To keep up with the growing number of silk throwing companies in the area, the Scranton Silk Machine Company was founded by Thomas Lewis at 516 Ash Street in 1910. In 1914, the business expanded and a new plant was erected at 1625 Nay Aug Avenue, with Lewis as president, Leo Schimpff as treasurer, and F. J. Helriegel as Secretary. Silk spinning machines were manufactured by this company until 1928.

### Scranton Silk Machine Company



Sectional Reel

Wages for silk mill workers varied with the specific job and the geographic locality of the mill. In 1913, a "Spinner" in England earned only \$2.56 per week. In France, the rate was \$4.75, and in Germany, Spinners earned \$4.26 weekly. (Figures are in U.S. dollars, as reported by James Chittick in *Silk Manufacturing and Its Problems*, published in 1913.)

In the U.S., Spinners earned weekly wages of \$5.50 in Patterson, New Jersey. The rate in Scranton averaged \$3.00 per week (as reported by the U.S. Government during The Silk Throwing Strike of 1907.) Workers in the Patterson mills worked a 55 hour week, while Scranton workers put in 58½ hours on the job. The arbitrators who settled the Strike of 1907 decided that the Scranton mills should reduce their hours to 55 per week and increase the Spinners' wages to \$4.00 weekly. An additional 10% increase in 1913 brought a Spinner's wage to \$4.40 per week.

While the salaries of mill workers in Scranton remained below those of workers in Patterson, the Scranton wage exceeded that found in Germany and was well above the English wage. (The Scranton workers earned wages rougly equivalent to their French counterparts.)

Although the Lackawanna County silk mills earned a certain amount of national criticism about their labor practices, it must be born in mind that many mining families were able to increase their standard of living through employment of family members in these mills. Silk manufacturer James Chittick stated that, "Any sane and decent employer, even if under no compulsion by law, would see to it that his people were fairly treated." Most silk mill operators in Lackawanna County were honest and fair businessmen.

Back in 1895, there were only three silk weaving mills in the Scranton area. By 1910, there were 23, and by 1920, there were a total of 46 silk weaving and throwing mills in operation.

The silk mills now were able to take the raw silk and turn out any number of completely finished types of yard goods for market. After the silk was thrown, it was tied in bundles and sent to the dyer.

The dying process was complicated, but many local silk mills did their own dying to eliminate the added cost of shipping the silk out to a dying company. Since the raw silk contains a natural "gum," the first operation in dying consisted of "boiling off" the gum in a bath of hot water and olive oil soap. The silk skeins were then placed in a "weighting" solution which was made by dissolving tin salts in muriatic acid. The weighting process actually increased the weight of the yarn while preparing it to be dyed. After the skeins were again washed to remove traces of muriatic acid, they were dyed various colors in copper vats (copper being the only readily available material at the time, as iron vessels were not suitable for dying.)

The colored threads were then woven on looms, and the woven cloth was "finished" in a number of different ways. Various machines were used to size (stiffen), soften, polish, stretch, singe, emboss, or moire the cloth. Some silk mills also printed the cloth on rotary presses.

## THE LACKAWANNA HISTORICAL SOCIETY BULLETIN

VOLUME 18, No. 3

SEPTEMBER, 1986

# PROGRAM SCHEDULE - FALL, 1986

September 17 -

8:00 P.M.

Attorney Robert Munley, "The History of the Federal District Court in Scranton,"

in recognition of the 100th anniversary of the first District Court session held in Scranton

on September 6, 1886.

October 15 -

8:00 P.M.

Ed Miller, "The History of Scranton's Street Car System," commemorating the

inaugural run in November, 1886, of the first successful, continuously running elec-

tric street car system.

November 19 - 8:00 P.M.

Dorothy Allen, "Ethnic Women of Lackawanna County," historical slide lecture about

local women with explanations of their ethnic backgrounds.

December 14 -

"A Polish Christmas," an afternoon Christmas program with Dr. Theodore L.

2:00 P.M.

Zawistowski.

All fall programs are at the Catlin House, 232 Monroe Avenue, Scranton.

The Lackawanna Historical Society Bulletin is published quarterly by the Society. Editor is Dorothy Allen, Society Director

## LACKAWANNA HISTORICAL SOCIETY

CATLIN HOUSE 232 MONROE AVENUE SCRANTON, PENNSYLVANIA 18510 Non-Profit Org. U.S. POSTAGE PAID Permit No. 56 Scranton, Pa.

### CATLIN HOUSE NEWS

#### **VOLUNTEERS:**

The volunteer staff at the Catlin House continues to grow. During the summer, four new names were added to our volunteer roll: Clark F. Cornell of Dalton, Marguerite Clark of Olyphant, and Jeffrey E. Jakubowski and Michele Ann Kreig of Scranton.

