

# Charlotte Pipe and Foundry

**Dr. G.H. Clamer | Metals Pioneer**

# Dr. Guillian H. Clamer

## ITEMS OF INDIVIDUAL INTEREST

### GUILLIAM H. CLAMER

Guillian H. Clamer, the new president of the American Society for Testing Materials, is vice-president and secretary of the Ajax Metal Company, manufacturers of bearing metals,



GUILLIAM H. CLAMER.

Philadelphia, Pa. Mr. Clamer was born in Philadelphia in 1875 and received his early training and education in the public and manual training schools of that city. In 1891 he was engaged in the private chemical laboratory of Dr. F. A. Genth, while at the same time he was a substitute teacher in the manual training schools in the departments of chemistry, electricity and manual drawing. In 1893, Mr. Clamer matriculated as a special student in chemistry at the University of Pennsylvania

from which he graduated in 1897. Following his graduation from the University, he became connected with the Ajax Metal Company, where he has been continuously until the present time, passing through various positions until he became vice-president and secretary as at present. In 1898 he began the study of metallography, and was counted among the pioneers in the metallographic study of the nonferrous metals. As a direct result of these investigations, Ajax plastic bronze, a copper, tin and lead alloy, was developed, which contains a high percentage of lead, and is employed extensively for railroad bearings. Mr. Clamer carried on a controversy on bearing metals with Andrew Allan, Jr., of New York, which lasted from 1909 until 1912, and was published only in THE METAL INDUSTRY for those years. He also has been associated with Dr. Carl Hering, James Wyatt and Dr. Edwin F. Northrup, of Princeton University in the development of electric furnaces, particularly

of the induction type, using both low and high frequency currents, alternating and oscillatory. As a result of this work several distinct types of electric furnaces have been developed which have proved to be commercially successful for brass melting.

Mr. Clamer has held many high executive offices in various technical bodies. He is a past president of the American Institute of Metals, now the Metals Division of the American Institute of Mining Engineers and of the Mining and Metallurgical section and Committee on Science and the Arts of the Franklin Institute. He is a member of the board of the Franklin Institute and of its committee on Science and the Arts; chairman of the committee of the Institute of Metals appointed to co-operate with the United States Bureau of Standards, and also is a member of its board. He is chairman of the committee on white alloys of the American Society of Testing Materials and also is affiliated with its committees on papers and non-ferrous alloys. When the war service committee of the American Foundrymen's Association was appointed, he was selected as the member to represent the non-ferrous casting industry, and he also is affiliated with practically all the leading technical societies of the United States and England.

G. B. Erickson, formerly with the Duluth Brass Works, and A. A. Williams, formerly of the Duluth Gas Engine Works, Duluth, Minn., have organized the Crescent Brass Foundry Company at Superior, Wis.

Charles B. Bohn, resigned several weeks ago as manager of the Aluminum Castings Company, Cleveland, Ohio, and has organized the Charles B. Bohn Foundry Company, Detroit, Mich., to manufacture brass, aluminum and bronze castings.

