organic damage. Hot fomentation was regarded as particularly beneficial and curative when applied ‘in the very early stages of acute inflammation, especially of the serous membranes’.107 Fomentations were also applied to relieve pain, so it is possible that the patient may have complained of some physical discomfort as well as ‘mental uneasiness’.

In July, Dr. Watson, who was treating the plaintiff, obtained the certificate on ‘soul and conscience’108 that cross-examination in court would be detrimental to his patient’s health. Professor Syme and Dr. Dunsmure were requested by the defendant company109 to provide another report. Syme again focused on the patient’s mobility as the major criterion of good health.110 He and Dunsmure found:

the claimant lying, or rather lolling, on two chairs in a garden, to and from which he walked in leaving and returning to his room, which was up a stair on the drawing-room floor. He told us that he sat at his meals, and, on the whole, he had no appearance whatever of bad health.

Although they reported that the trial for damages against the railway company could proceed immediately, the plaintiff’s request for deferral was granted. The plaintiff initially sued the railway company for £3000, however, at the trial, which took place in December, his counsel agreed to accept £1000 in damages.111 The sum of £1000 was twice the average amount of compensation awarded for railway injuries by the courts in the mid-1860s.112 In his article, Syme reasoned that no one ‘who had sustained a severe wrench of the spine and sacro-iliac synchondrosis [could] immediately afterwards walk a mile and a half, or on two following days travel sixty miles by railway, drive about in cabs, and make visits without local complaint’.113 Dr. Patrick Heron Watson, to whom Syme derogatively referred as a ‘surgeon of experience in such cases’,114 provided a rather different version of events. Watson wrote that on 28 April 1866, he was requested to visit the commercial traveller at his hotel. The patient, who was lying upon a couch, told him that when the collision occurred he was not only shaken, but also thrown violently backwards, and, ‘on recovering his senses found himself lying on the floor of the
carriage’. He eventually took an omnibus and then walked half a mile to see Dr. Maclagan. Contrary to Syme’s statements that Dr. Maclagan found ‘no local injury or occasion for confinement’, Maclagan wrote in his report to court that:

\[\text{It seemed to me that [the patient] . . . thought the risk was over, but that was not my opinion. I recommended him to take complete rest for some days. As a physician I should certainly say that a person receiving a shock such as Mr. . . . did would not feel the effects of it immediately so much as he would do some days after the shock, and that was my reason for recommending perfect rest for a time.}^{115}\]

Notwithstanding this medical advice, the patient went to Edinburgh, where, on his hotelkeeper’s advice, he consulted Mr. Syme. Under oath, the plaintiff testified that ‘Mr. Syme requested me to return home and foment my back with flannel and hot water, and that

\[\text{Dissatisfied with the superficial, and, as he thought, careless examination of his case by Mr. Syme, the patient sent immediately for me, not by the advice of his law agent, as Mr. Syme would have it, but as he stated to me, in pursuance of his original intention on coming to Edinburgh.}^{117}\]

Syme also questioned whether a ‘serious disease of the spine resulting from external violence [could] exist for eight months without presenting some sign of its presence in the patient’s gait, flexibility of trunk, or general appearance’.\(^{118}\) Watson’s clinical approach was to look for semiobjective as well as objective signs. His physical examination of the patient revealed no bruises on the body, but he observed that the patient experienced throbbing pain in the head, which ‘increased on motion of the head or body, and upon firm closure of the jaws’.\(^{119}\) The following part of Dr. Watson’s report is worth quoting as an example of a conscientious medical examination. It is also clear that Watson was greatly influenced by Erichsen’s theories. The physician observed that the patient:

