ington to do the honors of his country, Col. George L. Dumont, military attache of the French Government in that city, was in attendance. As on the day in 1825, the celebration was dimmed by tragedy, but this time the sadness did not fall on Waterloo. As Col. Dumont prepared to attend the unveiling of the monument, he was notified of the death of his son.

As hearty as the Waterloo celebration for Lafayette was that in Seneca Falls. Then on eastward the train moved across the great Cayuga Bridge, more than a mile long and extending across the northern end of Cayuga Lake to the village of Cayuga. Auburn sent her welcoming delegation to Cayuga, where Lafayette was greeted by military companies, Masons and veterans of the war.

In Auburn, as the General passed under an arch erected in his honor, a battery of twenty-four guns boomed out its salute and church bells pealed a welcome, while thousands cheered. After a parade and address, the visitor dined in an open air pavilion. A ball was given in the old Bostwick Tavern, erected in 1803-04 at the corner of Exchange and Genesee streets. The old hotel was rebuilt in 1824, just before the historic visit, named the Western Exchange Hotel and was torn down in 1863. The first band ever organized in Auburn came into being in 1825 in time to play for the French visitor.

Today on the site stands the Smith and Pearson block, on whose side is a memorial tablet erected in honor of Lafayette's visit by Owasco Chapter, D. A. R. The committee in charge of placing the tablet comprised Mrs. Julia G. Everatt, Mrs. Grace H. Quick, Miss Guilelma Thayer, Mrs. Clara M. Skilton, Mrs. Lena P. Snow and Miss Florence M. Webster.

In the old tavern, whose memory is perpetuated by the marker, the first public ball in Auburn was given on July 4, 1805. It commenced at 3 p. m. and closed "with the approach of night." Bostwick, the owner, kept the tavern until he sold it in 1816 to Canfield Coe, who eight years later transferred it to Emanual D. Hudson, who changed the name to the Western Exchange.

Auburn gave the Marquise de Lafayette the last of the larger receptions in Central New York. And the heartiness of that ovation was typified to Lafayette as he moved eastward from the region, by the sight of hundreds of lighted candles peeping through the windows of homes in Skaneateles, stage coach center, as his last farewell to Central New York.

In marked contrast to the visit of General Lafayette was the visit of another famous Frenchman, Louis Philippe, who from 1830 to 1848 was Louis XVIII of France. An outcast, a man without a country, afoot and by primitive boat, Louis Philippe as a young man penetrated the wilderness of the region in 1797, when only a few cabins dotted the thousands of square miles of solitudes.

Across one section of Central New York, then a frontier outpost, he laboriously traveled, gaining impressions of the new world which in years to come would send him back to Europe convinced that Central New York was one of the garden spots of the world. His introduction to the region came because he was exiled to America during the ascendency of Napoleon and traveled from the outpost at Buffalo to Philadelphia, in the course of his aimless journeyings while awaiting the time fate should place him on a throne.

Louis Philippe's father had died on the scaffold, his mother was immured in a Paris dungeon and his two brothers were released only on condition that they join him in the new world. So the three young men adventured into the wildest part of Colonial domains of America, a few years after the American Revolution.

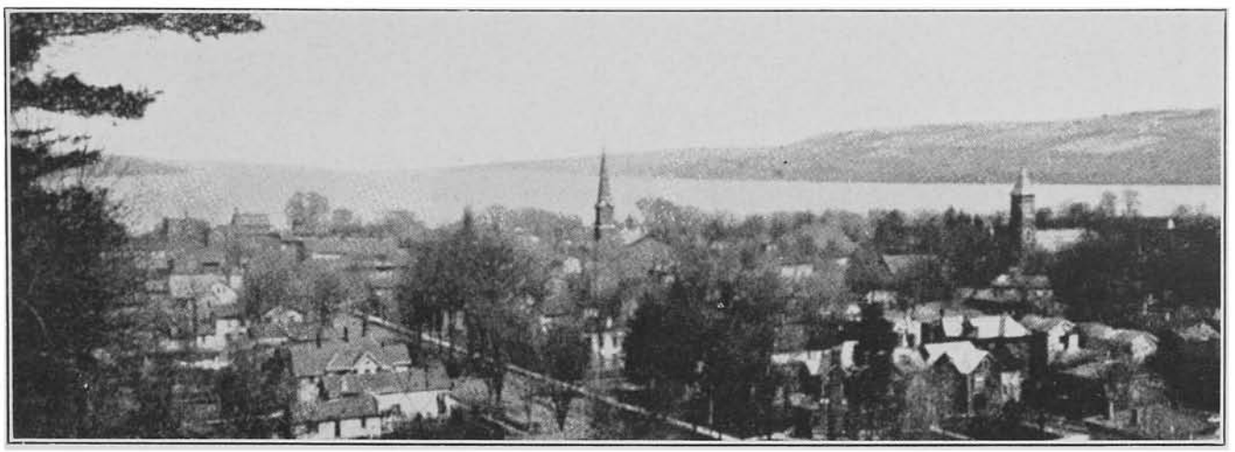
Of all their travels they recalled with most arresting memory the weeks they tarried in Central New York among the lakes. They spent several weeks at Canandaigua, where they were under the hospitable roof of Robert Morris, just two years after the first jury trial held west of Utica took place in the settlement, the defendant being accused of stealing a cow-bell.

The Frenchmen are believed to have been the first famous visitors at the "Long House" in the village of Honeoye on Honeoye Lake, erected in 1790 by the first settler there, Capt. Peter

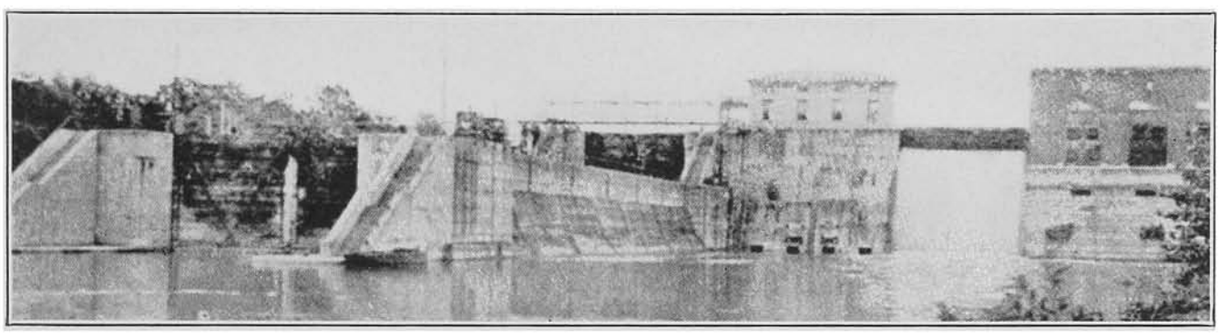
Pitts. Later this abode was to shelter such guests as Duke de Liancourt, General Lafayette and Tallerand. Louis Philippe characterized the wildwood paradise as the "Switzerland of America." The house was on an Indian trail from Canandaigua to the Genesee River.

After idling through restful days about Honeoye and Canandaigua, the three brothers proceeded to Geneva, where they procured a sloop for the long sail up Seneca Lake to what is now Watkins Glen. They stopped there, resting for several days, and scouting the adjoining country. The beauty of Chequaga Falls near Montour Falls, nearby, so impressed the exiled king-to-be that he drew a picture of the cataract and later this drawing was hung in the Tuileries in Paris.

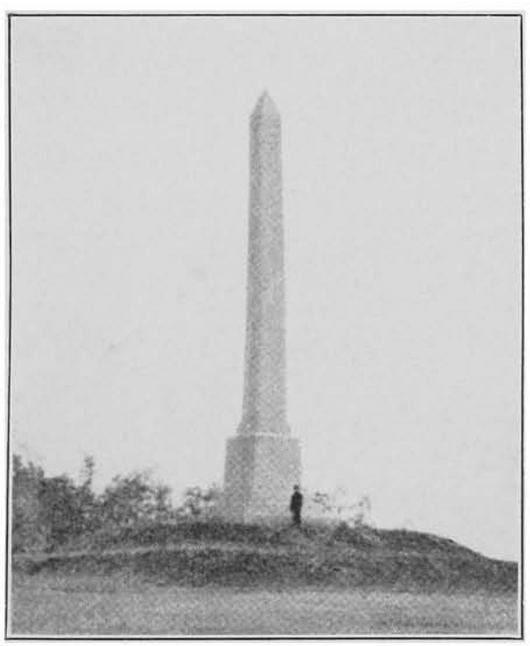
From Watkins, with packs on their backs the solitary brothers trudged afoot through the forest to Elmira where they spent some time hunting and fishing. A boat took them down the Chemung, through the Susquehanna and the trip to Philadelphia was overland from Wilkesbarre, Pennsylvania.