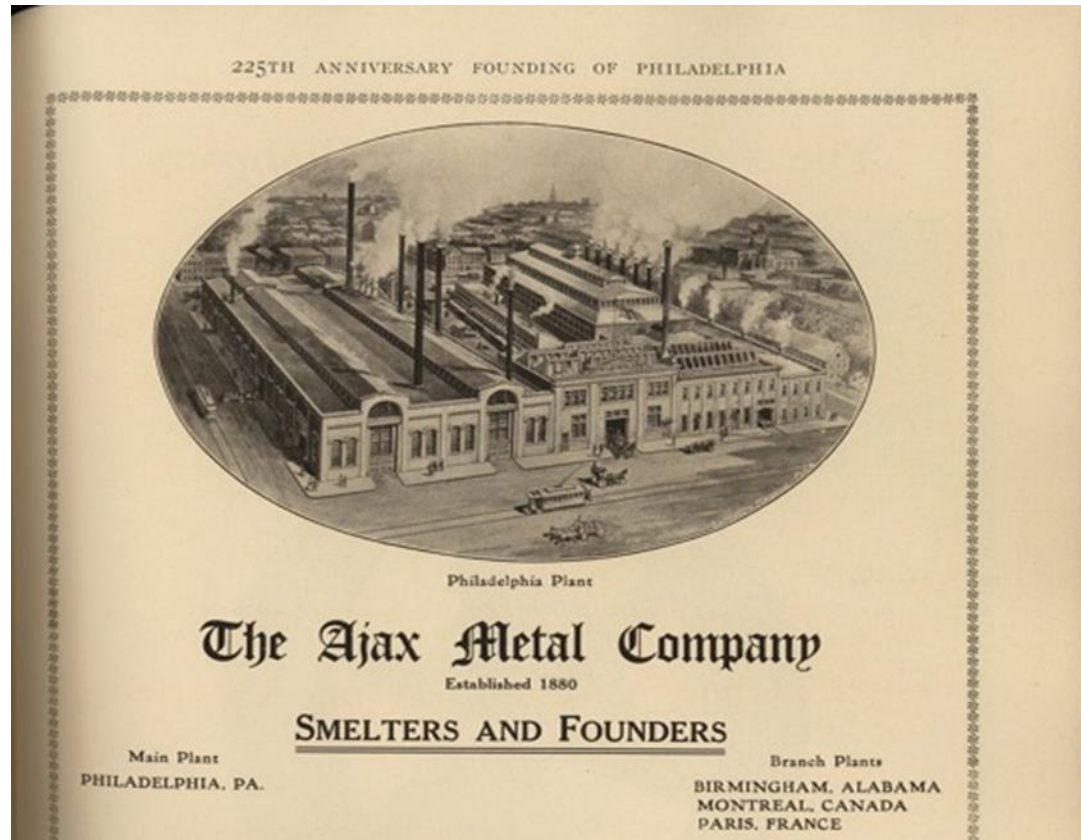
H. G. Spilsbury, metallurgical engineer for the Metal & Thermit Company, 120 Broadway, New York, and in charge of the alloy sales in the Pittsburgh district, recently moved to New York, and his headquarters will be in the home office at the above address.

Charles B. Seem, formerly with Perin & Marshall, consulting engineer of New York City, has become actively connected with the Electric Furnace Company, manufacturers of electric furnaces, Alliance, Ohio in the capacity of sales engineer.

- Dr. Guillian H. Clamer was the son of Francis J. Clamer, founder of Ajax Metal.
- Dr. Clamer graduated from the University of Pennsylvania in 1897 as a chemist.
- He was one of the first to combine chemical engineering with the science of metals into the profession of Metallurgist.
- He was the 24th president of the American Foundrymen's Society.
- According to his AFS bio, he was "among the foremost metallurgists in the non-ferrous industry."

