ROCHESTER HISTORY

Edited by Ruth Rosenberg-Naparsteck

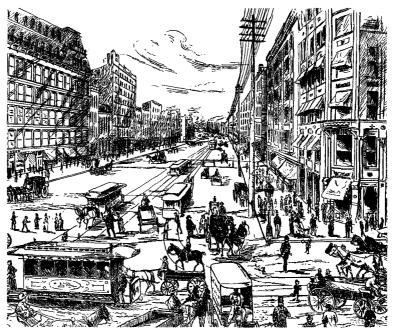
Editor

Vol. LI Fall, 1989 No. 4

Two Centuries of Industry and Trade in Rochester

by Ruth Rosenberg-Naparsteck





Above: State Street looking north from the Four Corners in 1887.

Cover: Sibley, Lindsay and Curr established their dry goods store in 1868. They imported fancy goods, china, household furnishings and other goods. In the space of a decade they had twice enlarged their store from 4,000 sq. ft. to more than 53,000 sq. ft. Though the building was nearly destroyed by fire in 1904 it now stands restored at the corner of E. Main Street and St. Paul.

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Daniel Powers built this Banking House at the Four Corners. His hotel is visible on the left. The architecture of this corner building remains one of Rochester's finest examples of the 19th century.

Rochester's Early Growth

Rochester grew at a remarkable rate. In 1884, only fifty years after it incorporated, I. J. Isaacs wrote in an industrial history of the city,

Children of the original founder have not yet passed away, and a great and beautiful city stands by the Falls of the Genesee. Ascend the tower of Powers' Block, and look out at midday upon the scene beneath and stretching far around you. Lofty buildings, beautiful churches, handsome streets, a teeming myriad of population meet the sight.

Along the stone-walled canal, boat after boat is passing; from the Central Depot freight and passenger trains come and go at brief intervals. Industry, affluence, and enjoyment are evidenced in every quarter. There seems no merchandise but has its mart, no interest without its representatives. All facilities for travel abound—the car upon the stony street or the miles of walk for the passing throng. The melody of bells proclaims the passing hour, and the shriek of the steam-whistle announces the cessa-

tion or renewal of a multiform change from solitude to highest form of civilization, this transformation of a forest to a magnificent city has taken place, realization has exceeded promise....

Though Rochester has, throughout its history, been known by names that recognize its dominant industry, it has been the "Multiform" or diversity of its industries that has been the city's economic strength.

Rochester got off to a slow start on its way to becoming the Flour City. A year after the One Hundred Acre Tract was laid out only fifteen people had settled here. But following the end of the War of 1812 and the resulting end of the threat of British invasion, settlers came to the Genesee country in greater numbers. In 1815 there were 331 settlers. Three years later more than 1,000 people had settled here and it had begun to expand its borders by annexing nearby settlements. The population continued to climb quickly. When the Erie Canal opened in 1825 there were more than 5,000 people. By 1834 when Rochester incorporated as a city there were over 12,000.

Early visitors to Rochester spoke of how quickly the village grew. They were impressed with the permanence of its structures and its planned growth. Nathaniel Hawthorne, the famous author, visited the city in 1834 on his way to Niagara Falls. He wrote an account of his visit:

The town (Rochester) had sprung up like a mushroom, but no presage of decay could be drawn from its hasty growth. Its edifices are of dusty brick and of stone that will not be grayer in a hundred years than now. Its churches are Gothic. It is impossible to look at its worn pavements and conceive how lately the forest leaves have been swept away. The most ancient town in Massachusetts appears quite like an affair of yesterday, compared with Rochester. Its attributes of youth are the activity and eager life with which it is redundant.

The whole street—sidewalks and centre—was crowded with pedestrians, horsemen, stage-coaches, gigs, light wagons, and heavy ox-teams, all hurrying, trotting, rattling and rumbling, in a throng that passed continually but never passed away. Here, a country wife was selecting a churn from several gayly painted ones on the sunny sidewalk; there a farmer was bartering his produce; and in two of three places a crowd of people were showering bids on a vociferous auctioneer....



