Photo courtesy of Mary Logan

Maurus Logan

Ty-Rap® Cable Ties

U.S. PATENT NO. 3,022,557: Cable bundling and supporting strap

Inducted in 2026 ***Born: July 6, 1921*** ***Died: Nov. 12, 2007***

Electrical engineer Maurus Logan invented Ty-Rap® cable ties to address worker safety and wiring installation inefficiencies in the aviation industry. Now a billion-dollar market segment, cable ties, also known as zip ties, are used in a wide variety of industries and projects, from aerospace to agriculture to DIY home improvement.

Full Bio: https://www.invent.org/inductees/maurus-logan

Primary Connections:

- Thomas & Betts Corp.: Vice President of Research and Development
- Diehl Electric Motor Division of the Singer Manufacturing Co.: Drafter
- Bethlehem Steel Shipbuilding: Drafter

Education:

- Ralph R. McKee Vocational High School

Things You Should Know:

- Logan was born in 1921 in Dalmuir, Scotland, a small community near Glasgow.
- At Ralph R. McKee Vocational High School on Staten Island, New York, he was trained as an electrical draftsman.
- He was hired by Thomas & Betts Corp. (now ABB Installation Products) to work on product development.
- Logan's development of cable ties came after he visited Boeing Corp. and saw workers sustaining injuries as they constructed airplane wire harnesses and secured thousands of feet of electrical wiring.
- He filed for a patent on his nylon cable bundling and supporting strap design in 1958, and the patent was issued in 1962.
- Branded as Ty-Rap®, Logan's invention was the first self-clinching cable tie.
- NASA has used Ty-Rap cable ties to fasten conduits and components on the Mars Perseverance, Spirit, Opportunity and Curiosity rovers, and other space exploration systems to support research and lab equipment.
- More than 30 billion standard and high-performance Ty-Rap brand cable ties have been produced by ABB, formerly Thomas & Betts, and billions more have been made by other manufacturers.
- Throughout his life, Logan continued to invent and remained determined to find practical solutions to the challenges of daily life.