

Tempest, Henry Clifford (1883–1965)

WARREN GRUBB

Warren Grubb, Ph.D. (University of Western Australia, Perth, Australia), retired in 2013 as professor of microbiology, Curtin University, Perth. Born in Australia, Grubb's career has been teaching and researching at universities. He has served as a layman on committees from local church to General Conference and been health director in the Western Australian Conference. In retirement, Grubb is an emeritus professor at Curtin University. He has published 130 peer-reviewed scientific papers.



Henry Clifford Tempest

Photo courtesy of Warren Grubb.

Henry Tempest played a major role in the early days of transforming a backyard enterprise into what is now Sanitarium, a multimillion-dollar international company.

Early Life

Henry Clifford Tempest was born in Yorkshire, England, on June 24, 1883.¹ He was referred to as Harry by a few close friends, Clifford by his wife, and Mr. Tempest or HCT by everyone else (except a general manager, who referred to him as Hurricane Cyclone Tempest!).²

Education and Marriage

After receiving a technical education, Tempest moved to Ireland, where he used his knowledge to install electricity-generating plants for the landed gentry before the advent of a national electricity grid.³ In 1905 he married, in Dublin, Alice Amanda (Hanna), born on January 14, 1877, in County Cavan, Ireland. They had one son, Morley James Clifford Tempest.⁴ Alice died on February 14, 1942.⁵ He later married her sister, Augusta Rebecca (Hanna), who died on October 1, 1955, at the age of 76.⁶ He then married Ruby (Zeininger), who died on August 8, 1964.⁷

Conversion

In the same year they were married, Tempest and his first wife sailed for New Zealand (NZ), where he had accepted an appointment with the NZ government's Mines Department to teach electricity at the Thames School of Mines in Auckland.⁸ At this time Drs. Martin and Florence Keller were operating a clinic in the same city and were instrumental in bringing the Tempests into the Seventh-day Adventist (SDA) Church.⁹ They were baptized by J. M. Cole at the Palmerston North camp meeting of 1913–1914.¹⁰

Career Ministry

Tempest accepted an invitation to teach science and math at the Australasian Missionary College (now Avondale College of Higher Education), in Cooranbong, NSW, and commenced employment in January 1919.¹¹ He was appalled at conditions under which health foods were being produced in a converted sawmill adjacent to the college.¹² This was the fledgling Sanitarium Health Food Company's first factory. Power was provided by a wheezing old steam engine and transferred to the machinery by belts and line shafts whose bearings dripped copious amounts of oil.¹³ Tempest caught a vision of electrifying the plant and set about convincing those who made the decisions. In spite of the fact that he was an academic and had never undertaken any project as large as this, the church leaders caught the vision, and in 1920 he was made consulting engineer and commissioned to electrify the plant while still maintaining his college appointment.¹⁴

In the first two years he designed and supervised the installation of a brick powerhouse for water tube boilers, high-speed compressed steam engines, and DC generators for the factory, wired the factory and installed individual electric motors to each machine. The latter was particularly innovative, as most electrified factories at this time were still transferring power to the machines via belts and line shafts. During this time he also increased the building and plant to fourfold its capacity and installed a new water reticulation system to meet the increasing demands of the factory and the college.¹⁵ In the following three years he designed and supervised the construction of a health food factory in Warburton, VIC. To power this, he designed and installed a hydroelectric plant to power not only the factory but also the adjoining *Signs of the Times* publishing plant and cottages.¹⁶

From 1925 until 1931 extensions and improvements were made to the Sydney Depot and Weet Bix factory, as well as to the Cooranbong plant. At the Cooranbong plant, work included converting the plant to AC motors when the electricity grid became available in 1928. This was accomplished without any interruption to production by using invertors for the DC motors, until they could be replaced by AC motors.¹⁷ In 1930 he was given a part-time assistant, Stanley (Stan) George Grubb, who was studying building construction at the college and needed employment to fund his studies.¹⁸

