

Jefferson Quick, Timely Reads

Talon Brings Growth During the *Depression* *Falls to Global Competition* *Creates the Tool and Die Capital of the World*

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Meadville, Pennsylvania is largely the story of the creativity and persistence of three men: Colonel Lewis Walker, Whitcomb Judson, and Gideon Sundback. The demise of Talon probably came as a result of the post-World War II

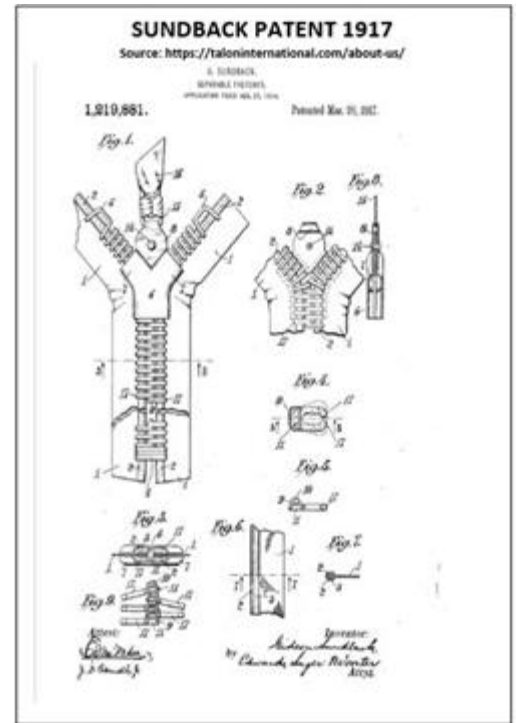
competition with Japan.

The story of Talon begins with Lewis Walker who came to Meadville in 1872 as a young man and enrolled at Allegheny College. After completing his studies, he married Meadville resident Susan Adelaide Delamater, and was admitted to the Crawford County bar in 1884. His involvement in the Delamater family's economic affairs took him to North Dakota; there he met Whitcomb Judson, a young inventor who had developed an early prototype of the zipper. Apparently, Walker was immediately impressed with the potential of the zipper. Later he became the chief promoter and salesman for the zipper and consequently was responsible for developing the largest industry in Meadville.

Judson initially was unable to market his fastener but did successfully demonstrate its capability at the 1883 World's Fair in Chicago where he sought investors. Judson went on to open the Automatic Hook and Eye Company in New Jersey and began to manufacture the fastener but lacked the capital to continue.

Gideon Sundback, the third person in the Talon story, was born in Sweden and was an electrical engineer trained in Germany. He immigrated to the United States in 1905 to work for Judson at the Automatic Hook and Eye Company in New Jersey. These three, Judson, Walker, and Sundback were mesmerized by the potential of the fastener and its usefulness in the garment industry. Together, they struggled for years to perfect its design and to promote the product.

In 1913, Walker, after convincing a group of investors from Meadville and Erie of the potential of the fastener, purchased the Automatic Hook and Eye Company for \$75,000 and moved the business from New Jersey to Meadville where they renamed it the Hookless Fastener Company. Sundback made the move to Meadville as well, and in 1917, he was granted a patent for the separable fastener, a significant improvement of Judson's original design. Even before the patent was granted, production of the new variant of the zipper began.



Sundback's design of a slider attached to a fabric tape on which metal cup-like extrusions were arranged in a row became the prototype. When pulled, the slider gently forces the scoops to interlock. However, there was a problem in producing the zipper: there was no machine capable of producing the sliding portion of the fastener.

Although the mechanics of the zipper appear to be very simple, its production required the most intricate engineering and tool and die skills. The machine shop, initially run by Gideon Sundback, became the most important feature of the factory floor. Sundback, along with eight or 10 tool makers, was entirely occupied by the building and adjusting of the intricate chain machines needed in the manufacture of the zipper. As

the fasteners were tried in various articles, faults in their design and manufacture appeared. These had to be remedied by the machine shop. Gradually apprentices were added to the machine shop, many of whom eventually opened their own tooling companies in the nearby area, leading to the Meadville area's designation as "Tool City."

The Hookless Fastener also established a customer service department. This department worked closely with manufacturers in the application of the zipper. It studied the application of the fastener to each article in which it was to be used and made recommendations on how the zipper should be applied and how it should not be applied. In addition, the customer service department sent skilled technicians and engineers to the manufacturing sites to ensure there were no problems.



