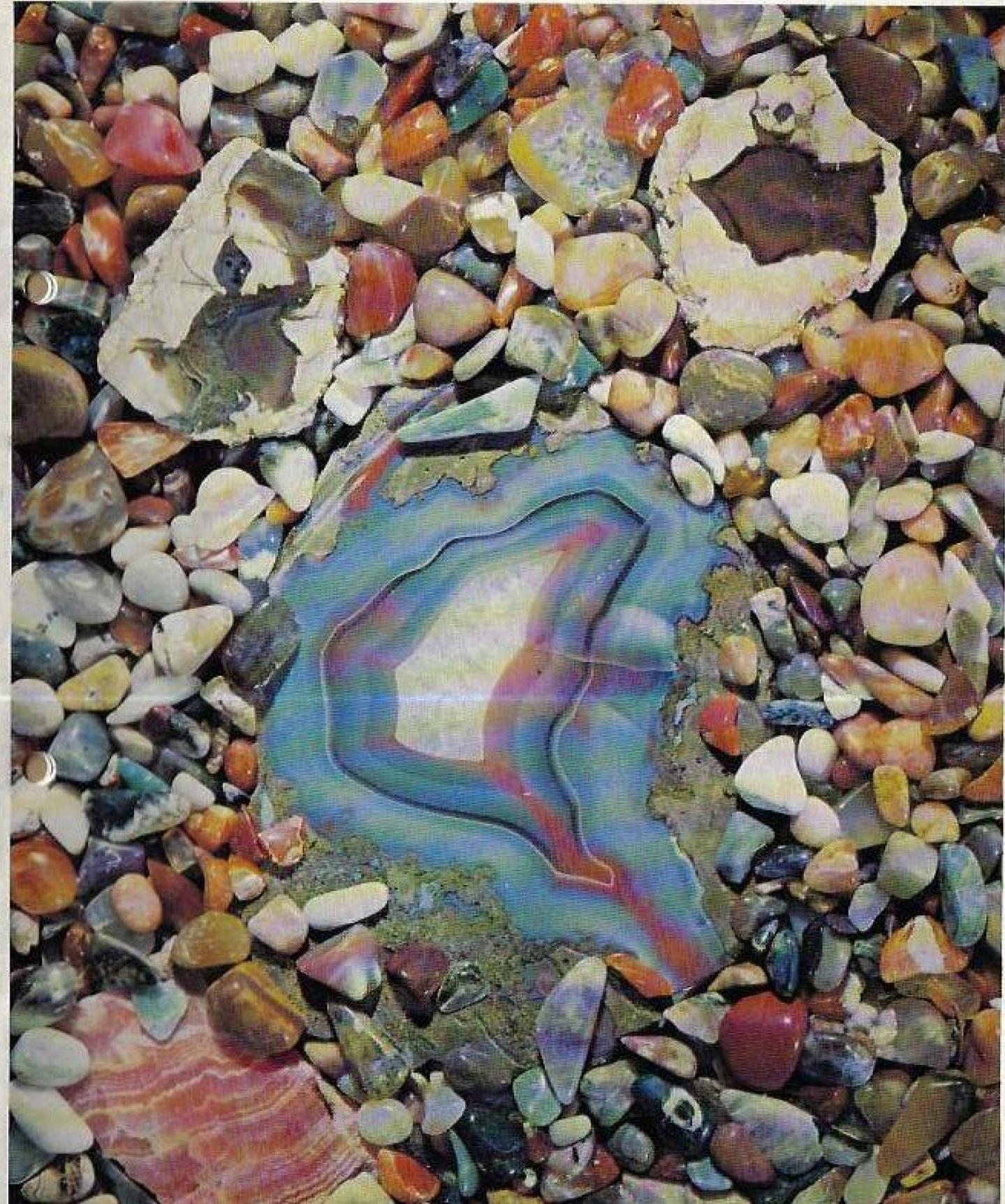
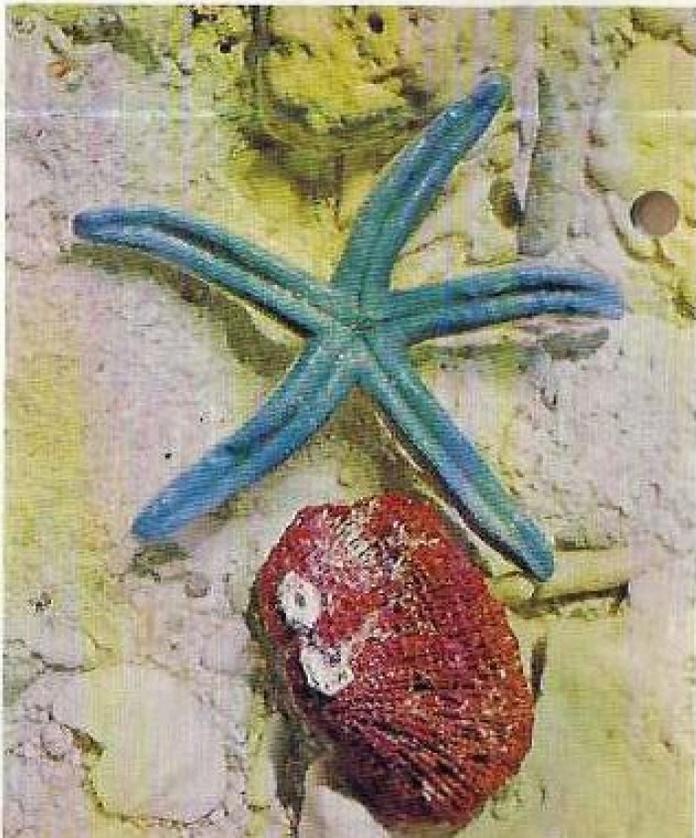
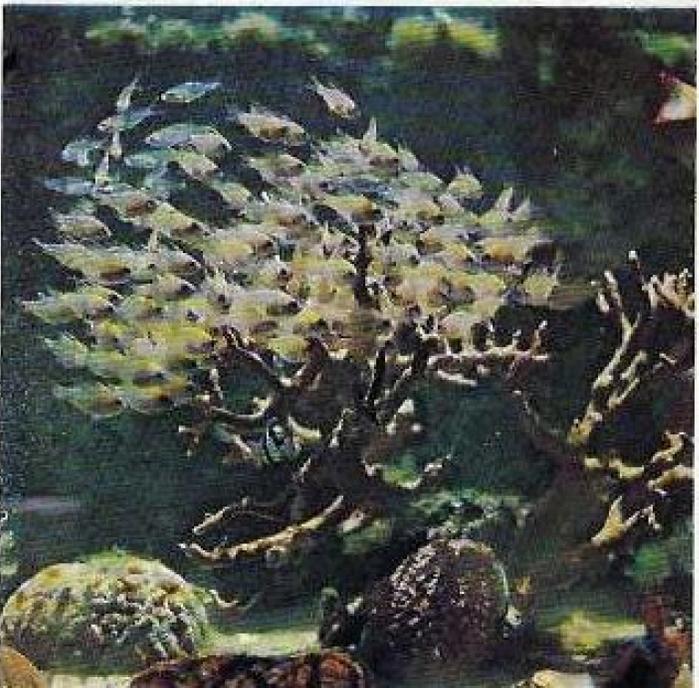
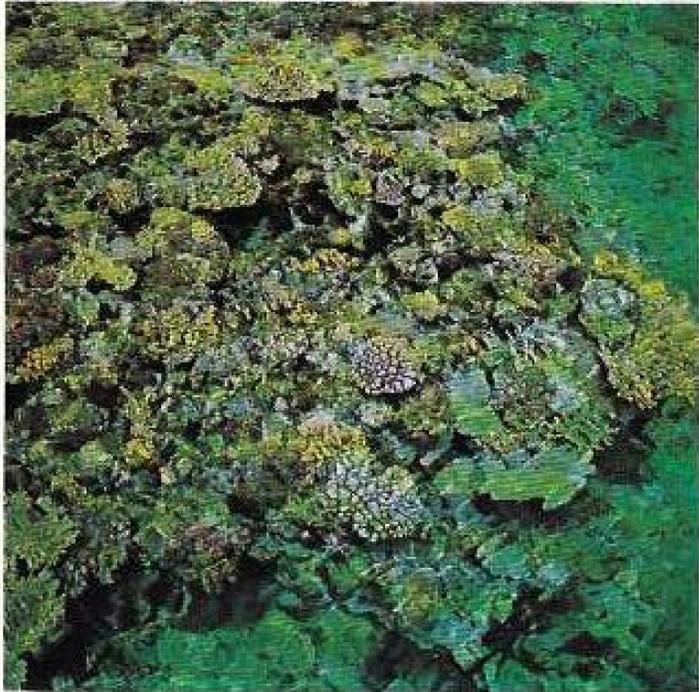
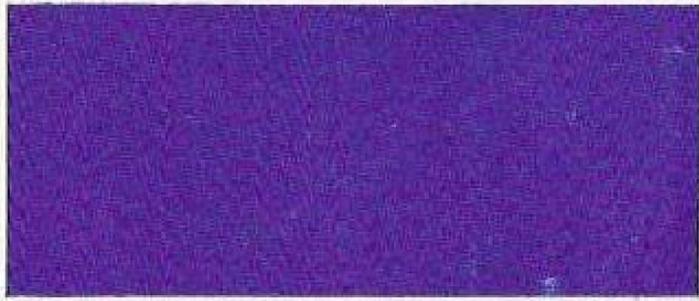


