

knee-deep in history

Industrial Giants of the Greater Lehigh Valley Their Presence in a Century of Progress

No single article in The Scribe can do justice to the lives of all who had an impact on the growth of the area. The popularity of History Channel presentations on industrialists, bankers, and railroad tycoons such as Rockefeller, Carnegie, J.P. Morgan, Vanderbilt, and Ford is an impossible act to follow. Their names are known from coast to coast. The lives of prominent local figures should not be overlooked. Their stories are equally interesting and important.

This brief summary will focus on three men - names synonymous with the area - whose contributions overlapped during arguably the greatest century of industrial development in the United States. One, a young carpenter by trade, who built a railroad empire to move coal from the Pennsylvania's rich anthracite mines. A second, the son of a New York City executive, who

surrounded himself with a team of investors to cobble together a number of smaller companies and create one of the nation's largest smelting operations. The third, son of a livery stable operator, whose ability to motivate workers in a common effort was legendary and led to his role as an innovative steel industry leader. Who were these men

Asa Packer (1805-1879)

Packer was born in Mystic, Connecticut but his achievements are linked to his life in the Mauch Chunk area of Pennsylvania. He was trained as a carpenter and as a young man he helped repair and build canal boats – at that time a

> major means of transporting goods and materials. By age 28, he acquired a barge to transport coal along the Lehigh Coal & Navigation Canal. Soon he had a fleet.

> Packer was an entrepreneur and he realized that the slow and tedious movement of coal through the canal system would not be able to meet the increased

demand in the growing markets of New York and Philadelphia. After failing to convince LC&N of the limitations of canal barges, he obtained a charter to create the Lehigh Valley *continued on page four*



Palmerton Area Historical Society

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Spiegeleisen – Palmerton's Role in Steelmaking

Manganese is important in steelmaking and there are only a few natural sources in the world of highgrade manganese ore – primarily in South Africa and Ukraine. As early as 1855, the New Jersey ores were known to be a reliable source for production of spiegeleisen – a 10-15% manganese alloy of iron.

The new Palmerton operations capitalized on this. Once the zinc had been recovered from the ore, the residual waste was highly desirable for its manganese content. In 1904, NJZ built two blast furnaces to convert these residues into a much sought after alloy.

The blast furnaces operated for more than fifty years until they were replaced by two electric-arc furnaces. The new furnaces further increased operational efficiency by directly charging hot residues into the furnaces. After tapping the molten metal (containing 20% manganese), the residual slag from the furnaces was water-quenched into a coarse, sand-like consistency. It was then back-loaded and sent to the Ogdensburg mine where it was mixed with cement and used as part of the mine's "cut and fill" operation.

During the Cold War there was much concern over the sourcing of manganese. South Africa was being sanctioned for its apartheid policies and Ukraine at that time was part of the Soviet Union. NJZ's Research Department held meetings with the US Bureau of Mines to explore ways to extract additional manganese from the East Plant Cinder Bank. It was estimated that more than 100,000 tons could be recovered if there was any further deterioration in world politics. Forty years later it has a familiar ring.

The Cemetery at The Little White Church Hallowed Ground in the Heart of Palmerton

The history of Palmerton's Little White Church has been documented several times through the years but less has been written about the adjoining cemetery. The Historical Society is indebted to Richard T. Schoenberger who, in 1939, undertook research into the cemetery

records. His efforts have been preserved in an historic document that until recently was on sale at the Heritage Center. Although photocopies of Schoenberger's work are no longer available, the Society is preserving it by having it formally reproduced together with a brief history of the church and the cemetery.

As part of a volunteer project, Palmerton High School senior Carl Jacob Kern converted Schoenberger's records to a digital format that allowed a more detailed study. More than 150 interments were made between 1845 and 1923, many of which were in unmarked graves. In the years between 1845 and 1875, there were 55 recorded burials - 31 of which were for children under the age of five! If the unmarked graves are included, the number of young children would almost certainly be higher.

It is not surprising to note the number of young children interred in the early years of the Little White Church. The average life expectancy at that time was less than fifty years and childhood diseases took a heavy toll. In subsequent years, the number of children buried in the cemetery dropped dramatically with only three out of 56 burials between 1876 and 1923. This was probably due more to the aging of the congregation than to improved health care.