The Sundback zipper, a ground-breaking innovation, has been in constant use with only modest changes for over a century and is still a mainstay of the garment, shoe industry and many others. However, this innovative product was never called the Sundback zipper; within the company, it became known as the Talon slide fastener. By 1928, advertising had created a strong demand for Hookless Fasteners, and it became apparent to the Hookless management that a distinctive name for the fastener was needed to distinguish it from other fasteners being produced. The legal department chose the name “Talon” as the trademark, and the generic term ‘slide fastener’ to designate the class of closures. “Talon” was a unique trademark, never used before.



But it was not the trademark “Talon” that identified the product, it was the name “zipper.” This came as a result of one of the first products in which the new fastener was used. The B.F. Goodrich Rubber galoshes were equipped with the new fastener and B.F. Goodrich Company called the boot, “zipper.” Zipper, initially the name of the boot, eventually came to identify the Sundback Talon fastener as well.

Advertising done by the company and by the retail outlets selling Talon zipper products jointly promoted Talon zippers and the Talon trademark which, as a result, became one of the best-known trademarks in the United States. In 1930, at the height of the Depression, Meadville had its largest yearly growth in population in its history. Population increased by 14.6 percent over the previous year. Talon was hiring. In 1937, the officers of the Hookless Fastener Board recommended to the stockholders that the company change its name from Hookless to Talon. The stockholders agreed and the company became Talon Incorporated.



TRYING TO RESCUE TALON

Remarks of Merton Lee Offensend to Judy Lynch:

Lee received his education in the Meadville public schools and Allegheny College. He spent 25 years with Talon, attaining the position of head foreman.

In 1956, he was assigned along with others to develop a new plant in Durant, Mississippi. He had been the production specialist in the zipper plant just opened in Morton, Mississippi.

After establishing the Talon plant in Durant, Lee was sent in 1960 to Hong Kong to establish a Talon zipper plant there.

These efforts were to no avail and Talon was sold to Textron shortly after Lee returned from Hong Kong.

Employment at Talon grew by leaps and bounds. When Hookless Fastener opened its doors in Meadville in 1913, only 20 persons were employed, working in a rented building. By 1942, Talon employed 4,000 workers and operated several Meadville facilities. In that year, according to the *Pittsburgh Post-Gazette*, April 3, 1942, the War Production Board prohibited the use of copper and copper alloy use for slide fasteners and the Meadville plants producing zippers were shut down, laying off 1,500 workers. Two Meadville plants, used exclusively for war production, remained open.

At its zenith, in the immediate post-war period, Talon became the largest employer in Crawford County, continuing to employ more than 4,000 workers. By the late 1950s, however, Talon began to quickly lose market-share to YKK, a Japanese zipper company. In 1950, YKK had purchased a chain machine from a United States manufacturer, providing the company the ability to produce machine-made zippers, previously made solely by hand in Japan. This allowed YKK to pay significantly lower wages than at Talon while ramping up production output. To counter this increasing competition, the Talon Board of Directors decided in 1957 to move part of zipper manufacturing to Morton and Durant, Mississippi, a lower-wage and union-free environment. In 1969, Talon built another plant in Durant, Mississippi, but by the time the plant opened, Talon had been sold.

On April 2, 1968, Textron Incorporated announced it had agreed to acquire Talon. Nevertheless, Talon, now part of Textron Incorporated, continued to encounter growing financial difficulties. In 1981, Talon was sold to Nucon Holdings, Inc. of Boston. It was sold again in 1991 to Coates Viyella, a British textile company and maker of Coates Thread. By 1993, the entire Meadville operation was closed.

In 1996, Tag-It Pacific, Inc., a publicly traded corporation based in Los Angeles, acquired Talon. By 2001, Tag-It was touting the Talon brand, and in 2007 Tag-It Pacific changed its corporate name to Talon International Inc. A global apparel accessory company, Talon International Inc. offers a wide array of apparel products and services around the world, one of which is zippers. Thus, Talon continues as a major producer and supplier of quality zippers, but not in Meadville.



According to Mike Froncillo and Lindley Homol, who wrote a short history of Talon, *Zip It Up: Talon Zippers*, for Pennsylvania Center for the Book, published in Spring 2009, the financial crippling and demise of Talon was a direct result of rising Japanese competition. They point out that the fall of Talon is mirrored by the rise of YKK a Japanese manufacturer of zippers:

YKK opened a plant in New Zealand in 1959, followed in successive years by plants in the U.S., Malaysia, Thailand, Costa Rica and other textile-producing countries, taking full advantage of the cheaper labor offered by many of these nations. By constructing plants closer to areas of consumption, YKK provided itself with a more responsive distribution network, guaranteeing timelier product delivery. By 1991, YKK had an international presence in 42 countries. . . YKK surpassed Talon for the American market sometime in the 1980s, forcing Talon to eventually forgo the zipper business (Froncillo & Homel, 3).

