BLACK RIVER FALLS AND SUSPENSION ERIDGE,
WATERTOWN, N. Y.

WATERTOWN, N. Y.

A HISTORY

OF ITS SETTLEMENT AND PROGRESS, WITH A DESCRIPTION OF ITS COMMERCIAL ADVANTAGES.

AS A

MANUFACTURING POINT, Property of Charles West ITS LOCATION,

ITS UNSURPASSED WATER POWER,

ITS INDUSTRIES AND GENERAL FEATURES OF ATTRACTION

TO CAPITALISTS AND MANUFACTURERS.

WATERTOWN, N. Y.:
PUBLISHED BY THE WATERTOWN MANUFACTURERS AID ASSOCIATION.
1876.

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One of the Fairest of Cities,

WHOSE PEOPLE,

BY EARNEST INDUSTRY AND ENTERPRISE

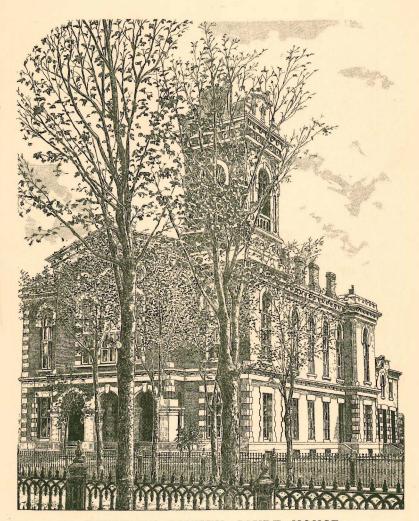
HAVE IMPROVED SO LARGELY

THE ADVANTAGES WHICH NATURE HAS SO LAVISHLY BESTOWED

AND TO WHOSE PUBLIC SPIRIT

SHE OWES HER GOOD NAME AND HER PROSPERITY,

THIS LITTLE BOOK IS MOST CORDIALLY DEDICATED.



JEFFERSON COUNTY COURT HOUSE.

TO THE READER.

We urge you most earnestly to examine with care the contents of the following pages, which are intended to set forth—perhaps hastily, but we trust fairly—some of the attractions which our city possesses as a desirable location for all classes of persons.

The officers of this Association will take great pleasure in furnishing additional information to all who may desire, not only by prompt attention to correspondence, which is urgently invited, but by personal effort and attention to all who may visit our city with a view of locating with us, giving the additional assurance that all will be heartily welcomed and hospitably entertained.

If what is said shall produce a favorable impression upon any person, in any quarter; inspire any intention to consider our claims, or arouse a spirit of favorable inquiry, to all such we give the assurance that we most cordially invite candid correspondence and inquiry, and that we have more to say.

THE WATERTOWN

MANUFACTURER'S AID ASSOCIATION.

ORGANIZED JAN. 25, 1875.

INCORPORATED NOV. 6, 1875.

ARTICLE 1 OF ITS CONSTITUTION:

"The *object* of the Association shall be to make an organized and systematic effort to develope and aid the manufacturing interests of the city of Watertown."

OFFICERS:

GEN. BRADLEY WINSLOW	
Dr. H. M. Stevens	Vice-President.
Charles R. Skinner	Corresponding Secretary.
W. C. HAVEN	
JOHN F. MOFFETT	Treasurer.

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A. D. REMINGTON.

CORRESPONDENCE SOLICITED.

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INTRODUCTION.

The primary object of this publication is to present in an impartial, although incomplete manner, some of the many advantages possessed by our city as a manufacturing point. While thus seeking to carry out the fundamental object of the Association, as expressed on a preceding page, a mutual benefit may result to our own city and its people by adding to its industries, and to those seeking new fields of labor by calling their attention to WATERTOWN as a healthy, lively and energetic city. To this end the following description of it location, its resources, its inducements, and its industries, is intended to invite the attention of live and energetic capitalists, manufacturers and others seeking opportunity for investment, or desiring a home in a growing and healthy community, to its manifest attractions, as a favorable location, and as an excellent field for the development of industrial talent, and the profitable production of skilled labor.

First among the claims of our city, stands pre-eminently its unsurpassed water power.

In this connection it may be said, if comment is necessary, that modern science has demonstrated that water is the cheapest, safest, surest and best power known, and any facts bearing upon it are becoming to be earnestly and candidly considered. The value of a falling stream to the manufacturing interests of the world is entirely beyond calculation. Its flow is ceaseless, nature exacts no royalty and it seems the perfection of power, inasmuch as the advance of civilization and enlightenment interferes not with its strength, lessens not its force, and suggests no possible improvement.

Black River which has its source in the midst of the myriad lakes which abound in the great forests of the North, and which flows with steady and rapid course through the very heart of our city.

SOME OF THE

falling one hundred and twelve feet in its flow through our borders, presents alluring charms to the progressive manufacturer, and invites him to seize a share of the wealth which she so freely distributes to such as are willing to curb her power and make good use of her strength. This power, the finest and most available in the country, froms the foundation of our desire to attract the attention of intelligent and industrious strangers to us.

It furnishes almost a natural water-power, with a full and rapid flow, requiring little outlay in any artificial direction, and we believe it no exaggeration to claim that no other river in the State or nation furnishes as much and as available power in the same distance, as Black River supplies in its passage through our corporate limits.

In addition to this important natural advantage we claim for our city a most favorable location in a thickly settled, prosperous, fertile and healthy portion of the State, surrounded by a wealthy and industrious population, who have grown up with the country and contributed to its prosperity and good name by an active and ear nest industry in the various pursuits which engage the attention of an honest, careful and prudent people.

We believe a careful perusal of what may follow, with inquiry as to what may have been omitted, will convince strangers now undecided where to locate in manufacturing or other enterprises, that we have some honest claims upon their consideration.

We have here a surplus of power sufficient to turn the wheels of scores of manufactories yet unbuilt, which only awaits more skilled hands of practical workmen to develope industries which shall yield abundant profit and rich reward. We believe that nothing is wanted but more organizing minds, more willing hands, more practical direction to make our city one of the leading manufacturing cities of the country. Her manufacturing interest is to-day one of her brightest possessions, but it may be doubled with tenfold profit, and our noble river is already here, ready to do its part in the work.

In this work we have also sought to present in an unprejudiced manner, the general attractions of our city from many standpointsour aim being not to attract manufacturers only, but good citizens of all classes. To this end we have devoted many pages to the consideration of various topics of local interest, with a view of giving all inquirers all the information possible in reference to every attractive feature of our city, its growth and present condition.

GENERAL ADVANTAGES AND ATTRACTIONS

WATERTOWN.

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1st. Its unsurpassed and almost unlimited water power, furnished by Black River, which falls nearly 112 feet within the city limits.

2d. It is located in the most fertile and productive portion of Northern New York, and in one of the most thriving and prosperous agricultural counties in the State.

3rd. It is the virtual centre of a railway system which has its outlets at favorable points in the interior of the State, and at the best ports on the "Great Lakes of the North."

4th. It therefore possesses the advantages of railway competition, all competing lines expressing and showing a liberal spirit toward all manufacturing enterprises.

5th. It is situated in the midst of vast and valuable mineral deposits, chief among which are inexhaustible beds of the finest iron ore to be found in the United States, many of which are in full and successful operation.

6th. Within the limits of the city lie portions of a ridge of limestone miles in extent, which, it has been demonstrated, has no superior as a flux for use in the reduction of iron ore.

7th. It has direct railroad communication with the vast coal regions of Northern Pennsylvania, by two competing railroad lines.

8th. It has direct railroad communication with the lumbering interest of adjoining counties, with lake and river ports, receiving lumber from the West, and with the great pine forests of Canada. 2

WATERTOWN, N. Y.

9th. It is within ten miles of one of the best harbors on the great lakes, with which it is connected by rail, thus affording direct communication by water, with the grain, lumber and mineral industries of the North West.

roth. It is situated in the midst of the most productive tanning interest of the State—Jefferson and adjoining counties being large producers of live stock, and the material for reducing hides to leather.

11th. The government of the city is based on the strictest ideas of economy, consistent with safe and sure progress, and the spirit of the people is decidedly in favor of every measure intended to make the rate of taxation low. The officers of the city are pledged to carry out this idea.

12th. Statistics show that it is one of the healthiest cities in the Union, subject to no contagious diseases, and free from prevailing sickness. The rate of mortality in 1875 was only one in seventy.

13th. Its public school system has been placed upon a satisfactory foundation, and affords excellent educational facilities.

14th. The cost of living is much less than in larger cities.

15th. Its social advantages are numerous, the tone of society healthy, and the morals of the community beyond dispute.

16th. Its great wealth, which is just now seeking investment in desirable and well conducted manufacturing pursuits.

GEOGRAPHY.

WATERTOWN is the capital of Jefferson county, one of the most thriving counties in the State of New York. It is situated upon both banks of Black River, seven miles from its mouth, where the river mingles with the waters of Lake Ontario. The river divides the city into two unequal portions, which are connected with each other by three bridges, two of wood and one an iron suspension.

It is 250 miles N. W. of New York City, 147 miles W. N. W. of Albany, 72 miles N. of Rome, 90 miles N. W. of Utica, 69 miles N. of Syracuse, 60 miles N. E. of Oswego, 76 miles S. of Ogdensburg, with all of which cities it has direct and unbroken railroad connection. It is also to miles East of Sackets Harbor, one of the finest harbors on Lake Ontario, and 25 miles South of Cape Vincent, a fine port on the St. Lawrence river, opposite Kingston, Ont., and one of the prominent outlets of a flourishing Canadian trade. With both the last named points Watertown has direct railroad connection. It is also connected by rail with Clayton, a thriving village on the St. Lawrence river, opposite Gananoque, which is also an outlet of Canadian trade—and with Morristown a prosperous village a few miles farther down the river, opposite Brockville, Ontario. Kingston, Brockville and Gananoque, with Prescott, opposite Ogdensburg, are important points on the Grand Trunk Railway of Canada. Kingston is the terminus of the Kingston and Pembroke railroad penetrating a productive lumber country. Brockville is the terminus of the Brockville and Ottawa railroad, and also of the Rideau canal, both passing through important lumber districts. Prescott is the terminus of the St. Lawrence and Ottawa railroad.

It will be seen that nothing can be more favorable than the geographical location of Watertown, commercially considered. It is an element of strength which cannot be well overlooked by those who look at the question of location with commercial eyes.

The city is situated in the very heart of one of the richest agricultural regions in the State, to which fact is largely due the substantial growth, thrift, enterprise and prosperity which have become its recognized features with those who know its history best. Its prosperity is second to no city of its size in the United States. It is in fact the leading commercial city of Northern New York.

HISTORY.

It is hard to resist the temptation offered by a study of local history, to enlarge more fully, and entirely beyond the scope of this small book, and beyond the main object in view, upon the interesting and attractive history which surrounds our city and county. We sacrifice local desire which would eagerly grasp it to the necessity of a plain statement of facts connected with the "first days of Watertown," and confine ourselves to the consideration of a few truths and statements which bear more directly upon present issues.

THE FIRST SURVEY.

The town of Watertown was first surveyed in the year 1796 by Benjamin Wright, a native of Connecticut, who was employed by the State to survey the northern and central portions of New York State, and who later in life was the originator of the first legislative steps toward the construction of the Erie canal, of which subsequently he was one of the chief engineers. His work in Jefferson county was performed through fatigue and hardships. Trackless forests contested every step of progress, and savages by day and wolves and panthers by night disputed his rights and were unwelcome visitors at his camp fires.

THE FIRST SETTLERS.

Settlements commenced in this vicinity in March, 1800, at which time Henry Coffeen, a native of Vermont, and Zachariah Butterfield, having during the previous fall visited the town and purchased farms, removed here with their families, and began improvements upon the site now occupied by the city. Mr. Coffeen was first to arrive, having penetrated from Lowville, Lewis county, forty miles east, through the woods with his family and household goods drawn on an ox-sled. He erected his hut at a point near where Court street now enters Public Square. Mr. Butterfield settled and built where Washington Hall now stands. Oliver Bartholemew, a native of Connecticut and a revolutionary soldier, arrived in town in March, 1800, and settled a few miles to the northward. In the ensuing winter, 1800-1, but three families wintered here, those of Coffeen, Butterfield and Bartholemew. They were soon followed by many others, among whom were Hart Massey, Asaph Mather, Jonathan Cowan and Thomas Butterfield.

THE EARLIEST OPINION.

Mr. Benjamin Wright who made the survey of the town in 1796, made the following report concerning one of the lots upon which the city is built:

"[Watertown.] Along the river there is some good land and some that is broken and rocky. The river is amazing rapid and rocky; some falls along the river which may be made good mill seats, and some excellent pine timber along the river. On the east line is a fine country. The west line is of good quality. There are some fine mill seats in this town which on the map are marked 'falls' and 'rapids.' To speak generally I think this to be an excellent township, and scarcely any poor land upon it. Will settle very fast, if laid in lots and sold to settlers."

ITS NAME.

The river then, in its primitive strength and beauty, was first to attract the attention of the settlers, and from the extraordinary amount and convenience of its *water power*, so early discernible to the keen minds of the pioneers, the city derived its name, a name which she has borne with honor for more than three-quarters of a century. To this cause, coupled with the foresight and energy of its founders, may be mainly attributed the early and rapid growth of the city, and the superiority in wealth and business which the city so rapidly developed, and which is still one of its distinguishing characteristics.

The confident expectation of the good men who came through the forests to build their humble huts upon the banks of Black River, that the fine water power here found would develope industries which would make the spot the centre of a large and prosperous business city in the years to come, have been well realized.

EARLY GROWTH.

The years 1801-2 witnessed quite a lively immigration into the county, many of the settlers coming from Oneida county, and locating in Watertown, attracted hither by the same causes which first led to its settlement, and which gave the spot its name. In addition to this the fertility of the soil was an element which impressed favorably those who were disposed to "pitch their tents" and cast their fortunes

here. The land books of the county during the years 1799–1800–1801 and 1802 showed an increasing demand for lots in this region, and hundreds of sales were recorded. The earliest records in the County Clerks office were made in 1805.

In September, 1802, over eighty families had arrived from the eastern States and counties and settled in the little hamlet or its vicinity. In the next succeeding two or three years, scores of other families, whose names are identified with the early history of the region, and with its growth and progress, many of whom were mechanics, came into the then new "Black River Country," bought their little farms, erected their humble dwellings, and began anew their labors to reduce the wilderness into a fertile valley, and enjoy the delights of their new homes. During the year 1802 a hotel was opened by Dr. Isaiah Massey, and Jonathan Cowan built the first dam across Black River at a point now known as Beebee's Island.

PRIMITIVE MANUFACTORIES.