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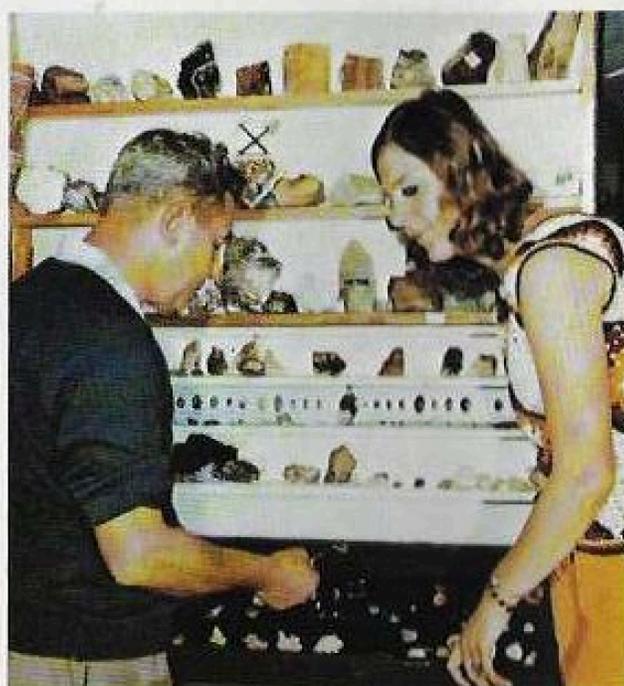
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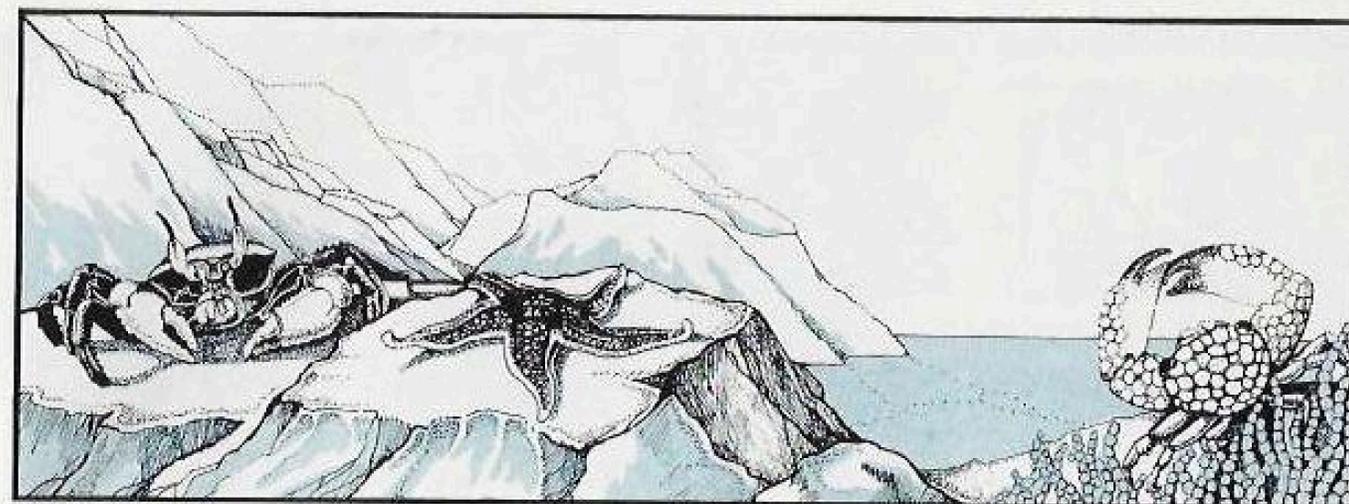
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Mr. Frank Holmes of Yarra Junction points out an item
of interest from his extensive gemstone collection.

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Marine Life and Gemstones Definitive Stamp Issue

A series of eight definitive stamps featuring four marine life subjects and four gemstones subjects will be issued by the Australian Post Office on 11th July, 1973.

The values and subjects are 1c Banded Coral Shrimp, 2c Fiddler Crab, 3c Coral Crab, 4c Mauve Stinger, 6c Chrysoprase, 7c Agate, 8c Opal and 9c Rhodonite. The 1c to 7c values replace the equivalent value one-colour Queen Elizabeth II stamps, the design of which has been in use since 1966. Queen Elizabeth II definitive stamps will remain on sale until all stocks are exhausted. The 8c and 9c stamps replace two similar values of the first National Development series.

The stamps featuring marine life were designed by artists of the Note Printing Branch, Reserve Bank of Australia, Melbourne. Those depicting gemstones were designed by Mr. John Mason of Melbourne who also designed the two official first day covers associated with the issue — one for the four marine life stamps and one for the four gemstone stamps.

The stamps were printed by multicolour photogravure on the Rembrandt press at the Note Printing Branch, Reserve Bank of Australia, Melbourne, on unwatermarked paper incorporating luminescence, and issued in sheets of 100. The four marine life subjects are all in horizontal format and measure 24.05 mm x 20.25 mm; the four gemstones stamps are in vertical format and measure 20.25 mm x 24.05 mm. A souvenir pack containing the eight stamps, priced at 40c, will be available from the date of issue.

The marine life subjects featured on the stamps illustrate but four of the many thousands of different species of sea life which abound along the shores and in the seas around the Australian coast. The Mauve Stinger is a beautiful and delicately coloured jellyfish which from time to time occurs in swarms, in the warm waters of the east coast of Australia. As its scientific name, "Pelagia noctiluca" implies, it is capable of producing light, as do certain other pelagic animals.

The three crustaceans on the stamps, the Reticulated Coral Crab (*Trapezia areolata*), Fiddler Crab (*Uca vocans*), Banded Coral Shrimp (*Stenopus hispidus*) occur in the waters of western, northern and eastern Australia.

The Reticulated Coral Crab lives amongst the branches of Pocillopora-type corals; the unusual reticulated markings of this tropical commensal crab bear a likeness to the pattern of polyps found in the branches of these corals.

The Fiddler Crab is a characteristic inhabitant of the mudflats and mangrove swamps of the tropical regions. The male of the species is distinctive for its greatly enlarged and brilliantly coloured nipper, the movement of which has been likened to that of a fiddler drawing his bow across the strings of a violin; one nipper only is enlarged. This is used both as a warning to intruders and as a very effective fighting weapon during disputes between males during the courtship of females. The smaller of the claws is used by the crab for feeding purposes.

The colourful Banded Coral Shrimp shelters amongst coral or rock crevices or in underwater caves, from the low tide level down through the depths. Observations have shown that the shrimp has the unusual habit of cleaning fish. They attract fish to their waving antennae by projecting their feelers towards the sunlight from their rock crevices. The fish remain static while the shrimps, using their two pairs of small nippers, pick at the parasites, fungal growth and injured tissues on their bodies.

Australia is fortunate in being richly endowed with gemstones, and the four featured on the stamps, Chrysoprase, Agate, Opal and Rhodonite are representative of the majestic beauty and fascinating formations of gems found throughout the continent.

The three special attributes which give value to gemstones are beauty, rarity and durability and stones possessing these qualities are generally divided into two classes of "precious" and "semi-precious". Australia abounds in stones of both varieties, including sapphire, diamond,



emerald, opal, agate, amethyst, garnet, chrysoprase, topaz, jasper, rhodonite, tourmaline, zircon and many more.

The mining of gemstones on a commercial basis, while never assuming the position of a major contributor to the national income, has consistently maintained a small yearly output. Diamonds mined in recent years have been used for industrial purposes. Corundum, emery and sapphire have been employed on laps for grinding and polishing materials, and stones such as quartz, garnet and topaz may be used in powder form as paper-backed abrasives or in the manufacture of grinding wheels and sharpening stones.

In recent years, increasing use has been made of local gemstones in the fashioning of attractive jewellery, particularly for the overseas tourist market, while gem hunting and lapidary (gem cutting) have become extremely popular hobbies for the layman.

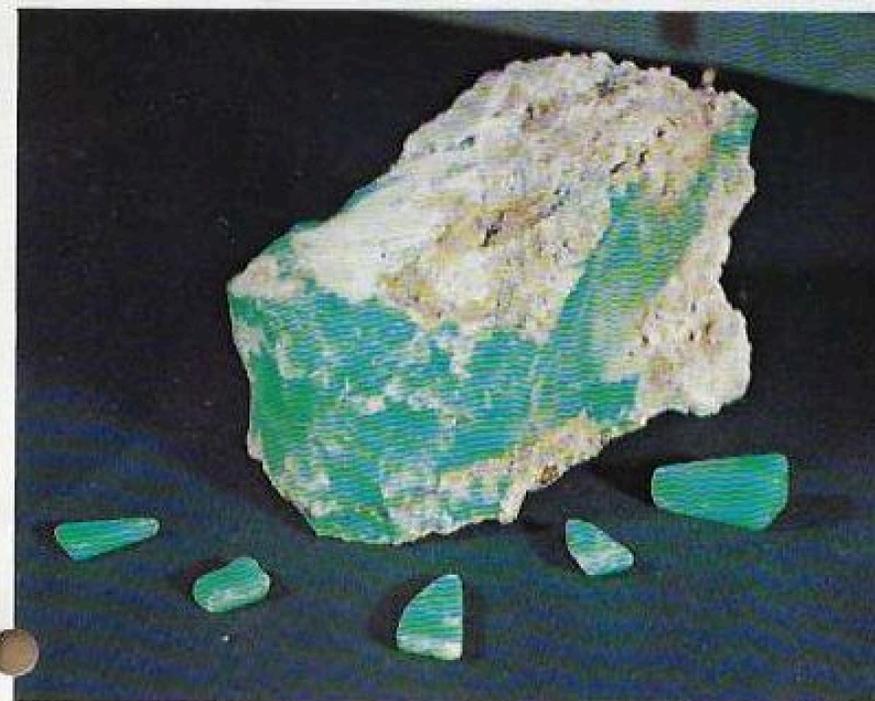
The agate shown on the 7c stamp is one of several varieties to be found throughout the continent. The stones, ranging from translucent to opaque, have a vitreous lustre, and make up part of the family of crypto-crystalline quartz. The more well-known varieties of agate include the banded agate, eye agate, moss agate, plume agate, fortification agate and onyx. The main area for the commercial mining of agate is Agate Creek, near Georgetown in North Queensland.

