

History of Aussie Innovation

The history of Australian inventions spans all industries and endeavours – from revolutionary agricultural tools to remarkable medical breakthroughs. Australians have always shown their ability to improvise and innovate.

Some of these great inventions were protected with a patent while other innovators chose not to pursue patent protection.

- 1904 • First Australian patent granted – Westinghouse brakes
- 1906 • Kiwi boot polish manufactured by William Ramsay and Hamilton McKellan, Melbourne.
 - Sundercut stump jump disc plough, invented by James Garde, released by Sunshine Harvester works, Victoria.
- 1910 • Spun concrete pipes manufactured by Walter Hume, Adelaide.
- 1913 • Automatic Totalisator (the 'Tote') invented by George Julius, installed at Ellerslie Racetrack, New Zealand.
- 1914 • Taylor header harvester exhibited by Headlie Taylor at Henty, New South Wales.
- 1915 • Periscope rifle invented by Lance-Corporal W. C. Beech at Gallipoli.
- 1916 • Spring tine drill cultivator, seed drill plough which sowed, fertilised and harrowed simultaneously, built by Raimond Squire, Quirindi, New South Wales.
- 1918 • Anthrax vaccine revealed by John McGarvie Smith, Sydney.
- 1919 • Rotary hoe demonstrated by Cliff Howard, Gilgandra, New South Wales.
- 1922 • Vegemite invented by Cyril Callister for Fred Walker Co., Melbourne.
- 1923 • Crankless engines, built by A. G. M. Michell's Crankless Engines Ltd, demonstrated in cars in Melbourne.
- 1925 • Transceiver, single unit for receiving and transmitting radio signals, used with pedal generators for the Flying Doctor Service, invented by Alf Traeger, Adelaide.
- 1926 • Heart pacemaker successfully used on a baby by Dr Mark Lidwill, at Crown Street Women's Hospital, Sydney.
- 1930 • Improved tiger snake antivenene produced by Doctors Kellaway and Morgan, Melbourne.
 - High pressure pipe joint produced by Rocla, Melbourne.
- 1933 • Ute designed for Ford company by Lewis Bandt, Geelong.
- 1937 • Defender metaldyhyde snail killer produced by Les Vaughan, Sydney.

- 1940 • Penicillin extracted from *Penecillium notatum* culture by Howard Florey's team at Oxford.
- 1941 • Owen gun, a simple submachine gun effective in wet conditions, invented by Evelyn Owen of Wollongong.
- 1945 • Hills hoist, improved rotary clothes hoist, made by Lance Hill, Adelaide.
- 1952 • Victa rotary petrol lawnmower designed by Mervyn Victor Richardson, Sydney.
- 1953 • Aerosol Mortein released by Samuel Taylor Company.
- 1954 • Precursor of Black Box flight recorder invented by David Warren, Aeronautical Research Laboratories, Melbourne.
- 1958 • Cane chopper harvester, to mechanise harvesting of the Queensland sugar crop, invented by Ken Gaunt for Massey Ferguson, Queensland.
- 1960 • Frozen embryos first successfully transferred (in sheep) by Neil Moore of the University of Sydney.
- 1961 • Ultrasound scanner built by David Robinson and George Kossoff at the Commonwealth Ultrasonics Institute, Sydney.
- 1963 • Drill attachment for chainsaws released by Atom Industries, Sydney.
- 1965 • Inflatable escape slide for aeroplanes, which doubles as a raft, invented by Jack Grant of Qantas, and trialled in Sydney.
 - Wine cask, synthetic wine skin in a cardboard box, released by Angoves, South Australia.
- 1968 • Polyvalent snake antivenene produced at Commonwealth Serum Laboratories, Melbourne.
 - "Billings method" of natural contraception devised by Doctors Evelyn and John Billings, Melbourne.
- 1969 • Turbo-charged self cleaning air filter by A. and J. Notaras, Sydney.
- 1971 • Orbital engine built by Ralph Sarich, Perth.
- 1974 • Super sopper, fast acting roller to dry sports fields, ovals and courts, invented by Gordon Withnall, Sydney.
- 1975 • Ultrasound diagnostic equipment put into commercial production by Ausonics.
 - "Triton" workbench designed and built by George Lewin, Melbourne.
- 1976 • Solar powered telephones and digital radio concentrator system, for extending clear phone calls to the outback, developed by Telecom, Melbourne.

- 1977 • Double glazed solar water heater, developed by Roger Morse.
- 1978 • Cochlear implant developed at Melbourne University by Professor Graeme Clark.
- 1979 • Race-cam camera installed in a car competing in the Bathurst 1000 for live broadcast, by Channel 7 engineer Geoff Healy.
- Computer socks, with modulated elasticity to keep them up, released by Holeproof.
- 1980 • Duoset dual flush cistern released by Caroma, Adelaide.
- Bishop's variable ratio power steering system for cars, a major improvement on previous systems, developed by Arthur Bishop, Sydney
- 1981 • Funnel web spider antivenene, developed by Struan Sutherland at Commonwealth Serum Laboratories, Melbourne, released.
- 1982 • Winged keel developed for use on Australia II by Ben Lexcen.
- 1984 • Safe-N-Sound capsules for transporting babies in cars, released by Rainsford, Melbourne.
- 1985 • Solar cell with recessed current tracks developed by Stuart Wenham and Martin Green, University of New South Wales, Sydney.
- 1987 • Synthetic sunscreen compounds, imitating those in Pacific Staghorn Coral.
- 1989 • Method of treating sleep apnoea, invented at the University of Sydney by Professor Colin Sullivan, developed commercially by ResMed.
- 1991 • "ReVinyl" bottles made from recycled PVC by Peteron Plastics, Melbourne.
- Cervical cancer vaccine – developed by Dr Frazer and Dr Zhou.
- 1993 • Wireless LAN (Local Area Network) technology, or WiFi, invented.
- 2000 • "Fastskin" competition swimsuit launched by Speedo.
- 2001 • Optim wool fibre processor to produce enhanced fibres developed by the CSIRO and Woolmark.
- 2002 • SolarScan skin cancer detection device launched by Polartechnics, Sydney.
- Albion lightweight cricket helmet released.
- 2003 • Jindalee Over-the-Horizon radar system switched on across northern Australia
- 2004 • "MOBI-lert", a crew monitoring and alert system for vessels in case of man over board incidents, invented by Mark Pallister.
- 2005 • Portable retinal camera, a low cost instrument for capturing digital images of the retina for public health in the developing world, is invented by Greg Koennecke.
- 2006 • Programmable turning bed, designed to assist carers and hospital staff to turn patients safely, invented by Hanne Piazza.
- 2007 • "Cone-head", a shock-absorbing liner for motorcycle helmets, invented by Don Morgan.

- 2009
 - Safety Propeller launched. Invented by Colin Chamberlain, this new propeller works like a normal propeller but without the dangers to humans and marine life.
 - Bionic eye, developed by Bionic Vision Australia
- 2010
 - “EVestG”, a diagnostic technique that uses patterns of electrical activity in the brain to detect mental and neurological illnesses, invented by Brian Lithgow and Jayashri Kulkarni.