# The Ajax Metal Company

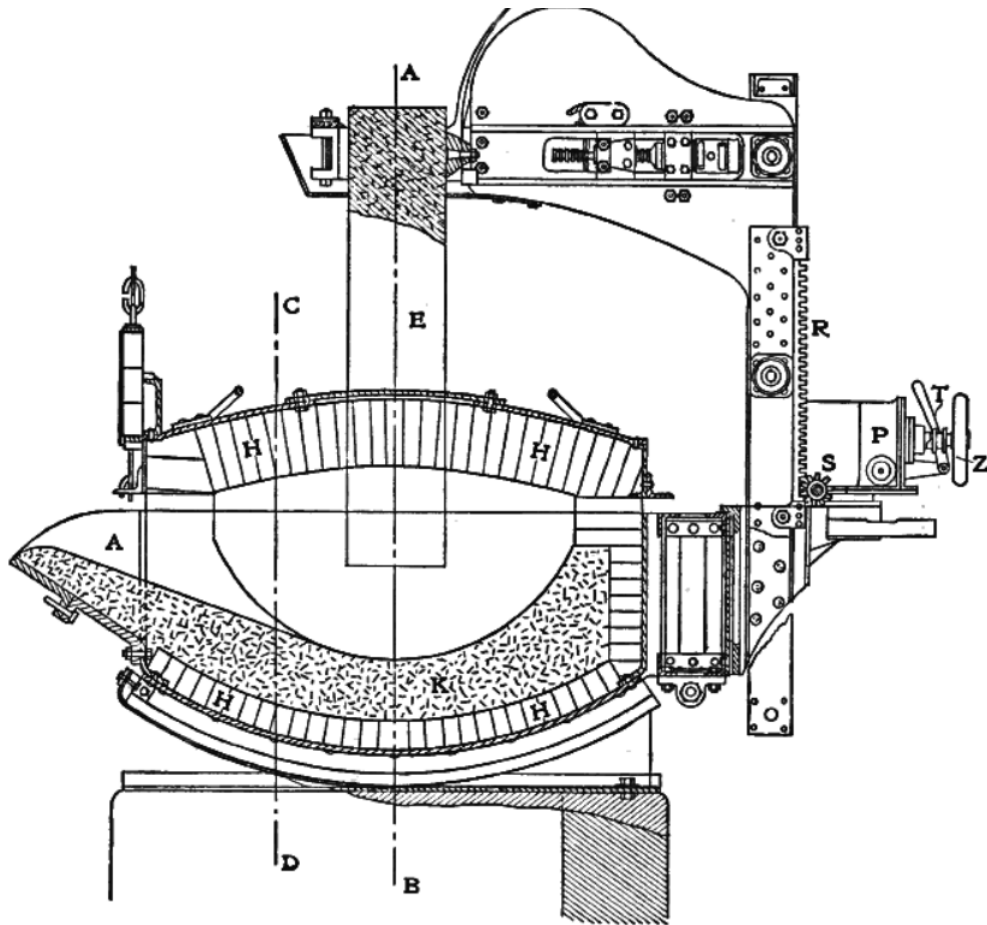
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- Francis J. Clamer founded Ajax Metal in Philadelphia in 1880 to manufacture a newly developed bronze alloy.
- Conventional crucible furnaces of the time were not only inefficient but also a health hazard.
- As president of his father's company, he sought new and more economical ways of melting metals and producing new alloys.

# Electric Induction Furnace

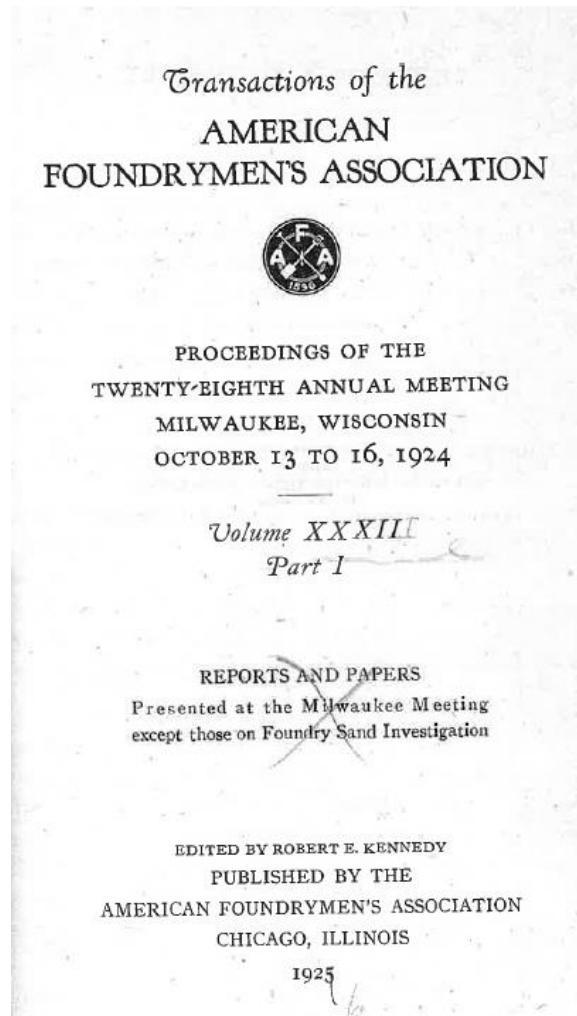
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- In 1912, Dr. Carl Hering, a prominent electrical engineer in Philadelphia, believed the "pinch phenomenon," which he had discovered accidentally, could be usefully applied to electric furnaces.
- Ajax Metal backed him to successfully produce a furnace that used a carbon electrode to draw an arc like a large welding machine to heat and melt metal.
- Ajax Metal subsequently formed Ajax Electrothermic to pursue commercial uses for induction melting.

