

**SIR THOMAS BRISBANE, F.R.S., FOUNDER OF
ORGANIZED SCIENCE IN AUSTRALIA**

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*"There is a tide in the affairs of men,
Which, taken at the flood, leads on to fortune;
Omitted, all the voyage of their life
Is bound in shallows and in miseries."*

Shakespeare, "Julius Caesar," Act IV, Sc. 3.

The scene is a street in Paris, the time — just after the defeat of Napoleon, who, with his army, is now broken and impotent. Two high-ranking officers are walking down the street arm in arm, discussing the idleness which must beset them now that peace reigns over Europe. As they part, the higher ranking of the two promises to make some recommendations on his colleague's behalf, and several days later greets him again in the street.

"Do you know, Sir Thomas," says his Grace the Duke of Wellington, "what Lord Bathurst writes me this morning? That he wants one who will govern not the heavens but the earth in New South Wales." Sir Thomas Brisbane responds to his friend's chiding with "Your Grace can testify, all the years during which I have had the honour to serve under you in the Peninsula, whether I have suffered my scientific predilections to interfere with my military duties!" "Certainly not: certainly not!" replies the Duke. "I shall write his Lordship that, on the contrary, you were never in one instance absent or late, morning, noon or night, and that in addition you kept the time of the Army."

Thus we gained the founder of our first institution devoted to scientific research. Sir Thomas was 48. He had served with distinction in Flanders, Ireland, the West Indies, and in the Peninsular War at Vittoria, St. Sebastian, and Toulouse; he could very well have retired to the easy life of a country squire. Instead, he chose to follow in a unique fashion his passion for the pursuit of knowledge. During his military travels he always carried with him his sextant and chronometer and engaged himself in the study of the sciences



SIR THOMAS BRISBANE

of astronomy and mathematics. Now his real opportunity to study his beloved science had come. No longer had he to work with portable instruments; he could set up a fixed observatory. This he did at Parramatta.

To New South Wales he brought the following instruments — 4 astronomical clocks, a Mural Circle, a Transit Instrument, a 16" Repeating Circle, 2 equatorial telescopes, Inclination and Declination instruments, Borda's Pendulum for determining the figure of the earth, Barometers, Magnetic Transit, Thermometers, an Azimuth Compass, a pair of 18" Globes, a Levelling telescope, to the total value of £1,261, and £353/13/- worth of books. This represented a considerable outlay at the time, and was made entirely at Sir Thomas' expense.

Not only did he bring the instruments, but also the staff to man them. He chose Dr. Charles Stargard Rumker, already well known as an astronomer, and Mr. James Dunlop, who had good technical skill. They arrived in New South Wales in 1821, and immediately set to work. An observatory was built about 100 yards from the back door of Government House at Parramatta in five months, and at the end of April, 1822, the instruments were set up.

The building was initially meant to be a temporary structure and was simply built. The walls were 11 feet high and the building was 28 feet square, with two domes 11 feet 6 inches diameter. There were suitable windows on the north and south sides, and openings in the roof for the transit instruments.

Instruments Preserved

Fortunately for us, some of Sir Thomas's instruments are preserved in the Government Observatory in Sydney, and through the courtesy of the Government Astronomer, Mr. Harley Wood, I was able to examine them. They are the 46 inch achromatic telescope; the repeating circle, which is still usable — it was utilised at Goondiwindi in 1922 to observe the solar eclipse; the clocks, still operational, one of which was used by Brisbane to record mean solar time for the settlement; one of the transit instruments, a 5½ feet one, quite large for the time; and the mural circle. These and others were housed in the observatory at Parramatta, and fortunately we have preserved for us in a book

giving the results of work there, a plan of this observatory and the siting of its instruments. This is the magnum opus prepared from the institution's findings — the famous "Brisbane Catalogue of Stars," or, to give it its full title — "A Catalogue of 7,385 Stars, chiefly in the Southern Hemisphere, prepared from Observations made in the years 1822, 1823, 1824, 1825 and 1826 at the Observatory at Parramatta, founded by Lieutenant-General Sir Thomas Makdougall Brisbane. The Computations made and the Catalogue constructed by Mr. W. Richardson London 1835."

In the park at Parramatta, behind the old Government House, may be seen to-day the original stone mountings to which one of the instruments was fixed. It is in a remarkable state of preservation, despite exposure to the elements. Unfortunately, the instruments, though large, were imperfect and not very accurate, so that later astronomers had difficulty in identifying some of the stars listed in the Catalogue. Nevertheless, the Catalogue filled a most important gap in scientific knowledge at the time, since no observation had been made in the Southern Hemisphere since 1751-2 (Cape of Good Hope).