During the first summer of the settlement of Watertown, it being entirely impossible to procure grinding at any mills nearer than Canada, from twenty-five to fifty miles distant through the wilderness, a stump standing upon what is now known as Public Square, a few rods east of the American Hotel as it exists to-day, had been formed into a mortar, with a spring pole and pestle attached. This served the purpose of a grain mill for the settlement, and was no doubt the era of "low tolls." This primitive implement suggestive of rustic life and the privations of a new colony, relieved the pioneers in some degree from long and perilous journeys "to mill" through a pathless forest abounding in more game in the shape of wolves and panthers and their kind, than was especially pleasant to honest and frugal and happy toilers who had a future to look to and provide for.

The settlers of the region were mostly poor. There were no bloated bondholders in those times, "banks discounts" were an unknown luxury, the bulls and bears had not been let loose in Wall Street—the honest Continental currency had scarcely passed out of circulation, and speculators were mostly confined to speculations as to how they could best earn an honest living. But although they possessed few of the comforts of life and none of its luxuries save industry, the pioneers had but few wants. The needful articles of the household were

mostly made with their own hands, the bread they are was wrought from the productive soil they found, and artificial grades of society existed only in books. The little "stump grist mill" should have been preserved in its simplicity as an evidence of the birth of that spirit of enterprise which now displays a round half dozen flourishing flour mills, kept ever busy to meet the growing demands of the times.

GROWTH.

The subject of manufacturing, using Black River as the motive power, received the early and careful attention of the pioneers. They were quick to see the powerful agent which nature had placed within their reach flowing so noisily past their humble dwellings, and they were prompt in making diligent use of the advantage offered. In 1802 Jonathan Cowan, a millwright, came here from Saratoga county, and began the erection of a grist mill at the bridge which crosses to Beebee's Island. This island (which is shown on the map) formed a part of Cowan's original purchase, and is said to have been offered by him at an early period for ten dollars. The customer offered five dollars, but the contracting parties being unable to agree, the bargain failed. They little dreamed that the same island commanding as it does the finest power the river, would within a few years be worth more than their united fortunes.

In 1803 a bridge was built below the village (the lower bridge shown in map and illustrations) by Henry Coffeen and Andrew Edmunds, and in 1805 a dam was built below the bridge, which is still standing. In the same year a saw-mill was built on the north side, and in 1806 a grist mill by Seth Bailey and Gershom Tuttle. A saw-mill was erected on the south side soon after, and a saw and grist mill by H. H. Coffeen.

THE FIRST STORE.

In 1805 John Paddock and William Smith who were among the more recent arrivals, opened to a wondering and well pleased public, the first "store" in the place, bringing their goods from Utica, ninety miles in wagons. An idea of the hardships attending the mercantile interest of that day may be drawn from the fact that in March, 1807, seventeen sleighs laden with goods for these pioneer merchants were

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twenty three days in coming from Utica to Watertown—a distance now traversed in less than four hours, many times each day by two flourishing railroad lines.

The pioneers of Watertown turned everything to account for trade, and as in other sections, the manufacture of potash formed the first means of realizing cash. Many paid in whole or in part for their lands by this means. In 1806, \$3,500; in 1807, \$6,000; and in 1808, \$9,000 worth of this staple was exchanged, the market being at that time in Montreal. In 1810, the firm of Paddock & Smith, the first merchants, purchased 2,800 barrels, averaging \$40 per barrel, making for that period the enormous aggregate of \$112,000. The declaration of war in 1812, entirely prostrated this industry, and in fact many others for many years.

THE WAR OF 1812.

The close proximity of Watertown to Sackets Harbor during the "unpleasantness" with Great Britain in 1812–15, the latter point being at that period an important naval station of the U. S. Government, and the scene of one or two spirited battles, was sufficient reason for a very general interest on the part of her people in the progress and result of the contest. Within hearing of the cannon which finally drove the enemy from the scene, there were many outbursts of excitement and patriotism, and the people contributed of their number and their means to carry on the conflict to a successful issue.

By an act of March 27, 1809, an arsenal was erected in Watertown in that year, and five hundred stand of arms deposited therein. The arsenal was built by Hart Massey, then collector of the district of Sackets Harbor, at an expense of \$1,940.99. This was before the day of "contracting, corruption and investigation." The street upon which it stood was patriotically called *Columbia* Street, now Arsenal Street, and the building was maintained as an arsenal until it was sold by act of April 9, 1850, and used for more peaceful purposes. Bodies of troops were stationed at Watertown for short periods, and the sick were often sent hither for the attendance which could not be secured at Sackets Harbor. The Academy which was built in 1811 was used as a hospital for a considerable time during the continuance of the war.

EARLY MANUFACTURING ENTERPRISES.

It was early apparent that Watertown possessed extraordinary inducements to manufacturers, and after the erection of Cowan's grist mill—the first manufacturing enterprise of which record is made, other institutions sprang into existence within a few years, many of which have been in active operation ever since.

From the only records attainable, the following brief account of the earlier manufacturing industries is made:

PAPER MILLS.

In 1808 a paper mill was built above Cowan's grist mill by Gurdon Caswell from Oneida County. Other paper mills were built soon after, and in 1824 Knowlton & Rice commenced the business which is still continued by Knowlton Brothers, whose flourishing establishment is illustrated and mentioned elsewhere. In 1832 this mill introduced into the county the first machinery for making paper.

COTTON AND WOOLEN MILLS.

The extraordinary prices to which cotton fabrics had arisen, led to the formation of the Black River Cotton and Woolen Manufacturing Company which was formed December 28, 1818, with a capital of \$100,000. The promoters of this scheme were Hart Massey, William Smith, M. W. Gilbert, John Paddock, Egbert Ten Eyck, Amos Benedict, William Tanner, Jason Fairbanks and Perley Keyes. The building (of stone) was erected in 1814 at a cost of \$72,000. Local history relates that there was at this time considerable prejudice against the use of machinery, in place of hand labor; and Spafford in the Gazetteer of New York wrote as follows on this subject: "The automaton habits, and the moral tendencies of these establishments will be better understood fifty years hence." It may be said that the fifty years has elapsed and that the more the world sees of "automaton habits" in manufacturing enterprises the better it likes them. This mill was carried on by the company for three years—was a few vears subsequently sold for \$7,000, passed into other hands and was destroyed by fire in 1869.

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In 1827 the Fefferson Cotton Mills were erected on Beebee's Island by Levi Beebee, a native of Connecticut, who came here from Cooperstown, N. Y. They were constructed of stone, 250 by 65 feet, and three stories high with basement and wings. It was intended for ten thousand spindles, and its value was estimated at \$200,000. On Sunday, July 7, 1833, the building was entirely destroyed by fire. Hough in his History well says: "Perhaps no private enterprise ever gave a stronger impulse to the growth of Watertown than the erection of these mills, and no single calamity was ever felt more severely than their loss." The site of this factory is one of the most eligible in the State for hydraulic purposes.

The Watertown Cotton Mills Company with \$100,000 capital was formed January 10th, 1834, Isaac H. Bronson, Jason Fairbanks, Samuel F. Bates, John Sigourney and Joseph Kimball as trustees. This association continued several years, and was replaced by the Watertown Cotton Company with a capital of \$12,000, formed January 7th, 1846, with E. P. Throop Martin, Daniel Lee, S. Newton Dexter, H. Holcomb and John Collins, trustees. The company occupied the building already mentioned constructed in 1814, and run fifty looms with proportionate machinery.

The Hamilton Woolen Mills Company was formed February 10th, 1835, with a capital of \$50,000, by Henry D. Sewall, George Goulding, John C. Lashar, Simeon Boynton and John Goulding. On the 10th of March following, the capital of the company was increased to \$100,000 under the name of the Hamilton Manufacturing Company. Mr. Sewall built a dam and factory, and the latter went into operation in the spring of 1836. It was designed for five sets of cards, with the necessary machinery, In May, 1842, this mill was bought by the Black River Woolen Company which had been formed November 7th, 1836. with a capital of \$50,000, the trustees being I. H. Bronson, S. N. Dexter, O. Hungerford, John Williams, Hiram Holcomb and Daniel Lee. This company also erected a factory, which after several years successful operation was destroyed in 1841. The mill was afterward repaired and put in operation by Loomis & Co., employing seventy hands.

The Watertown Woolen Company was formed February 4th, 1834, with \$100,000 capital, with I. H. Bronson, John A. Rodgers, John Williams, S. Newton Dexter and H. Holcomb as trustees.

The Watertown Woolen Manufacturing Company was formed Dec. 24th, 1835, with J. Williams, I. H. Bronson, H. Holcomb, D. Lee

and Silas Clark as trustees, and a capital of \$25,000. These existed a few years, but no record exists of what was accomplished.

The Williams Woolen Company was formed November 7th, 1836, with a capital of \$10,000, and was in operation many years. I. H. Bronson, S. N. Dexter, J. Williams, H. Holcomb and Charles Weber were the promoters of the organization. The premises were changed to a tannery.

THE FIRST TANNERY.

The first tannery on an extensive scale was built by Jason Fairbanks, in 1823. It was afterwards burned, and rebuilt in 1833. Two other large tanneries were built before the year 1827.

FOUNDRY AND MACHINE SHOPS.

The first machine shop for the manufacture of iron into castings and machinery was built by N. Wiley in 1820, and the first foundry by R. Bingham.

In 1823 George Goulding commenced the manufacture of iron, and in 1825 William Smith engaged in the same pursuit. The former was engaged on Norton's (now Sewall's) island in making mill gearings, factory machiney, and to a less extent, steam engines. Afterward for many years the firm existed as Goulding, Bagley & Sewall, and the business is now continued by the last two gentlemen. Their flourishing foundry is illustrated and described elsewhere. Mr. Smith was heavily engaged in manufacturing mill gearings and castings, stoves, hollow-ware and agricultural implements, on Beebee's Island. The site of his first foundry is now occupied by Gilderoy Lord, for a similar purpose, and does a large business. Smith's second foundry is still standing at the western end of the Island.

In 1841, Cooper & Woodruff built on the north side of the river, opposite Beebee's Island, a foundry and machine shop, and manufactured factory machinery, mill irons and steam engines, afterwards turning their attention to the building of railroad cars. These extensive works were burned July 22d, 1853, occasioning a severe loss to the proprietors and the public at large.

We have not attempted to give a full and complete history of all the manufacturing enterprises connected with the early history of our city. Such a work would be difficult and result in no particular benefit. We have simply sought to illustrate the fact that the manufacturing spirit was early manifested by the sturdy and enterprising

WATERTOWN, N. Y.

men who made up the community, and we hope to show in the subsequent pages that this spirit has never been allowed to droop, but surmounting obstacles which in many places would have proved too great to overcome, still exists and is one of the vital elements of our present existence and prosperity.

BLACK RIVER.

ITS SOURCE AND ITS TRIBUTARIES.

Black River has its source almost in the very heart of the Aditondac wilderness—aregion abounding in forests and containing hundreds of lakes. The actual source of the river is a small lake in Hamilton county, situated in a direct line about one hundred miles from Watertown. In its winding course the river must traverse a much greater distance. Within its first twenty-five miles it receives the outflow of numerous lakes of various sizes, most prominent of which are the South Branch, North Branch, Chubb, Bisby and Gull Lakes. The latter is 2,018.88 feet above tide water. These lakes with their outletting streams drain a large portion of Herkimer county, and the northeastern portions of Oneida county.

About thirty miles from its source Black River receives the contents of Moose River, a formidable rival which has its source in Lake Fonda in the northwestern part of Hamilton county. It flows across Hamilton county and unites with Black River at Port Leyden, Lewis county. Moose River is not far from fifty miles in length, and among a score of others receives the contents of Moose Lake, (2,239.21 feet above tide water) Lime Kiln Lake, the Fulton Chain, comprising the 4th, 7th and 8th Lakes, so called, Shallow Lake, &c.

A few miles farther on Black River receives Fish Creek, which latter is the outlet of Brantingham Lake. Besides other smaller inlets near the last mentioned, its next contribution is received within a few miles, when Independence River empties into it the contents of a lake of the same name situated near the castern boundary of Herkimer county.

Ten miles farther on, at Croghan, Lewis county, Black River receives the contents of Beaver River which has its source in Smith's Lake in the extreme northern part of Herkimer county. This river is the outlet of almost innumerable smaller lakes, among the more prominent being Albany, Rock, Burnt and Salmon Lakes, and the Red River Chain.

There are other considerable streams entering Black River from the south, and it is hardly more than a fair estimate to say that the river with its numerous branches, drains a territory of 2,000 square miles or 1,280,000 square acres.

It must thus be seen that the river at Watertown must be of formidable proportions, and possess all the power and importance claimed for it.

The action already taken by the Legislature of the State, to preserve the region of the Adirondacs as a "State Park" is very important in securing for all time to come, an ample supply of water, not only for the Black River, but for the sources of the Hudson River on the south and the numerous tributaries of the St. Lawrence River on the north. The measure is one which deserves the attention and encouragement of all who can realize the importance of the immense advantages to be realized from its successful accomplishment. The protection and preservation of the forests and wilds of this region will not only preserve and perpetuate to the northern rivers the advantages they now possess, but will secure to genuine sportsmen a boundless field for their enjoyment.

It is a well know fact that streams which have their sources in the wilderness are more even in their flow throughout the year, and less subject to freshets and droughts than are those whose water sheds are smooth or cultivated land. Nature seems to have provided the bogs and rooty jingles of the northern forests to hold like a sponge the superabundance of water from the melting snows of spring, and to let them out for us little by little as our needs require, instead or sending the whole volume down upon us at once, the result of which would be as serious as recent instances in the New England States where civilization has encroached so boldly upon the mountainous districts of their river sources.

Black River, rising as it does in the midst of almost eternal springs, stretching out its arms and fingers in every direction into the mountain defiles, draining from each a constant and steady supply of water

from mountain lakes, and springs and meadows, gives abundant assurance of a never ending power, which gathers its force from a thousand sources, and in its fullness hurls it past our city, over rocks and ledges, and which temptingly invites the water wheel and the varied industries of the nation to come and avail themselves of its strength and majesty.

For several miles above the city, the river flows rapidly over a solid rocky bed of Trenton and Birdseye limestone making the water pure and healthy, and well aerated for supplying the city, but coming as it does from a granite region, the water is almost as soft as the purest rain water, which renders it especially well adapted for use in the manufacture of cotton and woolen fabrics.

The rocky nature of the bed and banks of the river in the vicinity of Watertown is the fullest guarantee against all disasters arising from the washing away of banks or the undermining of dams.



THE WATER POWER OF BLACK RIVER.

Upon the organization of the Manufacturers' Aid Association, it was decided that a careful and scientific survey be made of the river upon whose power we base in so large a measure the distinctive attractions of our city, with a view of ascertaining in a definite an unmistakable manner, the exact measure of the power derived from the river in its passage through the corporate limits of Watertown. To this end a systematic survey was made by Mr. Frank A. Hinds, civil engineer, assisted by Mr. Fred. W. Eames, two gentlemen well calculated, and abundantly qualified to do the work assigned them. We quote the following from Mr. Hinds' report:

"I have made a survey of Black River throughout the extent of the city of Watertown, and in accordance with your wishes herewith submit a report of that survey together with a map and profile. (See map.)