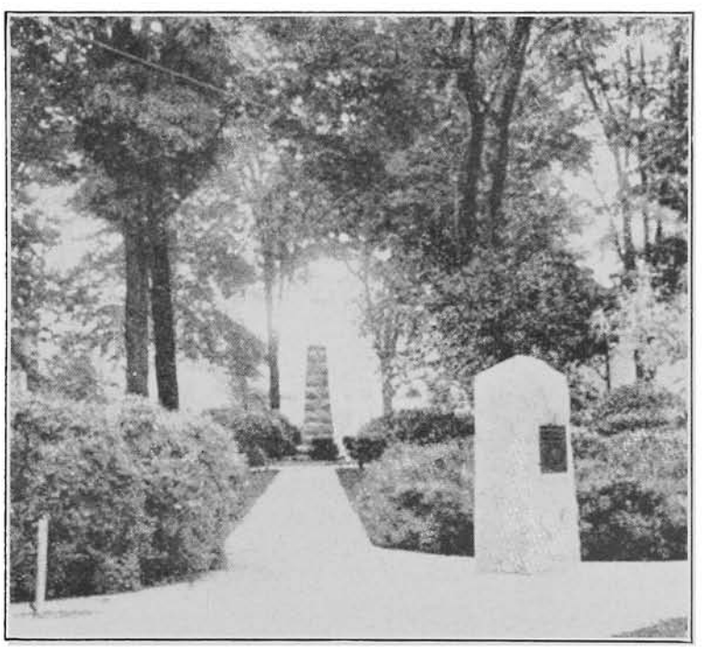
VIEW OF WATKINS, N. Y.



BARGE CANAL LOCK, SENECA FALLS, N. Y.



SULLIVAN MONUMENT,
NEAR ELMIRA, N. Y.



LAFAYETTE AND SKOIYASE MONUMENTS,
WATERLOO, N. Y.

CHAPTER VII

EARLY MISSIONARIES AND FOUNDING OF CREEDS.

COMING OF THE JESUITS WHO BRAVED TORTURE—MORAVIANS AND SAMUEL KIRKLAND AS PROTESTANT MISSIONARIES—JEMIMA WILKINSON'S FRIENDS—FOUNDING OF MORMONISM, JOSEPH SMITH AND BRIGHAM YOUNG—BIRTH OF SPIRITUALISM—QUAKER SETTLEMENTS—CENTURY OLD CHURCHES—LITTLE CHAPEL ON THE MOUNT.

More than 250 years ago, or a century before the Revolution, courageous French Jesuit priests penetrated the forest realm of Central New York to carry the Cross. They were the first white men to dwell among the Iroquois. Many paid for their faith with their lives and with harrowing torture the like of which has seldom been inflicted in any country.

Into bark houses where smallpox stalked these priests of Christ went to minister to humanity. And often times flames, the knife, bestial mutilations were all they gained for their pains. But for a century their missions formed the last Christian outpost beyond the frontier of civilization and in the wilderness they wrote a story of Christian fortitude which has never been equaled in history.

In recent years some of these heroes of the Cross have been canonized and to others there have been erected monuments indicating spots where these pioneers labored, suffered and were put to the torture.

Above the waters of Cayuga Lake, half way between Aurora and Union Springs, there is a monument, erected by Auburn Council, Knights of Columbus, bearing this inscription:

"This valley was the site of the principal Cayuga Indian village. To the brave French Jesuit missionaries, whose heroism was almost without parallel—Joseph Chaumont and Rene Menard, who as guests of Chief Saonchiogwa built here in 1656 the

first house of Christian worship in Western New York; Stephen DeCarheil, who for nine years was interested here, and his co-laborer, Peter Raffeix—this memorial is respectfully erected."

And again three miles west of Canandaigua is a monument with this inscription:

"Gannagaro, largest of the Seneca Indian villages, was located on Boughton Hill. Rev. Joseph Chaumont preached and baptized here in 1857. The place was also visited by Rev. Julien Garnier and other Jesuit missionaries. Rev. John Pierron had a chapel and resided here from 1673 to 1677. The village was destroyed by DeNoville's army in 1687 and the inhabitants driven eastward toward Canandaigua and Geneva."

Another monument inscription two miles west of Canandaigua reads:

"Gandougarae. Near this spot stood a village of Huron Christians, captives of the Senecas. Father Chaumont preached here in 1656. Father Fremin preached in a new chapel dedicated November 3, 1669. Father Garnier also ministered here. James Atondo and Francis Tehoronionga were exemplary members of St. Michael's flock."

The Jesuits, all educated men, took notes as they wandered through the land of the Indian, thus perpetuating minute descriptions, dates, opinions and information about the life of the Iroquois. The data was preserved in the "Relations," prized documents in France and translated into English by historians.

Pierre Raffeix, during his year at the mission of St. Joseph near Choharo or St. Stephen, at the foot of Cayuga Lake, strikingly tells of the abundance of game in the locality.

"More than 1,000 deer are killed every year in the neighborhood of Cayuga," he wrote. "Fishing for salmon and eel is abundant. Tiohero (Cayuga Lake) abounds with swan and geese through the winter, and in the spring nothing is seen but continued clouds of all sorts of game."

The intellectual training of these French missionaries was of high order. Any one of them could qualify for a Ph. D. degree. They knew French, Greek, Latin, Hebrew and the Indian tongues. One of them, Fr. John Pierron, was the first artist in

Central New York, having painted religious pictures while among the Indians. Maps, histories and geographies from the pen of these Black Robes still give best information on Indian days in Central New York. In addition of necessity they knew forestcraft and used their robes for tents when spending the night in the forest.

Jesuit missionaries to the Seneca Indians included:

Rev. Joseph Chaumont, born in 1611 in France, who landed in Quebec in 1639, when he at once went to minister to the Indians. He entered Central New York in 1656.

Fr. James Fremin, who arrived in Canada in 1655, and went to the Senecas at Sonnontuan, now Rochester Junction, where he served from 1668 to '69, when he went to villages two and three miles west of Canandaigua and served another year.

Fr. Julien Garnier, born in 1643, who came to Canada in 1662 and served the Seneca missions from 1669 to '84 and again from 1701 to '03. He died in Quebec in 1730.

Fr. Peter Raffeix, who arrived in ill health in Canada in 1663, was appointed a missionary to the Cayugas in 1666 and served the Senecas from 1670-'02 and from 1673-'80. He died in Quebec in 1723, broken down with years of toil.

Fr. John Pierron served the Senecas from 1673 to 1677, returning the next year to Europe.

Fr. James Bruyas was among the Senecas in 1673 but most of his time was among the Mohawks. It was he who concluded a final peace between the French and Iroquois, which lasted for more than fifty years.

Fr. John Morain was in the Seneca villages from 1681 to '84 followed by Fr. Francis Valliant de Gueslis, who served from 1701 to 1707. Fr. James de Hue served in 1708, the last French missionary in Central New York. He returned to France in 1715.

Some of the same courageous priests who served the Senecas carried the cross to the Cayugas in Cayuga County. Fr. Rene Menard, who was born in 1604 and had been in France confessor to Madame Daillebout, one of the founders of Montreal, accompanied Father Chaumont, mentioned above, to the Cayugas in

August, 1656, and on the east shore of Cayuga Lake between Aurora and Union Springs, erected the first house of worship in the region. He found great antipathy for the Black Robes, the dislike coming from Huron influence. The first person baptized at this little chapel was a man eighty years old. The second was a cripple deformed by cancer, who had been a renowned warrior. Father Menard was accused of being a sorcerer. He remained among the Cayugas for two months, when he was recalled to Onondaga, but soon afterward returned and remained until the missions were broken up in 1657.