Oil refining was an important industry in Rochester from the mid to late-1800s, but was lesser known. Over 200 people were employed refining and marketing the oil worldwide in 1887.

The number of public houses benefited the flow of temporary population. Some were farmers' taverns, cheap, homely and comfortable; others were magnificent hotels, with negro waiters, gentlemanly landlords in black broadcloth, and foppish barkeepers in Broadway coats, with chased gold watches in their waistcoast pockets.... (One man) carried a rifle on his shoulder and a powder horn across his breast and appeared to stare about him with confused wonder, as if, while he was listening to the wind among the forest boughs, the hum and bustle of an instantaneous city had surrounded him.

The rapid population growth increased the demand for products well beyond the capacity of existing factories to produce them. The food supply was unable to support the growing population either. In the 1827 Village Directory, Elisha Ely noted, "The supply of the village with the productions of the garden and dairy, is not yet equal to the demand; and we still import from abroad, at a high price, many articles for which our climate and soil is equal to any other under the sun."

A Village of Many Industries

Though the area was already noted for water power and milling, there were only 20 millers listed in the 1827 Village Directory; not a

Factories in 1827

- 3 Furnaces for melting and casting iron,
- 2 Trip hammers by water power,
- 2 Breweries,
- 3 Tanneries,
- 1 Oil-mill,
- 9 Saw-mills,
- 1 Nail manufactory,
- 2 Stone and earthen ware manufactories,
- 3 Scythe, axe and edge tool do.
- 5 Tin and sheet iron do.
- 3 Soap and candle do.
- 2 Morocco do.
- 1 Comb-maker's shop,
- 1 Machine maker's do.
- 3 Coppersmiths' shops,
- 3 Gunsmiths' do.
- 2 Plough-makers' do.
- 2 Iron turners' do.
- 4 Chair-makers' do.
- 5 Cabinet-makers' do.
- 4 Hatters' do.
- 1 Paper mill,
- 3 Book binderies,
- 6 Printing offices,
- 1 Looking-glass manufactory,
- 4 Saddlers' shops,
- 14 Coopers' do.
- 17 Blacksmiths' do.
- 1 Window sash manufactory, by water power,
- 1 Shoe last do. do.
- 1 Barrel do. do.
- 1 Pail and tub do. do.
- 1 Cotton Mill
- 1 Woolen Mill

Retail stores in 1827

12 Merchant	stores,		stores,
5 Hardware	do.	5 Goldsmith	do.
5 Druggist	do.	7 Millinery	do.
3 Book & stationar	v do.	1 Looking-glass	do.
14 Boot & shoe	do.	4 Clothing	do.
	:	ada atawa	

Growth of Rochester

		Year		Population
First Census,	December,	1815,	-	331
Second, -	Sept.	1818,	-	1,049
Third, (U.S.)	August,	1820,	-	1,502
Fourth, -	Sept.	1822,	-	2,700
Fifth, -	February,	1825,	-	4,274
Sixth, (State,)	August,	1825,	-	5,273
Seventh, -	December	. 1826,	-	7,669

Principal Occupations 1827

7 Clergymen,	124 Shoemakers,	17 Coachmakers,
25 Physicians,	20 Hatters,	67 Blacksmiths,
28 Lawyers,	73 Coopers,	14 Gunsmiths,
74 Merchants,	23 Clothiers,	10 Chairmakers,
89 Clerks,	20 Millers,	95 Masons,
84 Grocers,	21 Millwrights,	25 Cabinet-mkrs.
33 Butchers,	304 Carpenters &	5 Combmakers,
48 Tailors,	Joiners,	26 Painters,
24 Wheelwrights,	23 Tinners,	16 Inn-keepers,
21 Saddlers,	29 Tanners,	16 Goldsmiths,
8 Tallow-chan-	14 Bakers,	8 Bookbinders,
dlers,	423 Labourers,	31 Printers.