Stellar Observations

With his assistants Rumker and Dunlop, he set about making observations until his official duties made it necessary for him to leave most of the observing to his assistants. In a period of $2\frac{1}{4}$ years they made some 40,000 observations of over 7,000 stars. Michael Faraday, one of the most famous of nineteenth century scientists, once said that the important things about scientific work were to "Begin it, to finish it, and to publish it." Sir Thomas did all three. To the Transactions of the Royal Society of London he contributed — "On the Method of Determining the Time with accuracy from a series of altitudes of the Sun, taken on the same side of the meridian," 3 497; "Memoir on the Repeating Reflecting Circle," 9 97; "Method of Determining the Latitude by a Sextant or Circle from Circummeridian observations taken near Noon," 9 227; "Astronomical Observations made at Parramatta and Sydney," 10 112; "Observations before and after the Superior Conjunction of Venus and the Sun, made with the mural circle at Parramatta in 1824," 10 330; "Observations on two Comets discovered

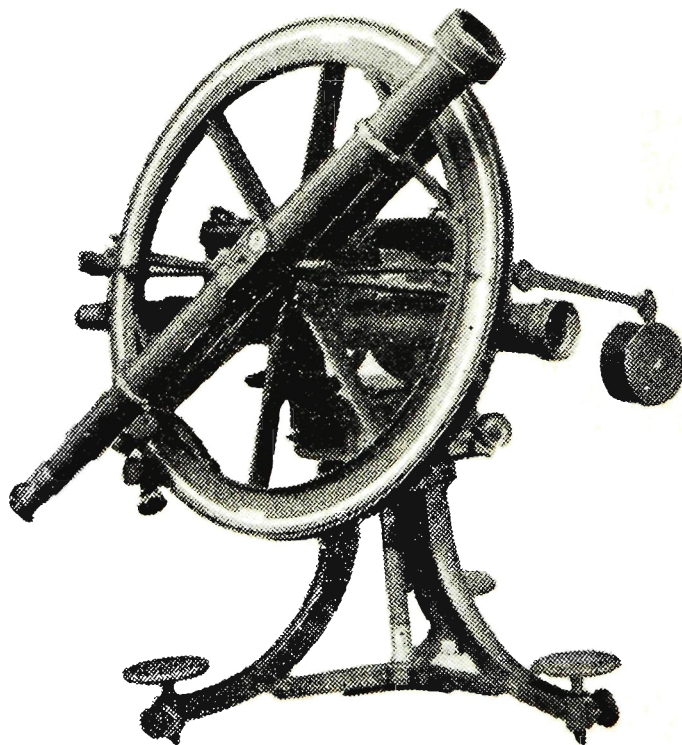
at Parramatta by Mr. Rumker and Mr. Dunlop," 10 332.

To the Royal Astronomical Society's transactions, he made five contributions, 1823-4; to the Edinburgh Philosophical Journal, 5 papers; to the Royal Society of Edinburgh, 6 papers, and of course, the "Brisbane Catalogue of Stars."

Honoured by Many Institutions

He was rightly honoured by many institutions during his lifetime. He was a Doctor of Common Law of Oxford and Cambridge; a Fellow of the Royal Societies of London and Edinburgh; Hon. Member of the Royal Irish Academy; President of the Royal