Chrysoprase is a bright apple-green stone of the chalcedony class of crypto-crystalline quartz, and when uniformly coloured, is the rarest type of

chalcedony to be found. Degrees of transparency range from translucent to opaque, with the stone being found in veins, normally associated with serpentine. Chrysoprase is mined commercially near Marlborough in Queensland, and in certain areas of Western Australia.

The quality and quantity of opals mined in Australia, have virtually made the opal Australia's national stone. One of the most famous to be found, the "Olympic Australis", measured 10 inches by 5½ inches by 5 inches and weighed 127 ounces. Opal is an example of soft gemstone, which because of its breath-taking colour and beauty has all the value of much harder and more durable stones. Precious opal mined in Australia includes fire opal, harlequin opal, and milk opal with its formation of brilliant colour on a white, milky ground. Approximately 80% of opal mined in Australia comes from the South Australian fields of Coober Pedy and Andamooka. The famous Australian black opal is found only at Lightning Ridge in New South Wales.

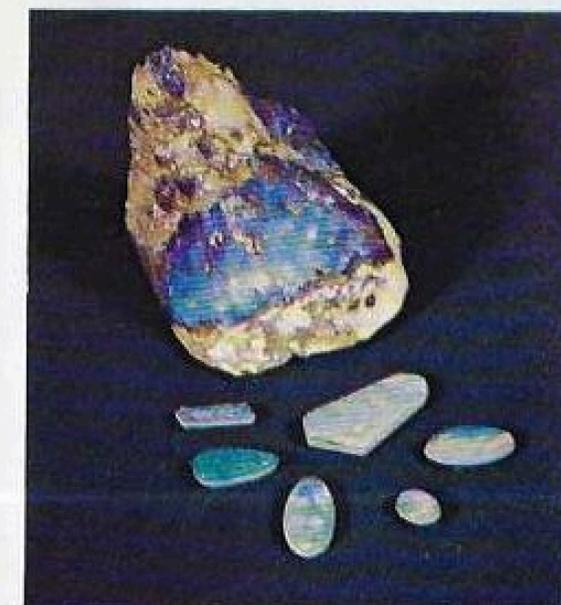
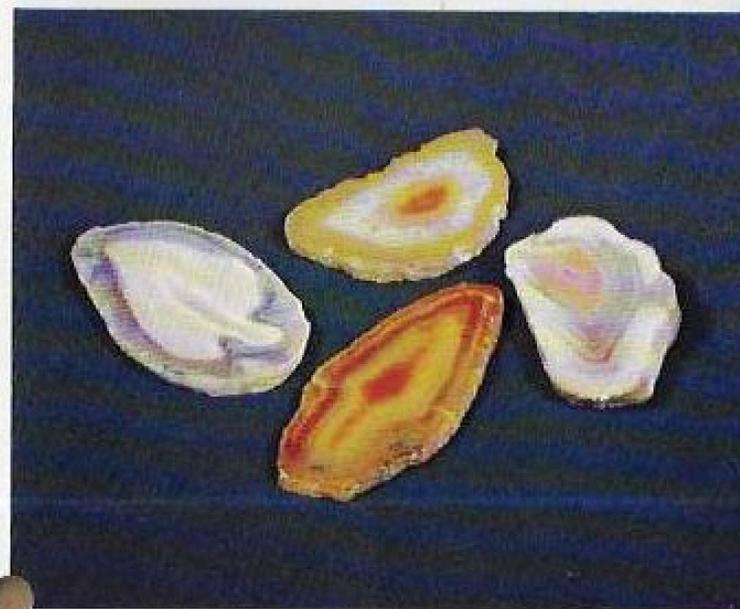
Rhodonite, which is depicted on the 9c stamp, has a manganese silicate composition and occurs in a variety of colours ranging from pale to deep pink, and also red and brownish-red, often with black veins. The major fields for rhodonite in Australia are found in New South Wales, particularly around Tamworth where it is mined commercially. Rhodonite was named after its colour, from the Greek "rhodon" for "rose". The stone has a dull vitreous lustre and is frequently used for ornaments and cabochon gems.



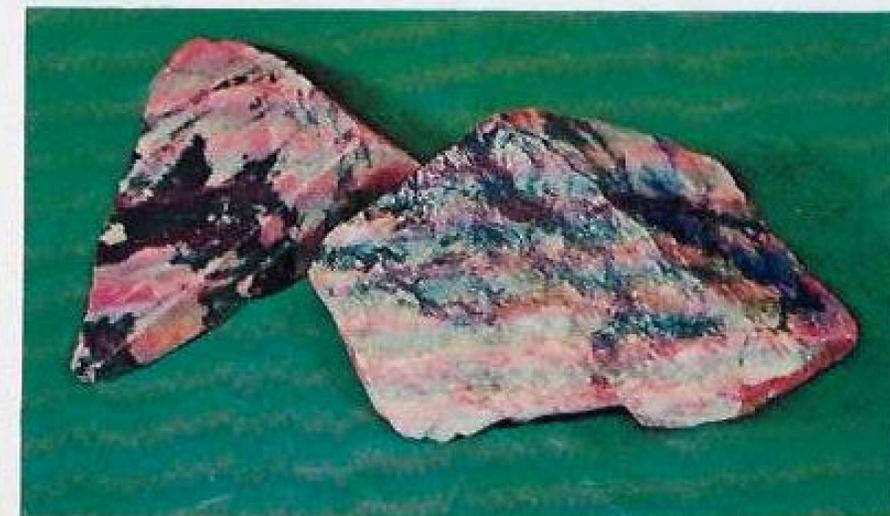
Left: Examples of uncut and polished chrysoprase.

Below left: Examples of agate slices.

Below: Examples of opal, both in its natural state, and cut and polished.



Right: Examples of uncut and polished rhodonite.



Famous Australians Third Stamp Series

Dame Mary Gilmore, Marcus Clarke, William Charles Wentworth and Sir Isaac Isaacs are featured in the third group of Famous Australian stamps, issued on 16th May, 1973. All four portraits for the stamp series were specially drawn by Mr. John Santry of Sydney.

The new stamps will remain on sale at Australian post offices for approximately two months from the date of issue. A souvenir pack containing all four stamps has been produced and a special first day cover for the set was designed by Mr. Lance Stirling of Melbourne.

The stamps each measure 20.25 mm x 24.05 mm, including perforations. They were engraved at the Note Printing Branch of the Reserve Bank of Australia, Melbourne, on unwatermarked paper incorporating heleon. Each stamp is a bicolour, having a paler background colour printed by offset and the portrait and lettering in a darker recess print. The Wentworth and Gilmore stamps have a light bistre panel background and the Isaacs and Clarke stamps are on lilac-tinted panels.

This is the first group of the series to be printed in the se-tenant format with the four subjects all in the one sheet. The Postmaster-General, Mr. Lionel Bowen, announced during March that stamp booklet production had been discontinued.

Instead handy 2c plastic wallets to hold small quantities of postage stamps have been introduced by the Australian Post Office. The wallets fit conveniently into pockets and handbags and are designed to contain a number of stamps in whatever denominations customers choose.

The Minister added that, booklets were costing customers \$1.40 each and sales had dropped considerably in recent years. It was too expensive to produce booklets with small numbers of stamps when a plastic wallet would provide a flexible and convenient alternative.

The design subjects:

Dame Mary Gilmore (1865-1962)

Dame Mary Gilmore, the grand old lady of Australian literature, was prominent for many years in the country's literary and political life.

She was born Mary Jean Cameron, near Goulburn in New South Wales, the eldest in the family of a Scottish immigrant and his Australian-born wife. She received her early schooling from her father who taught her to read from the family Bible. Later, while staying with her maternal grandparents, she attended a small country school. At the age of twelve she became a pupil-teacher, first at Cootamundra and then at Albury, both in New South Wales. She then commenced her training to become a classified teacher but had to resign when she contracted tuberculosis.

Upon recovery Mary began teaching again. One of her posts was at Silverton, near Broken Hill, where she was first brought in contact with the hardships suffered by the working classes; when



she left Silverton for Sydney in 1890, she was a confirmed socialist.

She arrived in Sydney during a period of great political and literary activity. It was also the year in which labour unrest reached a peak, first with the Maritime Strike and later the Shearers' Strike. Mary Cameron took an active part in the relief work organised to help the strikers and their families. In the following year, Mary Cameron was elected as the first female member of the Australian Workers' Union, as well as to the membership of the Union's executive.