\[\text{also complained of giddiness and nausea on changing his position, and of pain, on pressure, just below the occiput. . . . He moved stiffly as one mass in rising from the recumbent or sitting posture and on walking, and complained of pain in his loins. On stooping in the sitting position he bent his dorsal and cervical vertebrae, but kept his lumbar spine rigid, and rested with his hands on his knees. In walking he carried his superincumbent weight rigidly, and kept his arms fixed close by his sides. In standing he supported his weight equally on both feet, and could not bear to stand on one limb or to hop. On examining the lumbar region, where he complained of pain, I found no change in the line of lumbar spine, nor pain in the lumbar muscles, but marked pain on pressure over all the spinous processes of the lumbar vertebrae, especially the third, and along the line of both, but especially the right, sacro-iliac synchondrosis. In every mode of examination, the pain was persistently referred to the same parts.}^{120}\]
Whether or not he ordered fomentation to alleviate pain, Professor Syme—who was among the pioneers in the surgical use of chloroform in Britain—did not seem to have been seriously concerned with the patient’s pain. In contrast, Dr. Watson focused primarily on the pain the patient experienced when moving. He put the patient ‘under careful treatment’, which however, was not successful. In May, Dr. Watson asked Professor Spence to visit the patient. They both concluded that the patient suffered ‘a severe wrench of the spine and sacroiliac synchondrosis’.

As a result of their report, the railway company sent its own medical officer, Dr. Dunsmure (who, like Syme, appeared for the defence in the Denham’s case) to see the plaintiff in June. According to the plaintiff’s affidavit:

When Dr. Dunsmure first saw me he told me that I got a severe knock on the back, and that the muscles of the back were injured, and that I would in future require to be careful, as I would always be subject to rheumatism in the injured part of the back. . . . He also said that my nervous system received a shock.

Dr. Dunsmure and Professor Syme went to see the plaintiff at home, but did not physically examine him before writing the July report on behalf of the railway company. Sometime before, Watson sent the plaintiff to Portobello for medicinal water treatment. This therapy also failed to relieve the constant pain. Dr. Watson then resorted to the remedy of blistering the tissue in hope that this kind of ‘counter-irritation’ would alleviate the distressing symptoms. It was at this stage, that the physician successfully asked the court to postpone the trial. In September, the patient’s condition deteriorated. Their treatment suggests that Watson and Spence attributed their patient’s condition to an inflammatory disease, because they applied such standard anti-inflammatory remedies as the Corrigan cautery to his back, gave him iodide of potassium to swallow, and ordered complete rest. When the patient’s ‘spinal symptoms’ improved, the doctors recommended ‘the use of salt water douche bath at a neighbouring bathing establishment’.

In December, in anticipation of the trial, Watson and Spence again carried out a thorough physical examination of the patient. At the end of his letter, Dr. Watson pointed out that despite Professor Syme’s prediction, the settlement of the case by the plaintiff did not lead to speedy recovery. Some 2 months after the trial, he was still ‘obliged to continue the same repose and to maintain persistent counter-irritation by means of blistering tissue to relieve himself of pain’.

---

116 Ibid.
119 Ibid.
120 Ibid.
121 The term ‘sacro-iliac synchondrosis’ probably refers to an inflammatory disease or infection of sacroiliac articulation of joints in which the surfaces are connected by a plate of cartilage. In the past, the phrase sacroiliac disease was used to denote chronic tuberculous infection of the joint.

According to G. Johnson, ‘Treatment of Inflammation’, The Lancet, 22 December 1866, pp. 683–88, at 684, ‘In all cases of serious inflammation rest in bed forms an important part of the treatment. Muscular exertion quickens and excites the heart’s movements, and so increases pain and throbbing in the inflamed part’.


Watson also experimented with taking the patient’s temperature and checking the ‘sensibility and muscular contractibility of the extremities’. He found ‘a persistent difference of five degrees, a marked difference by the compass test in the sensibility and a manifest want of muscular irritability in the right limb as compared with the left’. P.H. Watson, ‘Letter to the Editor’, The Lancet, 2 February 1867, at 160.