Growth of canal exports

Articles		1823.	1826.
Flour,	barrels,	64,114	202,000
Wheat,	bushels,	20,590	
Pork,	barrels,	1,250	7,000
Beef,	do.	528	750
Pot and pearl ashes,	do.		9,500
Whiskey,	gallons,	52,903	135,000

1827 flour production

Beach's	mill,	24,530	barrels.
Brown's	do.	20,000	do.
Atkinson's	do.	20,500	do.
Rochester's	do.	20,000	do.
Cleveland's	do.	15,750	do.
Strong's	do.	17,000	do.
Ely's	do.	32,389	do.

Total, 150,169 barrels.

large number of employees for the number of barrels of flour the city produced. Rochester was noted for its flour industry, but it was the diversity of its industries and trades that made the economy strong. A review of the occupations in 1827 reflect the youth of the settlement; that it was undergoing construction. There were 423 laborers, 304 carpenters, 123 shoemakers, 95 masons, 89 clerks, 74 merchants, 73 coopers, 67 blacksmiths, 48 tailors, 33 butchers, 28 lawyers, 26 printers, 25 doctors, 21 millwrights and 17 coachmakers.

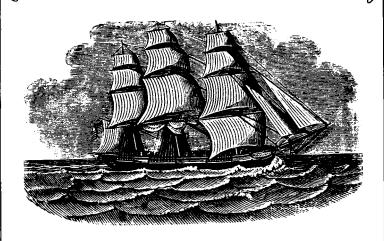
The lack of roads and other forms of transportation slowed communication with more established cities in the east and inhibited the expansion of Rochester's trade. The improvement of transportation was a priority among businessmen who joined together to form companies to build roads. Elisha Johnson built the Carthage Railroad, a horse-drawn stage that carried both freight and passengers between the Erie Canal and the lake port at Carthage.

The waterpower attracted numerous other types of industries not related to flour milling. In 1827 there were four dams built along both banks of the river. The dam built by Elisha Johnson just south of today's Court Street bridge, supplied water to the Rochester, Fitzhugh and Carroll Race. It powered nine factories on the west side of the river and ten factories at the Johnson and Seymour Race on the east side. The Brown brothers' dam near the upper Falls diverted river water to its race supplying ten factories on the west side. Across the river two mills were powered by the Cleveland Race. Two races at Carthage powered two mills. Many other mill sites were yet to be developed.

Rochester drew its economic strength from the diversity of its manufacturers. Scarcely a decade after Rochester became a village there were seven flour mills, nine sawmills, three iron furnaces, three tanneries, three tool manufacturers and many other factories that included brewing, soap and candle making, tanning, plow making, cotton and wool manufacturing, paper milling and printing. Coopers, saddlers, blacksmiths, tinsmiths, tailors and cobblers manufactured many other products by hand.

The demand for brass was "considerable," but there was yet no brass foundry established. An iron works was needed. A glass factory and a woolen mill were encouraged by business leaders. The natural resources of the area were generous offering bituminous coal, iron ore, lime, clay, timber and soil suited to wheat, hops, corn, flowering trees and other agricultural products.

More than natural resources were necessary for manufacturing



Freight passenger lines, 1827

Line	Boats	Horses
Pilot,	34	181
Washington,	32	170
Merchants',	30	1 72
Troy and Erie,	23	161
Hudson and Erie,	21	115
Union,	20	83
	160	882

The boats generally run from Troy and Albany to Buffalo, two of each line leaving this place every day, Sundays excepted. Although they are designed principally for the transportation of freight, most of them have comfortable accommodations for passengers—which they are enabled to carry at a less rate of fare than boats which are employed only as packets, owing partly to the difference in transit duties charged by the canal commissioners on freight and packet boats.

The usual rates of transportation of flour, from this place to the Hudson river, in the spring and fall, is one dollar per barrel, and during summer, 87½ cents.