Fr. Stephen de Carheil was sent to the Cayuga Mission in 1668, where he remained until 1684, when the mission was broken up. Father Stephen spoke Huron and Iroqouis as fluently as his own tongue and wrote treatises on the language. He early impressed the Cayugas with his courage by acting as a sentinel on a certain occasion when a rumor of attack by foes spread alarm and when he accompanied the warriors to repel the expected attack. The priest reached the advanced age of ninety-three.

When Father de Carheil came to the Cayugas a new chapel was built for him at Choharo, previously named Tichero or St. Stephen, on the present canal opposite Mud Lock.

Indicative of the perils which beset the missionaries to the Cayugas are the written records of Fr. Menard who relates that a warrior, lodging in the same cabin, for three nights in succession, attempted to kill him and was only prevented by the chief of the canton.

Fr. Peter Raffeix also labored among the Cayugas, as did Fr. David LeMoyne, a young priest of thirty, who died on the shore of Cayuga Lake.

As the labor of the French Catholic missionaries continued through the years, English settlers along the Atlantic seaboard became apprehensive lest they exert such political influence in favor of France that British aspirations in the new world might be endangered. In 1700 the Colonial Assembly of New York passed a stringent law providing a penalty of hanging for every Jesuit priest who came voluntarily into the province. British

fur trade and the safety of their frontier settlements depended upon the good will of the Iroquois, whose allegiance, it was feared, might be won by the Jesuits to the standard of France.

By the treaty of Utrecht, concluded March 31, 1713, the French relinquished all claims to the lake country of the Iroquois, which thereafter became an appendage of the British crown. This checked the Christianizing work of the Jesuits to an extent.

From 1744 to 1748 the French and English were again at war, settling their dispute by the treaty of Aix La Chapelle April 30, 1748. This contest had been chiefly for possession of the Mississippi Valley. In 1755 the conflict was renewed, lasting for eight years until the treaty of Paris in 1763. In this war the Canadian and Western Indians adhered to the French and the Iroquois to the English. The French were vanquished, never again to challenge English sovereignty in Central New York.

Under the rule of Queen Anne of England, Protestant efforts to Christianize the Iroquois were started about 1700, but they were abortive and in no way compared with the intensive work of the French priests. Not for years were any missionaries of the Protestant faith in the wilderness among the Finger Lakes.

Expeditions of the Moravians into Central New York form an interesting chapter in early Christian efforts, although the records of their endeavor are meagre. These latter day carriers of the gospel escaped the torments visited upon the Jesuits. Bishop John Frederic Christoph Cammerhoff and Rev. Davis Zeisberger, both Moravians, on May 28, 1750, left Wyoming, Pennsylvania, for a missionary tour to the Six Nations. They arrived at the citadel of the Cayuga Nation of Indians on the east shore of Cayuga Lake, between what are now Union Springs and Aurora, in June of that year. After a visit to the Onondagas, the missionaries returned June 26, 1750, to the Cayuga village where they remained until the following day.

The two spent June 28 at Kanadesaga and on July 2 reached the Genesee River. After a brief stay with the Senecas, they arrived on their return trip, at the outlet of Seneca Lake on July 6 and had a narrow escape from drowning in fording. On

horseback and afoot the missionaries traversed many sections of Central New York, but their services were of short duration compared with those of their Jesuit predecessors.

Bishop Cammerhoff, a native of Madgemurgh, Prussia, born July 28, 1721, and who came to America in 1747, died April 28, 1751, before he had reached thirty years of age. His comrade, born in Moravia, Austria, April 11, 1721, and who came to America at an early age, died in Ohio, November 17, 1808, after a missionary career of nearly sixty years among the Indians.

Of all the Protestant missionaries among the Indians just before the Revolutionary war period, none gave more devout, untiring service than Rev. Samuel Kirkland, who later became a chaplain on the staff of General John Sullivan in his Indian campaign of 1779. In that expedition he traversed a wilderness in Central New York with which he had become familiar before the war, when as a Presbyterian missionary he had wandered from long house to long house among the Iroquois. It was Kirkland who was delegated by the War Department to gather the Indian chiefs together for a conference in Philadelphia.

While a student at Princeton he felt the urge to teach Christ to the Indians. At the age of twenty-four he left Johnstown in January, 1765, and plunged into the wilderness on snowshoes with two red guides to travel 200 miles, carrying his forty-pound pack. His first work was among the Senecas, particularly at the Indian village on the site of Geneva. Despite his later efforts he was unable to keep the Indians of the western part of the Finger Lakes country from alliance with the British against the Colonists in the Revolution. Kirkland, a real lover of the Indians, founded the Oneida Indian Academy, which was later merged into Hamilton College.

From the earliest times Central New York has been an experimental ground for varied, strange and interesting religious efforts. As unique a group of colonists as ever headed toward the chain of lakes penetrated the region in 1788 to found the "New Jerusalem," over which ruled Jemima Wilkinson, the "Public Universal Friend." Two years previously scouts of this unusual woman had entered the wilderness between the lakes

to select a place of settlement. They chose lands near the outlet of Lake Keuka, going back to Pennsylvania and New York City to recruit the band of pioneers.

The first year there were but twenty-five "Friends," and it was not until 1791 that Miss Wilkinson joined her followers in the new land. This strange woman was born in Rhode Island in 1758 and in 1776 experienced a serious illness, during which it was claimed that she died. Life did seem almost extinct for thirty-six hours, at the end of which time the woman arose and walked. Her followers affirmed that she was no longer merely Jemima Wilkinson, but was reanimated by the power of Christ.

In Connecticut, Rhode Island, Pennsylvania and Massachusetts she gained followers, many of whom migrated to Central New York to set up a thrifty colony in what is now Yates County. Their settlement was the first permanent one west of Seneca Lake. The twelve acre wheat field sowed by the Friends their first year was also the first west of the lake. The Friends' grist mill built in 1790 ground the grain for a wide area. The society decreased until the death of its leader in 1819 and then passed out of existence. The Friends wore garb fashioned something after the style of the Quakers, but it was of expensive material and relatively costly.

As Central New York gave a sanctuary to the Friends of Jemima Wilkinson, so it likewise gave birth a few years later to Mormonism. The Mormon Church was first organized in the home of Peter Whitmer, a Pennsylvania German farmer in the town of Fayette, Seneca County, on April 6, 1830. The founder was Joseph Smith, born in 1805 and who ten years later removed to Central New York, settling in the town of Manchester, Ontario County. In after years he made known that as early as September 22, 1823, he had discovered certain "Golden Plates" buried in a hill in Manchester, four miles south of Palmyra. He did not remove them, however, until four years later. He began translating the inscriptions on the plates in September, 1827. In 1829 he removed to the Whitmer home in Fayette, where work of translation progressed. From his translation the

Book of Mormon or Mormon Bible was issued in 1830, being first printed by Egbert B. Grandin in Palmyra, Wayne County.

The Fayette church organization was perfected by Smith, then known as "The Prophet," and five others, Oliver Cowdrey, David Whitmer, Peter Whitmer, Jr., Hyrum Smith and Samuel H. Smith. As early as June, 1829, David Whitmer and Hyrum Smith were baptized by Joseph Smith in Seneca Lake and John Whitmer by Oliver Cowdrey. The first public meeting of the new organization was at the Whitmer house April 11, 1830. Converts were baptized in Seneca Lake, Seneca River, Thomas and Kendig creeks and other streams of the neighborhood. Preaching services wehe held in 1830-31 in the Whitmer residence and Whitmer's schoolhouse. The first conference of the Mormon Church was in Fayette June 1, 1830, with thirty attending. In 1831 Smith and some followers removed to Ohio, starting the pilgrimage, ever westward, that resulted in the founding of Salt Lake City, Utah, in 1747.

Today the Fayette farm of Whitmer, four miles south of Waterloo, is owned by the Mormon Church. The 100 acres are operated by Mr. and Mrs. Lewis Stoner, who lease it from W. W. Bean of Palmyra, overseer of the Mormon Church property in Western New York. The picturesque Colonial house, more than a century old, is still a shrine to Mormons.