While in Sydney, she met John Farrell, a freelance political writer and poet, who encouraged her literary career and influenced her in sending her first prose and verse to the "Bulletin" and the "Worker". During this time Mary became friends with Henry Lawson whose poetry was to immortalize the city worker.

In 1895, Mary Cameron sailed for South America to teach at a colony in Paraguay, set up on socialistic lines by a friend from Sydney, William Lane. There she met and married a fellow colonist, William Gilmore. In 1899 the Gilmores resigned from the colony and returned to Australia.

On the suggestion of the editor of the "Worker", Mary Gilmore started a women's page for the paper which she continued to edit for twenty-three years. She also contributed poetry to both the "Bulletin" and "New Idea", quickly establishing for herself a reputation as one of Australia's leading poets.

In 1930, at the age of sixty-five, Mary Gilmore retired from the "Worker" in order to concentrate on her writing and to devote more time to the social issues of the day. She campaigned vigorously for recognition of the rights of women, for improved conditions for the working classes and the under-privileged, remaining an ardent supporter of the Labor Movement throughout her life.



Santry's alternative portraits for the third Famous Australians series.

In 1937, she was created a Dame of the Order of the British Empire in recognition for her contribution to literature. She continued to write, and took a keen interest in social reforms right up to her death in 1962.

Marcus Clarke (1846-1881)

During fourteen years of creative output, Marcus Clarke, journalist and author, wrote over a wide range of literary activities. His works included two novels, about thirty minor tales, a dozen or so plays and pantomimes, and numerous satirical sketches and essays.

Marcus Andrew Hislop Clarke was born in London. His mother died while he was still an infant and he was brought up by his father, a barrister and man of literary interests, in an atmosphere of indulgence. He was educated at Cholmondeley Grammar School, Highgate, along with his friend Gerard Manley Hopkins who later became a poet of some distinction.

In 1863, when he was sixteen, Marcus Clarke was left in rather impoverished circumstances by the death of his father. He decided to emigrate to Australia, where his uncle, James Langton Clarke, was a Victorian County Court judge. Marcus Clarke arrived in Melbourne in June, 1863, and his uncle procured for him a clerkship in the Bank of Australasia. Temperamentally unfit for this career, he left after a few months and took up sheep farming in the Wimmera district of Victoria. During this period he began his literary career and some of his sketches appeared in the "Australian Magazine" under the pen-name of "Mark Scrivener". His experiences during this period of sheep farming are described in his sketches "Bullocktown" and "In a Bark Hut".

Through the efforts of a Dr. Lewins, whom he met at the sheep station, Marcus Clarke received a position on the staff of the Melbourne "Argus" in 1867. Here he worked as a reporter and leader-writer, as well as contributing articles to various journals and magazines. He wrote a column, the "Peripatetic Philosopher" for the weekly "Australasian" which soon added to his growing reputation. While still working for the "Argus" he bought the "Colonial Monthly" and his first novel "Long Odds" appeared in it in serial

form. This work was later published in book form, in 1869. The "Colonial Monthly" ceased publication through lack of support, in October, 1869.

In 1868 Clarke had started to write for the "Melbourne Punch" and a year later he started a rival paper, the satirical weekly, "Humbug". This however, ran for only three months. Clarke then contracted with the proprietors of the "Australian Journal" to write, in serial form, an account of the penal transportation system which the British Government had practised in the early days of Australian colonization. He visited Tasmania to study the old convict settlements and in March, 1870, the first instalment of his well-known novel "For the Term of His Natural Life" appeared in the "Australian Journal" under the title "His Natural Life". In 1874, the story, much shortened and differing in some aspects from the serial issue, was published in book form, and was later published in many overseas countries.

Marcus Clarke was appointed clerk to the Trustees of the Melbourne Public Library in 1870, and three years later became sub-librarian. He spent much of his time, however, in literary works of various kinds. He continued to write the instalments of "His Natural Life" until the last one appeared in June, 1872. He produced many other works, including a pantomime "Goody Two Shoes" in 1870, a play called "Plot" which had a successful season at the Princess Theatre in Melbourne in 1873, and much local journalism.

Clarke's ineptness over money matters had brought him to insolvency in 1874 and when he again became involved in proceedings of this sort in 1881, the trustees of the library requested his resignation. He died later in the same year, at the early age of 35.

William Charles Wentworth (1792-1872)

William Charles Wentworth, explorer, scholar, writer and statesman, during his lifetime saw the colony of New South Wales grow from a convict settlement of little more than 2,000 inhabitants into a potential nation of 1,700,000 people.

He was born at Norfolk Island during the six year period his father, D'Arcy Wentworth, spent on the island, first as an assistant at the hospital and later as a superintendent of convicts and

assistant surgeon. The family returned to Sydney in 1796 and young William was sent, at an early age, to England to be educated. He arrived back in Sydney in 1811.

In 1813, with Lieutenant Blaxland and Gregory Lawson, Wentworth successfully crossed the Blue Mountains and opened up a route to the fertile western plains.

Three years later he sailed for England, where he studied law and also embarked on his literary career. His book, dealing with the state of the colony of New South Wales and advocating parliamentary government through a nominated council, was published in 1819. Wentworth returned to Sydney in 1824 where he soon established his reputation as an advocate at the Bar.

As well as his legal practice, Wentworth on his return, immediately started a newspaper, the "Australian", with his friend, Robert Wardell. The paper was active in fighting against the influence of the Colonial Office and demanding for the young colony an elected legislature. Many flocked to these causes and by 1830 Wentworth and his followers had prepared a petition to the House of Commons. The party desired to see for the people of the colony the right to trial by jury and a "House of the People's Representatives". The petition was presented to the Commons with no effect.

Wentworth took a leading part in the formation of the Australian Patriotic Association in 1835, and eventually saw his labours for the people rewarded when trial by jury became law in 1838, and the first step towards representative government was taken with the passing of a new constitution act in 1842. An election for twenty-four members to the Legislative Council was held in 1843 and Wentworth was returned as one of the members for Sydney.

Wentworth remained prominent in political affairs for the rest of his life. He advocated for the right of the country to govern itself in all matters including the collection of taxes, the spending of revenue, the disposal of lands and the appointment of public servants, as well as being active in campaigning for many other reforms.

Sir Isaac Isaacs (1855-1948)

Distinguished barrister, prominent state and federal politician, a Chief Justice of the High Court, and the first Australian-born Governor-General of the Commonwealth of Australia, Sir Isaac Isaacs during a career that encompassed more than sixty years, was an active participant in many of the important phases of Australia's history.

The son of a Jewish tailor, Isaac Alfred Isaacs was born in Melbourne on 6th August, 1855. When he was four, the family moved to Yackandandah, a gold-mining town in north-eastern Victoria. They later moved to Beechworth where young Isaac received his early education, before becoming a teacher for five years with the Victorian Education Department at Beechworth.

He then moved to Melbourne where he worked as a clerk with the Crown Law Department for six years, while studying part-time for a law degree at the Melbourne University. He was admitted to the Bar in 1880 and decided to practise as a barrister.

Though work came slowly at first to the young and unknown barrister, his great legal ability and capacity for hard work soon won him the respect of both clients and colleagues. He became a leading figure at the Victorian Bar, and in 1899, when he was still in his early forties, he was appointed a Queen's Counsel.

Isaacs made his first venture into politics when he was elected to the Victorian Legislative Assembly in 1892. He was later made Attorney-General. Through his association with the Australian Natives' Association of which he had become a member in the 1880's, Isaacs became an active supporter of the cause of Federation. He was chosen as a member of the Victorian delegation to the 1897 Convention on Federation and by the end of the convention was regarded as one of its most influential delegates.

With the achievement of Federation in 1901, Isaacs became an elected member of the House of Representatives and in 1905 he was made Commonwealth Attorney-General. While carrying out this office, he still maintained an extensive legal practice at the Victorian Bar.

When in 1906 the Deakin Government increased the number of High Court judges from three to five, Isaacs was appointed as one of the new judges. He was to remain a member of the High Court for nearly a quarter of a century during which time he was created a member of the Privy Council in 1921 and later a member of the judicial committee of the Privy Council. In 1928 he was made a Knight Commander of the Order of St. Michael and St. George.

Upon the resignation of Chief Justice Sir Adrian Knox in 1930, Sir Isaac Isaacs was appointed to the post of Chief Justice of the High Court of Australia. Then in January of 1931, he received appointment to the country's highest office when he was sworn in as Governor-General of the Commonwealth of Australia. He was a popular and successful Governor-General during his five-year term and when he retired from public life at the age of eighty-one he still maintained his interests in many fields. A final honour was bestowed upon him in 1937 when he was awarded the Knight Grand Cross, Order of the Bath.

National Development Stamps

Shipping, Iron Ore and Steel, Beef Roads and Mapping are the four subjects featured on the 20c, 25c, 30c and 35c stamps issued on 6th June, 1973, for sale at all post offices and philatelic sales centres for approximately six months.

This set represents the second group issued in the National Development series and depicts four aspects of Australian national development which



have significantly contributed to the development of Australia's natural resources and secondary industries; important and continuing development over many fields owes much to the support of accurate mapping, efficient shipping and — in northern Australia — the network of good all-weather beef roads; the local availability of iron ore and steel has been an important factor in the development of Australia's secondary industries.

The first group in the National Development series covering the Snowy Mountains and Ord River Schemes, the Bauxite to Aluminium and Oil and Natural Gas industries, was issued on 31st August, 1970.

All four stamps of the second series were designed by Mr. John Copeland, of Adelaide, who also designed the official first day cover for the series. Souvenir stamp packs containing the four stamps, priced at \$1.10, are available from all official post offices.