Merchandise, from Troy and Albany, is charged about 68 cents per cwt.

Passengers are charged one and a half cents a mile, exclusive of board, which is an extra charge of about fifty cents a day.

The boats generally run night and day, and about sixty miles in twenty hours.

for without adequate transportation there was no market. Rochester owed its initial growth to its seemingly inexhaustible water power; but it was the advantage it gained in shipping that drew neighboring villages to its center. The Erie Canal opened from Buffalo to Albany in 1825 bringing within Rochester's reach the eastern markets that included the populous international port city of New York. The canal also brought nearer the western markets, hungry for trees, manufactured goods and supplies to develop the wilderness and farmlands. Between 1823 and 1826 canal exports of flour increased from 64,114 barrels to 202,000. Whiskey increased from 52,903 to 135,000 barrels during the same period. Pork exports jumped from 1,250 to 7,000.

The Flour City

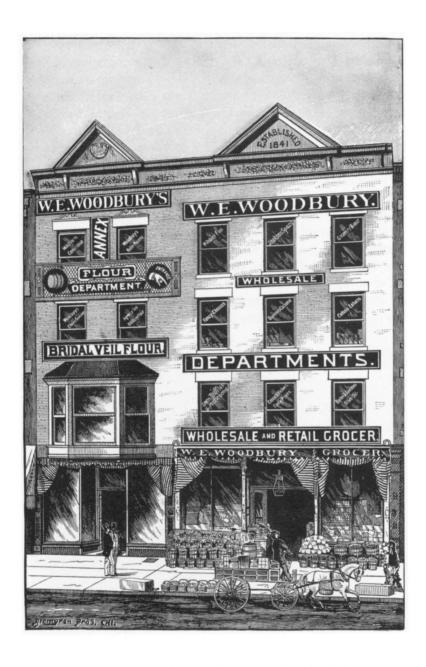
By the late 1830s Rochester was the largest flour milling city in the nation, grinding up to 500,000 barrels annually. Millers equipped the mills with modern machinery which resulted in a fine grade of flour. The industry kept smaller factories busy producing flour sacks and barrels, while other workers were employed to haul the wheat and flour to market. Flour milling remained the dominant industry in Rochester until the 1850s when a blight reduced the wheat crop and the wheat fields had moved too far west.

Long after flour milling declined manufacturers were induced to locate in Rochester for it continually improved upon its transportation advantages.

The Flower City

Flour milling was beginning its decline in the 1840s and 1850s when seedmen and nurserymen were just becoming established. Electus Boardman established his nursery in 1822. In 1832 Naaman Goodsell opened the Rochester Seed Store. The following year Asa Rowe opened the Monroe Garden and Nursery in Greece. They were joined by William Reynolds and Michael Bateham who took over the Rochester Seed Store, James Vick and C. F. Crosman who experimented with seeds and their germination. The most successful of the nurseries was Mt. Hope Garden and Nursery established by George Ellwanger and Patrick Barry. Together these men dominated Rochester's Flower industry.

Rochester was an ideal location for the nursery and seed industry, for the lake warmed over the summer bringing mild winters. As the lake cooled over the winter it brought a late spring which delayed planting and thus prevented a killing frost on new



Locally grown fruits and vegetables as well as fresh farm meats were important to the growing community. The Rochester area became famous for fruits, vegetables and flowers.

plantings. The Erie Canal brought further advantage to Rochester nurseries over those in the Hudson Valley, for it made shipping inexpensive and rapid enough to avoid damage to shipped plants and seeds. Rochester sent tons of trees and seeds to the expanding west.

Rochester's nurserymen knew that competition in the market could be beaten by meeting higher quality standards. Ellwanger and Barry's Nursery led the flower industry in quality control; studying to develop proper labeling and to ship healthy trees and plants. They traveled to Germany, France and England to collect graftings and to keep abreast of new developments among older, established and respected nurseries.