Before Brigham Young, founder of polygamy in Mormonism, turned to that faith, acquired eighteen regular wives, numerous "spiritual wives" and fifty-eight children, he worked at odd jobs in many communities of Central New York, generally for a dollar a day. In those days he never dreamed that he would found Salt Lake City. He'd never thought of polygamy as an institution which he would establish along with the "celestial law of marriage." He was simply a painter and glazier, and in a little shop in the rear of his home in Port Byron, Cayuga County, he mended furniture. He spent a full year in the village in 1832, working for a time for David Smith, a merchant. His backyard shop was sold in 1878 to a Throop resident for ten dollars for use as a summer kitchen.

But Brigham didn't tarry long anywhere. He sojourned in many towns of the area. In Auburn he stopped off long enough to do considerable work on the mansion of William H. Seward, Lincoln's secretary of state. He was also a resident of Canandaigua. It was not until he was twenty-nine years old that Young saw the Book of Mormon and it was a year later when he was "converted" by Samuel H. Smith, the "Prophet's" brother. Young Mr. Young had less than a year's schooling then, but Mormonism gave him an education.

Brigham was baptized April 14, 1852, and at once threw away paint brush and saw to start preaching. In the autumn he went to Ohio where he became an intimate of Joseph Smith and that winter was ordained an elder. He started baptizing and establishing missions in Canada. By 1835 he was one of the "twelve apostles" and a year later he became Mormon president. On Smith's death he rose to "Great Prophet." It was Brigham who led the exiled Mormons across the plains to Utah. His plan for forming an independent state out west was frowned on by Uncle Sam, but a territory was created and he was appointed governor. When the federal government in 1854 appointed a "Gentile" governor, Mr. Young's ire was aroused and it required a force of 2,500 troops to enforce the law.

Brigham hit upon his most famous idea in 1852 when he promulgated the "celestial law of marriage," which he said had been revealed to Joseph Smith nine years before. Though Smith's widow and her son declared the revelation to be a forgery, Young triumphed in his plural marriage campaign and had the Book of Mormon changed to fit his case. Most of Brigham's wives he kept in a building known as the "Lion House." In 1871 he was indicted for polygamy, but not convicted. His fifteenth spouse sued him for divorce in 1875, only two years before his death. But Young held his popularity and at his funeral 30,000 people, exclusive of his children, gathered at his bier. He never lived to see polygamy abolished by the famous manifesto of 1890, nor to return to Central New York again.

In Central New York also, Spiritualism found birth. The modern form of this belief dates from the Fox sisters in 1849.

On the night of March 31 of that year, Mr. and Mrs. Fox, who lived with their two daughters, Margaret and Leah, at Hydesville, a hamlet of the town of Arcadia, Wayne County, were disturbed by repeated and inexplicable rappings throughout the house. At length it was accidentally discovered by one of the daughters that the unseen "rapper" was so intelligent as to be able to reply to pertinent questions, and so communicative as to declare that he was the spirit of a murdered peddlar. When this discovery was noised about, there started the belief that intercourse could be obtained with the spirits and numerous "spirit" circles were formed in various parts of America.

The manifestations thus said to be received from the spirits were rappings, table turnings, musical sounds, writings, the unseen raising of heavy bodies and the like. Out of this Wayne County experience has grown the belief that our existence in this world is but one stage in an endless career; that the whole material world exists simply for the development of spiritual beings, death being but a transition from this existence to the first grade of spirit life; that our thoughts and deeds here will affect our conditions later, and that our happiness and progress depend wholly on the use we make of our opportunities and facilities in this plane.

Hydesville took its name from Dr. Henry Hyde, a pioneer physician who came there from Vermont in 1810. The old Fox home, where rappings first were heard, stood until a few years ago on the hamlet's sole corner. The structure was removed to the Spiritualistic camp grounds at Lily Pond in the western part of the state.

No story of the coming of varied religious sects to Central New York would be complete without reference to the advent of the Friends, a sturdy band of Quaker pioneers, whose settlements in Ontario, Cayuga, Wayne, Schuyler and Chemung counties planted a sure foundation for the civilization that was to follow them.

In 1790 the Friends, under the leadership of Nathan Comstock, Sr., made the first settlement in Farmington, Ontario County. They emigrated from Massachusetts, much against the

wishes of the society there. As a result of their act they were disavowed by the mother society until 1794, when other Quakers came west to attend the Pickering Treaty parleys at Canandaigua, and were impressed with the prosperity of the Farmington settlement. Early meetings were held at the home of Abraham Lapham, who later moved to Macedon, Wayne County, spreading Friends' settlements there. So it was that in 1796 a double log house was built in Macedon, near the site of the present Orthodox Quaker Church. This church burned in December, 1803, and in January, 1804, the Quaker meeting was held in Palmyra, Wayne County.

As early as 1795, a Friend came to Cayuga County, when Paulina, wife of Judge Walter Wood, arrived with her husband at Aurora, from White Creek, Washington County, whence they had removed from Dartmouth. It was Judge Wood who taught Millard Fillmore, thirteenth president of the United States, the rudiments of law.

The Society of Friends sent immigrants to Central New York from Massachusetts, Rhode Island, Long Island, New York City, New Jersey, Pennsylvania and Dutchess, Westchester, Saratoga and Washington counties in this state. Dartmouth in Massachusetts led the march. Meeting houses sprang up in several counties, but the chief center of the Quaker settlement was in south Cayuga.

The Scipio Quaker meeting at Sempronius, Cayuga County, was instituted in 1808; the Hector meeting, Schuyler County, was allowed in 1813; the Union Springs meeting, Cayuga County, followed in 1814 and the Aurora meeting, Cayuga County, in 1816. North Street preparative, Cayuga County, was instituted in 1817 and the meeting house at Scipioville, Cayuga County, built in 1820. Sempronius, Skaneateles and Elmira were severally granted preparative meetings in 1819.

The Farmington Monthly Meeting, in Ontario County, was the first in the region. It gave permission to the Scipio group to form an "indulged" Scipio meeting. Then in 1808 the Quarterly meeting at Easton, Pennsylvania, assented to the Scipio

Friends' request for a monthly separate meeting, aside from Farmington.

In 1798 Benjamin and Mary Howland and their five children, predecessors of the family of Howlands whose name has for generations been linked with Central New York progress, came in sleighs with twenty head of cattle from Massachusetts to settle in a three-acre clearing two miles west of Poplar Ridge, Cayuga County. In the front room of his humble home the first Friends' meeting place in the county took place.

The next arrivals were Jethro and Sylvia Wood who came from Saratoga County, Jethro being the inventor of the first iron plow. His gift to agriculture is mentioned in the section of this history devoted to inventions. Isaac and Ruth Wood gave three acres of ground for a future meeting house and burial ground. It was decided in 1809 to build a house thirty-four by fifty feet, the posts twenty-two feet, at an estimated cost of $1,800. The Yearly Meeting declared that this sum was too much. Then a meeting house to cost $1,700 was planned and when completed in 1810 it had cost $1,728.29. This structure was the first place of Quaker worship in Cayuga County and stood until about twenty years ago one mile west of Poplar Ridge. Some meeting houses built shortly afterward are still in use.

In 1808, there were twenty-four members added to the Scipio meeting; thirty-five in 1809; fifty-seven in 1810; thirty-two in 1811; thirty in 1812; twenty-seven in 1813; fifty in 1814; forty-five in 1815; sixteen in 1816; twelve in 1817; twelve in 1818; thirty-two in 1819; fifteen in 1820; twenty-three in 1821. Most of these settlers lived within ten or twelve miles of the meeting house.

The venerable John Searing came from Long Island and settled west of Poplar Ridge in 1823, one of his descendants being Leonard H. Searing of Auburn, president of the Cayuga County Historical Society and a past president of the Finger Lakes Association.

Places of worship, whose half buried ruins tell of other days, always have proved the key archaeologists have used to unlock

the secrets of past civilizations. Every race, civilized and pagan, has left in religious relics a gauge of its character. The places where men prayed have always been the places where the historian might reach closest to the heart of a bygone people. In Central New York, numerous century-old churches still in use are emblematic of the sturdy, simple faith of pioneers who bowed humbly to the God of nature.