FROM SMALL ACORNS



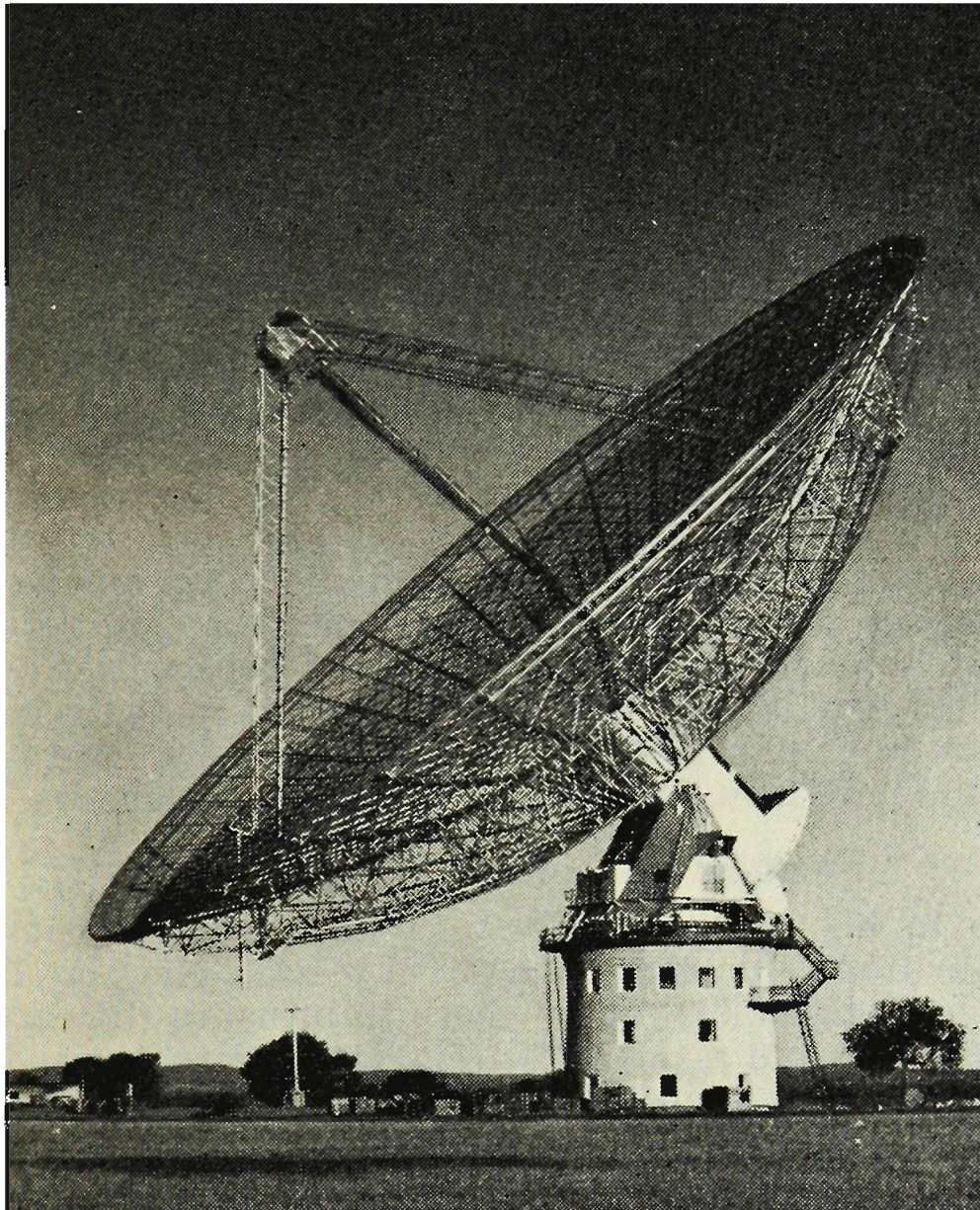
Courtesy, Mr. Harley Wood, Govt. Astronomer, N.S.W.

The readily transportable Repeating Circle of 16in. diameter cost Governor Brisbane £230 when he brought it to New South Wales in 1821. With his assistants, he made considerable use of it at Australia's first scientific institution at Parramatta.

Society of Edinburgh; Member of the Astronomical Society of London; Corresponding Member of the Institute of Paris. In 1828 the Royal Astronomical Society awarded him its Gold Medal, and in presenting it to Sir Thomas's proxy, the President, Professor Herschel, remarked: "We request you to transmit to Sir Thomas Brisbane this medal, accompanied by the strongest expressions of our admiration of the patriotic

and princely support he has given to astronomy in regions so remote. It will be a source of honest pride to him while he lives, to reflect that the first brilliant trait of Australian history marks the era of his government, and that his name will be identified with the future glories of that colony, in ages yet to come,

General View of the Parkes Radio Telescope.



Courtesy, C.S.I.R.O.

This year, one hundred and forty years later, the Commonwealth Scientific and Industrial Research Organisation installed their new Radio Telescope at Parkes, N.S.W. It weighs 1,350 tons, is 210ft. in diameter and cost £800,000. It is ten times more accurate than the Mt. Palomar (U.S.A.) optical telescope. It will be used to probe the mysteries of the Milky Way and the edge of the visible universe.

as the founder of her science. It is a distinction truly worthy of a British governor. The colonial acquisitions of other countries have been but too frequently wrested from unoffending inhabitants, and the first pages of their history blackened by ferocious conquests

and tyrannical violence. The treasures of gold and silver they have yielded — the fruits of rapine — have proved the bane of those who gathered them; and in return ignorance and bigotry have been the boons bestowed on them by their parent nation. Here, however, is a brighter prospect. Our first triumphs in those fair climes have been the peaceful ones of science; and the treasures they have transmitted to us are imperishable records of useful knowledge, speedily to be returned with interest to the improvement of their condition and their elevation in the scale of nations.”