The railroad enabled more rapid shipment than the Erie Canal had and further enabled the market to expand. The industry continued to grow until World War One when the supply of seeds from Europe was cut off and those nurseries without their own supplies perished. Also, the west, well established by the turn of the century, had less need for new plantings.

Old nursery lands were subdivided for building lots and by the end of World War One, the industry had greatly declined, giving way to the shoe and clothing industries.



The absence of a high school was an embarrassment to the community, but the 1827 village directory explained that citizens were until recently busy taming the wilderness. That year however, two school districts combined efforts to build Rochester's first high school.



In 1989 President George Bush spoke to Rochester area business and manufacturing people about the importance of education. The Rochester Brainpower Program noted behind him is an educational project sponsored by the Chamber of Commerce and the Industrial Management Council (IMC). Left to right are Gov. Mario Cuomo, Kodak president Kay Whitmore, Pres. George Bush and IMC president John Hostutler.



The Erie Canal expanded and speeded trade for Rochester and other towns built along its route.



Rochester and Pittsburgh Railroad Depot. Railroads broadened trade because they carried freight and passengers where the canal could not. It also sped communications and business travel, making distance less of a concern to business and industrial development. The canal continued to carry freight too heavy or expensive to move by rail.

Shoe manufacturing was a major industry in the 19th century, though not all company names are familiar today. Hough and Ford on Mill Street employed over 200 people to manufacture 2,000 pairs of shoes a day in 1887.



The Shoe Industry

For several decades prior to the depression of the 1890s the manufacturing of women's and children's shoes was the dominant industry in Rochester. It remained through the 1920s, a strong rival to Rochester's new leading industry—clothing manufacturing. Abner Wakelee, Rochester's first shoemaker, arrived in 1815, four years after Col. Rochester laid out his settlement.

By 1827 when the first Village Directory was published, there were nearly one hundred shoemakers. A few early shoemakers like Jacob Gould and Jesse Hatch organized shoe shops employing apprentices to manufacture shoes. Workdays were commonly twelve to sixteen hours long. Local tanneries supplied the shoe industry with leather even after the Erie Canal began to carry it from New York City and other areas.

The Erie Canal stimulated, not only the shoe industry, but other manufacturers as well for it enlarged the market by its access to the large eastern population and the westward moving settlers in need of supplies.

By 1831 there were nine shoe shops in the Village of Rochester. Shoemakers custom measured customers, cut the leather and sent it out to private homes to be sewn and pegged.

The work was hard. Bundles of leather were heavy. They were wrestled off the canal boats and freight wagons and placed in rolls in storage to be pulled out as the shoemaker needed the material.

The workday began at daylight for many of the sales for ready-made shoes were made on the passengers of canal packets arriving as early as 5 a.m. Rochester shoemakers competed with Troy, Utica and Syracuse to manufacture surplus shoes for the larger eastern markets. By 1848 Rochester employed 500 men in eleven shoe shops. Tanners, freight haulers and others were employed to support the growing industry. The competition stimulated Rochester to distinguish itself by producing a high quality product. A wooden peg maker invented in Rochester helped to give Rochester's shoes a good reputation for durability and sound workmanship.

New methods of manufacturing introduced into the shoe industry in the 1840s changed the small shops into factories in which one skilled worker was employed to supervise several employees performing specialized tasks. Machinery was introduced to perform repeated tasks more quickly and to end the practice of sending out work, thereby losing valuable production time. Now that the industry was extending beyond the local market, the elements of time and wasted energy took on new importance.

Jesse Hatch applied the Singer sewing machine to the production of shoe uppers in 1852. Hatch adapted a die used to cut the leather bills of army hats to cut out the soles of shoes. The sewing machine and die cutter enabled the shoemaker to greatly increase production. Ready-made shoes became more easily available. Hatch kept abreast of new advances in other shoemaking towns for he realized that beating the competition required adoption of new methods and marketing.