The stamps were printed by multicolour

photogravure by the Note Printing Branch, Reserve Bank of Australia, Melbourne, on Wiggins Teape coated unwatermarked paper incorporating helecron, and issued in sheets of 100. All the stamps are in vertical format and measure 25 mm x 37.5 mm, including perforations.

Five cylinders were used for printing the 20c value, six for the 25c value (during printing a new grey cylinder replaced the original one which had been used for approximately one third of the printing), five for the 30c value and four for the 35c value. Colours in printing order, were: 20c — grey, dark blue, green, light blue, black; 25c — yellow, dark red, grey, vermilion, black; 30c — grey, umber, dark blue, red, black; 35c — pink, green, red, black.

SHIPPING

By its very geographic isolation from its major trading partners in the Northern Hemisphere, Australia has always had close historic and





economic ties with shipping. Ships opened the way to the colonization of Australia nearly two centuries ago and they have continued to play an important role in the development of Australia into one of the world's twelve major trading nations.

Developments in sea transport in recent years have greatly accelerated the influx of shipping in Australian ports. During the 1960's the number of overseas vessels entering Australian ports rose from some 2,700 to 4,000 vessels and the cargo carried by this shipping increased from approximately 27 million tons to 75 million tons in the corresponding period. The traditional wharf scene with the skyline dominated by cranes and derricks, and wharves stacked with cargo is now being changed by the appearance of huge overhead container cranes; the wharf storage sheds are giving way to rapid transit terminals.

To date the major portion of Australia's trade has been serviced by foreign-built ships but the demand for shipping services has resulted in a marked increase in the amount of domestic shipbuilding. The Commonwealth Government provides encouragement for the growth of the shipbuilding industry by granting subsidies for vessels of 200 tons gross or more, which are constructed in Australia for use on the coast or inland waterways. Six main shipyards and many smaller ones are building a variety of ships ranging from small pleasure craft to roll-on/roll-off, stern-loading ships and 60,000 ton oil tankers.

The revival in the post-war years of coastal shipping has been significant. A number of private companies provide important feeder services to the major export ports as well as carrying domestic cargo along the Australian coast. The Commonwealth maintains an active role in the shipping industry with the Australian National Line, a statutory body responsible to the Minister of Transport. The line is now the largest along the coast and has been a leader in the development of new ships, especially the vehicle-deck or roll-on/

roll-off concept. Late in 1972 the line added two more specially designed vehicle-deck steel carriers for the transportation of steel products. As well, recent Australian ventures into overseas shipping via the Australian National Line have resulted in a number of modern ships plying to Japan, the United Kingdom, and the east and west coasts of America.

The Commonwealth and State Governments have been active in developing Australian ports to the standard required to handle shipping developments — the container ships, the huge oil tankers and iron ore carriers. State and Commonwealth ministers responsible for ports have held conferences to discuss and ensure that port development is fully in keeping with the growing Australian economy. New ports are being created to allow access for as many future users as possible, and existing ports improved. Port improvement and construction has been particularly active in the Pilbara area of Western Australia where huge port and loading facilities have been constructed to meet the iron ore export targets. The harbour at Port Hedland, one of the biggest mineral ports in the world has been deepened to handle giant ore carriers of over 100,000 tons, and a high precision electronic ship guidance system installed for the shipping approaches.

Increasing unit sizes of vessels will continue to be the pattern in all types of shipping. In terms of ship types and technology, the future will be one of continuing change, for an efficient and up-to-date shipping operation is a vital factor in the economy of the Australian nation.

IRON ORE AND STEEL

"Haematite...It is of the commonest occurrence in this Colony, but will not pay to work, although there are large bodies of a high class...but as iron ores are of no value, it is useless to trouble about them."

Harry P. Woodward, Government Geologist, 1894
"Mining Handbook to the Colony of Western Australia".



In a prospecting boom even greater than the gold rush of the last century, the mineral explosion of the 1960's uncovered some of the world's largest deposits of high grade haematite iron ore in the 171,462 square miles of the Pilbara area of Western Australia. The greatest stimulant to the discovery and development of these mountains of iron was the lifting of the Commonwealth's embargo on the export of iron ore which had been in force since 1938.

The full extent of the Pilbara iron reserves has not yet been proven but estimates show that there is sufficient to supply the world's current consumption for many years to come. By 1992 it is expected that the deposits will be yielding 800 million tons a year for export. At present Japan is the major customer for Australia's iron ore and large, long-term contracts have been negotiated with Japanese steel mills. Of the 82 million tons of iron ore consumed by Japanese mills during 1969, Australia supplied about 23 million tons in the form of lump ore, pellets and fines. By 1975, it is estimated that exports of iron ore to Japan under existing contracts, will total about 70 million tons.

In the biggest deposit so far developed, Mt. Whaleback in the Ophthalmia Range, geologists have so far inferred the existence of 1,000 million tons of high-grade haematite ore, and probably more. Others not yet fully proven may be larger. Major deposits include those at Mt. Goldsworthy, Mt. Tom Price, Mt. Newman, Paraburdoo and Mt. Enid. The richness of the major deposits is a result of rain over millions of years, leaching the silica and other material from the iron, leaving much of it nearly pure.

The discovery of these huge deposits has stimulated development and massive investment in a formerly remote and sparsely populated area of Australia. The projects have created new towns and harbours, hundreds of miles of standard gauge railways and brought people and large-scale industry to a barren region that for more than a century had supported little more than a struggling

pastoral industry. Beside the Pilbara, iron ore is mined at Yampi Sound, Koolyanobbing and the Koolanooka Hills in Western Australia. The latter in 1966 made the first regular shipment of iron ore following the easing of the Commonwealth export embargo.

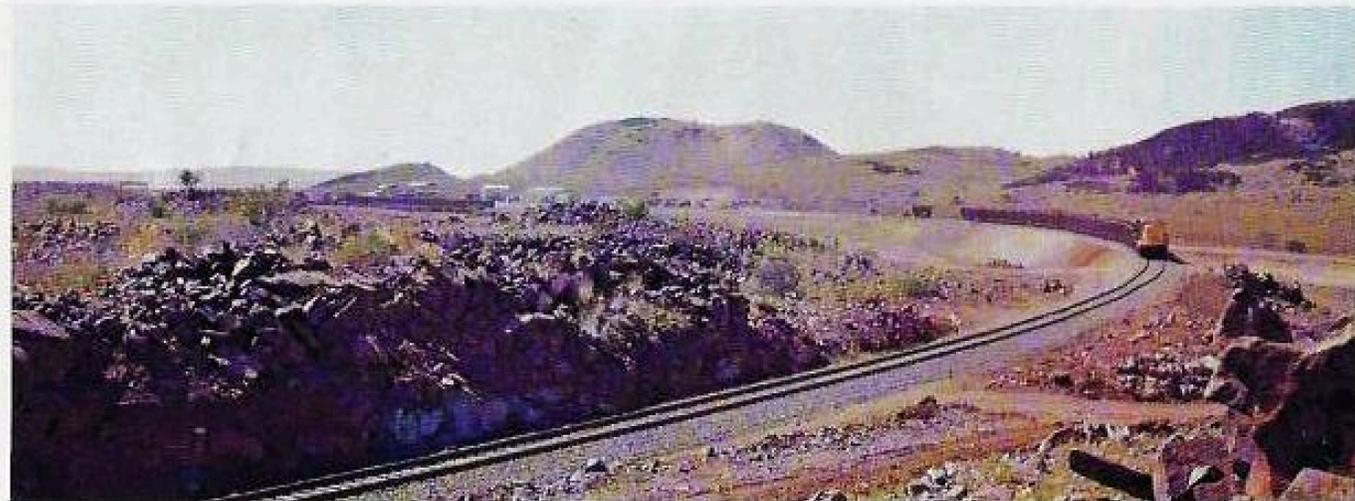
Iron ore is also mined for export to Japan at the Savage River in Tasmania and at a number of projects in the Northern Territory, while South Australia's Middleback Ranges near Whyalla have long been prominent in Australia's iron ore history. Producing some 6.5 million tons of ore annually, it has been a source of ore for Australia's modern steel industry, supplying about 60% of the requirements for domestic iron and steel.

Australia's first blast furnace was established in 1915 by the Broken Hill Proprietary company at Newcastle, a site which offered established port facilities and a plentiful supply of coking coal from the northern New South Wales coalfields. The first steel was produced in April of the same year, with the furnace having an initial capacity of about 150,000 ingot tons a year.

The growth of the steel industry was steady and by the outbreak of the Second World War, the steel works at Newcastle and Port Kembla had a combined capacity of 1.5 million tons of ingot steel a year. Both plants made significant contributions to the national war effort.

In 1941 a blast furnace was established at Whyalla, close to the supplies of iron ore in the Middleback Ranges and work commenced on the ship building yards which now build the biggest ships in Australia.

The post-war years saw a steady expansion in the steel industry. A hot strip mill, high speed rolling mills, continuous casting, an iron ore pellet plant, a tinplate plant and associated coke, iron and steelmaking facilities have been installed at one or other of the three B.H.P. steelmaking centres at Newcastle, Port Kembla and Whyalla. A new integrated iron and steel industrial centre is



currently being developed at Kwinana in Western Australia.

BEEF ROADS

"There's a trade you all know well, it's bringing cattle over.

On every track to the gulf and back, men know the Queensland drover.

Pass the billy round, my boys! Don't let the pint-pot stand there.