At first private cabin homes formed the place where prayers were sent heavenward. Then came the cabin meeting place and later more pretentious edifices dedicated to the worship of God. Picturesque villages, complacent in their disregard of time, still house these 100 year old churches. To find them, one needs the adventurous spirit of a Columbus. They are not heralded as relics. Today, in many of them, a faithful flock still worship, mindful perhaps of the spiritual strength of those who went before them and builded well.

If one goes into the churchyards adjoining some of these venerable places of worship, one finds tottering, moldy stones, telling in imperishable fashion the names of soldiers in Washington's army who were buried there.

What is said to have been the first church erected in the Empire State west of Schenectady was a little log building constructed in 1797 at Brinkerhoff Point on Owasco Lake, and known as the Dutch Reformed Church. This church society was organized September 23, 1796, at a meeting held at the home of Col. John L. Hardenbergh, founder of Auburn. Services were held for twenty years in the original log structure. The present edifice, two miles east in Owasco village, was completed in 1815 and except for a few minor changes stands today as it was over a century ago. In its 135 years the church has been served by twenty-one pastors, the present being Rev. Richard J. Blocker.

Across the lake, Sand Beach Church, town of Fleming, was built of planks in 1810 and the present little brick edifice replaced it in 1850. Rev. Dr. Samuel R. Brown was its first pastor. In 1859 he went as the first missionary sent by the United States to Japan.

The First Congregational Church "in the town of Canandarqua" was incorporated on February 25, 1799, with eighteen original members. This Old Brick Meeting House was the first place of worship in Canandaigua and for four years the only church building in the village. The same meeting house, without exterior change except that resulting from an extension of sixteen feet toward the west, stands today. The original box pews are retained. The only substantial changes have been those involved in installation of a modern heating plant to obviate the need of individual foot stoves of early days; electric lights to perform the office once left to tallow dips set in the window sills and at pew intersections, and the organ that gives the sacred melody that aforetime came from bass viol and flute.

Were a sketch of each of the century old church societies of Central New York to be given, an entire volume would be required to tell the story. Each of the eleven counties of the district has its quota of these venerable groups dedicated to the worship of God. Space limitations prevent even an enumeration of them. Down through the years the churches have constantly been improved until today hundreds of thousands of dollars are invested in church properties. The latest lines of religious education have been instituted in the church work and modern methods have replaced old, just as the modern organ has supplanted the old pitchpipe. In this recent effort at religious education for the young, a new church house of the Second Presbyterian Church at Auburn, opened in 1932 and representing an expenditure of $130,000, is said to be one of the finest equipped of its kind in the state. It is emblematic of the new ideas creeping into organized practice of religion.

No summary of religious activity of the area would be complete without reference to the Little Chapel on the Mount, one of the strangest places of worship in the state and one which many believe will become in generations hence a shrine for the pilgrim. This memorial chapel to Charles William Garrett was erected by his parents, Mr. and Mrs. Paul Garrett on Bluff Point, which separates the two arms of Lake Keuka and rises 1,200 feet above the water. It was consecrated July 12, 1931, and

since has been visited weekly by thousands of tourists and residents of all parts of the state. The chapel was deeded to the Episcopal Diocese of Western New York the day it was consecrated. It has no hours of service but is open continuously for meditation for the wayfarer of every class and creed.

Built for the ages, the stone of the chapel is Pennsylvania seam face granite; the roof and floor of the terrace are Vermont slate; the floor of the chapel is Rembrandt slate from Holland; the marble in the Crypt, where lie the bodies of four Garrett sons, is Xanadu onyx from Algeria; the reception room walls adjoining the crypt are crab orchard marble from Tennessee; the style of architecture is of the sixth century, the transition from Norman to Gothic; the gutters, leadings and flashings are copper, lead covered; the trusses in the roof are steel enclosed with fireproof cement resembling oak. Statuary inside came from various parts of Europe and the stained glass windows are done by artists, who have depicted some of the human activities —the fisher, the sower, the student, the scientist, the mechanic, sports, music, painting—rather than the time worn Biblical subjects. The Little Chapel on the Mount breathes the spirit of worship which has come down 150 years from the time settlers bowed humbly in the forest.

CHAPTER VIII

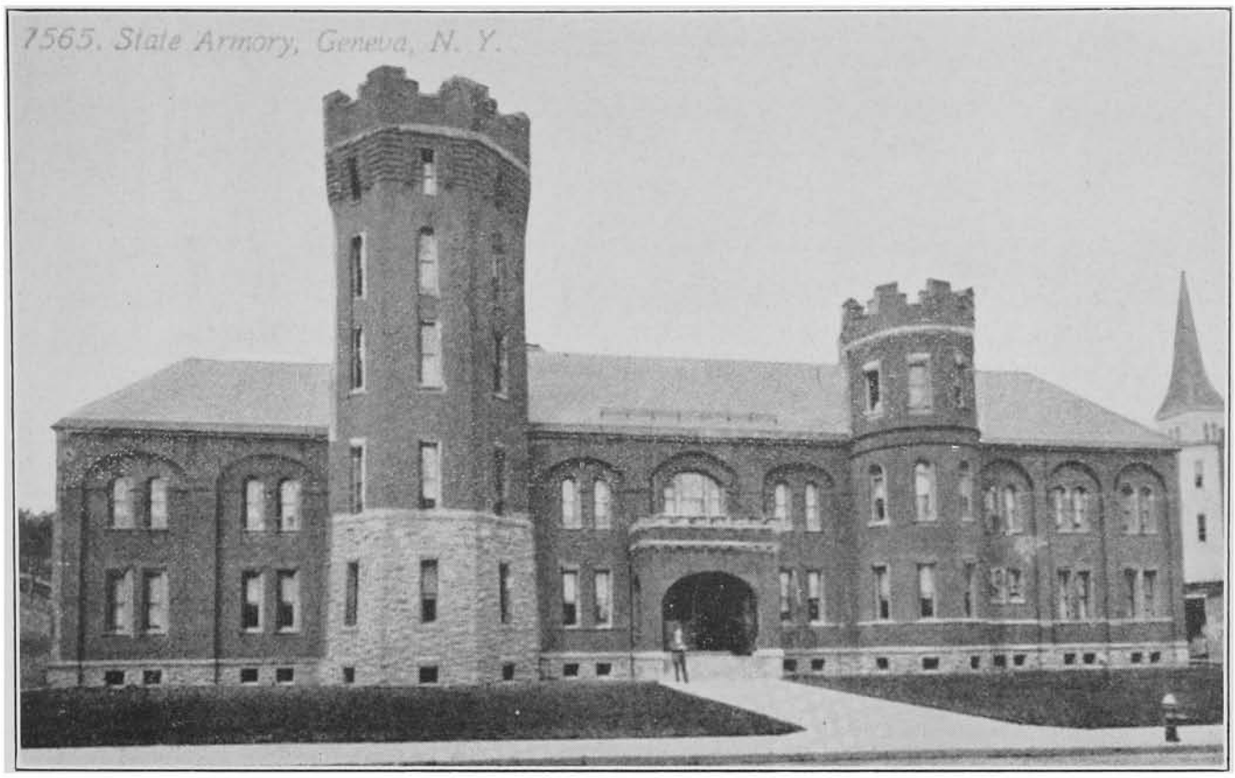
WATERWAYS AND CANALS.

PIONEERS FIRST CAME BY RIVER ROUTES IN 1791—WESTERN INLAND LOCK AND NAVIGATION COMPANY—SENECA LOCK NAVIGATION COMPANY—ERIE CANAL—CAYUGA AND SENECA CANAL—CROOKED LAKE CANAL—CHEMUNG CANAL—BARGE CANAL—ABORTIVE CANAL PROJECTS.