Catlin House "regulars" remained active throughout the summer months. Jack Hiddlestone continued with his "spruce up" activities, which included painting the foyer, cleaning and arranging closets, dismanteling the old tin shed which had stood behind the Catlin House, and re-installing the microphone for easier access with the new seating arrangement.

Marg Strein of Taylor spent several weeks organizing the biographical and genealogical photographs. Marg has begun to catalog the photographs, assigning accessions numbers and inventory cards to each.

Kathy Allen designed and arranged the Centennial Committee's Open House Railroading Exhibit which was on view to the public from July 18 through August 7. Kathy also used her calligraphy talents to prepare exhibit signs for the display.

Volunteer tour guides Bonnie Perugini, Connie Sheils, and Rev. Thomas Heafield-Mordan provided assistance with the summer schedule of group tours, which included groups from Elderhostel, the University of Scranton, the Scranton Counseling Center, the Jewish Community Center, the Cub Scouts, as well as other children's and family groups.

DOCENT TOUR GUIDE TRANING will resume again in late September and October. If you, or someone you know, would like to become a volunteer tour guide at the Catlin House, please call us at 344-3841.

#### GRANTS:

The Lackawanna County Department of Cultural Affairs has awarded an "Arts-to-the People" Grant to the Society to develop a photographic exhibit to be entitled, "The Photographic Art of Harry Baroff." Society Director, Dorothy Allen has been working on the exhibit, using the art room facilities at the Wyoming Historical and Geological Society in Wilkes-Barre. Volunteers Jack Hiddlestone and Jim Hosie are assisting with the exhibit which will consist of the positive prints which were recently made from Baroff's original glass-plate negatives.

### TELEVISION AND RADIO:

A half-hour television show featuring a tour of the Catlin House and an interview with the LHS Director was filmed by WOLF TV on June 19. The show, with host Tom Powell, was broadcast on WOLF's "Northeast Newsbeat" program on July 6. Volunteer Jack Hiddlestone has videotaped the program for the Society's files.

Channel 16, WNEP, featured a news spot of an interview with the LHS Director on June 20, concerning the historic preservation concept of the downtown Scranton area.

An interview, with host Denny Talerico, was taped at the studio of WBQW Radio on July 11. The fifteen minute program was aired on the morning of July 13.

Channel 28 TV featured a news spot of the Centennial Open House of July 27, with a short interview with the Director and coverage of the Railroading Exhibit. The spot appeared on the 11 PM news on July 27.

### THE SCRANTON SILK INDUSTRY

The silk textile manufacturing business was one of the leading Scranton industries in the early decades of the twentieth century. European immigration brought mining families to Lackawanna County, and the silk industry offered employment to the wives and children of the miners.

Scranton offered ideal conditions for the location of silk mills. Land was available; there was an ample water supply; the anthracite fuel supply was abundant and inexpensive since it was mined in the region; the electrical service was one of the best in the nation; street cars provided transportation for the workers to and from work; the railway facilities were good; and the location in Pennsylvania was close to New York markets.

Alfred Harvey of New London, Connecticut, was the first silk manufacturer to locate in Scranton in 1872, opening the firm known as the Sauquoit Mill. In 1886, Mr. Harvey built a large (140 x 40 feet) silk mill at 816 South Washington Avenue, employing 300 workers. The Alfred Harvey Silk Co. went out of business in 1913, after Mr. Harvey's death.



The Alfred Harvey Silk Mill (photograph from the Baroff Collection)

Raw silk, which is obtained from the cocoons of the silk worm, consisted of single threads which are unwound from the cocoons. Depending on weather conditions, diseases, and food supply, the threads would vary in thickness, strength, and length. Silk was graded according to quality as "Grand Extra, Extra Classical, Best Classical, and Classical." Most raw silk was obtained from Japan or China.

Silk was measured according to the Denier System which originated in France prior to the French Revolution. The denier (from the Latin "denarius," meaning ten) was a small French coin. The French developed a weighing system based on the weight of the denier, with 1/24 denier called the "Paris grain" and having the metric equivalence of .0531 grams. For silk sizing 1 denier, there would be 4,45,474 yards of thread (according to the 1913 publication Silk Manufacturing and Its Problems by James Chittick of New York.) However, there was no such thing as 1 denier silk, since a single cocoon filament was at least twice that size and several threads were twisted together to make thread suitable for weaving. The finest silk used for weaving silk cloth in the U.S. was usually 8 to 10 denier.

The process of converting the raw silk to weaving thread was known as "Throwing." The raw silk skeins were opened, examined, soaked in water to remove some of the "gum" from the cocoon, and dried. The spinning process consisted of twisting together several filaments, and there was often a second spinning to make a heavier thread.

Early mills in the Scranton area engaged in the weaving process only, but later several "Throwsters" opened factories for spinning the thread locally. In 1899, the Klots Throwing Company opened at 101 Poplar Street, near Monsey Avenue, with Walter J. Klots as manager and George Klots as treasurer. The business continued until 1933.