For tonight we drink the health of every Overlander."

"The Queensland Drover". Anon.

The overlanding of cattle by droving, along the traditional stock routes such as the Gulf Road and the Birdsville Track, has long been associated with the movement of cattle from northern Australia to the southern markets. The northern beef industry, which raises nearly 50% of Australia's beef cattle, reaches out over a vast and sparsely populated area, and, as an inevitable consequence, transport has always been a vital factor in its development.

Today, however, the colourful drover has been almost completely replaced by road-trains (as depicted on the 30c stamp) which rumble through the north, carrying prime beef cattle to killing centres in days, along routes that once took weeks or months on the hoof, and often left the stock in poor condition. This swing to road transport commenced in the post World War II years and was greatly influenced by the introduction of the first beef roads programme launched by the Commonwealth Government in 1949 under the States Grants (Encouragement of Meat Production) Act. Under the Act the Commonwealth made available \$4.3 million to build or improve roads and improve stock routes in the Channel country of south-west Queensland and the East Kimberly area of Western Australia.

Previously the first Australian road-train had gone on the road in the Meekatharra area of Western Australia as far back as the 1920's, but the real break-through did not come until the late 1940's. War-time projects had included the

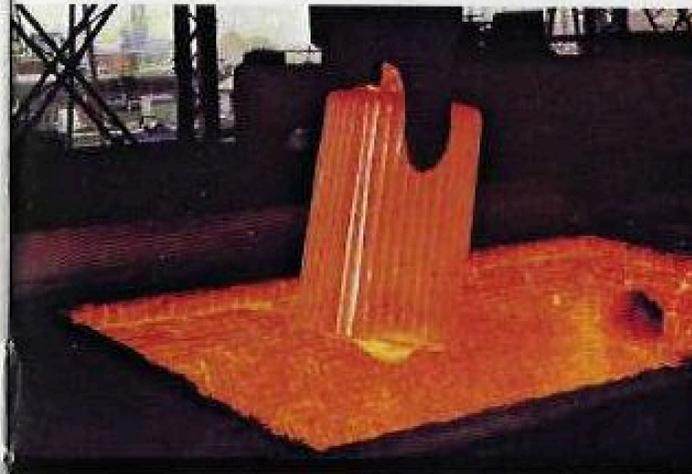
all-weather Stuart Highway running from Alice Springs to Darwin, providing a major asset for northern development; manufacturers began producing bigger, stronger and more reliable vehicles; and the modern method of cattle transport – the road-trains – became an economic reality.

In 1961 the Commonwealth, Queensland and Western Australian Governments began an expanded beef road construction programme. Surveys had shown that there was great scope, particularly in Queensland, to improve the quality of beasts turned off and to increase the amount of beef available for export, by expanding the programme. Grants of \$10 million to Queensland and \$1 million to Western Australia were provided by the Commonwealth Government, conditional upon both States allocating funds for roadworks themselves. Meanwhile the Commonwealth was carrying out a programme of beef road development in the Northern Territory.

The Commonwealth, recognizing the advantages of continual road development and upgrading, made grants to the States at regular intervals. Then in 1967 a new programme of beef road construction that would provide grants to the States aggregating \$50 million to be spent over seven years, was announced by the Commonwealth Government. The money was shared between Queensland (\$39.5 million), Western Australia (\$9.5 million) and South Australia (\$1 million). The \$1 million granted to South Australia provided for the improvement of the well-known Birdsville Track between Birdsville and Maree.

By 1968 more than 5,600 miles of roads in South Australia, Queensland, Western Australia and the Northern Territory had been approved as beef roads and nearly \$60.5 million spent on their development. It is expected that by 1974 the investment by Commonwealth and State Governments, in the strengthening of existing roads and the pushing of new all-weather roads deeper into the heart of the North, should reach about \$135 million.

Beef roads are primarily intended to assist the



modernization and expansion of the beef industry, but the network of roads now lacing northern Australia are providing outlets for a number of other industries; as well, they greatly assist in mineral exploration and carry a growing stream of tourist buses each year. In the long term, the beef roads are the life-lines that have and will open up the North to development in many fields.

MAPPING

Accurate maps have always been a primary requisite in the planning and development of a country and in the detection and assessment of its natural resources. They play a major role in every development from the prospector pegging his claim, to the engineer designing an irrigation scheme, to surveyors setting out a new township.

Australia has a number of map-makers which produce maps for the various facets of development. The main one is the national mapping organization, the Division of National Mapping of the Department of Minerals and Energy which is responsible for the geodetic surveys, air photography and topographic mapping required for general Commonwealth purposes and for the bathymetric survey and mapping of the Australian continental shelf. It also produces geographic and general purpose maps.

The mapping of Australia first commenced nearly four centuries ago, when the first maps of the continent were compiled from the various voyages of the seventeenth century navigators. These maps were little more than rough outlines of the continent. The discoveries made during the voyages of Cook and other eighteenth century navigators added more and detailed information.

With the colonization of Australia, surveyors-general were appointed in the various colonies, and commenced the exploration and charting of the interior, while the discoveries made during the voyages of such navigators as Flinders, Bass and King were compiled into more detailed Admiralty charts of the coastline.

After Federation in 1901, proposals were put forward for the undertaking of a complete

geodetic survey of Australia. The work was eventually commenced by the armed services; a small survey section which was established by the Australian Army in 1910; the hydrographic service of the R.A.N. which was formed in 1921 to chart Australian and New Guinea waters; and the photo squadron of the R.A.A.F. which during and following the Second World War, undertook important aerial surveys in Australia and New Guinea.

By the close of the Second World War, however, only about 5% of Australia had been adequately mapped and this area mapped encompassed mainly the coastal belt. The Commonwealth Government, realizing that a complete map coverage of the entire continent was essential to the country's development set up the national mapping organization, now known as the Division of National Mapping. The first task of the organization was the commencement of a systematic programme of overlapping aerial photography which would cover the entire continent of approximately three million square miles.

After rough "photomaps" had been produced to meet the immediate needs of prospectors, geological survey parties, land developers and the like, the map-makers then went out into the field to refine the discrepancies caused by height distortion and photographic tilt. This work was shared by the Division of National Mapping and the Royal Australian Army Survey Corps, with some assistance from the State Lands Departments and private contractors. The project was completed in 1966 when the last of 541 sheets (at a scale of 1:250,000), comprising the first complete map coverage of the Australian continent with topographic information in great detail, was produced by the Division of National Mapping.

The Division is currently involved in a more detailed series of contoured maps which will cover the continent at a scale of 1:100,000 and the work is expected to be finished during 1975. Modern maps must show both natural and man-made features in their correct geographic positions and contours indicating the correct height of the land above sea level.

The days when the compass and the measured tread of camels was sufficient to produce maps has long passed. Nowadays aircraft, electronic distance measuring, airborne profile recording which includes the use of laser terrain profiling equipment and automatic stereo-plotters are the tools with which the modern map-maker meets the need for greater precision.

Republic of Nauru's New Definitive Issues

Further to reference in the March, 1973, Bulletin, the Republic of Nauru issued the first group of six stamps of the new definitive stamp series on 21st March, 1973, in Australia. In Nauru, however, due to a delay of several days in the delivery of the stamps, the first group was not



issued on the island until 28th March, 1973. The second group of four stamps was issued on 23rd May, 1973, and the third and final group of four stamps will be issued on 25th July, 1973.

The stamp subjects are based on entries selected from a local stamp design competition held in 1971, and depict themes connected with the island's life; within the full series of fourteen denominations, there are two sub-sets, one showing native flowers of Nauru and one showing traditional skills of the islanders.

The first group of stamps issued comprised the sub-set of local flowers and the \$1 stamp, showing a map of Nauru on which are superimposed four local artifacts; the "eran nor" which is used for scraping pandanus fruit to extract the jelly (top left), an "ikiya" leaf splitter for making mats, baskets and hats (top right), an "etiwiw" pandanus leaf pounder (lower left), and an "ikiwi" coconut scraper (lower right). Subjects and denominations of the stamps are: 1c Ekwenababae, 2c Kauwe Iud, 3c Rimone, 4c Denea, 5c Erekoogo, and \$1 Artifacts and Map of Nauru.

The second group of stamps issued were the four stamps depicting traditional skills in a modern, stylized manner. The 8c, Catching flying fish, shows a canoe with two fishermen illuminated by a flaming torch; the flying fish are netted in

mid-air as they fly from the sea, attracted by the flames. The 10c stamp shows a crowd playing Itsibweb, the Nauruan ball game. Nauruan wrestling is depicted on the 15c design and the 20c stamp depicts snaring frigate birds.

Stamps in the third group to be issued are the 7c Ikimago or angel fish; the 25c Nauruan girl, which is drawn from a photograph of a local island beauty; the 30c Catching noddy birds - tasty birds which are netted in the evening by parties of Nauruans, and eaten almost immediately; the 50c Frigate birds stamp showing a Frigate bird on a perch, with others on a lattice at treetop level behind. These birds are regarded as a status symbol amongst Nauruans who tame them and pass them on to their children as an inheritance. All first day cover orders for the third group should be forwarded to the Officer-in-Charge, Philatelic Bureau, Republic of Nauru, Central Pacific, to reach there before the date of issue, 25th July, 1973. The cost of a fully serviced cover for this group is \$1.23.