The diagnosis by Dr. Watson and Professor Spence of ‘severe wrench of the spine’ was based on epistemology provided by Erichsen’s work. In the 1860s, knowledge of the nervous system, and neurology in general, was still in its infancy. Neither Erichsen nor Syme had the scientific methodology that would enable them to test whether these symptoms were of ‘cerebral’ (that is, psychological) or spinal (physical) origin. Syme’s opinion that the complaint was ‘more mental than bodily’ suggests that he suspected the presence of psychogenic factors. However, medical practitioners who adhered strictly to the theory of Cartesian dualism would have considered such conditions outside the purview of medicine. Indeed, in 1867 medical understanding of psychiatric injury was not yet sufficiently advanced for either Syme or Watson to diagnose that the patient’s condition was due to, or complicated by, a neurotic disorder. Yet Watson, possibly as a result of his interest in Erichsen’s work, showed an insight into such conditions by recommending treatment that in the 1890s would become one of preference in the management of neurasthenia and hysteria.

In the course of legal proceedings, Syme’s view that the patient’s complaint was mental rather than physical, lent itself to an argument that in the absence of a diagnosable medical injury no compensation should be awarded. Watson’s diagnosis of an organic injury was supportive of the plaintiff’s claim.

7. Nervous shock in the court

Erichsen’s book focused on psychosomatic sequelae of traumatic events, a condition that hitherto attracted minimal attention from medicine. In the 1860s, those doctors who accepted the existence of the Erichsenian ‘secondary symptoms’ ascribed their aetiology to meningomyelitis of the spinal cord and the brain, which, though not physically apparent, was organic in nature. The ‘secondary symptoms’ themselves were given by medicine the collective appellation of ‘nervous shock’. The judiciary accepted this medical theory and treated claims for ‘nervous shock’ by railway passengers as they would any other physical injury that was shown to be a consequence of a tortious act.

P. Bailey, Accident and Injury; Their Relations to Diseases of the Nervous System, New York: D. Appleton & Co. (1898), at 409, wrote that ‘the douche excels all other hydriatric measures in the constitutional treatment of neurasthenia and hysteria’.

A year earlier, George Burr described the condition that came to be known as ‘shell-shock’ in ‘Cases of Injuries of Nervous Centres, from Explosion of Shells without Wound of Contusion’ (1865) 1 New York Medical Journal 428–32.

The term ‘nervous shock’ was used already in the 1860s, however, Erichsen who is associated with this term as denoting severe symptoms which some patients developed following physically threatening circumstances, he did not use it in the first edition of his book On Railway and Other Injuries of the Nervous System, London: Walton & Maberly. He appears to have used this term for the first time in print in 1875, see J.E. Erichsen, On the Concussion of the Spine, Nervous Shock and Other Obscure Injuries of the Nervous System, New York: William Wood & Co. (1875); J.E. Erichsen, On Concussion of the Spine: Nervous Shock and Other Obscure Injuries of the Nervous System in their Clinical and Medico-Legal Aspects, London: Longmans, Green & Co. (1875).
However, in the early 1880s, the notion that nervous symptoms were due to lesion in that part of the central nervous system which has its seat in the spinal column was challenged by Herbert Page, who wrote that:

> most of the strange nervous symptoms so commonly seen after railway accidents . . . were more or less immediate concomitants of the profound mental emotion aroused by the unquestionably special features of every collision.

According to Page, these symptoms, though serious, usually had a transient effect upon the nervous system. Indeed, from the 1870s until the end of the 19th century and beyond, medicine began to reconceptualise the symptomatology and aetiology of nervous shock in terms of hysteria, traumatic psychoneurosis, and other psychiatric conditions. Correspondingly, the lawyers of the time proceeded to distinguish between two kinds of personal harm for the purposes of compensation: physical or ‘organic’ injury on the one hand, and ‘mental’ or emotional injury on the other. Adapting the ‘organic’ theory, Thomas Beven, in his Principles of the Law of Negligence, explained that ‘where nervous shock is produced, the terror is merely another expression for a direct effect on the nervous system—a portion of physical organisation’. In contrast, the term ‘mental shock’ was taken by lawyers to refer to such painful but transient emotional experiences as anxiety, anguish, or grief that—it was then thought—were not productive of any appreciable injury to the organism. Recovery would be allowed for ‘nervous shock’, but not for ‘mental shock’, unless the latter followed upon the former. These fine distinctions were bound to create confusion.

The medically controversial nature of nervous symptoms that did not follow on physically demonstrable injury became the basis for denial of liability by the railway companies. While admitting negligence in causing the accident, they would deny liability on the grounds that such controversial condition as ‘nervous shock’ could not be regarded as a reasonably foreseeable consequence of negligent conduct.

