COCKLE, Sir JAMES (1819-1895), mathematician and chief justice, was born on 14 January 1819, the second son of James Cockle of Great Oakley, Essex, England. He was educated at Stourmouth House, Kensington, at Charterhouse, and privately by Rev. C. Lennyy, D.D., of St John's College, Cambridge, where he discovered his mathematical talent. After a year in the West Indies and the United States of America, in 1837 he entered Trinity College, Cambridge (B.A., 1842; M.A., 1845). He was called to the Bar at the Middle Temple in 1846 and practised as a special pleader in 1845-49, joining the Midland circuit in 1848. On 22 August 1855 in London he married Adelaide Catherine, daughter of Henry Wilkin of Walton, Suffolk; of their surviving children, three daughters were born in England, four daughters and a son in Queensland. Cockle was elected a fellow of the Royal Astronomical Society in 1854 and a member of the Cambridge Philosophical Society in 1856. In the 1870s his determination of the explicit form of a certain sextic algebraic equation attracted much attention. In 1862 he drafted the Jurisdiction in Homicides Act.

In the same year the government of Queensland, having rejected the application of A. J. P. Lutwyche [q.v.], the colony's sole resident judge, whose conduct it had recently condemned, asked through the Colonial Office that the solicitor-general of England choose for chief justice of the colony a properly qualified person 'of high moral character, not less than 40 years of age, firm, discreet and above temptation to mix in local party politics'. Cockle was recommended and took up his appointment in Brisbane on 23 February 1863. With courtesy but great firmness he persuaded Lutwyche to stop airing in the press his grievances against parliament; later the two became firm friends.

Cockle was a dignified, imperturbable and scrupulously impartial judge, highly respected by the Bar and the general public. His clear and logical reasoning and concise expression were as apparent in his legal pronouncements as in his mathematical and philosophical writings: only two appeals against his judgments succeeded. He set a high standard for what were to become traditions of the court and was polite and considerate to other members of the legal profession. As senior commissioner in 1866-67 he consolidated many colonial statutes, especially in criminal, mercantile and constitutional law and court procedures. He was knighted in 1869. A man of simple tastes, his relaxation lay in mathematics and he was interested in his young family; their sayings are quoted in two of his addresses. He was chairman of trustees of the Brisbane Grammar School in 1874-77, but remained rather aloof from public life, perhaps intentionally to reassure the small community of his impartiality. In 1863 Cockle was elected president of the Queensland Philosophical Society, founded in 1859, and held office until 1878. In presidential addresses he urged the value of pure scientific research and of the study of the history of science; he exhorted the society to embrace the largest possible field of inquiry, and to exhibit a universal scientific tolerance. At first he took an active and constructive part, but in his last eight years attended only three meetings and many members felt that his lack of interest harmed the society. He was elected a fellow of the Royal Society in 1865, a corresponding member of the Manchester Literary and Philosophical Society and a member of the London Mathematical Society in 1870, and an honorary member of the Royal Society of New South Wales in 1876. While chief justice he continued his researches in higher algebra and differential equations which were published in the journals of these societies and among others of the Royal Society of Victoria. An erect white-clad figure, he walked daily to and from the court three miles from his home Oakwal (now in the suburb of Windsor), where with Lady Cockle he gave an annual picnic for local school children. In fifteen years of continuous service as chief justice he never missed a day's duty from illness or
other cause; on these grounds he successfully sought a year's leave on full pay. He sailed with his family for England in June 1878 and on 18 June 1879 tendered his resignation, indicating that he was legally entitled to retire on half-pay after fifteen years service. For more than sixteen years he lived in England and drew a pension of £1250 from Queensland, a sore point with some colonists. He was a commissioner for the Queensland section of the Colonial and Indian Exhibition held in London in 1886.

In retirement Cockle devoted his time to mathematical writing and the affairs of scientific societies; he served as president of the London Mathematical Society in 1886-88 and councillor of the Royal Astronomical Society in 1888-92. To his friends' surprise he took an enthusiastic part in London club life, being treasurer of the Savage in 1884-89 and an active member of the Garrick and Savile. Altogether he published over eighty scientific papers but remained modest about his own work and readily encouraged others in the same fields. His writings included studies of Indian astronomical literature, the motion of fluids and effects of magnetism on light, but were chiefly on algebra and the calculus. There his original and independent approach revealed important relations between algebraic and differential equations and stimulated others to elaborate and perfect the theories he initiated. Deeply interested also in problems of metaphysics and theology, he was a sincerely convinced Christian and a Mason. He died at his home in Bayswater on 27 January 1895 and was buried at Paddington cemetery. Perhaps because he shunned ostentation and controversy and because his scientific work was in a theoretical field Cockle became almost forgotten despite his important contribution in the formative years of Queensland, and is remembered best by lawyers and boys of the Brisbane Grammar School, whose Cockle prize for mathematics he himself endowed in 1874.