Withdrawal dates for the 1968 provisional stamp series being replaced by the new definitive stamp series are: 1c Anibare Bay, 2c Nauruan netting fish, 3c Loading phosphate, 4c Iyo, 5c Palm trees, and \$1 Map of Nauru on the 21st September, 1973; 8c Capparis, 10c Frigate bird, and 15c Flag



of Nauru (1969 definitive) on the 23rd November, 1973 - the 20c stamp of the new definitive series is a new value: 7c Black lizard, 25c Coral pinnacles, 30c Poison nut, 35c Reed warbler, and 50c Micronesian pigeon on 25th January, 1974.

The stamps are available to Australian collectors from the Australian Post Office philatelic sales centres. Collectors resident outside Australia should forward orders to the Officer-in-Charge, Philatelic Bureau, Republic of Nauru, Central Pacific.

Christmas Island Ships Series

On 4th June, 1973, Christmas Island issued the fourth and final group in the Ships series of definitive stamps. This group, of 10c, 25c, 30c and 35c values, depicts three ships which featured in the early history of the Island, and a cargo and passenger vessel which currently runs between the Island and Western Australia.

Printed in multicolour photogravure by Harrison and Sons Ltd., London, the stamps measure 37.72 mm x 25.40 mm perforation to perforation and were issued in sheets of 50. The stamp subjects are:-

10c H.M.S. "Egeria". During 1887, H.M.S. "Egeria", commanded by Captain Pelham Aldrich, called at Christmas Island for ten days, during which period a number of geological specimens were collected. J.J. Lister, who accompanied the expedition as a naturalist, made extensive collections of the flora and fauna in the immediate vicinity of Flying Fish Cove. The soil and rock specimens collected proved on examination to be composed of nearly pure phosphate of lime; as a result the Island was formally annexed by Great Britain in the following year.

25c H.M.S. "Gordon". Captain Gardner of the brig, "Gordon" landed a party in the cove in 1864, in an attempt to explore the Island.

30c "Cygnet". In 1888, after landfalls on the north-west coast of Australia and the Sumatran coast, William Dampier in his ship, the "Cygnet",

made the first recorded landing on Christmas Island, while en route to the Nicobars. Dampier had attempted to put in at the Cocos (Keeling) Islands, but was carried east of his intended landfall by contrary winds. He sent two canoes ashore at the Island to forage for fresh water and timber from which to make a new pump.

35c S.S. "Triadic". Built in 1945 by the West Coast Shipbuilders of Vancouver, Canada, The S.S. "Triadic", a vessel of 7,461 gross tons, was launched bearing the name H.M.S. "Dungeness". The British Phosphate Commissioners obtained her in 1948 and renamed her "Triadic". The "Triadic" first called at Christmas Island during 1958 and since 1961 has been plying a regular run between the Island and Western Australia, carrying general cargo and passengers on the outward run from Fremantle and returning with passengers and phosphate rock.

Australian clients may obtain mint and postmarked stamps from the philatelic sales centres of the Australian Post Office.

Clients outside Australia should order stamps from the Philatelic Officer, Christmas Island, Indian Ocean.

The 4c, 5c, 9c, 10c, 15c, 30c, and 50c Fish series stamps will be withdrawn from philatelic sale on 31st December, 1973.

The Territory of Christmas Island has also announced some details of its 1973 Christmas stamp issue. It proposes to issue two commemorative Christmas stamps on 2nd October, 1973. The denominations will be 7c and 25c. Further details of the two designs will be published when they become available from the Christmas Island Administration.



Design for the 10c and 25c Royal silver wedding commemorative stamps issued by Fiji on 20th November, 1972.



Papua New Guinea New Definitive Issue

On 13th June, 1973, Papua New Guinea issued the first group of six stamps in the new "P.N.G. Panorama" definitive series of stamps, which will gradually replace, in four stages, the 1968 Shell definitive series. The new series will depict many facets of the country's life and history, as found in the eighteen districts of Papua New Guinea.

The denominations and subjects of the first group to be issued are: 1c Wood Carver, Milne Bay; 7c Coastal Village, Central District; 9c Fire Dancers, East New Britain; 15c Mount Elimbari, Chimbu; 25c Council House, East Sepik; and 40c Fishing Canoes, Madang.

The stamps were designed by Richard Bates and printed in multicolour photogravure on unwatermarked granite paper, by Helio Courvoisier of Switzerland. Stamp size is 35.9 mm x 25.7 mm, in sheets of 50.

The 1c subject, the Milne Bay District, shows a wood carver from the Trobriand Islands preparing the design for a canoe prow. The panel design is also based on the decoration of an elaborately carved canoe.

The Milne Bay district is contained in a land area of 7,820 square miles and comprises the extreme south-eastern section of Papua New Guinea, including 160 named islands, 500 islets and atolls, and a vast area of sea and coral reefs. Exports are copra, rubber, shells, fish and timber. New industries include coffee, cocoa and rice growing. Alotau, which has recently supplanted the island township of Samarai as the commercial and administrative centre for the Milne Bay District, is situated on the mainland.

European influence over the years has always been strong in the Central District, which is the subject of the 7c stamp, and many of the

traditional ways have gradually disappeared. Coastal villages, however, built on piles over the water, may still be seen. The 7c design shows this style of village with traditional lagatoi in the distance. The two posts in the foreground are now in the grounds of the University of Papua New Guinea in Port Moresby and are shown where they might have originally stood as part of a Dubu platform. The panel design is from a carving on a flute from this district.

The Central District of some 12,760 square miles extends along the south coast of Papua, east and west of Port Moresby between Cape Possession in the west to Port Glasgow in the east. Back from the coastal section the country rises to the Wharton Range and the Owen Stanley Mountains. Port Moresby, the main centre is also the capital, port of entry, administrative centre and seat of learning for Papua New Guinea. Major exports for the area are copra and rubber. Newly emerging industries are cattle raising and teak planting.

The colourful fire dance of the Bainings people of the East New Britain District is depicted on the 9c stamp of the series. This unique dance is associated with initiation ceremonies and communication with the world of spirits. The performers dance through fire to a rhythmic accompaniment in masks made from tapa bark sewn on to light wooden frames. The panel design is based on the decoration of a Sulka shield.

Rabaul is the main town, port and administrative centre for the East New Britain District, which covers an area of 7,425 square miles, consisting of the north-eastern end and eastern portion of New Britain, and also including the Duke of York Islands. Major exports are copra, cocoa and timber. Rabaul is noted for its fine harbour and many dormant volcanoes. The most recent volcanic activity occurred during 1941 to 1943

when Tavurur erupted on several occasions.

The 15c stamp subject, the Chimbu District, is a region of some 2,260 square miles and is wholly confined within the central range system of New Guinea. The topography varies from the Papuan Plateau on the south to the high alpine country of Mount Wilhelm on the northern boundary.

The main town is Kundiawa. Most of the population, however, live in the valleys and on the hill-sides between 4,000 and 8,000 feet, away from the malarial belt found at lower levels. Major industries are coffee, pyrethrum, timber and cattle raising.

The stamp shows Mount Elimbari, which is a prominent landmark that can be seen from practically all parts of the Chimbu District. The round house in the foreground is a typical example of local architecture. The panel design is derived from woven cane chest bands worn by some of the men in this area.

The Council House illustrated on the 25c stamp of the series shows the beautiful carving for which the East Sepik District is famous. The Council House on this design is at Ambunti. The panel design is in the style used in decorating the Council Houses of the Maprik area.

The East Sepik District of 16,879 square miles extends for some 120 miles along the northern coastline, westward from the boundary of the Madang District, and from the coast inland to the boundary of the Western Highlands District. The off-lying islands of Kairiru, Muschu and the Southern Group are also included. Major established exports are Robusta coffee, copra, timber and gold mining. New industries include fishing, cattle breeding and coconut and rice planting.

Madang, the main town and port, commercial and administrative centre for the Madang District has been described as the Venice of Papua New Guinea, because of its many quiet and palm-lined waterways which extend well back into the township. Such a scene is shown on the design of the 40c stamp; the panel is from another section of the Madang District and was taken from a finely carved black palm section of a pig arrow at Simbai.

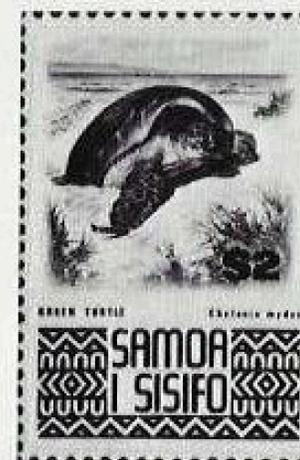
The Madang District covers an area of 10,800 square miles which extends along the northern coast of New Guinea from near the mouth of the Sepik to the western border of the Morobe District and includes several large and small islands off the coast. The southern border of the District is along the high ranges of the Bismarck and Schrader Mountain chain. Major exports are copra, cocoa and coffee. Local industries include timber logging, slipways to provide shipwright and engineering services for the many coastal vessels plying Madang waters, and cigarette manufacturing. Cattle raising and small fishing ventures are also on the increase.

Collectors in Australia may purchase the stamps, in mint or postmarked condition from the Australian Post Office philatelic sales points. Collectors outside Australia should forward their

orders to the Philatelic Bureau, G.P.O., Port Moresby, Papua New Guinea.

Current shell definitives will remain on Philatelic sale until 1974.

Western Samoa – New Definitive



Further to reference in the March, 1973, Bulletin, the new \$2 definitive stamp, depicting the Green Turtle (*Chelonia mydas*), is being issued on 18th June, 1973. The Green Turtle is one of four known varieties of marine turtles.