"A level was carefully taken of the water from the point where the river enters the dity at its eastern limit, to the point where it leaves it at its westerly boundary, a distance of less than two miles, including in detail all the numerous falls and rapids both improved and unimproved. The whole amount of fall within this distance I have found to be III.75 feet. Eighty three feet of this noticable fall is included between the upper and lower railroad bridges, as seen by the accompanying map.

"There are five distinct falls between the points named. The river was guaged at a point about two miles above the city, where its course is straight and level for a considerable distance, and it was found to deliver 596,728 cubic feet of water per minute. This measurement was taken on the 22d of March, and although the water was very little if any higher than the ordinary winter flow, and the ice still unbroken, a deduction equal to one-third was made, to insure a safe estimate of the fair working average of the year. This allowance gives an average delivery of 397,819 cubic feet per minute. This, multiplied by 62.3 and 111.75, and divided by 33.000, gives 83,928 as the average actual horse power for the whole river in its

passage through the entire city. If a still farther allowance is made of two-thirds of this amount for leakage, clearance, friction and unavoidable waste, we still have 27,976 horse power, which may be regarded as effectual, and available to turn machinery.

UNUTILIZED POWER.

"Aside from the unused power which now flows over the dams already built, there is an opportunity for raising a dam eight or nine feet at a point below all the present improvements, near the mouth of Cowan's Creek (shown on the map near the western boundary of the city), which would furnish between two thousand and three three thousand additional and effectual horse power, and is immediately adjoining the Rome, Watertown & Ogdensburg railroad track.

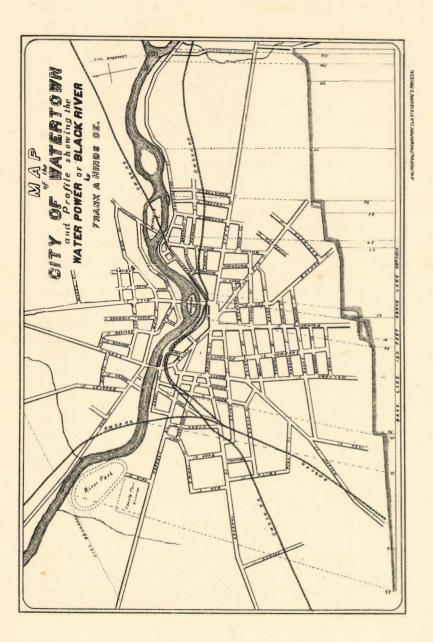
"There is also on the north side of Beebee's Island, and below the falls, an excellent point for a dam, now unused, and especially desirable on account of its central location, being in the very heart of the city. Three thousand effectual horse power could easily be gained here at a comparative slight expense.

"Again, at a point near the eastern limit of the city, the whole river falls abruptly fourteen feet over a ledge of rocks, offering natural advantages rarely met with for the purpose of large mechanical operations. At this point may readily be added over thirty-five hundred actual horse power that may be realized to turn machinery. This point is convenient to both lines of railways entering the city.

"Still other points along the river are susceptible of improvement in this respect, though of less extent, and all accessible to excellent railroad facilities."

Considering this most favorable showing, Watertown may well challenge any other point to show similar advantages, or a like instrument of power and usefulness.

It may be here stated that those now interested in the ownership of available water rights now unoccupied, show a liberal spirit in offering their rights to such as desire to locate here. It some cases, the owners offer to donate some of the finest water rights to manufacturers who will come here and use them. Further information upon this point will be cheerfully given upon application, and inducements offered which men of enterprise cannot afford to overlook. The feeling manifested now is, to encourage any movement to utilize all our



vast power, that nothing that can be used shall be allowed to go to waste. This is regarded as one of the most important of the many advantages offered.

Mention may also be made of the unlimited number of points along the river between this city and Brownville, four miles distant, capable of being improved, and which would yield an almost incalculable amount of water power. The river is rapid, in many places narrow, and excellent points for the erection of powerful dams present themselves in each mile of the distance.

MAPS:—LOCATION AND WATER POWER.

Two important maps are shown in connection with the illustrations given in this pamphlet, to which the attention of inquiring readers is invited. Both are the work of Mr. F. A. Hinds of this city, who was especially engaged to present in this attractive manner some of the many advantages possessed by our city. They are as follows:

LOCATION.

No. 1. "Map showing the location and railroad connections of Watertown, with its tributary Agricultural, Mineral and Lumber producing regions."

In many senses this map speaks for itself, and must prove to the observer at a glance, an almost visible demonstration of the truth of the claims we have sought to present in words elsewhere. The admirable location of Watertown for manufacturing purposes is plainly apparent and truthfully represented. The course of Black River, rising in the wilderness and fed by mountain streams is clearly shown with many of the lakes which form its sources, and contribute to it that power of which we boast. The various iron mines so plentifully found in Northern New York, are faithfully pointed out, and suggest to those familiar with geological formations the vast wealth which underlies all this region. The lumber producing districts covering so large a portion of the Northern wilderness, and of the Canadian Provinces are illustrated, and tell of a never ending supply of the finest timber grown on the continent, within easy reach

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of our city. The map also shows our city as located in the midst of one of the finest and most productive agricultural regions of the State.

The great lakes of the North, the lines of railroad extending in every direction, are made prominent, and all is suggestive of advantages which should not escape attention. Excellent receiving and shipping facilities are a most noticeable feature of our situation. Direct and speedy connection is shown with the iron mines located so near the city,—with the coal mines of Pennsylvania—the lumber regions of Northern New York and Canada—the grain States and mineral localities of the West. In fact Watertown is the centre of a system of railway facilities second to no other locality for general advantages offered. We let the map itself tell the rest of the story.

WATER POWER.

No. 2. "Map of the city of Watertown, and profile showing the water power of Black River."

While this map shows the general topographical appearance of Watertown, its streets and other points of interest, its principal object is to represent the course of the river, and show the points at which its power is greatest, the location of the dams, the islands which aid in utilizing its power, etc. It will be seen by the shaded profile at the left of the map, that the total fall of the river within the boundaries of the city is 1113/4 feet—the base line being 120 feet above Lake Ontario.

The various falls shown are five in number as follows: First (at lower end of map), 14 feet; Second, 12 feet; Third, 13 feet; Fourth (North Branch), 35 feet; Fourth (South Branch), 20 feet; Sixth, 11 feet.

The North and South Branches refer to the falls on either side of Beebee's Island, the principal of which (North Branch), is shown in the frontispiece of this pamphlet.



THE LEATHER TRADE.

THE MANUFACTURE OF BOOTS, SHOES, &c.

It may be safely claimed of Watertown, that no other inland city offers more substantial inducements to attract capital and skill for the manufacture of leather into boots and shoes. The trade in this branch of mechanical industry is everywhere large and constant. It involves few risks, and is reasonably sure to give large returns for the amount of capital and labor invested. Experience and industry in this direction nowhere fail to be richly rewarded.

The tanning of foreign and domestic hides into sole, harness and upper leather, has, for many years, been a large and important interest in northern New York, of which Watertown is the most prominent point. The hemlock forests of the section being easily accessible, furnish many thousands of cords of bark annually for this purpose. The Rome, Watertown and Ogdensburg Railroad traverses an extensive bark and tanning section, and the more recent extension of the Utica and Black River Railroad opens to some extent the great bark supply of John Brown's tract, while the interior of that famous region remains still untouched by the woodman's axe—a locality which will secure bark to the tanner for hundreds of years to come, without noticeable diminution in the supply.

New York and Boston capitalists have already availed themselves of this advantage, and immense sole leather tanneries are located in his section, the products of which are shipped to their salesrooms in their respective cities.

There is also an extensive business in the tanning of domestic hides and calfskins conducted in this city and surrounding country, a great part of which is finished and sold in this section for the home trade, while much of the leather is shipped to Boston in the rough state. If the demand required, this could and would be finished into upper stock and sold in a home market. The kinds of leather now finished are harness, upper, kip and calfskin.

The city of Watertown, while there is no manufactory of boots and shoes for the jobbing trade located here, is conceded by all who are conversant with the city and section, as an excellent and profitable point for the establishment of such manufactories. As there is no manufactory of this nature between the New York Central Railroad and the St. Lawrence River there would be but little local competition.

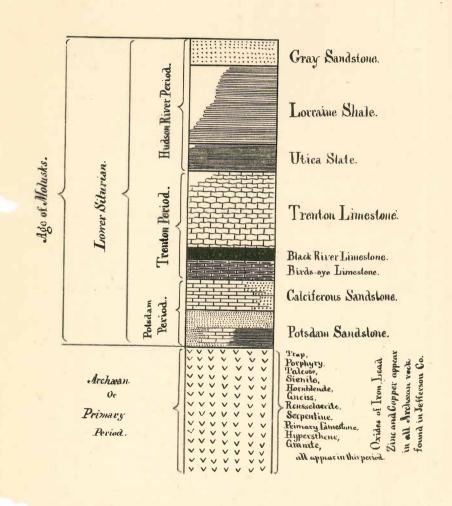
The stock and material for boot and shoe manufacture, both sole and upper leather, can be obtained directly from first hands. There are sole leather tanneries in the immediate vicinity which tan their own stock, and sell delivered at the railroad what they would find market for at home. The light stock tanneries would prefer a home trade and would market their entire tannage here if there was a sufficient demand. By such a principle of dealing the manufacturer would save annually a large amount over those manufacturers who buy in the eastern cities, paying freights, commissions and profits to dealers. Rents are cheap for buildings, suitable rooms for manufacturing purposes, and for tenements for families of operatives. The expenses of living are low and reasonable, compared with eastern cities and towns where this branch of industry is extensively conducted.

The shipping facilities here are of the best. The Rome, Watertown & Ogdensburg Railroad leaves the New York Central Railroad at Rome and Syracuse, traversing the frontier counties to Watertown and Potsdam Junction, connecting at the last named place with the Central Vermont Railroad; and to Ogdensburg, Oswego and Cape Vincent, connecting at each point with lines of steamers and propellers for Chicago, Detroit and intermediate points. The Utica & Black River Railroad leaves the New York Central at Utica, extending through Oneida, Lewis, and into Jefferson and St. Lawrence counties, with termini at Sackets Harbor on Lake Ontatio, and Clayton and Morristown on the St. Lawrence River, connecting with vessels for the West. These facilities afford reasonable rates of freight over the different lines by rail and water to all points East, West, North and South.

Under the present system of the manufacture of boots and shoes, a great part of the labor can be procured in the city among the industrious working class.

These are not all the advantages which suggest themselves to the careful observer of manufacturing interests, but are the most essential and important to our present object. Parties extensively and actively engaged in this branch of manufacture at the East, have repeatedly

Geological Section of the Strata of Jefferson County.



expressed themselves most favorably upon the location and facilities which Watertown presents for the successful manufacture of boots and shoes.

Reference is made in other portions of this book to the extent of the work already carried on in this branch of trade in this city, and also to the extent of the tanning interest in both the city and county.

ECONOMIC GEOLOGY OF JEFFERSON CO.

To the student in Geology but few sections of the State present so many points of interest as Jefferson County. Its catalogue of minerals is exceeded in number by only three or four counties, while the numerous and apparently inexhaustible beds of iron ore on its northern boundaries are among the most valuable of any in the State.

Added to this is the interesting fact, that when the Creator uttered his grand fiat: "Let the dry land appear," some portions of Jefferson County were among the first to respond. In that far away time, whose chronology must ever remain mere conjecture, the huge masses of rock which help to make up the charms of the Thousand Islands were the first to greet the smiles of their Creator. These rocks are of a gneissose character, being a mixture of quartz, hornblende and feldspar, the three elementary minerals which make up the largest part of what is known of the earth's surface.

This rock forms the surface rock of parts of Clayton and contiguous towns, underlies the greater part of Antwerp, touches Natural Bridge, and from thence extends to Carthage, where it forms the islands among the rapids of Long Falls.

Near the latter place, as also at OxBow and Antwerp, are immense masses of feldspathic granite, equaling in fineness and beauty the far famed Scotch granites, and only awaiting the introduction of proper machinery to place it in direct competition with the latter.

In the same districts are also found white and variegated marbles and beautiful specimens of verde antique and serpentine; but the 30

mineral of far more importance is the red oxide, or specular iron. Immense beds of this valuable ore are found lying between the gneiss and Potsdam sandstone of the towns of Philadelphia and Antwerp, and of a purity ranging from fifty to ninety-six per cent. These beds have been worked for the last fifty years, and may be worked with tenfold force for many years, if not centuries, to come; the ores, after being mined, finding ready market in different sections of the State.

There must come a time, and seemingly in the near future, when these ores will be worked in our own city. Our immense water power, our inexhaustible beds of limestone for purposes of flux, and the nearness of magnetic oxide and hydrous per-oxide iron ores, affording combinations suitable for the manufacture of every grade of iron and steel, are among the many items which must influence the capitalist in his future investments.

From the gneiss we ascend to the Potsdam sandstone, which is the prevailing surface rock of Alexandria, Theresa, Clayton, Orleans and Antwerp. This is an extremely hard, close grained quartzose sandstone, easily quarried, hardening with exposure, and furnishing very valuable building material. This rock is remarkable for its many divisional places, which may be cleaved at any thickness desired, varying from a single inch to two feet. Unfortunately the rock is not so evenly stratified as at Potsdam, but it is nevertheless extensively used for building purposes, as well as for lining blast furnaces and in the manufacture of glass. When calcined in kilns, crushed and sifted, the Theresa variety affords a very white and pure sand for the latter purpose, and is exclusively used in the Redwood Glass Factories.

Passing the Calciferous sandstone, which, from its want of regular fracture, and coarse rotten texture is of no use as a building material, and can only be utilized in the manufacture of water-lime, we reach the Birds-eye Limestone.

This is quite extensively utilized in all the central portions of this county for lime; as a paving and building stone has been shipped to some extent to adjoining counties. Some of the strata are over two feet thick and remarkably compact. It breaks with a conchoidal fracture and weathers to an agreeable dove color. This and the Trenton limestone are the surface rocks in the central portions of the county. It is a remarkably pure carbonate of lime and if iron

manufactories were established at this point, would be the best possible flux. It has been found by experience to be far more valuable for this than the older granular lime rocks.

Separating the Birds-eye from the Trenton we have the Black River limestone. This layer has been designated as Black marble and as the Isle La Motte marble. It is about eight feet thick, but from the quantities of flint contained in it, has been found worthless for all but the coarser purposes. As the presence of this flint may be only local, quarries near by may be ultimately discovered which may be worked into mantles and other ornamental uses. The numerous caves in and near by Watertown are located in this layer.