Of Sir Thomas’s work as an administrator I do not intend to deal. He apparently was not fit to be the Chief Gaoler to the Penal Colony — perhaps this is to his credit! In any case he was recalled, but the instance brought from the Duke of Wellington a letter to Lord Bathurst from which we can learn a lot of the sterling character of Sir Thomas. Letter dated 1824, November 20th — “I have received your note regarding General Brisbane’s removal; and I am very sorry that he should have conducted himself in such a manner as to induce you to think his removal from his government to be necessary. He is a very good officer, with a great deal of science and very gallant in the field. I know nothing of him but in the field. But there are many brave men not fit to be governors of colonies.”

Founded Astronomical Observatory

On his recall, Brisbane founded an astronomical observatory in Makerstoun in 1825, and in 1841 extended the observatory there to measure the earth’s magnetism and make meteorological observations. This was the only institute in Scotland to do this up to the time of his death. Three quarto volumes of observations, of 1,500 pages, were published and distributed to observatories throughout the world. He also interested himself in the health, comfort, and education of the people of Largs, a neighbouring town; he directed the drainage work and financed the Brisbane Academy — of high school standard.

As members of one of Australia’s societies for the promotion of knowledge it should interest us to know that Sir Thomas also founded the first society of this type on these shores. In 1821 he presided over the Philosophical Society of Australia, the other members being Alexander Berry, Esq., Henry Grattan Douglas,

M.D., Barron Field (Judge of the Supreme Court), Major Goulburn (Colonial Secretary), Patrick Hill (Colonial Surgeon), Captain Irwin, Captain Philip King, John Oxley (Surveyor-General), Charles Stargard Rumker (astronomer), and Edward Wolstonecraft, Esq. They lent each other books, they met at the houses of each one in succession, where papers were read and discussed; the fine for not presenting a paper when called on was £10 sterling; the only refreshment allowed was a cup of coffee and a biscuit. Only four of the papers read at the meetings have come down to us, and are recorded in **Geographical Memoirs of N.S.W.**," by Barron Field. Unfortunately the Society did not last long, due to a disagreement between the Government and some of the members, and the meetings became fewer and eventually ceased.

Observations in Brisbane Area

The opinion has been expressed that Sir Thomas made no observations in the Brisbane area during his short visit here in 1824. However, in the Brisbane Survey Office I have located a chart of Moreton Bay, prepared by John Gray, Pilot of Port Jackson, on which is marked "Pt. Lookout. Latitude 27° 23' 8" on observation by His Excellency Sir Thomas Brisbane, K.C.B., 30th November, 1824." Whether Sir Thomas made the observation on the land or from the ship cannot be decided. Mr. L. Duffy, B.A., of the Survey Office, tells me that the value is only the equivalent of 2 miles out by modern measurements, so Sir Thomas must have been very close to have made it so exact.

A word about the personal character of Sir Thomas. His biographer, the Rev. William Tasker, describes him simply — "He has fulfilled his prolonged and marvellously varied course without a stain on his good name and his fair fame. For he was a good man. He made many a friend; he has not left behind him one whom he made justly to be a foe." Sir Walter Scott, in a letter to his son, says: "We had a visit from a very fine fellow indeed at Abbotsford, Sir Thomas Brisbane, who long commanded a brigade in the Peninsula. He is very scientific, but bores no one with it, being at the same time a well informed man on all subjects, and particularly alert in his own profession." Like the great majority of scientists, Sir Thomas was a deeply religious man—I mean religious in its highest and broadest sense — and found expression of this in

his dealings with people and in the pursuit of his beloved science. A few extracts from his personal journal written while in Australia indicate this. Thus, September 1823 — "I can avow before the Author of my being, whom I now call to witness on this occasion, that I have never done an act whilst here, which I considered displeasing to God or unjust to my fellow man, and have never allowed myself, in any one instance, to be misled by representations or swayed by prejudice." November 9th, 1823 — "Had the inexpressible satisfaction in sparing the lives of twenty-six fellow creatures condemned to death by the late Criminal Court." 8th October, 1824 — "Great and marvellous are thy works, O Lord God Almighty; how unsearchable are thy judgments; thy ways are past finding out."