The introduction of the sewing machine and its success only hinted at the rapid changes about to take place in the shoe industry as a result of mechanization. Machines were introduced to cut lasts, shoe uppers and insoles. In the 1860s a machine was used to sew the shoe uppers to the soles, though it was another decade before the introduction of the Goodyear welt machine made the sewed shoe preferable to the superior workmanship in the pegged shoe.

Rollers used to prepare sole leather replaced lapstones, nailing machines attached the sole to the upper, mechanized dies cut shoe soles and peg machines drove in the wooden pegs.

The mechanization created an unsettled workforce. It reduced the need for less skilled workers and apprentices. It changed the type of work performed by laborers when management reclassified jobs. The pay scale was renegotiated frequently as management and employees struggled to reclassify jobs and set compensation rates. By the late 1870s when mechanization was strong, increased production absorbed workers displaced by it.

Mechanization was not enough to maintain leadership among its competitors on the eastern seaboard who already had an advantage in their large local market. Rochester had to remain on the leading edge of style, paying close attention to changes. Shoe manufacturing remained number one in production in Rochester and ranked fifth or sixth in the nation in the 1880s. By the 1920s the clothing industry had taken the lead in city manufacturing output.

The Clothing Industry

The clothing industry, for many decades the second most important industry in Rochester, was never a dominant industry; though at times it ranked first in the number of employees, in wages paid and in profits. In succession Rochester's industries were dominated first by flour milling, then women's shoes, clothing, photographic supplies, optics and technological products.

Jehiel Barnard, arriving in Rochester in 1812, opened the first tailor shop, making custom fitted clothing. The number of tailors grew to neary twenty by 1834. In the mid 1840s, Myer Greentree introduced standard patterns to the clothing industry making it possible to sell wholesale. Hundreds of travelers passing through Rochester each year welcomed the readily available clothing and shoes. The number of tailor shops grew to thirty by 1848. Scores of tailors worked out of small tailor shops on the Main Street bridge and nearby Front Street. Clothing was measured and cut in-house and sent out to be sewn in private homes. Though this practice later came under criticism, it provided much-needed employment to newly arriving immigrants.

As in the ladies shoe industry, mechanization changed the clothing industry. The introduction of the sewing machine in the mid-1850s made mass production possible. Orders for uniforms in the 1860s kept the clothiers busy. Following the war the number of tailor shops grew. Salesmen sent out to take orders found a ready market in the expanding west.

Innovations and inventions advanced the industry toward mechanized assembly line factory production. The most important move was the use of water power in 1875 to run the sewing machines of Stein & Adler. Their move to expanded facilities at

Mill Street attracted several other clothiers to relocate there. By the late 1870s wholesale clothing manufacturers employed about 2,700 workers, mostly women and children.

The invention of a knitting machine by J.W. Lamb prompted Max Lowenthal to enlarge his factory that knitted gloves, socks and scarfs. Moses B. Shantz imported vegetable ivory (made from a sliced nut) from South America to make buttons. His company became the largest button factory in America.

Just as in the shoe industry, the mechanization of the clothing industry brought labor problems. Workers were drawn from their homes into the factories by mechanization. Workers struggled to organize unions, but the hundreds of newly arrived Polish and Russian immigrants anxious to work inhibited their growth. Bitter strikes eventually won some increases in pay for skilled workers and a nine-hour workday.

The second World War brought brisk orders for uniforms and supplies that kept the factories busy. The orders for men's suits continued through the 1940s bringing the number employed in the clothing industry to more than 9,000 by 1947.

By the 1960s the scarcity of skilled employees had become a problem to the clothing industry. Skilled tailors were brought from Italy and other countries from which Rochester's earlier clothing workers had emigrated.