The Trenton limestone surpasses in extent, thickness and economical value those which immediately precede it, underlying the towns of Champion, Rutland, Watertown, Pamelia, Henderson, Ellisburgh, Adams and parts of Rodman and Hounsfield. Hough places its thickness at not less than five hundred feet. Some of its layers are rich in bitumen, while others, lying both above and below, are entirely destitute of any trace of petroleum. Professor Sterry Hunt attributes the appearance of this inflammable substance in the Trenton limestone to the transformation of vegetable and in some cases animal tissues existing in the rock from the time of their first deposition. Layers which are so charged are of little worth as building material, while some of those free from this bitumen have proved of great value, the Cathedral at Montreal being constructed of the latter.

The student in Paleontology will find the Birds-eye, Black River and Trenton limestones particularly rich in fossil remains of the lower Silurian age. Coral, crinoids, brachiopods. orthoceratites, trilobites and other forms of ancient life greet the wondering gaze at almost every step. Here blossomed in shoreless seas, those beautiful stone lilies—encrinites—growing flower-like from submarine soil, with uplifted corolla, and delicately fringed petals, an animal yet clad with a beauty which Solomon in all his glory could not transcend.

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As corals never build beyond a isocryme of 68 ° F., the conditions of climate must have been far different from what they are to-day. Then eternal summer bloomed throughout the 44th parallel, to be ultimately succeeded by a great Ice Age, when masses of congealed snow, more than six thousand feet in thickness, with the pressure of

a ton to every square inch, moved in a North-westerly direction, polishing, plowing out immense valleys, grinding and distributing the detritus that man might ultimately find in its bosom the promises of seed time and harvest.

From the inexhaustible beds of limestone, the manufacture of calcic oxide (lime) has been quite extensive, and there is no reason why this branch of industry should not be indefinitely extended. But few sections present beds of purer rock than the Birds-eye, and the lime manufactured from it is the very best quality, while some of its layers, particularly those of a drab color, are eminently suitable for the manufacture of water lime.

The Trenton terminates in a black shaly mass, running into the Utica slate, which forms the surface rock of parts of Champion, Rutland and Rodman. There are no beds or roofing slate in this mass, the layers breaking and crumbling in every direction. This rock quickly disintegrates when exposed to the atmosphere. It has never been utilized, though Professor Emmons thinks that, with proper treatment, it might be converted into alum. Its formation may be studied to fine advantage at South Rutland where canyons, from one to two hundred feet, have been cut down through it by running streams, presenting many picturesque and romantic scenes.

The Lorraine shales present some features belonging to the Utica slate. It is more compact, however, in its formation, and belongs properly to the Hudson River group. It supports a gray sandstone which only needs contiguity of market to prove very valuable. This rock is tough, close-grained, compact, weathers admirably, and possesses all the virtues of the best building material.

We append herewith the localities of some of the different minerals to be found in the county. The persevering young geologist however will find many treasures in old stone walls and in the drift of the fields.

ADAMS.—Fluor, calc tufa, barite.

ALEXANDRIA.—Fluorite, phlogopite, chalcopyrite, feldspar, tourmaline, hornblende, orthocase, celestite.

Antwerp.—Specular iron, chalcodite, spathic iron, millerite, red hematite, crystallized quartz, yellow aragonite, niccoliferous iron pyrites, calcite, heavy spar, idiocrase, phlogopite, pyroxene, sphene,

fluorite, chalcopyrite, bog iron ore, scapolite, serpentine, yellow tour, maline, steatite, apatite, graphite.

Brownville.—Celestite, calcite,

NATURAL BRIDGE (in Wilna).—Feldspar, gieseckite, steatite, hornblende, pyroxine, scapolite, sphene, tremolite wollastonite.

OMAR (in Orleans).—Beryl, feldspar, specular iron.

PHILADELPHIA.—Garnets, bog ore, specular iron.

Pamelia. -- Agaric mineral, calc tufa.

THERESA.—Fluor, calcite, specular iron, hornblende, quartz crystals, serpentine, celestite, strontianite, steatite, tourmaline, verde antique, apatite.

WATERTOWN.—Tremolite, calc tufa, calcite, wad.

THE HORTICULTURE OF JEFFERSON COUNTY.

FRUIT, SPECIALTIES, ETC.

SOILS

Nearly every kind of soil is found in Jefferson county, from the coarsest till, without fertility or organic remains, to the finely comminuted alluvium, rich with organic matter and consequent fertility. This condition of things is due to the varied sources from which our soils have been derived, and the conditions under which they have been distributed. By reference to the sketch of economic geology accompanying this publication, it will be seen that the surface of the northern, central, and southwestern portions of the county have been subjected to the modifying influence of intense glacial erosions. In some sections the original soil has been carried away and barren rocks left. In others, heavy deposits of drift, composed of coarse and fine materials variously intermingled, have been distributed over the surface.

In the northern portions of the county the soils have been mainly derived from the Laurentian rocks and have too little organic matter, but in many places make fine dairying soils, owing to the abundance of potash and lime derived from the decomposed feldspar. Some-

times there is sufficient organic matter and depth to make most durable and valuable lands; in other districts, sand prevails mainly destitute of organic matter or fertility. In the central portions the soil is derived more from the underlying limestone in situ, often intermingled with drift and a stratum of clay and sand, doubtless deposited by the waters of the lake during some of its periods of elevation. The hills are mainly covered by soils derived from the natural decay of the underlying limestone intermingled with less drift. The southern and southwestern portions of the county derive their soils principally from the underlying disintegrated slate and shale. Soils thus derived in connection with the Trenton limestone group are durable and fertile.

Notwithstanding the abundance of lime rocks in the county, analysis shows that many of our soils are deficient in lime. This is owing to the fact that so many of them came from the north during the ice periods. There is but little inferior land in the county,—this is found mainly on the sand plains of the north, and over the Birdseye limestone along a portion of the shores of Black River and the lake. They have been denuded by glaciers, and insufficient depth remains to retain a proper degree of moisture, not sufficient time having since intervened to recover the rocks by natural processes of decay. The land as a body is good, durable and fertile, even much of the rocky land being valuable for dairying, and producing rich nutritious grasses not too lush and watery as in so many districts of the west.

It will be seen by the foregoing that the horticulturist can select the variety of soil best adapted to the special crop he may desire to grow. This is a great advantage, making possible the production of a variety of useful crops.

Climate is one of the factors in horticulture which must be carefully considered. Surprising as it may seem to people at a distance who have a vague idea that the 44th parallel is too far north to do anything of the kind,—owing to the modifying influences of the lake, we grow here very successfully, a goodly number of what are usually considered tropical or semi-tropical products, such as sweet potatoes, melons, tobacco, figs, grapes, etc. This is due to the fact that we have at least three full months of steady semi-tropical heat.

It is an established principle in agriculture that the northern limit of production gives a vigor and health to plants not attainable farther south, chiefly because of the greater exemption from mildew or sporadic diseases and injurious insects. This fact enables our horticulturists to produce specialties of superior excellence, such as seeds for seedsmen which have given great and increasing satisfaction to consumers. The business is a growing one and capable of profitable extension into a leading business for large numbers of people. The detritus from the Trenton limestone and Lorraine shales furnish an admirable soil for this interest. There is every reason to believe that a seed store located in this city to work up and manage this business would be a profitable investment.

The potato attains great perfection in this county, because our climate in the growing season is somewhat similar to that in which it originated. We should supply the South with its seed for this crop, and the benefits would be interchangable, for better crops would be secured there by using seed grown in this section.

FRUITS.

We cultivate successfully here a considerable variety of choice fruits such as grapes, apples, pears, plums, cherries, strawberries, raspberries, etc. Grapes are purposely placed at the head of this list, not that it is now the most important but it undoubtedly will be in the near future, and the day is probably not distant when hundreds of acres will be devoted to this crop, within the belt of land influenced by the warm air of the lake. Certainty in securing an annual crop is of great money value. When grape vines are laid down for winter protection, they never fail to give a plentiful yield. Even European grapes (vitis vinafera) grow here with a fair degree of success,—clusters weighing three pounds having been fruited here in the open air. Two hundred miles south they would require to be grown under glass. Our natives are more healthy and rugged.

Could our fruit trees receive the same winter protection as grapes, this would be a more successful fruit region. As it is, in sheltered situations with wind breaks, good results are attained and the interest will extend with more care and attention. There are orchards here, sixty years old, still in good bearing condition; where the bodies of trees are protected by boxing they do much better. Some of the finest apples in the county, and some of the healthiest and thriftiest orchards are found within the city limits of Watertown. Pears are hardly as successful as apples, yet do finely. Plums attain great

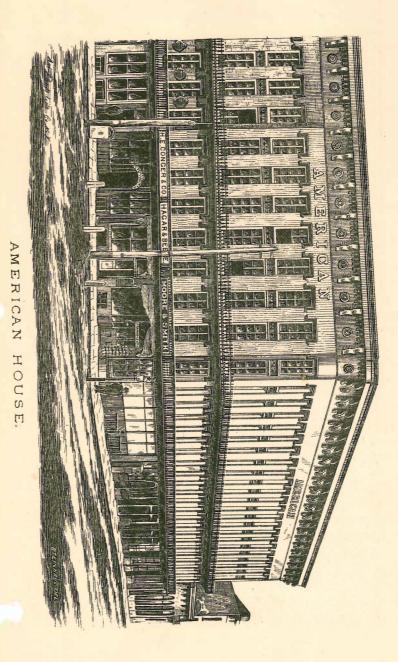
perfection and should be made a specialty. The country seems suited to them, chiefly on account of our comparative exemption from the depredations of the curculio.

Our soil and climate seem especially well adapted to making specialties of grapes and plums. In order to test the comparative excellence of these two fruits, with other sections more celebrated for their production than our own, Mr. D. S. Marvin of this city, a scientific and enthusiastic lover of this branch of industry, and who has done more than any other person to raise the standard of excellence in fruit culture in this county, exhibited in 1873 and again in 1875, in competition with other sections at the Cincinnati Exhibition, samples of these fruits grown at Watertown. They received the highest premiums on each occasion, being a high compliment, and indicating what may be done here in this direction.

Strawberries and raspberries are likewise cultivated successfully, also currants and gooseberries. They all seem to do well and to be at home in this climate. Figs have also been ripened in the open air at Watertown by Mr. Marvin for the past few years—giving them the same winter protection given to grape vines. The climate is not suited to peaches.

There is not sufficient attention paid to the growing of fruits to supply the home demand. Prices are good but the supply is inadequate. More workers are wanted in this interest. Apples sometimes bring one dollar and a half per bushel. The production of butter and cheese absorbs too much attention here to develope properly the fruit interest. The following apples are best adapted to this climate: Golden Russet, Roxbury Russet, Duchess of Oldenburgh, Tallman Sweet, Northern Spy, Ben Davis, Fameuse, 20 Ounce Pippin, Red Astrachan, Rawles' Jannet, St. Lawrence, Malinda and Wealthy. The usual garden vegetables find here a congenial climate, and are cultivated at a good profit. The needs of a general seed store for merchandise of this class, has been before alluded to. The interest could be better developed by this means.







THE TANNERIES OF JEFFERSON COUNTY.

. The tanning business of Watertown and vicinity is of an old date, extending far back among the oldest trades in existence here. The first tannery erected in Watertown on an extensive scale, was built by Jason Fairbanks in 1823, and since that date the interest has been an important one to Watertown as well as to this section of the State. Fairbanks' tan yard was upon the site now occupied by S. Pool's residence on State street. The second tannery built by this industrious and enterprising pioneer, was located near Factory Square and continued to do a large business under various managements, until destroyed by fire in 1874. Messrs. Holt and Beecher carried on the tanning business for many years on Beebee's Island near the smaller bridge. This tannery was twice destroyed by fire. In 1844 the extensive tannery now occupied and conducted by Farwell, Hall & Co., located at the lower dam, was built by Messrs. Fisk & Bates. A good business has been carried on here since that year, and much profit has followed the enterprise.

In 1837 Messrs. Milton Clark & George Burr established a tannery between Beebee's Island and Factory Square, which was devoted principally to the sheep skin and morocco line. This tannery has been in continuous operation and has proved valuable property. It is now conducted by Farwell, Hall & Co.

The present tanning business of George Parker & Son was founded in 1854 and was run for nearly twenty years by B. F. Hotchkin & Son. The tannery is located on Fairbanks street near Factory Square.

The last tannery built in Watertown was put up in 1868, upon the north side of the river on Sewall's Island, near the upper dam, by Messrs. Millington & Burt, and the tanning of hides and skins was conducted here for many years. It is now operated by Messrs. Gates & Gillett, both practical men, in wool pulling and sheep skin tanning. This tannery is of brick and is considered by the trade as a model of convenience.

The tanning interest of this county is extensive, and extends into the neighboring counties of Lewis, Oswego and St. Lawrence. We give below a record showing the tanneries in Jefferson county with

WATERTOWN, N. Y.

such facts and statistics respecting each one, as may interest inquirers in this direction.

DOMESTIC HIDES.

Farwell, Hall & Co., Watertown, in their two tanneries, tan 3,000 hides and 4,000 skins annually, rough and finished. Sales principally in northern New York, Vermont and Boston. The tanneries run to their full capacity.

George Parker & Son, Watertown, tan 500 hides and 6,000 skins annually, rough and finished, and sell principally in northern New York and Boston. The capacity of the tannery is 800 hides and 10,000 skins. The cost of bark in Watertown is \$6.50 per cord.

G. N. Crosby, Antwerp, tans 800 hides and 3,000 skins annually, sold in the rough in Boston. Capacity, 1,500 hides and 8,000 skins. Cost of bark, \$5.

Weaver & Son, Adams, tan 200 hides annually, finished as harness and upper. Runs to full capacity. Cost of bark, \$6. Sold in Boston and home markets.

J. S. Lewis, Adams, does a business of like extent.

Baldwin & Douglass, Mannsville, tan 800 hides and 4,000 skins, in rough, and sell in Boston. Capacity 1,500 hides and 15,000 skins. Cost of bark, \$6.

Tuttle & Holcomb, Carthage, tan 2,000 hides and 10,000 skins, finishing in the rough and selling in Boston and home markets. Capacity 2,000 hides, 15,000 skins. Cost of bark \$5.

V. & J. Cooper, Theresa, tan 1,000 hides and 8,000 skins, finishing in the rough and selling in Boston and home markets. Capacity 1,000 hides and 10,000 skins. Cost of bark \$5.

H. E. Farnham, Philadelphia, tans by the pound for other parties. Capacity 5,000 skins. Cost of bark \$5.

Hiram Herring, Rodman, tans 500 hides and 10,000 skins, finishing in the rough and selling in Boston. Capacity 500 hides, 15,-000 skins. Cost of bark \$5.

Gates & Gillett's tannery, Watertown has a capacity for tanning $_{1,200}$ hides and $_{10,000}$ skins annually. Cost of bark \$6.50.

FOREIGN HIDES.

C. C. Vebber, Felts Mills, Thos. E. Proctor, Natural Bridge; E. Brannan and Hoyt and Dickerman, Carthage have sole leather tan-

neries, using foreign hides, and sales are made in New York and Boston. Cost of bark \$5.