The Little White Church and the adjoining cemetery eventually came under the ownership and care of the Millport Evangelical Church in Aquashicola (now Salem United Methodist Church). The Little White Church property itself changed hands several times until bank foreclosure brought it to the attention of the Palmerton Area Historical Society. With the

assistance of grants and contributions, the Society purchased it in 1993 for \$25,702. The Society later acquired the cemetery in a transfer from Salem United Methodist Church.

By accepting responsibility for the cemetery, the Historical Society assumed an obligation to provide care to the graves of those buried there. These include the site of a resident born in 1776. Another grave is the final resting place of a 21- year-old casualty of the American Civil War. For almost thirty years, the property has been maintained through the generosity of members and friends. The Society is honored to provide these early members of the community with the dignity they deserve.

Industrial Giants of the ~ continued from

Railroad to facilitate the movement of coal to the urban areas.

Before he was forty, Packer started to dabble in politics and in 1853 he began the first of two terms in the United States House of Representatives. He later lost a bid for Governor in one of the closest races in Pennsylvania history. However, it was Packer's foresight in creating the LVRR that secured his position as one of the wealthiest men in the Commonwealth.

In 1865, and for much of the remainder of his life, Packer dedicated his efforts to the founding of Lehigh University for engineering education. In addition to his initial contribution of land and money, Packer's annual generosity enabled the school to remain tuition free for twenty years. At his death, the University received a bequest of \$2.0 million and a one-third interest in the remainder of his estate.

Packer's home in Jim Thorpe, overlooking the tracks of his beloved railroad, is maintained today as a National Historic Landmark and is visited annually by thousands.

Stephen S. Palmer (1853-1913)

Stephen Palmer was born in New York City. His father was an executive with National City Bank of New York and although Stephen was accorded all the benefits of wealth and education, he lived a relatively quiet life. During his youth, he was fortunate to have as mentors men who would subsequently achieve financial success and who would dedicate much of their wealth to the benefit of others.

As a business man and investor, Palmer became intimately involved with a number of independent producers of zinc and zinc oxide. In 1897 he endeavored to bring them

together as The New Jersey Zinc Company. Such an undertaking might be challenged today under anti-trust legislation, but in that era such mergers were common.



In 1898, work was begun on a huge zinc smelter and on the adjacent town that would bear Palmer's name. He engaged the finest architects and engineers from New York on these projects and he instilled a progressive spirit into the health and education of the thousands of immigrant families who would eventually find prosperity in the New World.

Very little has been written about Palmer. He served as a trustee of Princeton University and sat on the Boards of thirty corporations. At his death at a relatively young age, Stephen was succeeded as President of New Jersey Zinc for the next thirty years by his son, Edgar.

e Greater Lehigh Valley a the front page ~

Charles M. Schwab (1862-1939)

Some might question the inclusion of Charles Schwab in this article. As an industrialist, his link to Carbon County was not as obvious. When compared with Asa Packer and Stephen Palmer, his personal life would not qualify him for sainthood. Yet, despite his character flaws, about which much has been written, Schwab was justifiably recognized for his achievements in the steel industry.

Schwab was born in Loretto, Pa., and attended St. Francis University. He started his career at Andrew Carnegie's steel plant in Braddock and by age 28 he had risen to the rank of General Superintendent. His motivational skills were such that he was prominently referenced in Dale Carnegie's book *How to Win Friends and Influence People*.

When banker J. P. Morgan and his associates acquired Carnegie Steel in 1901, Charles Schwab became the first president of the newly structured US Steel. This relationship ruptured two years later and Schwab turned his talents to the east and helped transform Bethlehem Steel from a shipbuilding company into the world leader in structural steel. He was an innovative risk taker

who invested enormous sums of capital in the development of the H-Beam and I-Beam at a time when their use was unproven. The new beams revolutionized the construction of skyscrapers in New York City and other urban centers and catapulted Bethlehem Steel into prominence.

