

## World Refrigeration Day - James Harrison, the 170<sup>th</sup> Anniversary of Refrigeration, and more.

The 26<sup>th</sup> June 2024 was World Refrigeration Day which marked the 170<sup>th</sup> anniversary of James Harrison's invention of the vapour compression refrigeration process that significantly changed the world. Since that time, refrigeration has become commonplace in keeping produce fresh and maintaining air conditioned comfort in room space through cooling and heating. This day was celebrated by a number of commemorative events organised by the National Trust Geelong and Region Branch (NTGRB) and the Royal Geelong Agricultural & Pastoral Society (RGAPS) with support from the Geelong Regional Engineers Group (GREG), the Australian Institute of Refrigeration, AirConditioning and Heating (AIRAH), and the Australian Refrigeration Council (ARC).

During the first day, the event was opened to the public with rostered volunteers from GREG in attendance to provide visitors with a guided explanation of the James Harrison display at the Geelong Machinery Shed at the Geelong Showground Museum. A big thank you to all GREG members that volunteered. Warwick Bryce, a retired engineer and model maker, provided running demonstration of his 1:10 scale model of Harrison's patented Ice-Making machine.



**Mark Vender, AIRAH speaks of the influence Harrison's invention has on the lifestyle we now enjoy**

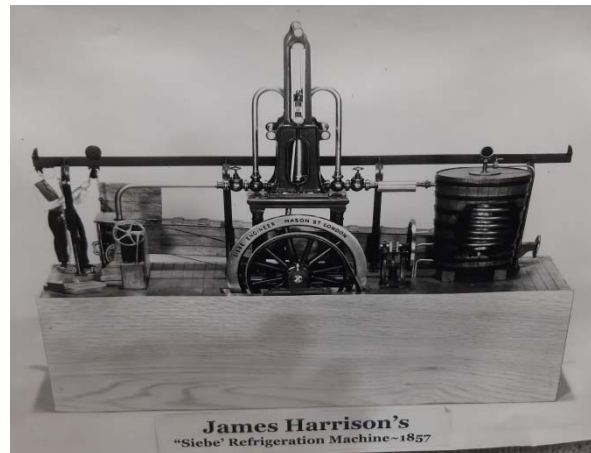
In the evening, a separate event featured a presentation by Mark Vender from AIRAH speaking of the societal life changing effect from Harrison's invention. Greg Shoemark from ARC also made a presentation paying tribute to James Harrison and celebrating the importance of Harrison's invention 170 years ago. The event was attended by many local dignitaries from the City of Greater Geelong, The Geelong Advertiser, local region tourist promotion entities, Deakin University and descendants of the James Harrison family.

A similar public open day was hosted on the weekend, the 29<sup>th</sup> June 2024 with GREG volunteers manning the display to guide visitors through the display along with members of the NTGRB.



**Vivienne Lewis, NTGRB presents Warwick Bryce with acknowledgement gift.**

In late June this year, 170 years of refrigeration were celebrated worldwide. The 170 years were from when James Harrison, a Scotsman, who immigrated to Sydney in 1837 before shifting to Geelong via Melbourne in 1840, brought together the fundamental requirements and introduced steam power to produce what is now known as the refrigeration cycle. He then went on to build the first commercial ice-making machine in 1854. It was in a secluded cave by the Barwon River that, after many attempts, Harrison made artificial ice, the basis of his 1857 commercial ice-making machine.



As a result of Harrison's and other Geelong inventions, Geelong became Australia's UNESCO City of Design in 2017. To celebrate this occasion of Harrison's invention, the National Trust Geelong and Regional Branch organised an event in conjunction with the Geelong Showgrounds Museum. The GREG supported what was called a "Very Cool" Exhibition of Harrison's achievements, including demonstrations provided by Warwick Bryce with his 1:10 scale working model of Harrison's 1857 commercial ice-making

machine. The GREG members joined with the National Trust and Museum members to form a roster ensuring that the hourly ice-making demonstrations provided by Warwick were well supported by someone with knowledge of Harrison's achievements.

Harrison was more than just the pioneer of commercial refrigeration. His life is well documented in a book by W R Lang, "James Harrison – Pioneering Genius." Harrison was born and bred in Scotland in 1816 near the Highlands where sturdy independence was necessary for survival. His father was a salmon fisherman and his mother was thought to be related to Rob Roy McGregor who lived by the simple plan "They should take who have the power and they should keep who can." With a strong genetic heritage and his upbringing in a testing environment, it is of little surprise that he was a man of significant achievement and impact on humanity because of his perseverance in developing the vapour compression refrigeration cycle under difficult circumstances, eventually leading to commercial ice making. This subsequently has led to the modern-day refrigerators and air conditioning. Unfortunately, he has been very much understated in the history of refrigeration.

Harrison embarked on several successful endeavours upon migrating from Scotland to Sydney, Australia and later shifting to Melbourne and eventually Geelong. While mostly involved with the print media of newspapers, his satisfaction derived from fishing in his youth, and driven by "necessity being the mother of invention," eventually his achievements amounted to more than most people can imagine. From printer to journalist to editor, establishing the Geelong Advertiser, not to mention his involvement in local and state government positions, his determination to make a difference as Geelong developed to become a significant city is well chronicled by Lang in his book on Harrison.



On the 27<sup>th</sup> June 2024, a ceremony was held to commemorate the 170<sup>th</sup> anniversary of refrigeration with the restoration of James Harrison's grave at Eastern Cemetery, East Geelong. The event was attended by James Harrison's descendants, who contributed to the grave restoration, supporting members of the National Trust Geelong and Region Branch, and Geelong Regional Engineers Group.



Great-grandchildren, Mark & Jennifer Harrison and Helen Underhill at the grave of James Harrison, Geelong's Eastern Cemetery.



James Harrison's restored grave at Geelong's Eastern Cemetery.