In conclusion it may be said that Watertown being a central point in the localities described offers excellent inducements as a place for the successful carrying on of the industry mentioned. The reciprocity treaty with Canada places tanners' stock, hides and skins on the free list, thereby affording the tanner a convenient and well supplied market for purchasing his necessary stock.

COTTON AND WOOLEN GOODS.

THEIR MANUFACTURE IN WATERTOWN.

Reference has already been made in this book (pages 17 and 18) to the manufacture of cotton and woolen goods in Watertown in the early days of its history. It was one of the first and most important of the industries which attracted the attention, and inspired the efforts of capitalists of that period, and was continued with much profit for a long series of years, fire alone at last causing what was hoped to be only a temporary suspension of the business.

COTTON.

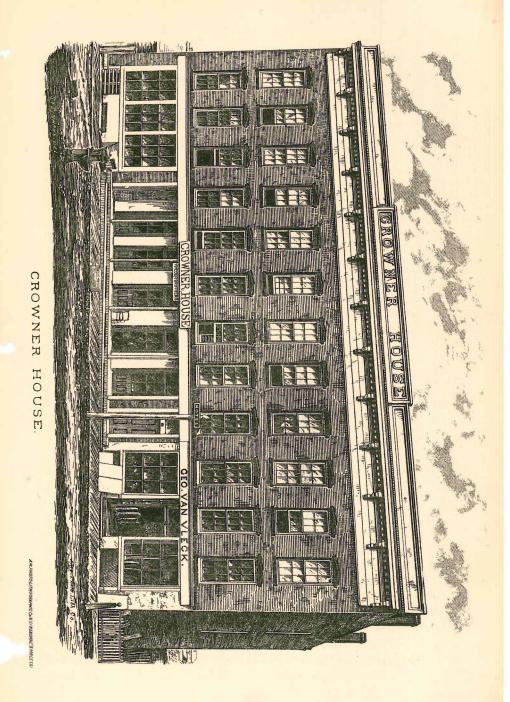
The large cotton factory erected on the river at Factory Square in 1814, by a company formed December 28, 1813 (not 1818, as the types have it on page 17), stood until April 28, 1869, a period of over half a century, when it was destroyed by fire. During this time it was never idle. Owing to the war with Great Britain which cut off importations of cotton goods, the factory, during the first years of its history enjoyed a high degree of prosperity. The building was, with the exception of the ship house at Sackets Harbor, the largest in the county. The machinery with which it was stocked was brought from Hudson N. Y. Considering the early period and the disadvantages under which every branch of trade in this section then labored, from its distance from tide water, the establishment of this

institution was justly considered a great stroke of enterprise. The first company conducted the business five years after which it was under the charge of M. W. Gilbert and John Sigourney. The war had closed and with its close there came a lively importation of cotton goods from England which made it more difficult to realize large profits on the goods manufactured here, but the administration of these two gentlemen was remarked for economy and care and the factory was considered one of the sound institutions of Watertown. In 1830, H. D. Sewall succeeded Gilbert and Sigourney, and continued the business for four years, when a new company was organized, as stated, including Thomas Baker as one of its trustees. Mr. Baker is the only living representative of that organization, and his gray hairs may be seen in our Aldermanic Council, still covering a young and clear head. This company conducted the affairs of the manufactory until 1848 in a manner which secured for its managers the good will and the esteem of the community. It was the leading interest then in this section and was regarded as a public benefit in many senses. It was a matter of congratulation among the people, that a business could be conducted so safely so economically and yet so profitably. It was afterwards a matter of sincere regret when it passed into other hands, although the operations of the mill were fairly profitable until its destruction in 1869.

During the life of the institution Factory Square was the liveliest point in the city. It may be a matter of interest to state that the bell in the factory was the first one brought into the place. It was one of the trophies captured by General Pike in 1813 at the battle of Toronto, Ont., and was formerly in use on a British man-of-war.

WOOLEN.

The last woolen factory in the city stood at the upper dam noted on the map, on the south side of the river. The business was established here and the factory built by a company organized in 1835, Mr. H. D. Sewall being the principal actor. In 1842 the company was changed, and after a few years the building was rented to Elting King & Co., who conducted it in 1859. At this time 150 hands were employed and an extensive and profitable business was carried on. May 6, 1859 the works were entirely destroyed by fire, attended by a great loss of property and some loss of life.



ADVANTAGES.

The advantages which may be considered, with a view of the revival of the manufacture of cotton in this city are briefly as follows:

r. The value and utility of the water power at this point. Nothing superior in this direction can be offered anywhere. We have already given this subject prominence on preceding pages.

2. The facility of obtaining building materials for the erection of new buildings. Lumber of the finest quality, brick, lime and stone can be obtained readily and cheaply here. No point excels Watertown in this particular, all these materials being readily obtainable in its immediate vicinity.

3. The population of the city is amply sufficient to supply operatives.

4. The transportation of raw cotton from Memphis and other cotton shipping points, to Watertown via. Chicago and the great lakes, secures to Watertown a cheaper rate of freight than can be given eastern cities. Cotton can be landed cheaper in Watertown than it can be in New York city, using the route named. This is a most important consideration and one which largely affects profits.

The same arguments may be urged in favor of the establishment here of woolen factories with the additional advantage offered by the peculiar nature of the water of the river which makes it unsurpassed for cleansing woolen goods. This is the decision of men who have been engaged in this branch of industry for many years, and who have given the subject careful thought and the chemical character of the water attentive study. The rocky bed of the river over which it flows for so many miles imbues it with cleansing properties which are unexcelled anywhere in the United States.

The same arguments which induced the first establishment of cotton and woolen manufactories in Watertown still hold good. Many of the finest points in the city offer special inducements to manufacturers in this branch, and we feel confident that attention and inquiry, and if practicable, personal observation will convince even the most critical, that the claims of our river and of our city for favor in the eyes of enterprising capitalists and manufacturers of these specialties are well founded.

There is a sentiment already prevailing in Watertown in favor of the re-establishment here of cotton and woolen manufactories. In 42

WATERTOWN, N. Y.

1875 a commodious building on the south side of the river near the upper dam, was put in order and stocked with machinery by A. D. Remington, who already conducts one of our largest paper mills, for the manufacture of cotton yarn. It was projected on a small scale, but additions have been made and more will be. The factory now employs 20 hands and turns out 800 pounds of cotton yarn per day, of excellent quality and at a fair profit.

The development of an interest in the manufacture of woolen goods is regarded by this Association as one of great importance and a special committee has been appointed to collect all information on the subject that may interest inquirers in this direction, and to take all possible means of properly presenting it to the public—answer questions and promote the object set forth. The Committee consist of Charles W. Sloat, D. Van Ostrand and John C. Streeter.

THE IRON INTERESTS OF JEFFERSON CO.

IRON ORE DEPOSITS.

Among the rare prizes awarded in the games which closed the funeral obsequies of Patroclus, Homer enumerates slender-waisted women and hoary iron.

No longer rare iron still remains one of man's most precious possessions. So widely distributed through nature it is difficult to conceive the time when its use was not, as to-day, universal, yet archæologists trace the culture of the race through two long ages in which, successively, implements of stone and bronze were used before this wonderful ductile and tenacious metal received due cognizance.

According to the estimate of Buckland, iron constitutes two per cent. of the mineral crust of the earth. All soils, all plants contain it, and it is a necessary element of the blood. It forms the coloring matter of nearly all the rocks and precious stones, the brownish-yellows, the yellow-browns, the green, brownish-green, olive-green, the red all being due to its presence.

While it is thus so universally distributed, through the wise manipulations of Nature vast and seemingly inexhaustible beds have been gathered together, subject to the industry of man.

Among the many problems which modern Geologists are attempting to solve, is the process through which these ore beds are thus segregated. Many of these beds are of great depth and cover large areas of territory. The old theory of igneous origin, of the thrusting up of immense masses of iron by volcanic action, fails to account for the present condition of rocks in which these ores are imbedded. Prof. Sterry Hunt says: "I can hardly conceive of an accumulation of iron, copper, lead or gold in the production of which animal or vegetable life has not been directly necessary."

Wherever iron is diffused in the rocks it exists chiefly in combination with oxygen, the two forming two principal compounds; the first a protoxide soluble in water containing carbonic or other soluble acids, the second a peroxide insoluble in the same liquid. When a ditch is dug in moist soil, covered with a decaying vegetation, the stagnant water which collects at the bottom soon becomes coated with a shining, iridescent scum which is a compound of the peroxide of iron. Exposed to the air it absorbs oxygen and the peroxide is formed which separates as a film on the surface of the water and finally sinks to the bottom as a reddish ochre and under different conditions becomes aggregated as a massive iron ore. A process identical in kind with this has been at work at the earth's surface ever since there were decaying organic matters, dissolving the iron from the porous rocks, clays and sands and gathering it together in beds of iron-ore or iron-ochre.*

AGE OF THE ANTWERP MINES.

These facts, indicate that in the Primordial Era a rank vegetation must have had existence, as the iron ore beds of this Era far exceed in thickness those of later ages. It is only within the last ten years that Geologists have been willing to admit of any organic life existing before the Primary or Silurian Era. The discovery by Professor Dawson of a rhizopod in the Laurentian period, together with layers of graphite, which is carbon, one of the constituents of wood or animal matter, have pushed back through immense lapses of time the dawn of life. Of course this length of time can only be guessed at. Professor Helmholtz has calculated from the rate of cooling lavas that the earth in passing from 2,000 ° to 200 ° F., must have taken three hundred and fifty millions of years. Other writers claim

^{*}Hunt's Chemical and Geological Essays,

a period four times this. Haeckel states that the Primordial Era alone occupied as much time as it has taken to build all the successive stratas of the earth.

In this light the Antwerp ore mines receive an archæological as well as an economic interest, since they are located in the Laurentian period. These mines lie beneath the Potsdam sandstone in beds of metamorphic rock of gneiss, hornblende, hypersthene and syenite. From the presence of rensselaerite, serpentine, the rounded crystals of quartz and apatite, these rocks have probably experienced more than one reformation since they were first deposited. When the remoteness of the Primordial era and the chemical powers of water charged with heat and therefore with alkalies and silica are considered, such changes are not a source of wonder.*

The specular oxides of iron—hematites—of which these beds are composed, are among the most valuable mineral deposits of the world. Mines of gold and silver have for a short time produced a greater profit, but none of these have afforded such constant and long-continued prosperity, and no other metal is so enhanced in price by the valuable qualities imparted to it by labor. A writer in Appleton's Cyclopædia tells us that a bar of iron worth \$5, when made into horse-shoes is worth \$10.50, in the form of needles \$55, in penknife blades \$3,285, in shirt buttons \$29,480, in balance springs of watches \$250,000.

THE HEMATITES.

With the exception of a few beds of limonite and of magnetic oxide, the iron mines of Jefferson county are of the red hematite order. This name is derived from the Greek word *Amatitas*, bloodstone. The color is sometimes dark steel-gray or iron-black, but even then, in very thin particles by transmitted light showing a light blood red. Besides the compact varieties it is found columnar, granular, botryoidal and stalactitic in shape. It has a metallic lustre, is opaque, fractures uneven, and is some times attractable by the magnet. The greater portion of all the iron made in the world is from hematite ores. They work easily in blast furnaces, produce a good yield, and make excellent qualities of iron whether for foundry or forge purposes. Being often deficient in the silicious matters requir-

ed to make a glassy cinder, the magnetic oxides, which have commonly more or less quartz intermixed, are advantageously employed with the hematites in the proportion of one third or one fourth of the whole charge of ore. The hematites are extracted in the form of clear coarse lumps, and in fine ore which is mixed with the associated clay and other foreign matters.*

When pure the hematites consist of iron 59, oxygen 26.3, water 14.7. An analysis of the Kearney ore bed, which is but a continuation of the Sterling in this County, made by Dr. Lewis C. Beck, resulted as follows: Peroxide of iron 96.52, silica, alumnia, &c., 3.48.

From a communication kindly furnished us by Mr. D. Minthorn, of this city, we copy the following interesting statement:—"The outcropping of iron ore nearest Watertown is the well known Shurtliff mines in the town of Philadelphia, now extensively worked by Mr. Gere of Geddes, and Mr. Mills of Carthage, both running hot blast furnaces. This mine is situated on the Utica and Black River Rail Road.

"From the peculiar formation of contiguous ore beds, we evidently have three extensive ranges of specular ore, or red oxide deposits. The more northerly range begins at the Shurtliff mines, outcropping on the Wicks farm, continuing in a north easterly direction, is seen at Wegatchie, comes out boldly at Little Bow Corners, and extends to the vicinity of Cooper's Falls. The middle lobe includes the Dixon, Sterling, Keene's, Caledonia, Parish and Kearney, and extends to the north east to the town of Canton; while the southerly ranges in the same direction from Little York in Fowler to the Grasse River.

"A few miles south east of this range commences the vast deposits of black oxide or magnetic iron ore, taking in both the northern and southern slopes of the wilderness known as John Brown's Tract. From the summit level near Cranberry Lake it appears in high hills and mountains, and about half way down the northern slope. It has the same appearence at Clifton, rising above the valley some one hundred and fifty feet, presenting an out-crop of about eighty by two hundred yards.

"An analysis of this ore by Dr. Torrey gave 67 per centum of metallic iron. Another analysis from ten different openings gave an

^{*}Dana's Manual, p. 156.

^{*}Appleton's Cyclopædia,

average of 53 per cent. The red oxide or specular ore yields an average fully equalling the above analysis. The theories of science and the facts of practical experience have determined that the best iron is made by mixing magnetic with specular ores. Most of the red oxides are now shipped to distant furnaces for the above purpose, it having been discovered that at a red heat the one gains what the other loses in magnetism.

"While the Lake Champlain and the Lake Superior ores have been interchanged from Cleveland, Ohio, to Boston, Mass., forming a large item in our commercial statistics of iron, here nature has placed, in inexhaustible quantities, and but few miles apart, not alone the different ores whose mixture produces the finest irons, but immense beds of the best alkaline fluxes known. A third factor, entering into the manufacture of iron, is fuel. The high price of labor precludes the use of charcoal, but in the immediate region of these ore beds are vast fields of peat. Up to the present time this resource has been entirely overlooked. Successfully and economically used to manufacture iron in France, Belgium and Wales, no notice of its value or investigation of its merits for this purpose, seems to have been put to practical test by the capitalists of this country. A charcoal from peat can be produced for nearly one half the cost of wood charcoal, and if made in connection with a blast furnace, all the bituminous matter can be used in roasting the ore, which would cause a still further reduction in the price of the charcoal."

EARLY MINING.