New Jersey Zinc played a small, but significant, role in Schwab's success at Bethlehem Steel. A Palmerton by-product, manganese bearing *spiegeleisen*, was an important addition to the manufacture of structural steel. Beginning in 1904, thousands of tons of this iron alloy were shipped from Palmerton to Bethlehem.

During the latter years of his career, Schwab was recongnized at home and abroad for his outstanding contributions to the steel industry. The Great Depression and excesses in his lifestyle wiped out Schwab's wealth and he died virtually penniless. His funeral in 1939

> filled St. Patrick's Cathedral in New York with dignitaries - and thousands more thronged the streets outside. He was buried in Saint Michael Cemetary in Loretto, Pa.

> These three vignettes represent the lives of only a small fraction of the men and women who helped transform the United States into the strong industrial nation it is today. Each

community can look with pride at the local contributions that have been made through the years and that continue to be made today.



Festival Displays The Golden Age of Palmerton Art Concourse Club Exhibit is a Resounding Success







2022 Monthly Program Schedule

all programs held in the Knight's Gallery of the Palmerton Library at 6:30pm unless otherwise noted handicap accessibility

October 3

PA German Gravestones Michael Emery of PA Historical Museum Commission

at Little White Church

December 4 Ecumenical Service (3pm) at Little White Church

Annual Banquet (4:30pm) at Bert's Steakhouse

November 14 *Guitar/Piano Music* Roger Latzgo

WANTED!!!

Are you an active member?

Do you reside in the Palmerton area?

Can you spare three hours one day each month?

If so, we need members like you!

Experience the joy of volunteering! Experience what it is like to welcome visitors to the Heritage Center! Experience the warmth that comes with making new friends!

If you would like to know more, call Susan Steigerwalt at 610-824-6954. Feel free to leave your name and number and we will return your call promptly.

By-Product of Zinc Manufacture Indium – Palmerton's Little-Known Gem

Indium metal? During the decade of the 1970's only a few engineers and scientists at New Jersey Zinc had any appreciation of the potential of this minor component of the periodic table of elements. Yet its recovery from NJZ's smelting process was carefully studied and recorded.

In a typical year prior to the oil crisis, indium in the zinc raw material entering the NJZ plant averaged 0.009%. Although this might appear insignificant, the Palmerton process was suited to recovering more than 50% of this valuable by-product as unrefined indium. This amounted to more than 250,000 troy ounces per year and, at a few dollars per ounce, this by-product was a welcome addition to the bottom line. This was about to change.

In 1975, NJZ purchased a significant quantity of zinc sulfide concentrates from the Huari-Huari mine in Bolivia – the indium content of which was at least ten times higher than in other sources. To take full advantage of this additional material, NJZ and

Indium Corporation of America in Utica, NY partnered to form NJZ Alloys Inc., a Palmerton production facility.

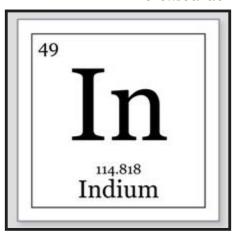
Using pilot-scale equipment, NJZ's Research Department built a recovery plant in the East Plant Field Station. On April 13, 1976, the first batch of 99.97% indium metal was produced. For the next four years – until the shutdown of the vertical retorts – 25% of the world's indium metal made its way from Palmerton to Utica for further refining (often to 99.9999% purity) and marketing. The timing coincided with increased market demand – and sharply higher prices!

Prior to the advent of the personal computer, indium was used primarily in alloys and solders. Its melting point was not much above that of boiling water and as such it was ideal for many sensitive electronic components. Worldwide production at the time was only about 2.5 million ounces. The dramatic growth in personal computers in the '70's along with increased demand for monitors and television

> screens forced the metal price to lofty levels. In the years of NJZ Alloys operation, indium metal was in short supply and the price was often between \$10 and \$20 per ounce.

> Today, indium has been officially designated "technologically

critical" and annual worldwide production is now about 20 million ounces. The United States is no longer a major market player with 40% produced in China, 30% in Korea, and 10% each in Japan and Canada. But for years, Palmerton was one of the world's major suppliers of this critical and little-known metal.





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Thursdays & Saturdays 10am-1pm