---

132 In the 1870s, William Cullen’s medical nosology was drastically modified, with neurosis confined to a much narrower category of ‘nervous’, meaning emotional disorders.


134 Id., at viii.

135 Ibid.


137 The reasoning regarding remoteness of damage was analogous to that in Hadley v. Baxendale (1854) 9 Ex 341; 156 ER 145.

---


This line of argument was presented in Coultas v. Victorian Railway Commissioners, the first reported case on compensability of nervous shock. In this case, a gatekeeper, employed by the Victorian Railways Commissioners, carelessly ushered the buggy driven by Mrs. Coultas’ husband across the railway crossing. Just as they had passed over one set of rails, a train came...
past. Frightened by its approach, Mary Coults fainted. Shortly afterwards she suffered a miscarriage and was ill for several months. Medical evidence at the subsequent court hearing indicated that she had suffered a ‘severe nervous shock from the fright, and that the illness from which she afterwards suffered was the consequence of the fright’. The Supreme Court of Victoria held that Mrs. Coults could recover for mental and physical injuries resulting from nervous shock caused by the defendants’ negligent conduct. However, on appeal from Australia, the Privy Council advised that:

Damage arising from mere sudden terror unaccompanied by any actual physical injury, but occasioning a nervous or mental shock, cannot . . . be considered a consequence which, in the ordinary course of things, would flow from the negligence of the gate-keeper.141

The Privy Council equated mental (in the sense of a ‘purely emotional’ occurrence) with nervous shock (in the sense of an actual physical or organic injury). The legal outcome of this mistaken—in terms of the then current medical theory—identification of nervous with mental shock142 was the denial of recovery for both. The Judicial Committee refused to allow damages for negligently caused nervous shock not accompanied by physical impact on the grounds that if such recovery were granted:

Not only in such a case as the present, but in every case where an accident caused by negligence had given a person a serious nervous shock, there might be a claim for damages on account of mental injury. The difficulty which now exists in case of alleged physical injuries of determining whether they were caused by the negligent act would be greatly increased, and a wide field opened for imaginary claims.143

The reference to causal uncertainty and fear of ‘imaginary claims’, suggests that the Committee’s approach was influenced by more than purely theoretical controversies about the nature and medical status of nervous shock.144 The phrase ‘imaginary claims’ encapsulates the language used by some medical practitioners to describe patients presenting with ‘nervous shock’ both outside and inside the court. The debates of the 1860s were instrumental in shaping the perception of psychosomatic sequelae of accidents that do not result in demonstrable lesions as medically and legally suspect. Erichsen thought that although there would be cases of fraud and exaggeration of symptoms, the majority of patients who presented with nonphysical injuries were genuine. His opponents presented precisely the opposite view, arguing that save for few genuine exceptions, severe symptoms, which some patients developed following physically threatening circumstances, were factitious. In their arguments, they created a plethora of pejorative phraseology, including such terms as ‘litigation symptoms’ ‘railway spine’, ‘golden blisters’, and ‘malingering’. With the development of psychologically oriented theory of neurosis in the 1870s and 1880s, such phrases as ‘railway brain’,145 ‘litigation neurosis’, and ‘compensation neurosis’ entered the medical vocabulary. Medical practitioners would use these phrases in their clinical practice and court reports as if they formed a part of medical nosology. Yet, without denying the existence of fraudulent claims and factitious disorders, it would have been possible to assess such
claims in scientific and value-neutral terms. The disparaging terminology adopted by many physicians and surgeons reflected polarisation of medical views and attitudes, which, in turn, found expression on the witness stand. Those medical practitioners who ignored the principle of scientific impartiality of an expert witness advocated by Thomas Percival in his Medical Ethics advanced neither the cause of medicine nor the law.

Acknowledgments
I am grateful to Professor Margaret Humphreys of Duke University, Professor Ian Freckelton of Monash University and the anonymous reviewers for the International Journal of Law and Psychiatry for their helpful and insightful comments.