As early as 1812 specular iron ore had been wrought in Rossie, but it was not until 1836 that the Sterling mine, three miles north of Antwerp village was discovered. This mine is pronounced by Dr. Beck, in the Mineralogy of the State, as being the most valuable of any in New York. It is however but one of a series of mines, deposited in the same Geological era and contiguous to each other. This series commences in St. Lawrence county with the Caledonia which has been worked about sixty years. Passing into Jefferson county we have the Keene, Sterling and Dixon, which have been worked with more or less activity for fifty-five, forty and thirty years, in the respective order they are named. Though all these mines are in the same range, they are not seemingly connected by veins, but lie in immense and inexhaustible pockets. The ores of

these beds are principally of the compact variety, sometimes in crystalline plates with a high metallic lustre. Dodechahedral crystals of quartz abound in the ore, and in the sandstone which accompanies it. The rare cocoxenite in radiated tufts of yellow and brownish yellow color is frequently found in crevices of the ore, and carbonate of iron, in well defined crystals abounds. Beautiful capillary crystals of the sulphuret of nickel, in connection with spathic iron also occur.

THE KEENE MINES.

Notwithstanding frequent application to parties who were supposed to possess the information sought, we have been unable to obtain statistics regarding the annual amount of ores raised from the different mines. Through the courtesy of Col. Hiram B. Keene of Keene's Station, and Mr. Charles R. Westbrook, Superintendent of the Keene ore bed, we present the amount of ore, in tons, sold during the last five years:—1872, 42,000—1873, 40,000—1874, 24,000—1875, 18,000. In 1875 one hundred and twenty men were employed in the Keene alone. The present year the force is not so heavy. The above figures are in no way an indication of the capabilities of this mine, but simply show the condition of the markets. The Keene has all the appliances for exceeding in tons the amount raised in its busiest years, and only waits for better days to dawn upon the iron interests of the country.

So far the Keene has been excavated to the depth of about one hundred and twenty feet. Its ores yield from fifty to fifty-five per cent. of metallic iron, and are shipped to Hudson River, Buffalo, Rochester and Cleveland.

THE STERLING AND DIXON.

Of these mines our information is simply conjectural, though from the number of men employed, the yield during 1875 was very much less than that of the Keene. As these mines are contiguous and, in chemical analysis, identical with the Keene, the same truths apply to them as to the former. The enlarged demand for ore will bring them into increased activity. Of the

SHURTLIFF, WICKS AND FULLER MINES,

which constitute one series of deposits, the former alone is worked. The bed at present is controlled by the Geddes Iron Company of which A. J. Belden, of Geddes, N. Y., is President. The ores

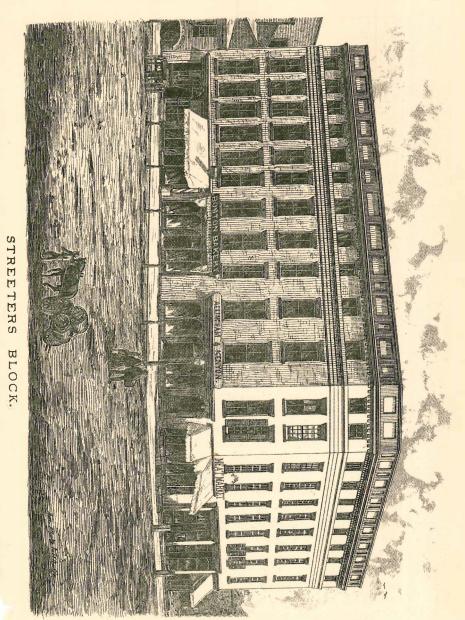
mined are shipped to this point, and also to supply the furnace at Carthage. This furnace has just closed a successful run of over five months in which about 15,000 tons of iron were made. When in full running order ten tons per day can be turned out at this furnace.

BOG ORES OR LIMONITES.

The limonites occur in secondary and more recent deposits, and are now in course of modern formation throughout our low marshy lands. They are in all cases the result of alteration in other ores through exposure to moisture, air, and carbonic or organic acids, and are borne by streams from hills and elevated places into low damp grounds or swamps. In compact forms the bog ores occur in stalactites as well as in tube rose and other concretionary forms, frequently making beds in the rocks which contain the minerals that have been altered into them.

In moist places where a sluggish streamlet flows into a marsh or pool, a rust-yellow or brownish-yellow deposit often covers the bottom, and an iridescent film the surface of the water. The deposit is a growing bed of marsh ore. The iron is transported in solution as a protoxid carbonate in carbonated waters, a sulphate, or as a salt of an organic acid. Lumps of it weighing five hundred pounds have sometimes been found, but it usually occurs in small irregular shaped pieces, or in the form of shot.* In deposits among vegetable refuse the oxide of iron takes the place of wood fibres, retaining in its more solid material the exact form of the branches of trees, of the small twigs, and even of the leaves with their delicate reticulations. Sometimes when a mine has been exhausted, by filling the space with loose earth, leaves and bushes, a new bed has been formed in from seven to ten years.

As some difference of opinion among Geologists is held regarding the origin of these beds, we extract the following from the eleventh edition of Lyell's Principals of Geology:—"At the bottom of the peat-mosses there is sometimes found a cake, or 'pan,' as it is termed, of oxide of iron, and the frequency of bog iron ore is familiar to the mineralogist. The oak, which is often dyed black in peat, owes its color to the same metal. From what source the iron is derived has often been a subject of discussion, until the discoveries of Ehrenbergh seem at length to have removed the difficulty. He



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^{*}Dana's Mineralogy.

had observed, in the marshes about Berlin, a substance of a deep ochre yellow passing into red, which covered the bottom of ditches, and which, where it had become dry after the evaporation of the water, appeared exactly like oxide of iron. But under the microscope it was found to consist of slender articulated threads or plates, partly silicious and partly ferruginous, of a plant of simple structure, *Gallionella ferruginea* of the family called Diatomaceae. There can be little doubt, therefore that the beg iron ore consists of an aggregate of millions of these organic bodies invisible to the naked eye."

The beds of bog ore in this county are of secondary importance compared with those of the red oxide. Near OxBow, in the town of Antwerp, as also near Carthage, in the town of Wilna, they are found; and, mixed with the red hematites, in former years have been somewhat worked.

During the year 1873, the R. W. & O. Railroad shipped 81,509 net tons of iron ore, produced by the various mines on the line of this road.



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RAILWAY ENTERPRISES AND ADVANTAGES.

The admirable railroad facilities possessed by Watertown, are the outgrowth of a spirit of enterprise which began early to manifest itself, and which permitted no cessation of earnest work and endeavor until the ultimate objects were accomplished. The first railroad in the country, (from Albany to Schenectady), was hardly in full operation, before the people of Jefferson county caught the inspiration, and the project of securing an easier and more speedy access to tide water markets was most earnestly discussed.

THE FIRST RAILROAD.

April 17, 1832, the Legislature passed an act incorporating the Watertown and Rome Railroad, authorizing the construction of a railroad from Rome to Watertown, and thence to the river St. Lawrence or Lake Ontario, or both, with a capital of \$1,000,000. The commissioners named in the first act for Jefferson county were Henry H. Coffeen, Edmund Kirby, Orville Hungerford and William Smith. No active work was done under this act, and it was revived May 10, 1836. George C. Sherman was added to the commission, but again nothing definite was accomplished. May 6, 1837, the act was revived and amended, and Clarke Rice was added to the list of commissioners. May 17, 1845 the act was extended and \$25,000 were required to be expended within two years, and the road to be finished in four years. On the 28th of April, 1847, the former time was extended one, and the latter two years. The capital was increased to \$1,500,000.

During this time meetings were held at many points along the proposed line of the road, and the public generally aroused to the importance of its construction. A sufficient sum having been subscribed to save the charter, a meeting of the stockholders was held at the Court House in Watertown March 21, 1848, and the following resolution, among others, was adopted:

"Resolved, That the directors proceed without delay to the speedy construction of the road * * * from Rome to Cape Vin-

April 24, 1848, Isaac W. Crane of Troy was employed to re-survey the route. The summit was found to be only 190 feet above Rome—the estimated cost of superstruction was \$6,042.40 per mile, and the total of grading, bridging and fencing, \$442,940.62; and the entire cost of the road including engines, cars, depots, land damages etc., was estimated at \$1,250,620. More credit is due the original movers in this work than they ever received, for the untiring energy displayed against all opposition in carrying the project to a successful issue.

In November 1848, actual work was begun upon the road at Rome, and on Sept. 5, 1851, at 11 o'clock p. m., the first engine reached Watertown amid the cheers and exultations of the multitude which had assembled to witness the advent in their midst of the mighty agent which was destined to revolutionize, in so great a degree, the future interests of the village and section. On the 24th of the same month, the completion of the road was formally celebrated at Watertown by appropriate festivities, which evinced the joy and cordiality with which the citizens of the county welcomed the coming of the iron horse, and the full realization of this long delayed and long desired improvement.

EXTENSIONS AND CONSOLIDATIONS.

In April, 1852, the railroad was completed from Watertown to Cape Vincent, twenty-five miles distant. The total length of the completed line was 971/2 miles, and its total cost \$1,957.992. The road was constructed by Phelps, Barnes and Mattoon of Springfield, Mass.

On the 8th of January, 1852, a company was organized to construct a railroad from Watertown to North Potsdam (Potsdam Junction) a point on the (now) Vermont Central Railroad, extending east from Ogdensburg to Rouses Point. This road, 76 miles in length, was completed in 1854 and until 1860 was known as the Potsdam and Watertown railroad. In the latter year it came into the permanent possession of the Watertown and Rome Railroad Co. The latter company laid a track from DeKalb Junction, a point on the P. & W. R. R., to Ogdensburg, 19 miles distant in 1861-2, and the name of the consolidated road was soon afterward changed, by act of Legislature, to the Rome, Watertown and Ogdensburg Rail-

In 1866, the Oswego and Rome Railroad, extending from Oswego eastward 29 miles to Richland, a point on the R. W. & . R. R., was completed and leased at once to the last named road.

The Syracuse Northern Railroad, extending north from Syracuse 45 miles to Sandy Creek Junction, a point on the R. W. & O. R. R., was completed in 1870, and in 1875 was consolidated with the main line and is now under its control.

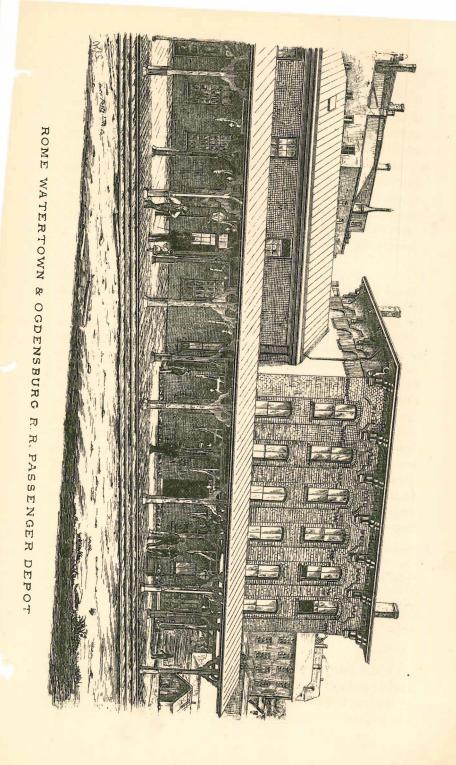
The Lake Ontario Shore Railroad extending west from Oswego to Charlotte (Rochester's port of entry) and now (1876) rapidly approaching completion to its western terminus at Lewiston on the Niagara river (150 miles) was merged into the R. W. & O. R. R. in January 1875, and is now controlled and operated by it.

THE R. W. & O. R. R.

It will thus be seen that the Rome, Watertown and Ogdensburg Railroad Co. has now under its control and operates 417 miles of railroad, the combination constituting one of the three most important lines of travel and traffic in the State and one of great value to the people of the northern and western counties. It taps the great mining regions of this section, which it has aided very materially in developing; traverses one of the finest agricultural portions of the State, accommodates extensive lumber districts, draws largely from Canada on the north, and reaches into the coal regions of Pennsylvania. The country through which it passes is thickly settled and prosperous. It serves directly the cities of Watertown, Rome, Ogdensburg, Syracuse and Oswego, and a score of thriving villages along its whole line. Since its beginning it has paid in dividends \$2, 829,304.55, the first being paid in 1852. The capital stock of the company is \$3,147,500. The annual report made to the State Engineer for 1875 gives the tonnage during the year as follows:

- Tould of the toront	the year as follows:
Vegetable food.	77,734 tons.
Manufacturers 110ducts	74,040 "
Manufacturers Mechandise Other Articles	
	115,392 "
Of this total there were	

Of this total there were 45,989 tons of lumber, 7,608 tons of cheese, and 4,169 tons of butter. In 1873 there were 81,509 tons of iron ore transported. The number of passengers carried in 1875 was 564,200.



This excellent showing is in the face of a general depression in trade of all kinds which prevailed in that year. Previous and future figures will show a still better condition of its business. The company builds its own cars, and the road is one of the most perfectly equipped in the country, both as to its facility for handling freight, and the superior quality of passenger cars, giving to the travelling public benefits and luxuries not found elsewhere. It maintains a line of sleeping cars to New York at all times, and the finest drawing room cars are put on the line during the summer season.

The road is of immense advantage to Watertown, and the Company keeps the interests of the city well protected so far as in its power. It is especially zealous in its favor to the manufacturing interests of this section and displays a liberal spirit in its action.

PLEASURE TRAVEL.

During the summer season the road maintains a line of steamers from Cape Vincent down the River St. Lawrence, among the Thousand Islands to Clayton, Fisher's Landing, and Alexandria Bay. The summer travel in this direction is becoming extensive and these points are popular summer resorts.

OFFICERS.

The First Superintendent was Orville Hungerford who died before the completion of the road. Mr. H. was also the first President. Following him as Superintendents were Robert Doxtater, Job Collamer, Carlos Dutton, Addison Day, Charles C. Case and J. W. Moak, the present officer. He is one of the most thorough railroad men in the country, and his administration since 1869 has given perfect satisfaction to all interested—company, employees and people. His popularity as a railroad Superintendent is well known. Hon. Wm. C. Pierrepont one of the original workers for the project was President of the road after Mr. Hungerford's death until 1871 when he withdrew and Marcellus Massey of New York, formerly an enterprising citizen of Watertown, was chosen. His ability and efficiency are plainly discernible in his excellent management of the road and its extended combinations.

Other officers are as follows:—T. H. Camp, Vice-President; J. A. Lawyer, Treasurer; H. T. Frary, General Ticket Agent; E. M. Moore, Assistant Superintendent and General Freight Agent, all of Watertown. The directors are Marcellus Massey, Moses Taylor,

Samuel Sloan, C. Zabriskie, Wm. E. Dodge, John T. Denny, all of New York, G. Colby, J. S. Farlow, of Boston, T. H. Camp, Watertown, S. D. Hungerford, Adams, Wm. C. Pierrepont, Pierrepont Manor, Wm. M. White, Canaseraga, Theo. Irwin, Oswego. The general offices are located at Watertown, where the road also has extensive workshops, giving employment to over 100 men. The road gives employment, on its whole line, to about 1,200 men.

The excellent management of the road is displayed in the fact that there never has been a fatal accident upon the line through any carelessness of officers or employees.