# A Leader of AFS

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- Was the first non-ferrous president of the American Foundrymen's Society.
- Presided over the 1924 AFS Convention Banquet at the Hotel Pfister in Milwaukee on October 15.
  - AFS income that year totaled \$71,025 with expenses totaling \$66,120 for an operating surplus of \$4,905 (about \$89,000 in today's dollars).
- Published the paper "Test Bars for 85-5-5-5 Alloy – Their Design and Some Factors Affecting Their Properties" for AFS in 1946.

# An Industry Titan

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## Dr. G. H. Clamer, 87 Former Resident, Metal Expert, Dies

Dr. Guillian H. Clamer, a former Collegeville resident, and well-known as a pioneer for 65 years in the nonferrous metals industry, died on Friday at Graduate Hospital, Phila., after a short illness. He was 87 years of age.

Dr. Clamer was a son of the late Francis J. and Margaret Yeager Clamer, a widely-known Collegeville family, who resided here for many years. The Clamer family home was on Main Street, a landmark in the borough, known as the Clamer Mansion and was built by his father, F. J. Clamer, between 1901 and 1902. The Glen Farm property, Ninth Ave. and Gravel Pike, was their summer home.

The Clamer Mansion was subsequently given to Ursinus College by Dr. Guillian Clamer and became Clamer Hall, a girls' dormitory.

Dr. Clamer was a member of the Collegeville Fire Company.

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- Was a charter member of the American Electrochemical Society.
- Was president of the American Institute of Metals division of the Mining and Metallurgical Engineers.
- Was president and a 50-year member of the American Society for Testing Materials (ASTM).
- A member of the Committee on Science and the Arts of the Franklin Institute.
- Chaired the Bartol Research Foundation “directing the work of 40 scientists in the fields of nuclear physics and cosmic rays.”
- Was a founding member of the Brass and Bronze Ingot Institute.

# Highly Decorated

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- Awarded the American Foundrymen's Society Joseph S. Seaman Gold Medal for "outstanding contributions in research, process development and inventions" in 1933.
- For his work in developing the induction furnace he was awarded the Trink's Medal of the Industrial Furnace Manufacturers Association in 1920.
- His previous work in electric smelting of metals and scrap metal refining earned him the Elliot Cresson Gold Medal, the Franklin Institute's highest award, in 1901.
- Recipient of the George Hoadley Certificate in 1958 in recognition of his 55 years of service on the Franklin Institute's committee on science and the arts.

# A Pillar of the Community

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- The family home – the Clamer Mansion – was built in 1903 on Main Street in Collegeville, PA.
- Was later leased as a women's dormitory until 1953, when Dr. Guillian H. Clamer officially donated the property to Ursinus College.
- Dr. Clamer was active in the community as a member of the Collegeville Volunteer Fire Company.



**Am I Officially In the Club Now?...**