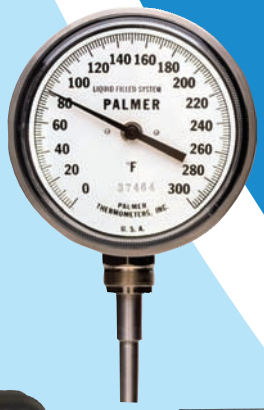
Innovative temperature technology then and now...

What began as a small instrument shop in 1836, developed into an enterprise of international reputation during the 1940's and 1950's, and continues to evolve into the 21st century.

Virtually every industry relies on temperature measurement in the production of quality products. Our customers know they can rely on the accuracy of our temperature instruments for their processess.

From bimetal, mercury, liquid, and temperature labels; to thermo-couples, RTD's, infrared, digital meters, and thermal imaging - since the beginning we've proven our commitment to constant progress in the development and manufacture of the highest quality temperature instrumentation.



Quality • Accuracy • Reliability

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ISO9001:2008 CERTIFIED

PALMER Wahl

INSTRUMENTATION GROUP

America's First Manufacturer of Precision
Industrial Temperature and Pressure Instrumentation

- FIRST Thermometer in America - The Foster Cup
- FIRST Red-Reading-Mercury Thermometer
- FIRST Direct Drive Double Wound Coil for Dial Thermometers
- FIRST Miniature Temperature Recording Labels
- FIRST Portable Digital Infrared Thermometer
- FIRST Replaceable Element Bimetal Thermometer
- FIRST Portable Digital Platinum-RTD Thermometer
- FIRST Thermocouple Surface Probe
- FIRST Universal Digital Soldering Iron Tester
- FIRST Sanitary Bimetal Thermometer
- FIRST Slip-Fit Bimetal Thermometer
- FIRST Self-Checking Digital Platinum-RTD Meter

Celebrating Innovation since 1836

Our Company

Palmer Instruments and Wahl Instruments, with more than a century of *Firsts* in temperature technology, have come together to offer a complete line of temperature, pressure, test and calibration instruments from our manufacturing facility in Asheville, North Carolina.

Family owned and operated, our history is built on our reputation of outstanding product development, quality, and customer service. Our future is dedicated to innovating more industry *Firsts* in instrumentation.

www.palmerwahl.com

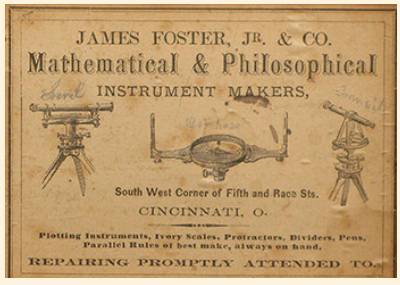
The tradition of manufacturing quality precision instruments began in 1836...

1830 | 1850 | 1860 | 1880 | 1920 | 1930 | 1940

▲1814 Born in Maryland, James Foster, Jr. travels by wagon train with his family, settling in Cincinnati.

▲1836 As a young man, Foster works for the Wells family at the Cincinnati Type Foundry. He later partners with L.T. Wells, in the manufacture of mathematical, optical, and philosophical instruments.

James Foster surveyors compass



▶1846 The discovery of kerosene and it's increased use as in homes, leads to the decline of candle use. However, the volatility of the lighting oil causes many deaths, and the need for a safe product.

▲1852 As manufacturing flourishes on the Ohio River, Foster dissolves his partnership with Wells, establishing James Foster, Jr. & Co. He then continues in the manufacture of instruments such as the compass pictured below, and patents several other types of instruments.

▼1860's Testing the safety of kerosene leads Foster to develop the *Foster Automatic Oil Tester*. Known as the **FIRST thermometer in the west**, it's closed cup design made it the most accurate method used at the time. Because of it's accuracy, the *Foster Cup* becomes the standard for the inspection of petroleum oil products in Ohio, Michigan, and other states.

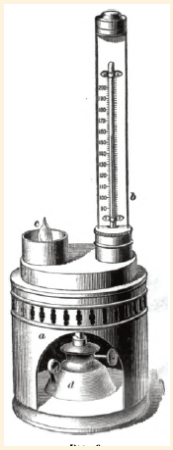


Image of *Foster's Automatic Tester* from the 1902 International Library of Technology.

▲1872 Employee Richard Penny Palmer, purchases the business from Foster's widow and renames it: The R.P. Palmer Company. Having partnered in the development of the Foster Cup, he designed the First Palmer Thermometer. He establishes his company with the "goal of making the finest and most accurate thermometers possible".

Image courtesy of Procter & Gamble

▲1878 Palmer announces that Procter & Gamble is purchasing Palmer Industrial thermometers for use in processing "White Soap", later known as Ivory Soap.

▲1908 Charles R. Palmer, son of Richard Palmer, joins the company. He makes and delivers the thermometers himself.