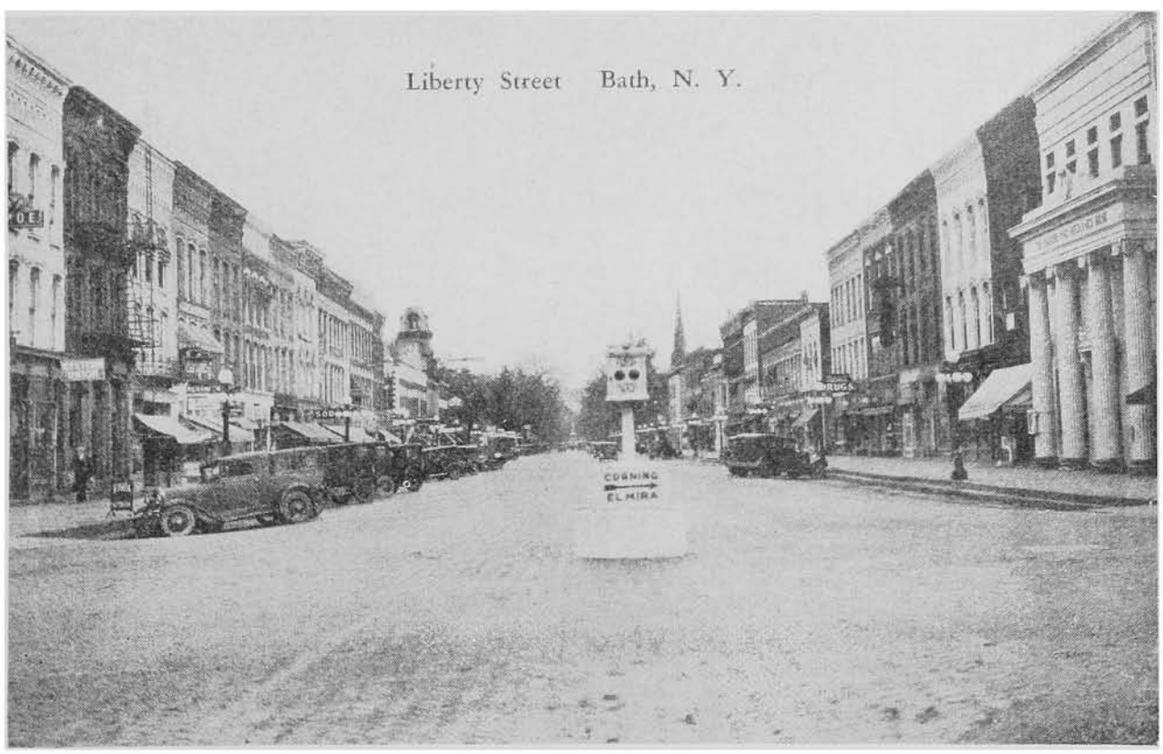
Natural waterways, predecessors of the artificial canals, formed one of the earliest avenues of entry to Central New York. Down through the ages in all lands water travel has been among the earliest modes of transportation. In the heart of New York State, primitive forest roads preceded the canals, but the rivers even before the passages through the woods, had been channels of travel. Possibilities for boat transportation upon the Finger Lakes hastened the building of the canals, which came to rival the highways and spelt the doom of the wayside taverns.

As far back as 1791 waterways were used as avenues to Central New York. But it took fifteen to twenty days to bring a ton and a half of freight from Schenectady as far as Seneca Lake. In that year the Western Inland Lock and Navigation Company was formed to improve transportation facilities. On the Mohawk, between Schenectady and Little Falls, a distance of fifty-six miles, no serious obstructions were found. But at Little Falls a carry or portage was unavoidable. Light boats and canoes were carried by hand, while the heavier craft and bateaux were drawn three quarters of a mile around the falls by ox teams over a difficult and rocky pathway.

The craft used in those days were generally from twenty to thirty feet long and four to six wide, flat bottomed and of light draught. On the upper edge and on both sides of these boats ran a walk or plank their entire length, upon which the boatman, whose power alone propelled the vessel, could walk. The mode



STATE ARMORY, GENEVA, N. Y.



LIBERTY STREET, BATH, N. Y.

when moving against the current was to place one end of a pole upon the bottom of the stream and the other against the boatman's shoulder and then by pushing, the craft would glide along while the pilot walked the boat's length.

After passing Little Falls the next obstruction was the shoals at German Flats, now Herkimer. From there to Utica an easy passage was found. But from Utica to Rome the river was more shallow and obstructed by logs and trees felled by settlers as an easier way to dispose of them than by burning. At Rome or Fort Stanwix, a carry was necessary to reach Wood Creek, a small stream, which instead of emptying into the Mohawk, less than three miles distant, with an elevation of land of only two feet between them, flowed by a circuitous route of nearly thirty miles into Oneida Lake, and thence by the Oswego River into Lake Ontario. From the Oswego River the boats slipped into the Seneca River, passing Montezuma, the stopping place for Cayuga County. The Seneca River, as outlet of the Finger Lakes, opened up a wide territory by water.

The Western Inland Lock and Navigation Company pursued a vigorous policy and in two or three years constructed locks at Little Falls, improved the passage at German Flats and removed obstructions between Utica and Rome. The company built a canal at the latter place to connect the Mohawk and Wood Creek, thus shortening the distance to Oneida Lake. By this artery, the first to presage the canals to follow in Central New York, settlers came pouring in.

To improve navigation of the Seneca River between Seneca and Cayuga Lakes, the Seneca Lock Navigation Company was incorporated April 6, 1813. Work on the improvement progressed favorably and on June 14, 1818, the first loaded canal boat was locked through at Seneca Falls.

But it was not until the War of 1812 that in the center of the state a realization of the value of water navigation was forcefully impressed upon pioneers. Congress had an embargo on British commerce, during the war, so that the plaster business along Cayuga Lake, centering at Union Springs, was greatly aided. Heavy demand thus sprang up, as this was the only large

plaster quarry in the United States then known. The stone was shipped by boat to Ithaca and then in wagons thirty miles to Owego, where it was put on boats and transported down the Susquehanna. During this period more than fifty of Philip Yawger's plaster boats at Union Springs were seized by the government and sent to Sacketts Harbor to transport troops to Canada. But the plan was abandoned and the boats, in a great fire, were consumed.

The war so vividly proved the value of lakes and rivers for defense and trade that on April 15, 1817, the Legislature authorized the construction of the Erie Canal. This was the greatest engineering undertaking in the new world and gave a new strength to the development of Central New York. Digging was begun July 4. By 1822 there were 222 miles of channel open to navigation and in November, 1823, the schooner, Mary and Hanna, owned by enterprising farmers on Seneca Lake, carried a cargo of wheat from Hector Falls, Schuyler County, to New York, a distance of 350 miles. The start was seventy miles from the Erie, but the connection was made by way of Seneca River through the private locks of the Seneca Lock Navigation Company at Waterloo, Seneca County. This company in 1813 had received a charter to connect Cayuga and Seneca Lakes by canal and finished the job eight years later.

The full line of the Erie Canal was not completed until October 26, 1825, when the waters of Lake Erie were admitted and the first boats left Buffalo for New York. There was then no telegraph, but along the route, cannon were fired, bringing the news to the metropolis in just an hour and twenty minutes.

The Seneca Chief, which in 1828 came to Seneca Lake as its first steamer, led the canal fleet. The craft was gaily decorated and carried a distinguished party, including Governor DeWitt Clinton. Crowds gathered at every hamlet, bells rang and parades filled the streets. When the Seneca Chief later made its maiden voyage from Geneva to what is now Watkins Glen, great demonstrations were repeated. The boat plied Seneca Lake for twenty years.

Construction of the Cayuga and Seneca Canal was authorized by the Legislature April 20, 1825, to extend from Geneva to Montezuma on the Erie Canal, a distance of twenty-one miles (principally in Seneca County). The state purchased the interest and improvements of the old Lock Navigation Company and began work on the canal in 1826. It was opened November 15, 1828. The canal had twelve locks in a descent of seventy-four feet from Geneva to Montezuma and cost $214,000.

The instantaneous success of the Erie Canal stimulated immediate plans for connecting it with other sections of Central New York by water. None were more interested in the projects than farmers whose grains went to eastern markets. General George B. McClure, a leading pioneer in the development of Central New York, operated warehouses at Dansville, Penn Yan and Pittston, purchasing wheat from the settlers. This he consigned annually in large arks and on rafts through the Cohocton and Susquehanna rivers to tidewater at Baltimore. General McClure is credited with having been the first man to undertake commercial navigation on Lake Keuka. He built a fourth warehouse at Hammondsport, at the south end of the lake, simultaneously placing into operation there a schooner, The Sally, of about thirty tons burden.