Woman's Work

For the first time in our country's history, women entered the shops in large numbers during the Civil War. Millions of men marched off to war leaving their benches and tools while they took up arms. Manufacturing is no small part of fighting a war. There were jobs that were vital to the support of the army and to the continuation of civilian life. Women manufactured shoes, clothing, leather saddles and harnesses. They ran the dry goods stores and groceries. They drove wagons and helped to edit newspapers. They worked in tobacco factories and other traditionally male jobs. On the farms women who were already overburdened by the demands of child rearing, housework and kitchen gardening, took on the additional labor left by their temporary soldiers. Children, too, worked on the farm as well as in the city's mills and shops.

Though women first entered the workforce in large numbers during the Civil War, women had always been "gainfully" employed. When Rochester was first settled, many women took in sewing and



Many women worked in the shoe, clothing and tobacco industries. The Peerless Tobacco Works owned by W.S. Kimball was a major employer of women in the late 1800s.

laundry. Edwin Scrantom, the first settler on the One Hundred Acre Tract, recalled that his mother and sister frequently sewed for a tailor who boarded with the family. They earned money for each article sewn.

Women, of course, took in boarders, for early Rochester did not have enough inns for its growing number of immigrants. Other women opened shops of their own, dressing hair, selling hair pieces hand made into falls, braids and other styles. Women ran stores selling yard goods and fabric printed with patterns ready to embroider. A few women were cooks, waitresses, cleaners and launderers for inns and restaurants as early as the late 1820s. Certainly most of the work before the Civil War fell within the domain of "woman's work," but the Civil War changed all that. Following the war, women continued to work in the mills, clothing and shoe shops and tobacco factories.

The immigration of hundreds of Italian and other European women in the late 19th century employed more women and children in manufacturing, for the households of these recent arrivals required more income than the man alone could earn. Many, if not most, of these women, however, worked at home for the many clothing factories, piecing suits and other articles together.

Their children sometimes pushed the baby's carriage to the rear entrance of the factory where it was loaded with cut pieces to be sewn at home.

The employment of immigrant women living in congested housing and earning little money was criticized by many civic leaders. When the economy was better, men preferred that women did not work outside the home, and women seldom prepared themselves for careers. Of course, women were so frequently called into the workforce or required to work out of poverty that it can be said that in Rochester's history women have always worked outside of the home.

In large numbers women were again called upon to work in traditionally male occupations during World War One and World War Two. Today women often prepare for careers and more than fifty per cent of the women in the nation work outside of the home.

The Depression and World War Two

It was several months after the stock market crash of 1929, when hundreds of people joined the growing ranks of the unemployed, that Rochester realized the depth of what came to be known as the Great Depression. The public cut back on purchases causing merchants to reduce their inventory. As a result factories faced slowdowns that resulted in lay-offs. In April of 1930 the unemployed were counted by the U.S. Census Bureau as numbering 10,708 in Rochester. By November the Civic Committee, which organized to study the problem of the Depression in Rochester, counted 19,000.

Throughout the 1930s the demands for clothing and moving picture film maintained those industries. Early in the Depression, Ritter Dental Co., Todd Co. and Kodak expanded or introduced new products.

Efforts by other industries to avoid lay-offs and manpower reductions resulted in pay cuts. The depth of the Depression was too much for a locality to manage alone. The federal government sponsored work relief projects that not only employed hundreds of local people, but made several lasting contributions, including the construction of the Rundel Memorial Building. Controversy over the numerous relief programs continued throughout the decade.

By the late 1930s, defense contracts received from Europe sparked production in some factories. The difficulties of the Depression faded as the attention of the city turned to war-torn Europe. New

relief groups organized to send aid to the Allies and countries from which many people had only recently emigrated. After a decade of Depression, the city welcomed the challenge to meet new production schedules.

Eastman Kodak, Symington Gould Co., Odenbach Shipbuilding Co., Consolidated Machine Tool Co., Folmer-Graflex, Rochester Products, Bausch and Lomb and many other companies manufactured defense materials.