▼1929 Charles R. Palmer **invents and patents the FIRST Red-Reading-Mercury Thermometer.** This radical improvement in the legibility in temperature reading is the most outstanding achievement in modern thermometers at the time.

red reading mercury

When you see RED your temperature readings are MORE ACCURATE!

▲Providing the finest thermometer tubes possible requires skilled workers. The same processes are still used today.

▼1937 The invention of Red-Reading-Mercury revolutionizes the thermometer market, and leads to great success for Palmer. The company moves to Norwood, a suburb north of Cincinnati. The company motto: "PALMER FOR PRECISION".

King Street Plant, Toronto, Canada

▲1944 Palmer supports the war effort with manufacturing focused on quality and precision.

▲1946 Under the able leadership of Charles R. Palmer, the business grows from a modest plant to an enterprise with an international reputation.

◀1946 Manufacturing at our plant in Canada enables "better and more prompt service to our Canadian customers".

▲1946 Palmer thermometers are used in processes around the world, including the Procter & Gamble plant producing *Crisco*.

...continues today, and on into the future!

1950 1960 1970 1980 1990 2000 2010

▲1953 Aerospace engineer William Wahl founds the William Wahl Corp in Culver City, CA, producing temperature control valves for the aerospace industry.

▲1950's Palmer develops the **FIRST direct drive double wound coil** in the U.S. for dial thermometers; offering vibration resistance, and long life.

▲1960 Wahl develops and patents the **FIRST miniature temperature recording labels**. Wahl Temp-Plates® are the only NIST traceable labels on the market.

▼1961 Wahl thermocouples are used by NASA's Apollo Space program.

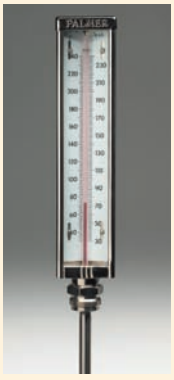
▲1962 Palmer sells their first pressure-volume recorder to Ohio Fuel Gas.

▼1967 The **FIRST portable digital, non-contact infrared thermometer** is introduced by Wahl, and is featured in the Nov 1967 issue of Popular Science magazine. The Wahl Heat Spy® thermometers accurately detect surface temperatures at a distance.

1971 Jack J. Santangelo purchases Palmer from the widow of Charles Palmer.

▲1973 Palmer develops the **FIRST replaceable element bimetal thermometer,** allowing direct insertion in the process, increased speed of response, and easy replacement of the element.

▲1977 Wahl patents the **FIRST portable digital Platinum-RTD thermometer,** the Wahl Heat Prober®, with interchangeable probes.



▲1978 Palmer classic industrial thermometers are known as the *Cadillac of the Industry".*

1979 Jack's son Stephen J. Santangelo takes over operations of Palmer.

▲1980 Anheuser Busch uses Palmer thermometers in the processing of beer. Palmer engineers a solution for Anheuser Busch, saving them money.

1981 Jack's son Richard J. Santangelo joins the Palmer management.

▲1982 Wahl patents the **FIRST thermocouple surface probe**.

▲1986 Wahl develops the **FIRST universal soldering iron tester with digital display** for proving compliance with government standards.

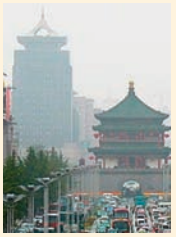
▼1987 Steve Santangelo relocates Palmer to Asheville, NC, and is appointed President.

1991 Palmer acquires Asheville based MITCO Thermometers from founder Lothar Pitz. MITCO specializes in mercury in glass tubes.

▲1992 The **FIRST sanitary bimetal thermometer** is introduced by Palmer; it does not require thermowell.

▲1993 Palmer develops the **FIRST slip-fit bimetal thermometer,** which allows interchangeability with same thermowell as mercury in glass thermometers.

▲1997 Palmer acquires Wahl and relocates it to the Asheville, NC plant.



▲2001 Wahl joint venture is established in Xian, China, for the manufacture of infrareds.

▲2004 Palmer Wahl becomes ISO 9001:2000 CERTIFIED.

▲2006 Palmer Wahl announces it's first thermal imaging camera.

▲2006 The **FIRST digital Platinum-RTD thermometer with patent-pending, self-checking technology** is introduced. The Wahl Digi-Stem® DST600 has faster response then other temperature technologies.

▼2008 New Digital RTD meter receives Processing Magazine's *Breakthrough Product of the Year!*

▼2008 Asheville Chamber awards Palmer Wahl *Most Innovative.*

▼2008 Asheville Chamber awards the *Sky High Growth Award* to Palmer Wahl.

▲Owned and operated by the Santangelo family, Palmer and Wahl move forward in the development of new products, continuing the long held tradition of manufacturing the finest quality temperature instruments.