By 1991 Talon Zipper was no longer a presence in Meadville. It had arrived early in the 20th century and was a technological juggernaut that took off just as the Great Depression hit similar communities in the United States.

Meadville, however, was the place where the recession never came; where employment grew and the future seemed secure. However, a new economic tsunami hit, the aftermath of WWII. Lower Japanese wages, in addition to their technological acumen, led to the demise of the Talon company. Yet, there was a rich residue.

The demand for precision machining in producing the zipper resulted in the creation and strength of Talon, the machine shop. For years, young men from the Meadville area were apprentices and employees in this shop. The skills they obtained remained after the sale and closure of Talon in 1993 and then blossomed in the years following into the tool and die industry giving Meadville the title, “the tool and die capital of the world.”

MANUFACTURING/TOOL & DIE COMPANIES IN MEADVILLE AREA MEADVILLE WESTERN PA CHAMBER OF COMMERCE

[Meadville Forging Company](#)

[Advanced Cast Products](#)

[Leech Carbide](#)

[Maloney Tool & Plastics](#)

[U.S. Bronze Foundry & Machine Inc.](#)

[PRISM Plastics, Inc.](#)

[Parker/LORD, Chemical Operations](#)

[Highpoint Tool & Machine](#)

[Acutec Precision Aerospace, Inc.](#)

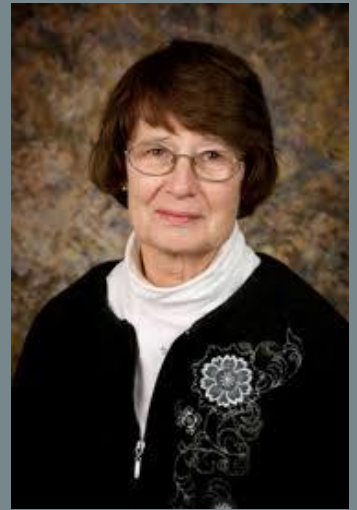
[Parker/LORD, Cambridge Springs Facility](#)

[J.M. Smucker Company, The](#)

[Imperial Carbide, Inc.](#)
[Channelock, Inc.](#)
[C&J Industries, Inc.](#)
[Northwest PA National Tooling & Machining Association](#)
[Starlite Diversified, Inc.](#)
[Fostermation, Inc.](#)
[Chip Blaster, Inc.](#)
[Chipsco Inc.](#)
[Greiner Extrusion US, Inc.](#)
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[1101 Morgan Village Road Meadville PA 16335](#)
[\(814\) 333-2060](#)
[Laser Tool & Plastics](#)
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[17763 State Highway 198 Saegertown PA 16433](#)
[Syst-A-Matic Tool & Design](#)
[PROper Cutter](#)
[Layke Tool & Manufacturing Co.](#)
[Shorts Tool & Mfg.](#)
[Suburban Precision Mold Company, Inc.](#)
[SECO/WARWICK Corp.](#)
[AA Precisioneering, Inc.](#)
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[Tamarack Packaging, Ltd.](#)
[Optical Filters USA LLC](#)
[NuTec Tooling Systems](#)
[Aetna Machine Company](#)
[Corry Micronics, Inc.](#)
[Belco Tool & Manufacturing, Inc.](#)
[Minco Tool & Mold](#)
[Deist Industries](#)
[Greenleaf Corporation](#)
[COINCO Inc.](#)
[Kuhn Tool & Die Co.](#)
[Marlan Tool, Inc.](#)
[Talbar, Inc.](#)
[Peters' Heat Treating, Inc.](#)
[Starlite Group](#)
[Jeglinski Group Inc. dba Moon Tool & Die Co.](#)

ABOUT THE AUTHOR

Judy Lynch, Ph.D., is a Scholar-in-Residence at the Jefferson Educational Society. She was named the Jefferson's Decadean Scholar in 2018. She continues to serve on the Jefferson's Board of Trustees and was its first chairwoman. From 2004 to 2017, she served as Associate Professor of Political Science and History at Mercyhurst University. From 2002 to 2004, Dr. Lynch taught at Allegheny College and was part of the Civic Engagement Institute. Prior, she worked as an analyst for the CIA and served for 20 years as Erie County Executive. She received her Doctorate With Distinction in Political Science in 2001 from the University of Pittsburgh and her M.A. in Social Studies from Gannon University. Her undergraduate degree, a B.A. in History and Political Science, is from George Washington University.



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