



Photo Courtesy of Dana Morgan

# Ed Morgan

## Tubular Steel Track Roller Coaster

U.S. PATENT NO. 3,114,332: Bobsled amusement ride

**Inducted in 2025** Born: June 19, 1915 Died: March 22, 2009

### Primary Connections:

- Arrow Development: Co-founder and Engineer, 1946-73
- Hendy Iron Works: Machinist

### Key Memberships/Awards:

- American Coaster Enthusiasts: Coaster Landmark Award for Matterhorn Bobsleds, 2003
- International Association of Amusement Parks and Attractions: Hall of Fame Award, 1998

Ed Morgan and Karl Bacon engineered the world's first tubular steel track roller coaster. Matterhorn Bobsleds, which debuted in 1959 at Disneyland in Anaheim, California, set the standard for roller coaster design technology and paved the way for future innovations in the amusement park industry.



**Full Bio:** <https://www.invent.org/inductees/ed-morgan>

### Things You Should Know:

- Morgan was born in 1915 in Detroit.
- He was self-taught engineer and a lifelong tinkerer.
- Morgan and Bacon met in 1943, when they worked together at Hendy Iron Works, a U.S. Navy contractor in Sunnyvale, California, that built torpedo launchers and marine steam engines.
- Morgan said, "I was the guy that made them happen from the mechanical standpoint. Karl was the guy who did the math."
- In 1953, Walt Disney hired Arrow Development to work with WED Enterprises, now Walt Disney Imagineering, to design and construct original rides for the Fantasyland area of Disneyland, which would open in 1955.
- He and Bacon remained close friends for life.
- Looking back on his and Bacon's impact, Morgan said, "I remember seeing children on the rides and seeing their smiles. But our main drive was to take challenges and find answers to them. That's what made our eyes light up."
- Morgan had 10 U.S. patents.