The equipment of the road consists of 55 locomotives, 50 passenger coaches, 24 baggage and express, 1,195 freight cars of all kinds.

CONNECTIONS.

The Rome Watertown and Ogdensburg Railroad, as now operated, with all its combinations, offers advantages and facilities for shippers which are unsurpassed. It reaches the New York Central Railroad at two important points, Rome and Syracuse. At the former city extensive docks have been constructed on the Erie Canal. It has two termini on the St. Lawrence river, Cape Vincent and Ogdensburg, at both of which points it owns superior and well arranged docks and has close ferry connections with Kingston and Prescott. The former is the southern terminus of the Kingston and Pembroke railroad, which, when completed, will bring from one of the finest lumber regions of the continent the production of that section. Prescott is the southern terminus of the St. Lawrence and Ottawa R. R. from which vast quantities of freight are received. It touches three important points on Lake Ontario, viz:-The city of Oswego, noted for its flourishing grain trade, Charlotte, near Rochester, and Lewiston on the Niagara river. At Oswego the road owns valuable dock privileges. Here is also a bridge across the Oswego river, completed April 6, 1876. The completion of this bridge with the opening of the road to Suspension Bridge, June 12, 1876, and the completion of the few remaining miles of the Portland and Ogdensburg railroad, will open a direct line from Portland to San Francisco, accommodating with immense advantages a large and productive territory in the northern part of the Union heretofore unsupplied and not wholly developed. The future of this section glows with brilliant prospects in view of all these considerations, and Watertown must reap her share of the benefits to be received.

THE UTICA & BLACK RIVER R. R.

The opening of this road to Watertown in 1873, gave the city an additional outlet to the east, which added the advantage of competition to our already extensive railroad facilities. The original company was formed in 1853, with a capital of \$1,000,000, and the construction of the road began in June, 1853, at Utica. It was completed to Boonville, Oneida county, 35 miles, in 1855. The original plan was to construct a railroad to Clayton, Morristown and Ogdensburg, on the St. Lawrence river, but this was not immediately carried out. In 1868 the line was completed and put in operation from Boonville to Lowville, Lewis county, 24 miles. In 1872 the line was extended to Carthage, 16 miles.

While the last division was being constructed, a company was organized at Watertown, under the title of the Carthage, Watertown and Sackets Harbor Railroad, and a road constructed in 1872 from Watertown to Carthage, 18 miles, which was completed about the time the U. & B. R. R. Co. completed its track to the same point. Upon the completion of the road from Watertown to Carthage, it was leased to the U. & B. R. R. Co. In 1873 the latter road extended its track to Clayton (34 miles from Carthage) and in 1874 the C. W. & S. H. R. R. Co. completed a road from Watertown to Sackets Harbor, 12 miles, which was in the same year leased to the main line. In 1875 a track was laid from Theresa Junction (between Carthage and Clayton) to Morristown, 31 miles, opposite Brockville, Cntario. The total length of the road, including its branches, is 169 miles. It passes near the Shurtliff iron ore bed, and through a thickly settled and prosperous section. In 1875 its tonnage was as follows.

Products of Forest	14,802 Tons.
Animals	9,533 "
Vegetable Food	
Other agricultural products	
Manufactures	
Merchandise	
Other articles	

This showing compares very favorably with results of former years, although lessened by the general depression felt in trade everywhere. The number of passengers carried in 1875 was 245.847.

OFFICERS.

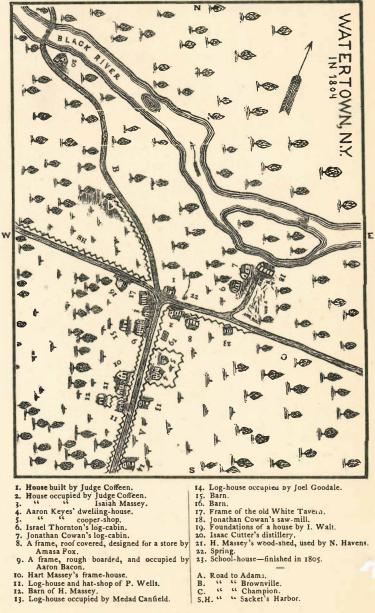
The management of the road is economical and safe, and good dividends are regularly paid. The present officers of the road are as follows: - Dewitt C. West, of Lowville, President; John Thorn, Vice-President; Isaac Maynard, Treasurer; W. E. Hopkins, Secretary; I. F. Maynard, General Superintendent; Theodore Butterfield, General Ticket Agent; Charles Hackett, General Freight Agent. The offices of the company are located at Utica, Mr. West, its President, is one of the most stiring and energetic men connected with it, and his administration is satisfactory to all concerned. Mr. Maynard, although the youngest railroad Superintendent in the country, displays qualities which eminently fit him for the position and make him popular wherever known. The directors of the road are as follows:- James Sayre, T. S. Faxton, E. A. Graham, I. Maynard, R. Wheeler, John Thorn, William J. Bacon, L. Lawrence, A. J. Williams, A. G. Brower, all of Utica, D. C. West, Lowville, D. B. Goodwin, Waterville, and R. L. Kennedy, New York.

ITS CONNECTIONS.

At Utica it connects with the New York Central railroad, the Midland railroad, Utica, Clinton and Binghamton railroad, and the Delaware, Lackawanna and Western, giving direct communication with the coal fields of Pennsylvania. Its two termini on the St. Lawrence river, Clayton and Morristown, give it facilities for accommodating a large Canadian trade from Gananoque and Brockville. These points are located on the Grand Trunk railway of Canada, and Brockville is the terminus of the Brockville and Ottawa Railroad and also of the Rideau Canal, both extending through extensive lumber districts. At Sackets Harbor, on Lake Ontario, the road possesses advantages for the transhipment of grain and lumber from the west. At all the northern termini it has excellent shipping advantages. At Carthage the Black River Canal ends, extending thither from Utica.

Map of Watertown in 1804.

Engraved from the original Map, drawn by Dyer Huntington, and now owned by E. S. Massey, Esq., of Watertown.



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WATERTOWN, N. Y.

ITS APPEARANCE IN 1804—THE VILLAGE GOVERNMENT—FIRE AND PLUCK—WATERTOWN IN 1876; AS A CITY—ITS PAST AND PRESENT CITY GOVERNMENT—POPULATION—ITS GENERAL APPEARANCE AND CHARACTERISTICS—WHAT INDUSTRY HAS DONE—ITS PUBLIC BUILDINGS—PUBLIC SCHOOLS—WATER WORKS—FIRE DEPARTMENT—BANKING INSTITUTIONS—INSURANCE COMPANIES—CHURCHES—HOTELS—NEWSPAPERS CIVIC SOCIETIES—HEALTHFULNESS—CAVES—CEMETERIES—MANUFACTORIES, &C.,—WHAT OTHERS SAY OF US.

THE ILLUSTRATIONS.

If the excellent illustrations contained in this pamphlet did not in a great degree speak for themselves, we should call particular attention to them. While they do not represent all, they illustrate most of the finest buildings and manufactories of our city, and give to a stranger an excellent but not a perfect idea of the value and extent of our architectural attractions. The expense attending the production of the engravings and illustrations has been in a great measure borne by the owners of the buildings represented. The remainder have been furnished by the Association.

The larger portion of the illustrative work shown herein, is repreresented by "Osborne's process" of photo-lithographing, furnished by the American Photo-Lithographic Co., of New York, a company which we cordially commend to the public, not only for the superior character of its work, but because it is fair and reasonable in its charges, courteous in its treatment, and obliging and patient with its patrons.

Most of the photographic views from which the illustrations were drawn, have been furnished by Charles S. Hart of Watertown, whose artistic work is unsurpassed for excellence and finish. He and his assistants have aided very materially in rendering this portion of the pamphlet presentable and attractive.

Most of the maps and illustrations of buildings presented are alluded to and described in other portions of this work, as well as the views of Watertown in 1804 and in 1873.

FRONTISPIECE.

The illustration on the second page presents Black River Falls and Suspension Bridge, representing one of the liveliest points on our busy river. These falls extend from Beebee's Island to the north shore of the river, over one hundred feet, and are, in their full glory over forty feet in height. For several rods along the north shore extends a powerful flume, furnishing an abundance of water power to the several manufactories situated at that point.

The suspension bridge is 120 feet long, 20 feet wide, and is one of the finest structures of the kind in Northern New York. It is strong and durable in every respect and has sustained without injury every pressure that has been brought to bear upon it. The first bridge erected at this point was erected in 1836 by Philo C. Moulton. It was a wooden structure and was rebuilt in 1853.

WATERTOWN IN 1304.

We give elsewhere, an illustration showing Watertown as it was in 1804 with a corresponding chart naming each structure which then comprised the little hamlet. There is probably no person living who remembers the spot as it then existed, and but for the chart which was drawn in 1804, all historic trace would have been removed. The picture can best be appreciated by comparing it with the representation of Watertown in 1873, given on another page. The lesson which it teaches of change, improvement, and progress is important, if we look to the future, and estimate the progress of the next half century by the past.

The mill shown, located near Beebee's Island is put down as "Cowan's saw mill." Mr. Hough in his history alludes to it as a "grist mill." The map was doubtless correct.

THE VILLAGE GOVERNMENT.

Watertown became an incorporated village April 5, 1816. The act of incorporation provided for the election of five trustees, one for each ward, in whom was vested the usual powers of similar corporations. These extended to the formation of a fire department, the construction of water works, regulation of streets, &c. On the first Monday in May of the same year, the first village election was held, at which Timothy Burr was chosen President. March 22,

1832, the village trustees were empowered by an act of the Legislature to borrow not to exceed \$2,000, to improve the fire department. An act was passed April 16, 1835, authorizing the erection of a market. April 16, 1852, the boundaries of the village were extended and two wards added, making seven in all. The officers consisted of President, three Assessors, Clerk, Treasurer, Collector and two police constables. Elections were held on the first Monday in March.

Following is a list of Presidents during the existence of the village: 1816, Timothy Burr; 1817, Isaac Lee; 1818, Orren Stone; 1819, William Smith; 1820, Egbert Ten Eyek; 1821, Olney Pearce; 1822, David W. Bucklin; 1823-4, Orville Hungerford; 1825-6, Olney Pearce; 1827-31, Norris M. Woodruff; 1832, Jason Fairbanks; 1833-5, O. Hungerford; 1836, Jason Fairbanks; 1837-8, Dyer Huntington; 1839, David D. Otis; 1840, George C. Sherman, 1841, William Wood; 1842-3, William H. Robinson; 1844, Benjamin Cory; 1845, D. Huntington; 1846, Orville Brainard; 1847; Stephen Boon; 1848, Peter S. Howk; 1849-50, D. D. Otis; 1851, Joshua Moore; 1852, K. Hannahs; 1853-4, Joseph Mullin; 1855, Randolph Barnes; 1856-58, Henry H. Babcock; 1859, Ambrose W. Clark; 1860-3, Henry H. Babcock; 1864-5, John M. Carpenter; 1866, George A. Bagley; 1867, Wilbur F. Porter; 1868, Lysander H. Brown; 1869, Edmund B. Wynn.

FIRE AND PLUCK.

Like all cities, Watertown has shared her portion of devastation by fire in years past. Since the completion of her powerful water works in 1853, however, and their enlargement in 1873, the fire fiend has slumbered in comparative quiet beyond the ordinary demands of careless people, and she has not been purified by its stern demands. Hardly a fire has been allowed to extend itself beyond the building in which it originated.

The most disastrous fire which ever visited the place was May 13, 1849, which swept over a considerable section of the business portion of the village, destroying an immense amount of property. The American hotel, Paddock's Building, Iron Block and all the buildings on both sides of Court street, for nearly an eighth of a mile were swept away, including three printing offices, thirty extensive stores, three banks, post office, the Episcopal Church, and many dwelling houses.

In less enterprising towns this disaster would have been fatal to progress and prosperity. But with Watertown, her energies sprang forth anew as soon as the blow was struck, and it was a signal for greater effort and further improvement. Some of the finest business blocks in the State now adorn the once devastated district.

Mr. Hough's comments in his history of 1854, were as follows:—
"This was by far the most disastrous fire that ever occurred in the
county, and nothing more fully proves the enterprise of the place,
than the quickness with which it recovered from the disaster. While
the flames were still raging, preparations for re-building were made,
by purchasing materials, and laborers were seen pulling the bricks
still hot, from the smouldering ruins, and laying the foundations of
new and larger buildings on the site of those destroyed. The sites
of the burned buildings were in many instances sold for a greater
sum than the same with the buildings on them would have previously brought. During the ensuing summer the village exhibited
an industry among masons and carpenters which had never been
equalled, and the external appearance of the village has been greatly
improved. The place recovered with an elastic energy characteristic of a progressive age and people."

AS A CITY.

With a population of about 9,000 the village aspired to become a city. Its aspirations were realized May 8, 1869, when a city charter was obtained. On the 15th of June, of the same year, the first city government assumed control of the new made municipality. This government is vested in a Mayor, and two Aldermen from each of the four wards of the city. The Mayor, and one Alderman from each ward, are chosen on the third Tuesday of December of each year. Following is a list of its city officers to the present date:

MAYOR—1869-70-71, G. W. Flower; 1872, Gilderoy Lord; 1873-4, W. F. Porter; 1875, Bradley Winslow; 1876, Levi H. Brown.

RECORDER-1869 to 1876, Laban H. Ainsworth.

CITY CLERK—1869-70, Edward M. Gates; 1871, A. D. Seaver. TREASURER—1869-70, Louis C. Greenleaf; 1871, J. A. Quencer. CHAMBERLAIN*—1872, George Smith; 1873-4-5, Byron D. Adsit; 1876, Charles A. Settle.

^{*}The office of Chamberlain has, since 1872, combined the offices of Clerk and Treasurer.



BIRDE ETE TENOWATERNOWN SET TORE TOUR



Levi H. Brown Mayor of Watertown 1876.

Gen. Biadley Winslew Mayor of Watertown and President of The Watertown Manufacturer's Hid Association!

1875

STREET COMMISSIONER—1869-70, Jacob Hermes; 1871-2, Stephen Clark; 1873-4, J. Quencer, Jr.; 1875, Joseph Miser; 1876, Egbert T. Butterfield.

OVERSEER OF POOR—1869-70-71, Clark Wetherby; 1872-3-4-5, Solon B. Hart; 1876, Daniel McCormick.

JUSTICE OF PEACE—1869-70-71-72-75-76, Lysander H. Brown; 1873-74, Thomas Baker.

WATERTOWN CITY GOVERNMENT, 1876.

Mayor, Levi H. Brown; Chamberlain, Charles A. Settle; Recorder, Laban H. Ainsworth; Justice of the Peace, Lysander H. Brown; Street Commissioner, Egbert T. Butterfield; Overseer of Poor, Daniel McCormick; Assessors, Henry P. Cooke, Solomon O. Gale, Charles W. Acker, Nelson Burdick; Aldermen—First Ward—Walter S. Lamb, Nathan Whiting; Second Ward, Gilbert Bradford, George Smith; Third Ward, Thomas Baker, Timothy A. Smith; Fourth Ward, Soranus H. Tripp, Robert B. Richardson; Policemen—Chief—Miles Guest, William McCutchin, Thomas Millington, Charles G. Champlin.

