



2023 NATIONAL INVENTORS
HALL OF FAME INDUCTEE

Born: May 30, 1900

Died: March 4, 1989

Primary Connections:

- The Ohio State University: Adjunct Professor of Metallurgy, 1967-71
- Tennessee A&I State University (now Tennessee State University): Professor of Metallurgy, Department Head, and Dean of the School of Engineering, 1953-66
- Duriron Co. (now part of Flowserve Corp.), 1922-53

Education:

- Rensselaer Polytechnic Institute: B.S., Electrical Engineering, 1922

Key Memberships/Awards:

- Rensselaer Polytechnic Institute: Alumni Hall of Fame Inductee, 2020
- Dayton Urban League: Distinguished Community Service Award, 1983
- American Society of Metals, Dayton Chapter: Citation for Meritorious Contributions to the Science of Metals in the Field of Corrosion Resisting Alloys, 1953
- Alpha Sigma Boule: Member

10 Things You Need to Know About

James A. Parsons Jr.

Durimet 20 (Alloy 20) Stainless Steel Alloy

U.S. PATENT NO. 2,185,987

1. Parsons was born in 1900 in Dayton, Ohio.
2. He received an appointment to the U.S. Naval Academy, but turned it down because his father, his high school guidance counselor and Duriron founder Pierce Schenck, for whom Parsons' father worked, all feared for his safety at a time when there were no Black midshipmen.
3. When Parsons received the Harmon Foundation Award for his first invention, Alcumite, an aluminum/bronze alloy, his gold medal was presented by NIHF Inductee Orville Wright, and NIHF Inductee Charles Kettering gave the address for the event. Parsons was 27.
4. From 1935 to 1936, he served as the second national president of the National Technical Association, the first technical society of African Americans in science and engineering, formed in 1925 and continues to exist.
5. In 1941, Parsons received an honorary doctorate from Wilberforce University, a private historically Black university in Wilberforce, Ohio.
6. At Duriron, he was the chief metallurgist and laboratory manager. He developed corrosion-resistant metal alloys that could be used to produce vessels, pumps, valves and fittings capable of handling the isolation of uranium and plutonium corrosive solutions processed in the Manhattan Project from 1942-45.
7. When Parsons retired from Duriron in 1953, the Dayton Daily News reported that Duriron was probably the only company of its kind with an all-Black laboratory staff (led by Parsons).
8. His name was added to the Dayton, Ohio, Walk of Fame in 2007, and in 2021 he was memorialized among other inventors from the area on Dayton's "Peace Bridge."
9. Parsons had eight U.S. patents for corrosion-resistant metal alloys that he created and assigned them to Duriron Co. (now merged as Flowserve Corp.). Those metal alloys continue to be used throughout the chemical industry worldwide.
10. Passionate about education, Parsons taught until he was 80 at the Garfield Skills Center, an occupational training center in Dayton. This included tool and die making, as he was an expert.