The stamp was designed by Waddington Studios and printed by Questa Colour Security Printers Ltd., for issue in sheets of 25. The stamp incorporates the usual "Kava bowl" watermark. Stamp size is 31.75 mm x 48.26 mm.

The \$2 Mao bird stamp being replaced by the new definitive will remain on sale at Australian philatelic sales centres for a further three months from 18th June.

New Stamp Issues from Fiji

Further to reference in the March, 1973 Bulletin, the Diamond Jubilee of the Fiji Rugby Union was marked by a set of three commemorative stamps, issued on 9th March, 1973. The denominations of the stamps were 2c, 8c and 25c.

The stamps depict action scenes from Fijian rugby matches. Questa Colour Security Printers of London printed the stamps in sheets of 50, by lithography. Actual stamp size is 28 mm x 43 mm.

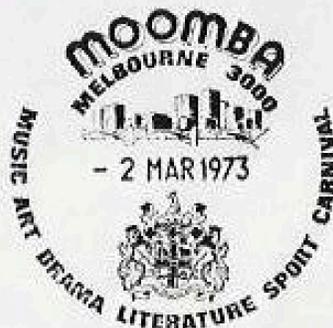
Mint and postmarked stamps are available to Australian collectors from Australian Post Office philatelic sales centres until 9th September, 1973. Overseas orders should be addressed to the Postmaster, Philatelic Bureau, P.O. Box 40, Suva, Fiji.

The Government of Fiji has announced two further issues for 1973. A series, featuring Government Development Projects will be issued on the 23rd July, 1973. Subjects and denominations will be: 5c Forestry Development, 8c Rice Irrigation, 10c Low Income Housing, and 25c Highway Construction. A first day cover will be available for 62c.

During October, 1973, a series of "Festival of Joy" stamps will be issued. The stamp designs will show religious festivals - Christmas (Christian), Diwali (Hindu), Id-ul-Fitar (Moslem) and the Chinese New Year. The price of a first day cover will be 72c.

Australian collectors will be able to purchase the new stamps from Australian Post Office philatelic sales centres, as the dates of issue occur. Clients outside Australia should send orders direct to the Postmaster, Philatelic Bureau, P.O. Box 40, Suva, Fiji. All orders for first day covers should be sent to the Postmaster, Philatelic Bureau, P.O. Box 40, Suva, Fiji, to reach there before the dates of issue.

SHORT NOTES



A special pictorial postmarker was used to cancel a total of 8,938 articles, including 38 registered, at a temporary post office at Melbourne, from 2nd to 12th March, 1973, during the 1973 Moomba Festival. A new design for the postmarker was adopted for this year's festival and replaced the one which had been used in previous years.



A special pictorial postmarker as illustrated was provided at Melbourne from 12th to 28th February, 1973, during the 40th International Eucharistic Congress, and was used to cancel 15,511 articles, including 54 registered. A temporary post office was established at the Exhibition Buildings, Carlton, for the convenience of persons attending the Congress.

The Congress symbol, which was depicted on the postmarker, represents the chalice containing the Host. The thick outer line forms a strong support

for the chalice and is symbolic of the strength of the Church. The bottom curving in from the two sides is to represent the coming together of devotees, and the complete symbol represents a squatting figure with arms raised in praise of God.

Nett quantities issued of the two Australian Antarctic Territory stamps which commemorated the 10th Anniversary of the Antarctic Treaty, were as follows: 6c Sastrugi, 793,618; 30c Pancake Ice, 488,302. The stamps were withdrawn from sale on 23rd June, 1972.

The 7c stamp issued on 4th April, 1973, to mark the twenty-fifth anniversary of the World Health Organisation, was printed on Shoalhaven/KP5D unwatermarked coated paper, incorporating helecon. Four cylinders were used for printing and the colours in printing order, were: pink, grey, green, blue.

Further to references in the September and December, 1972, Bulletins to several postmarkers provided in connection with the centenary celebrations of the Overland Telegraph Line, at the Overland Telegraph Line Centenary Exhibition at John Martins, Adelaide, 69 registered articles were cancelled: at Frews Ironstone Ponds, 41 registered articles; and at the Old Telegraph Station, Alice Springs, 26 registered articles.



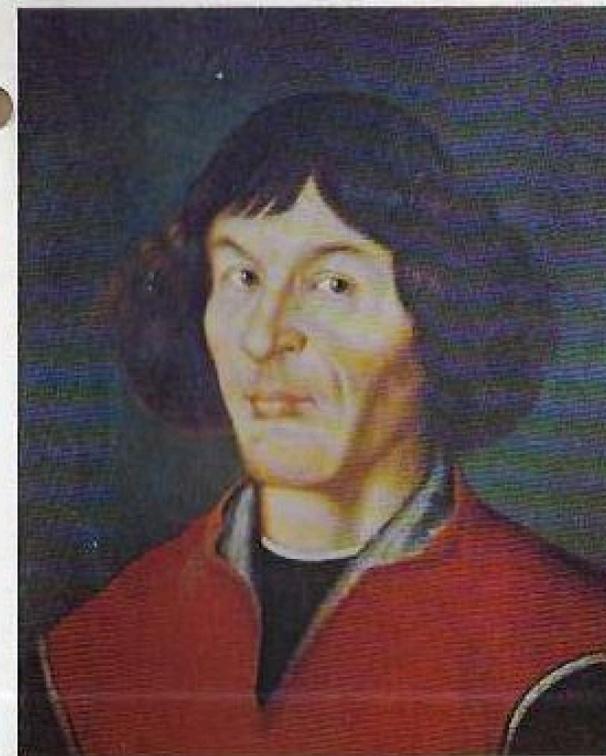
A special postmarker was provided at Kendall Post Office, New South Wales, on 18th April, 1973, to commemorate the opening of the Kendall Memorial Park. A total of 3,426 articles, including 10 registered were postmarked.

The park was developed by the Henry Kendall

Memorial Association as a memorial to the Australian poet, Henry Kendall (1839-1882). Kendall resided in the district (formerly known as Camden Haven) from 1876-1881 and the opening on 18th April coincided with the 134th anniversary of Kendall's birth.

Kendall was born near Ulladulla, N.S.W., and in his lifetime he published three volumes of verse. Some of his early poetry was published by Henry Parkes in "The Empire" newspaper. Henry Kendall was a friend of fellow authors, George Gordon McCrae, Marcus Clarke and Adam Lindsay Gordon.

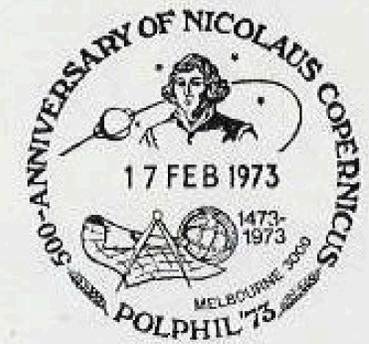
500th Anniversary of Birth of Nicolaus Copernicus



The 500th anniversary of the birth of the Polish astronomer, Nicolaus Copernicus, occurred this year. The Australian Post Office recognized this occasion by providing a special postmarker which was used in Melbourne from 17th to 21st February, 1973, during a philatelic exhibition, POLPHIL '73, sponsored by the Polish Philatelic Society as part of the Copernicus celebrations. Later this year, the Australian Post Office will be participating in POLSKA '73 in Poznan, Poland, another philatelic exhibition to mark the Copernicus anniversary.

A total of 8,102 articles including 59 registered items posted in a special postal box at the Sir Dallas Brookes Hall in East Melbourne, were processed with the postmarker.

Copernicus was born on 19th February, 1473, at Torun in Poland and was by profession, a churchman, being Canon of Frauenberg from 1497



until his death. His thirst for knowledge led him to study mathematics, astronomy, medicine, theology, languages and law at the universities of Cracow, Vienna, Bologna, Rome, Padua and Ferrara. It was at Bologna, where under the influence of Domenico Novarra, from 1496 to 1500, that he began his work in astronomy.

At this time, astronomers were taught the theory of the universe as conceived by the Greek, Ptolemy, in about A.D. 150. His theory was that the earth was a stationary body in the centre of the universe, around which all other bodies revolved.

Copernicus became increasingly sceptical of the Ptolemaic system following discrepancies between the theory and his observations. His doubt had increased further with his reading of other classical writers, such as Pythagoras and Aristarchus, who suggested that the sun and not the earth was the centre of the universe.

Copernicus developed a heliocentric theory, in which the sun was stationary and was the centre of the universe while the earth and other planets revolved in individual, circular orbits around it. He also believed that the earth revolved on its own axis, thus explaining the succession of days and nights. He believed this theory of a moving earth to be correct, because it accounted for the movements of the celestial bodies in a more logical manner than the Ptolemaic system.

Copernicus' ideas were so revolutionary that he purposely delayed publishing them. It was only through the urgings of friends, such as his pupil and disciple, George Rhaticus, that he did so in his work "Revolutions of the Heavenly Spheres". A copy of the printed work was brought to Copernicus at Frauenberg on the day he died; 24th May, 1543.

His ideas were not immediately condemned by the Church. Pope Clement VII gave his approval to lectures being conducted in Rome on Copernican principles. The position changed in the following century, when Galileo was forced by the Inquisition to deny his agreement with Copernican theory.

Despite some inaccuracies, such as the movement of the planets in circles, rather than ellipses around the sun, his work was the basis for studies by later astronomers such as Tycho Brahe, Kepler and Galileo.