The years 1930 and 1931 were spent combining the production of Weet Bix and Granose into one operation at Papanui, NZ.¹⁹ The following two years were spent designing and building a factory in Carmel, WA, using primarily student labor from the adjacent Western Australian Missionary College.²⁰

In order to meet the increasing demands of production and technology, in 1934 the head office formed the General Engineering Department under Tempest and appointed Stanley Grubb as a full-time assistant to him.²¹ Tempest did not approve of the name General Engineering Department and unilaterally used the title Consulting Engineer's Department, which the head office tolerated until he retired.²² Initially, Tempest and Grubb had a corner in the factory's general office, but in 1935 they were given two rooms in the new research building that also housed the Australasian Food Research Laboratories.²³

The application of new technologies enabled the company to be competitive. Some of the advances were the fitting of V-belt drives to the machinery and a grain-conditioning plant made of monel metal until stainless steel became available. Some changes were ahead of their time, such as roller bearings to the flaking mills. The latter was at a time that American and English mills were still using bronze ring oil bearings or grease lubricated Babbitt bearings. Roller bearings saved about 25 percent in power consumption.²⁴

The department's work steadily increased. Plans were drawn for an enlarged Cooranbong factory and architects and builders commissioned. This program was completed in 1936. A similar project was supervised for the Warburton factory and this was completed in 1938.²⁵ There was now an increasing demand for new factories and the introduction of new technology. Consequently, the number of staff gradually increased. One of these was Albert (Bert) Bohringer, and he, together with Tempest and Grubb, were the nucleus of the expanding department.²⁶ The workload could now be shared. For example, two new factories were commissioned in 1942, one in Adelaide, supervised by Grubb, and one in Brisbane, supervised by Tempest.²⁷ From then on, Stan Grubb was the main person sent away on projects.

Harry Tempest was never daunted by a challenge. When the greatly expanded Cooranbong factory required more silos for grain storage, the General Engineering Department designed the silos. Tempest wanted to build them, but Grubb and Bohringer insisted that experienced concrete formers be used under their supervision.²⁸

Another project was a bridge over Dora Creek. Some factory workers and outdoor college students lived on the other side of the creek and had to commute, either by boat or by a road trip of at least three miles (five kilometers). Around 1935 the General Engineering Department designed and supervised the building of a suspension footbridge over Dora Creek, called the "swing bridge" by locals.²⁹ The original bridge, except for general maintenance over the years, was still in use in 2019.

Later Life and Legacy

On December 31, 1953, at the age of 71, Henry Tempest retired.³⁰ He died on May 2, 1965.³¹

Attached to his biographical records are handwritten notes summarizing some of the things he had accomplished. He very much understated his contribution by concluding: "Helping in some measure to uphold the cause of God."³²

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Henry Clifford Tempest Biographical Records. South Pacific Division of the General Conference Archives. Folder: "Tempest, Henry Clifford." Document: "Biographical Information Blank: July 3, 1950."

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NOTES

1. Henry Clifford Tempest Biographical Records, South Pacific Division of the General Conference Archives (Folder: "Tempest, Henry Clifford"; Document: "Biographical Information Blank: July 3, 1950").
2. Stanley George Grubb, "History of the Plant Development Division," unpublished manuscript of an oral presentation given on March 26, 1984, held in the personal records of the author.
3. Ibid.
4. Henry Clifford Tempest Biographical Records."
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6. A. W. Knight, "Augusta Rebecca Tempest obituary," *Australasian Record*, October 25, 1955, 7; Henry Clifford Tempest Biographical Records."
7. H. G. Bryant, "Ruby Tempest obituary," *Australasian Record*, August 17, 1964, 15; E. J. Johanson, "Harry Clifford Tempest obituary," *Australasian Record*, June 7, 1965, 15.
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13. Ibid.
14. Ibid.
15. Henry Clifford Tempest Biographical Records. George Grubb.
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23. Ibid.
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26. Grubb, "History of the Plant Development Division."
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29. Personal knowledge of the author as the son of Stanley George Grubb.
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 31. Johanson., "Harry Clifford Tempest obituary."
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