The Sally was used in carrying grain purchased from settlers in the vicinity of Canandaigua and Penn Yan over the length of Lake Keuka to Hammondsport. From that point it was hauled by team to Bath where it was shipped by raft over the Cohocton River. But the construction of the Erie Canal changed this route of transportation by the rivers, diverting freight to the northward to meet the canal, instead of southward by the Susquehanna. Lake Keuka, then known as Crooked Lake, advanced to immediate importance from the standpoint of navigation.

The Bath agents of the Pulteney estate, which once comprised a large portion of the western part of Central New York, accepting wheat from settlers in payment for lands purchased, began shipping by barges from Hammondsport to Penn Yan, whence the grain was hauled to Dresden on the west shore of

Seneca Lake and consigned to lake barges there, finally reaching Geneva and the Erie Canal. To obviate the unloading and reloading of the grain at Penn Yan and Dresden, the importance of a canal connecting Keuka and Seneca Lakes was recognized by the passage of a bill by the State Legislature in 1831 authorizing the Crooked Lake Canal, extending from Penn Yan to Dresden. The length of the canal was seven miles and the "ditch" was completed in 1833. The canal bed proper is now used by the New York Central Railroad as a roadbed. This line was the Fall Brook Railroad before the Central acquired control. Where the old canal bed is not used, the tracks are laid along the towpath. Some of the tracks run through original locks of the old canal, one being located near the old Cascade Paper mill, now the site of the extensive chemical plant of the Taylor Chemical Company of Penn Yan and New York City.

There were twenty-eight locks of the lift pattern and the canal was fed by the waters of Lake Keuka. The main lock for the letting in or shutting off of the water was located at Main Street, Penn Yan, where the present bridge crosses the street, and close by, a few feet to the south, was a second bridge over the Minnesetah River, the outlet of Lake Keuka, which flowed into Seneca Lake.

The Crooked Lake Canal was completed at a cost of $137,000. Laden canal boats from any point on Lake Keuka were towed over the lake by the early steamboats, to the canal junction at Penn Yan, where they were taken in charge by horses or mules over the canal. When the boats reached Seneca Lake, there were five steamers, operating either north or south. They were The Elmira, S. T. Arnot, P. H. Field, Duncan S. Magee and Canadesega. Large quantities of grain, lumber and farm products not naturally perishable within the period of navigation were conveyed over the canal during the thirty-seven years it was in operation. Merchandise was transported on canal boats on their return trips from Albany and New York to the villages in the Lake Keuka region, thus supplying a large number of merchants with their stocks of goods. And the canal boats in

the seven mile channel lifted their freight up an elevation of 270 feet between Seneca and Keuka Lakes.

The Crooked Lake Canal was abandoned in 1869 or 1870, as a result of a drop in clearances and tolls consequent to railroad competition. The beginning of the end of the canal came with the construction in 1850 of the main line of the Erie Railroad through the southern part of Steuben County, and then the completion in 1852 of the Corning-Avon road, now the Rochester division of the Erie system.

Simultaneously with the completion of the Crooked Lake Canal was the completion of the Chemung Canal. In the spring of 1825 canal commissioners were appointed by the Legislature of that year to determine the best route for a canal from Seneca Lake to the Chemung River. On April 15, 1829, the sum of $300,000 was appropriated by the state for construction of the canal and in 1830 work was started. Colonel Hendy, the pioneer settler of Elmira, turned the first spadeful of earth at fitting ceremonies marking the start of the building task.

The canal, extending from Watkins Glen on Seneca, to Elmira on the Chemung was extended through a navigable feeder from Horseheads to Corning, making the total length thirty-nine miles. The total cost of all was $344,000, there were fifty-three locks and a rise of 516 feet. Completion of the canal feeder led to the building of the Tioga and Blossburg Railroad leading to Pennsylvania coal mines. The canal proved the great outlet for vast lumber operations that employed much capital and labor, and gave the waterway its profits. Just about the time that the lumber operations began to wane, the Junction Canal connected it with the Pennsylvania coal regions and inaugurated another era of prosperity. The Chemung canal, by using the inlet of Seneca Lake, also had a spur that reached Montour Falls, three miles from Watkins.

Before the days of the railroads, there were several abortive canal projects launched in various parts of Central New York. They never were brought to fruition but they denoted the ambitious character of the builders of the cities and villages of the district today. Typical of these movements to link up with the

Erie Canal by water was a proposition put forward in Auburn in 1822 for building a canal from Auburn to Port Byron, on the Erie. Meetings were held, speeches made and an influential committee named. But time sped by with no results. Seven years later a new committee was appointed and the project revived. The Auburn and Owasco Canal Company was organized and $100,000 subscribed toward the development. The company was incorporated April 20, 1828. Then the proposition of connecting with the Erie was agitated and the matter even reached the State Legislature, but nothing was done upon either canal.

In June, 1835, the Auburn and Owasco Canal Company was reorganized and a big celebration was held in Auburn preliminary to inauguration of the Auburn and Owasco Canal to Port Byron. Work on the Big Dam commenced and an excavation was made as a start of a canal basin. The project failed and the company sold its property on the Owasco River, but it had given the city a dam twenty feet high that added greatly to the utilization of the water power of the stream. As late as the Twentieth Century, there was agitation to build a canal from Auburn to connect with a new Barge Canal, an outgrowth of the old Erie, but again failure resulted.

Another abortive canal project bobbed up in Cortland County where it was proposed to construct a canal from Syracuse to Port Watson. In 1825 the canal commissioners were instructed to make the necessary examinations as to the feasibility of the project. But nothing came of the idea. In that period it was looked upon as a remarkably poor season for canals when two or three new waterways were not projected and discussed.

Some years after the Erie Canal became a reality, Gen. William H. Adams, a prominent citizen of the town of Galen, Wayne County, organized a company to build a canal connecting Sodus Bay on Lake Ontario with the Erie at Clyde. Some work was done on the enterprise and the general's entire fortune was expended on the project, but the canal never materialized.

As years went on, the inadequacy of the old Erie Canal became apparent. In 1884 the locks were lengthened. This

proved a mere makeshift and in 1903, by popular vote, New York State authorized an expenditure of $101,000,000 to convert the Erie into a wider and deeper Barge Canal. Actual construction began in 1905 and the waterway was opened to traffic May 15, 1918. Today the canal system represents a cost of more than $140,000,000. Three fourths of the state's population resides within a half hour walk of the Barge Canal system, and in 1929, a total of 2,876,160 tons of merchandise was transported through the system.

There are three chief branches of the Erie Barge Canal, one of which, the Cayuga and Seneca Canal, lies wholly within Central New York. This waterway connects Cayuga and Seneca Lakes with the water lanes of the world, Ithaca on Cayuga and Watkins Glen on Seneca being the southern termini. The Cayuga Seneca Canal provides a waterway ninety-two miles long.

Present giant locks of the canal are operated by electricity, with gates that can be opened or closed in thirty seconds, some of the lock gates weighing more than 200,000 pounds.

The original canal was four feet deep and forty-two feet wide. The modern waterway has a twelve feet depth and in most places is at least 200 feet wide.

Boats on the old Erie Canal, drawn by horses or mules, surged slowly along carrying about thirty tons of freight. The new canal has a growing fleet of huge cargo carriers, motor driven, capable of carrying up to 2,100 tons, a load comparable to that carried by many ocean tramp steamers.

Day and night they slip rapidly from one canal level to another, guided by green and red signal lights that resemble those controlling railroad trains. Electrically operated locks reduce locking delays to a minimum.

Long, slim and seaworthy, these newest cargo carriers resemble ordinary ocean ships, lying low in the water and without tall masts or superstructure. Capable of lakes and ocean navigation, this type of canal boat last year traveled regularly from Philadelphia into the state waterways, voyaging up the Atlantic Coast from Cape May, and on through the canal and Great Lakes to Chicago.

Other fleets of smaller boats have grown up. These operate on fast schedules and move regularly between Buffalo and New York or between other points.

As a result of this improved equipment the canal in recent years has been able to handle greatly increased traffic. In 1925 the canal moved 2,344,013 tons of freight and in 1930, 3,605,457 tons. Last year the total tonnage increased to 3,722,012.

Central New York has two admirable harbors on Lake Ontario today at Fair Haven, Cayuga County, and at Sodus, Wayne County. Thousands of tons of coal are shipped yearly from these ports to Canada. When a proposal to convert the St. Lawrence into an ocean canal becomes a reality, ocean going craft may dock at these two Central New York points.