He must have loved this country of ours — for he named two of his children after it — Eleanor Australia Macdougall and Thomas Australius Macdougall. On his recall, the people of Sydney presented him with a memorial which stated: "We can truly say that during the four years you have presided over us we have enjoyed three of the greatest political blessings, a mild, an impartial and a firm administration."

It is fitting that we should pay tribute to this famous and good man, and that we should do it in this building (Newstead House), for here began the first systematic scientific observations in Queensland. From January 1843 to December 1846 (4 years), Captain Wickham recorded meteorological and temperature readings on this site — the birthplace of science in Queensland. As a humble follower in the footsteps of these scientific pioneers, it has been my honour to have been able to tell the story of the founder of our science, and the man after whom our beautiful city has been named, an Australian of whom we can well be very proud.

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EDITOR'S NOTE

During his four years term as Governor of New South Wales, Brisbane introduced many reforms in penal settlement; promoted the cultivation of sugar cane, tobacco, and cotton; and left at the close of his administration 50,000 acres of cleared ground where he had found only 25,000. Emigration to New South Wales also began during his term of office; he found a colony of 23,000 and left 36,000. Under his auspices the river which bears his name, and on which stands the City of Brisbane, capital of Queensland, was discovered.

In its Biography of Brisbane, *The Australian Encyclopaedia* (p.126) says: "Brisbane's career as Governor cannot be regarded as a success. He would probably have been an excellent controller of a modern self-governing colony; but for a Crown colony — especially for one rent with disputes between "exclusive" and emancipist, and about to enjoy a slight measure of freedom after years of autocracy — he was too peace-loving, too apt to rely on subordinates, too much of an onlooker. Dr. Lang described him as "a man of the best intentions, but disinclined to business, and deficient in energy."

These comments scarcely do justice to the number of real reforms and progress achieved in the Colony during his term as Governor.

The chief of these reforms — and they were of great importance — originated from reports by J. T. Bigge, or from the Act (4 Geo. IV cap. 96) which credited constitution for the Colony.

This Act of 1823, which set up a Legislative Council, was passed partly to remove the legal disabilities referred to in the petition of the emancipists, partly to provide for relations between Masters and Servants, partly to meet difficulties raised by the exercise of legislative powers by Governors, and partly to carry out the recommendations of Commissioner Bigge. For details of the Act see *Select Documents in Australian History, 1788-1850*, C. M. H. Clark (p.318 et. seq.)

Among the most effective of Brisbane's reforms was the limitation of land grants, both increased by the provision that grantees must employ and maintain one convict for each 100 acres. He also systematised convict administration, and made it pay by hiring out gangs to settlers for clearing land; abolished censorship of the Press (in 1824); and reformed the currency.

Brisbane's Governorship was notable for an activity in coastal exploration that resulted in the discovery of the Brisbane River; the journeys of Hume and Hovell to Port Phillip; and of Allan Cunningham to Pandora's Pass; the encouragement of migration by young settlers with capital who developed the districts round Bathurst, Maitland, Goulburn, and Campbelltown, and pioneered the "squattling" movement.

The Australian Encyclopaedia comments, however, that nearly all Brisbane's measures were "tainted" with the maladministration of his subordinates, and "even the notable explorers of his term suffered."

"Oxley, as an 'exclusive,' was able to disparage the achievement of Hume and Hovell. The greatest offender, however, was Frederick Goulburn, the Colonial Secretary of New South Wales, who used to alter the Governor's orders and issue others on his own authority, put words into Brisbane's mouth, and do many things that embroiled both himself and the Governor with colonists and the Colonial Office."

In 1824 Lord Bathurst recalled both Brisbane and Goulburn. Brisbane left on December 1, 1825; he had prolonged his stay in the hope of being able to carry on until Darling arrived.

In his reply to a petition for Trial by Jury and Representative Government, contained in an address of farewell on October 26, 1823 (*Historical Records of Australia* IV, 1, pp.629-31) Brisbane insisted that all sections wanted liberal institutions in New South Wales. The only difference of opinion was when they should be introduced: How far her offspring, in this infant Empire, may be fitted to receive those Institutions, which in a more ripened age will become their indisputable inheritance, differences of opinion do prevail; and it is a question, upon which some diversity of sentiment may be allowed to exist, without any impeachment of motives.—H R.A. IV 1, p.632, (See also *Select Documents in Australian History 1788-1850*. C.M.H. Clark, p.321).