PERSONAL MENTION.

GENERAL WINSLOW.

In connection with the current history of our city government and its more recent officers, we present an excellent portrait of General Bradley Winslow, Mayor of the city in 1875, and President of the Manufacturer's Aid Association since its organization. We may add that General Winslow's administration of the city's affairs in 1875 was one of the most prudent and economical which the city has ever enjoyed. He taught the people in the ways of reform and retired with the thanks of all classes of citizens, and their regrets that he would not consent to serve them longer. It was through his advice and personal efforts that this Association was formed "to make an effort to develope and aid the manufacturing interests of arcity." His interest in its work, and in the realization of its objects, has been sincere and unselfish, and entitles him to the cordial thanks of our people.

MAYOR BROWN.

We also present a faithful portrait of Levi H. Brown Esq., the "centennial" and present Mayor of our city. He was elected in

December 1875, and his aim and effort seem to be to give our citizens an administration which in practical economy shall meet their hearty approval. In this respect he seems to be carrying out the wishes of the whole people, and winning their good opinions by his efforts to do what is best for the interests of our city.

POPULATION.

In 1800 there were 119 voters, and in 1801, 134 voters in what was then the town of Watertown, according to the first official "count" ever made of the voting population of the then "far west Black River country." The census returns of 1807, the first formal figures obtained, gave the number of legal voters with property qualifications only. The following table will give an idea of the steady growth of the village and city:

1800	119 1840 5,0	27
1801		
1807	231 1850 7,2	105
1810	1.841 1855 7,5	57
1814	2,458 1860 7,5	567
1820	2,766 1865 8,1	94
1825 3	3,425 1870*	336
1830 4	4,768 1875	41
1835 4		

WATERTOWN IN 1876.

The illustration shown elsewhere "Bird's-eye view of Watertown in 1873," will give the reader a very clear idea of the location, general beauty and surroundings of our city as it exists to-day. The winding course of Black River appears in the foreground, showing the location of many of the manufactories which line its banks, demonstrating the existence of a large amount of activity, and proving also that there is plenty of room for many more institutions of similar strength and importance. The railroad lines entering the city are represented—the Rome, Watertown and Ogdensburg on the lower left hand corner, coming from Ogdensburg, winding through the city and bearing away south towards Rome—the Cape Vincent Branch appearing on the left. The Utica & Black River road enters the city from Utica, on the left, passes through the city and bears off at the upper right hand to Sackets Harbor. The pas-

senger and freight depots of both these railroad lines are located near the centre of the city. Public Square appears prominently near the heart of the town, surrounded by many of our best public buildings which are illustrated and described elsewhere. Suspension bridge is shown on Mill street, north of Beebee's Island and clusters of busy manufactories, machine shops and factories of various kinds are located in this vicinity. On the extreme left and right are situated three of the paper mills of the city—the fourth being near Mill street and Beebee's Island. The large wagon manufactory, foundry, tanneries, &c., are located at the left, an extensive tannery also appearing on the right. Most of the flouring mills are situated near the centre of the city, on Mill street.

Reference to this illustration, in connection with the map defining the streets, presented opposite page twenty-four, will enable the reader to fix the location of the various public buildings and manufactories described in the following pages.

GENERAL APPEARANCE AND CHARACTERISTICS.

Watertown as it is, is a thrifty, enterprising and prosperous city, the county seat of a prosperous county, the leading city of Northern New York, a source of pride to her citizens, and a monument of what energy and industry have done for her. Situated in the centre of a fertile and productive region, in the Black River Valley and upon the banks of Black River itself, she possesses important commercial advantages, given her by nature, unexcelled anywhere. Her people have made diligent use of these, not only enriching themselves thereby, but increasing her strength, adding to her influence, and multiplying her attractions. Peopled by an industrious population many of whom have grown up with her growth and strengthened with her strength, her progress and development bear evidences ot an industry and a progressive spirit which have made fertile fields of her forests, trained the rushing waters to do their bidding, overcome all obstacles, taken advantage of every opportunity to increase her stability, made the most of every inducement offered, and established herself and her industries upon a strong and safe foundation. Beautiful in herself by nature, the labors of her citizens have preserved that beauty to her. She is yet young in her progress, but no other city excels her in beautiful location, handsome streets, bountiful shade, elegant public and private buildings, or hospitable people.

^{*}City only.

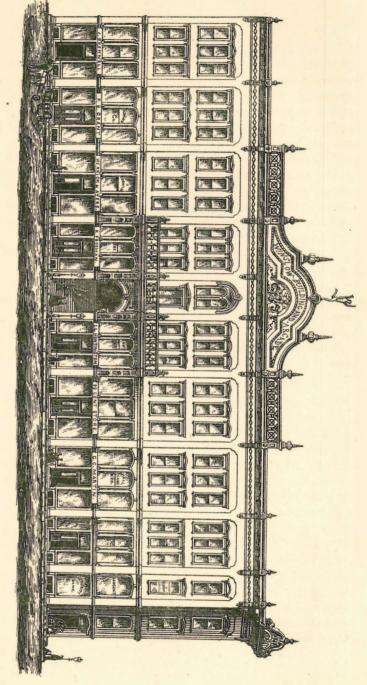
[†] There is every reason to believe that the census of 1875 was hastily taken and incorrect, and a private census taken in 1876, places the population at over 11,000.

Evidences of wealth and strength, industry, energy and intelligence everywhere abound, the ready proofs of a healthy and wide awake community. Her water power is unlimited, her manufactories important and well managed, her school system in the front rank, her railroad advantages of the best, her banking institutions among the oldest and soundest in the State, her commercial industries many and thriving—her merchants numerous and enterprising, and her facilities for extending her influence and increasing her usefulness unbounded.

With these go a generous social life, a friendly spirit, cordiality, hospitality, live and excellent newspapers, prosperous churches, and all the elements which make society healthy, attractive and agreeable. The wisdom of the founders of the city, finds echo in the prosperity of to-day, and the good name of the pioneers is reflected in the integrity of the people of the present generation. The spirit of activity and progress is the characteristic of the people as we find them to-day. In this spirit they hold out their hands to welcome all who may read of her, and who may yield to the tempting advanteges she offers as a busy place of industry or as a city of quiet homes.

PUBLIC SQUARE.

One of the chief beauties of the place is Public Square, located in the heart of the city, comprising an open mall, containing nearly ten acres of land. This spot was set aside as a public park early in 1805, and presented to the city by those who owned lands lying adjacent. The people of to-day have their ancestors to thank for this handsome breathing spot, set like a gem in the busiest portion of the town, and which has grown with its years to be more and more attractive, and adds greatly to the beauty of the city. It is surrounded on all sides by most of the finest buildings in the city, and gives to the spectator an impression of beauty and life which cannot be easily removed. The Square is entered by six of the most important streets, and has become therefore an important business centre. Two large oval parks with a smaller one between, occupy a portion of this space, the two former well supplied with lawn and shade, and the latter embellished by an elaborate fountain. Around and between these parks are spacious driveways.



TREETS.

The streets of Watertown are regularly and tastefully laid out many of them very wide and spacious. It will be difficult to find a street more charming to the eye than Washington street. Its rows of shade trees and handsome lawns with its uncommon width combine to produce a very pleasing effect. Among the other handsome streets of our city may be mentioned Clinton, Sterling, Ten Eyck, Paddock, Stone, State, Franklin and Massey.

WALKS AND DRIVES.

The country around affords a great variety of delightful walks and drives, and presents many attractive and interesting views of the surrounding country. Many of the drives, especially along the river, up and down, abound in romantic and picturesque scenery.

GAS.

A gas company was organized in 1852 and the city has since enjoyed the luxury of gas light,

WHAT INDUSTRY HAS DONE.

Dr. Hough in his remarks concerning the growth and development of Watertown, made use of the following language in his "History of Jefferson County," in 1854. The sentiment is as applicable to-day as twenty years ago:

"It is a singular fact that Watertown in common with the whole county of Jefferson, while it vies in wealth and enterprise with the most favored portions of the State, owes very little, if anything to imported capital. In most instances the wealth now existing has been acquired on the spot, by those who, at an early period were thrown upon their own immediate exertions for support, and from the ashes of the timbers that covered the land, and the first crops which the virgin soil yielded in kind profusion, they received that first impulse, which, seconded by industry, prudence and sagacity, has not failed in bringing its reward."



PUBLIC BUILDINGS—BUSINESS BLOCKS, ETC.

One of the most prominent features of Watertown as a city, and the characteristic which attracts the attention of visitors, is the elegance and substantial beauty of its public buildings and business blocks. In this respect it yields none of its claims to attention, and while it excels nearly every city of its size, rivals if not equals the appearance of many larger municipalities. The exhibit illustrates in a high degree the enterprise of those under whose direction the buildings were erected, the taste and skill of our architects, the growing demands of business, and tells its own story of wealth and development.

In other portions of this work will be found full descriptions of the manufacturing establishments, together with the churches, hotels and schools of Watertown. Our object here is to note the most prominent of the notable buildings which adorn Public Square and the principal streets.

In this connection it seems proper to quote Dr. Hough's opinion on this subject, expressed in 1854, in his admirable history:

"The taste which has been exhibited within two or three years in the erection of private dwellings, cannot fail of being noticed and admired by strangers, and this if continued, will soon render the village as conspicuous among the inland towns of the State, for the classic elegance of its private as well as its public buildings, as it has already become for the immensity of its water power, and the extraordinary combination of facilities for manufacturing purposes which it possesses."

JEFFERSON COUNTY COURT HOUSE is one of the finest of our public buildings and is situated at the corner of Arsenal and Benedict streets. It is surrounded by spacious grounds, enclosed by a handsome iron fence. The building was erected in 1862 at a cost of \$50,000. It is built of brick and stone, is two stories high, and 100x50 feet. During the present year provision has been made for ornamenting the yard with trees and shrubbery. The court room and Supervisors room are among the finest and largest in the State. The building is supplied with water and gas throughout. It contains the Surrogate's office and the County Clerk's office is located in the rear. (See illustration.)

THE WINSLOW BLOCK, the most attractive of our business blocks, occupies the angle formed by Franklin street and Public Square. It was erected by Hon. Norris Winslow in 1874. It fronts 174 feet on the Square, and 194 on Franklin street, and varies in width from 12 to 130 feet. It is five stories high, built substantially, of brick, and is admirably arranged for business purposes. The first floor contains eight stores, and there are also several others on the second floor. The remainder of the building is devoted to offices, halls, and private rooms. The three upper stories are reached by a broad stairway, and contain an arcade 125 feet long and three stories high. (See illustration.) It may here be said with truth that this building is another and a durable monument of the industry, enterprise and public spirit of its founder. No man has done more for the substantial good of Watertown in the erection of public buildings and private residences, and he deserves the good will and esteem of every citizen.

Washington Hall stands at the corner of Washington street and Public Square and is one of the finest and most conspicuous structures in Watertown. It was built in 1853, on the site of Perkins' hotel, and the site of the second dwelling erected in the city. It was built by Walter and Gilbert Woodruff and came into the possession of John A. Sherman in July 1859 who has since owned and improved it. The building is of brick, 90x120 feet in size and three stories high. The first floor is occupied by eight stores, the second story by offices and the third is devoted to one of the finest halls in the State—capable of seating 1,200 persons with standing room for 300 more. Its height is 37 feet, and it is elaborately frescoed. The stage is 40 by 46 feet. The handsome illustration shown elsewhere does but simple justice to a fine and substantial building.

The Agricultural Insurance Company's Block, located on Washington street near Washington Hall, is the best and most substantial office building in Northern New York. It was erected in 1873 at a cost of \$50,000. It is 26x103 feet, three stories high, and basement. The walls are brick, with a handsome marble front surmounted by a figure of "Ceres." It was erected by John W. Griffin. It is occupied by the Agricultural and Watertown Fire Insurance Companies.

THE DOOLITTLE & HALL BLOCK is situated on Public Square a short distance east of the Woodruff House, and presents a fine

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appearance. It was built in 1871 by L. D. Doolittle and R. H. Hall. It is of brick, three stories high, and presents a front of 90 feet. Gas and waterpipe extend throughout the building. Its first floor contains five stores, its second floor is devoted to offices, and its third floor to offices and a hall. The building is now owned by R. H. Hall. (See illustration.)

THE VAN NAMEE BLOCK is one of the most prominent of the private business blocks in the city. It is of brick, four stories high, and was built in 1873 by Richard Van Namee, one of the most practical business men in the community. Its first floor is occupied by Van Namee Brothers pharmacy, the remainder being used for offices etc. (See illustration.)

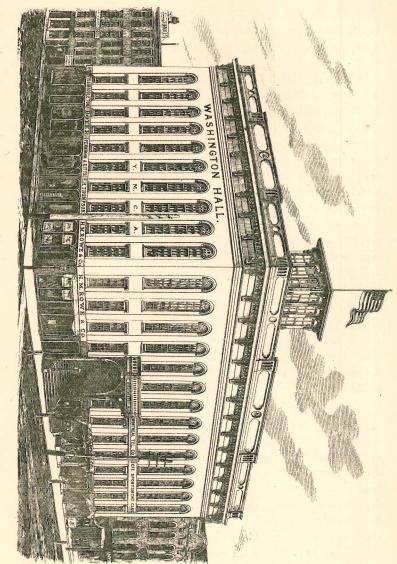
THE STREETER BLOCK is located at the corner of Public Square and Mill street and fronts on each about 90 feet. It is three stories high besides basement and attic. There are seven stores in the building, built in 1843 by different parties. They are now owned by N. W. Streeter, one of the early citizens of the county. It is a handsome and busy block. (See illustration.)

THE ROME, WATERTOWN AND OGDENSBURG R. R. DEPOT, situated in the rear of the Woodruff House is a tasty structure of brick consisting of two divisions. The three story part is 48x54 feet and the two story, 27x68 feet. It is heated by steam and handsomely furnished throughout. The offices of the road are located in the building. (See illustration.)

THE PADDOCK BUILDINGS on the west side of Public Square, adjoining the American Hotel, were erected in 1849 by L. Paddock. They are devoted to stores, law offices, &c. One of the best and most convenient and attractive Arcades in the State extends through this building to Arcade street containing the post office and a score of stores and offices. The building is of brick and four stories high. (See illustration.)

SCRIPTURE & CLARK'S CARRIAGE REPOSITORY on Arsenal street was erected in 1876. It is one of the tastiest of the smaller blocks in town. It is built of wood, covered with iron, and is three stories high. (See illustration.)

THE IRON BLOCK on the north side of Public Square, west of the Woodruff House, is a fine brick structure four stories high. It is one of the most sightly blocks in the city.



THE PROPERTY CAN ST. WOOD OF THE STREET