In the months that preceded World War Two, business leaders speculated that the city had reached its peak in both population and production; indeed they felt fortunate that Rochester had not endured the economic damage that crushed many cities in the Depression. But the onset of war quickly answered the speculations of stagnation and Rochester went into heavy production. Men and women returned to factories and offices. Many people who were employed in vital defense plants worked overtime; passing others who kept the plants operating around the clock. Wages in many jobs increased. With millions of able-bodied men off to war, opportunities to enter the work force were open to women, older citizens and minorities often discriminated against in peacetime. Committees organized to encourage everyone to work or give their time in some way to the war effort.

Many people began to ride bicyles to work and to shop after gasoline rationing began. Women wore slacks to work and kept the style when the war ended. As in World War One, women learned to cook without many of the rationed items and they conserved food. Victory gardens became popular. It became difficult to get sugar, gasoline, hosiery, some cereal or grain products, car and tractor parts and even rubber tires. Materials used in home construction changed to accommodate the war effort.

School children collected recyclable materials such as tin cans, razor blades, aluminum and paper. They gathered milk weed to use as a substitute for kapok in life preservers.

Even before the war ended, business leaders worked on a smooth transition from wartime to peacetime production. Returning veterans flooded the housing market, boosting new construction. Many jobs vacated by wartime workers became available to returning veterans; but in the 1950s, additional jobs developed out of new businesses and expansion. Rochester arose as a technological city in a strong educational community and it has remained so into the 1980s. Rochester produces photographic equipment, photocopiers, business machines, lenses and eyeglass supplies.

Thousands of people are employed by Rochester Gas and Electric, Rochester Telephone, Rochester Transit Authority and other businesses. Communications and printing companies and hundreds of smaller businesses operate as extensions of or support to larger companies.

By the mid 1960s, the Chamber of Commerce reported that more than sixty businesses established over a century ago were still in business. An additional sixty were more than eighty years olds. The businesses ranged from banks to newspapers to public utilities, tool manufacturers and clothiers. For over two centuries Rochester has taken its identity from its dominant industry, passing from one industry to another through the decades. But the diversity of its businesses and trades has been the city's strength in both employment and production. Presently, with a highly technological economy and a large educational community to support it, Rochester's future is bright.

Education, the Second Largest Industry

It was an embarrassment to the growing village that there was not yet a high school. The 1827 village directory pointed out that civic leaders were so busy building the city from the wilderness that there was just now time to turn their attention to education and a high school was planned.

The basic courses of study such as arithmetic and English were emphasized for it was these subjects that were useful in earning a living.

Education has grown to be the second largest industry in the city when measured by investment, payrolls and the money that it brings to Rochester. This city has seven colleges and universities or seminaries to support its continuing need for a trained workforce.

Education was an early concern among the pioneers. In 1829 the Rochester Atheneum was organized "to disseminate useful knowledge." It maintained a small library of 400 books and subscribed to eleven daily newspapers, four semi-weeklies and thirteen weeklies. Keeping abreast of development and business elsewhere in the nation was of critical importance to the growing village. In 1891 the Rochester Atheneum combined with the Mechanics' Institute, then only six years old. The Rochester Institute of Technology evolved from this early union.

In 1850 the University of Rochester opened at the United States Hotel on West Main Street. It later moved to a campus on Prince Street and eventually opened the River Campus as well. St. John

Fisher, Nazareth, Roberts Wesleyan, Colgate Rochester Divinity School and Monroe Community College educate men and women for productive lives.

Rochester leads the nation in the innovative efforts to meet the educational needs of its young people and through them, the city's future. The city and county are experimenting with methods of recycling, waste disposal or chemical and toxic cleanup. Indeed they must depend more than ever upon the ingenuity and determination of their citizens.

Today the city faces strong international competition and increasingly complex issues in production and waste disposal; but perhaps at no point in the city's history has it ever been better prepared to face the challenges of the future.

Copy edited by Hans Munsch.

The author thanks William T. Davis for his assistance on this article.

Back cover: The Upper Falls of the Genesee River in 1887. Note the industries are centered around the river and water power in this period in which some manufacturers are beginning to use gas and electric.