As early as 1826 the Pocket Gazetteer, of the United States, published in New Haven, says of Sodus Bay: "The best harbor is on the south shore of the lake. It is six or seven miles long and from two to four wide and of sufficient depth for vessels of great burden."

Before the days of the artificial waterways, some of the smaller rivers of Central New York were used for navigation, the first settlers coming along their winding courses in canoes. The Tioughnioga River formed such a water highway for Cortland County. In the spring and fall when there was usually a freshet, the turbid torrent of this stream carried many arks, filled with produce of settlers, down to the Susquehanna and on to Harrisburg and points on Chesapeake Bay. Some of these arks were ninety feet long with a depth of six or seven feet. After the building of dams was commenced in the river, the arks gave way to scows or flatboats.

An act of the Legislature passed April 15, 1814, provided that the "western branch of the Chenango River, commonly called the Onondaga branch, from the Forks on Lot 66, in the town of Homer, Cortland County, to the upper bridge, on Lot 45 in said town, be and the same is hereby declared to be a public highway." The Tioughnioga flows southward across Cortland County.

In Wayne County the Clyde River was followed by craft of pioneers and it is significant of the value of navigable waterways that most of the settlements of the district were along Ganargwa Creek, which branched off at what is now Lyons. The Ganargwa, more commonly known as Mud Creek, was by legislative act in 1799 made a public waterway linking eastern markets with the frontier.

CHAPTER IX

EARLY RAILROADS.

CAYUGA & SUSQUEHANNA SECOND ROAD IN STATE—HORSES DREW FIRST TRAINS ON AUBURN AND SYRACUSE—SOME LINES LINKED UP WITH STEAMBOATS—ANECDOTES OF EARLY BUILDING PROJECTS—LIVELY CAREER OF LOCOMOTIVE "SAM PATCH."

The stage coach and the Erie Canal had been magnificent expressions of an indomitable courage, but it was the railroads, spanning hill and valley in Central New York, that first gave evidence that time and distance had definitely come under the control of man. In April, 1834, the first railroad in Central New York was opened. The Cayuga & Susquehanna Railroad, second road chartered in this state, ran its first train between Ithaca and Owego. The road had been chartered still earlier, in 1828, with a capital stock of $150,000. In 1837 the road failed and was sold for $4,500. Today, substantially this same old line chartered to bring lumber, salt and plaster to the Susquehanna and its barge fleet, is known as the Cayuga division of the Delaware, Lackawana & Western.

The second railroad into Central New York—the Auburn & Syracuse—was incorporated May 1, 1834, a month after the opening of the Ithaca-Owego line. Its authorized capital was $400,000 and it was to be a continuation of the first road in the state, that from Albany to Schenectady. Settlers scoffed at the idea that a railroad could cross the hills about Auburn. Subscriptions had to be forced, the public fearing the competition of packet boats on the Erie Canal. Constant effort among residents between Auburn and Syracuse finally resulted in all the stock being subscribed, but $350,000 of the $400,000 was taken by Auburnians.

The company organized in 1835 and by 1838 the road was practically completed. The first excursion train upon it made the trip of twenty-three miles January 8, 1838, the train being drawn upon wooden rails by horses of Col. John Sherwood, stage coach magnate. On June 4, 1839, a second excursion went to Auburn to celebrate the completion of the entire distance, but this was drawn by an engine.

The Auburn & Rochester Railroad Company was organized in 1836 to complete the line from Albany to Rochester. Ground was broken in 1838 at the western end, construction this time working eastward. The first train left Rochester for Canandaigua on Thursday, September 10, 1840, but owing to some hindrances caused by an unfinished track, it did not arrive there until Sunday and started the return trip on Monday. On September 22 the first time table was issued, after due schedule experiments. These were for freight and passengers, three trains a day. The first conductor on the road was William Failling and the first baggageman Herman G. Miller. The fare from Rochester to Canandaigua was nine shillings, which was afterward reduced to five and then advanced to six.

Soon it was proposed to complete the road eastward to Geneva by May 15, 1841. The work was hurried and the road continued on to Seneca Falls. The first passenger train east to this point ran July 4, 1841. The bridge over Cayuga Lake was completed in September of the same year and during November the road was finished to Auburn, lining up with the Auburn & Syracuse. Two tracks were built between Geneva and Canandaigua, but one was found sufficient and the other taken up. The track consisted of scantling about four inches square and laid on top of the ties, upon which were placed strips of half-inch thick, two-inch wide iron, spiked. Often the strips would come loose as the wheels ran over them, and would run through the bottom of the cars. Sometimes these mishaps caused fatalities.

The first train that left Geneva consisted of two coaches and an engine. Each coach would hold fifteen or sixteen people. It was a free train to test the road and it returned the same day, running about ten miles an hour and stopping often. Wood was

used as fuel. Many people along the line had a great antipathy for the cars. A colored woman, Old Annie Lee, as she was called, had such hatred for the strange conveyance that when the first train came through she armed herself with an axe and, standing in the center of the track, defied the engineer to come farther under danger of having his locomotive cut to pieces. Many times afterward she greased the tracks, making it impossible for trains to proceed until the rails had been cleaned.

In 1853 the direct road from Syracuse to Rochester passing through northern Cayuga County and Wayne County, was completed with a single track. Today it is the four-track main line of the New York Central.

Both the old Auburn & Syracuse and the old Auburn & Rochester now form the Auburn branch of the New York Central.

The early roads often utilized stage and steamboat connections to solicit business. An ancient poster, dated Geneva, June 14, 1849, advertising a "new line from Geneva to New York by the Seneca Land and New York and Erie Railroad" evidences this enterprise and stresses the words "through in twenty-four hours." Instead of the modern steel leviathans of the rails, the poster indicates that the traveler of that age went to a Geneva steamboat office, purchased his ticket, boarded the steamer Richard Stevens, and steamed up Seneca Lake to Jefferson, now Watkins Glen. There he entered a four-horse stage coach, mounted on leather springs, and headed for Owego, there to transfer to the New York and Erie Railroad. Then the traveler was whisked to the metropolis at fifteen to twenty miles an hour. All the advantages of rail, water and stage travel were available for six dollars and fifty cents one way.

The Erie was extended to Elmira in 1849 and to Corning the following year, as it advanced steadily toward Lake Erie. It was on May 14, 1851, that the road was opened to Elmira, which turned out to welcome Millard Fillmore, President of the United States, there for the occasion. Daniel Webster also came, with the president and directors of the road and other notables.

At the Brainard House, now the Rathbun, was the President of the nation, Attorney-General John J. Crittenden, Postmaster-

General Hall, Senator Douglas of Illinois and 300 others. At Haight's Hotel were Daniel Webster, William H. Seward, Secretary Graham, Christopher Morgan and 200 others. From a balcony of the Brainard the President addressed the throngs. It was one of the biggest days in Elmira's history.

May 14, 1845, the Chemung Railroad Company was incorporated and commissioners named to solict subscriptions for stock. The Elmira & Williamsport Railroad was incorporated in 1832, before the New York & Erie, but did not materialize until about twenty years after. Between Canandaigua and Williamsport there were three separate railroad companies: The Jefferson & Canandaigua between Watkins Glen (Jefferson) and Canandaigua, which was forty-six miles long; the Chemung Railroad, from Elmira to Watkins, of seventeen miles, and the Elmira & Williamsport, about seventy-five miles long. These three subsequently came under control of the Northern Central Railroad, now a part of the Pennsylvania system and known as the Elmira Division.

This Northern Central Railroad originated as the Canandaigua & Corning Railroad. On March 12, 1845, publication was made of application for incorporation. The bill passed May 11, 1845. The capital was to be $1,600,000. Total cost of building and finishing the road was estimated as $950,100. Breaking of ground toward commencement of the work took place at Penn Yan on July 4, 1850. Within a year the enterprise was under full headway. June 25, 1851, a thousand men were employed laying rails from Penn Yan to Watkins Glen, and in grading near Canandaigua. The road was opened from Canandaigua to Watkins Glen in September, 1851, the New York & Erie furnishing engines, cars, etc., for a specified rate per mile. Later the line purchased its own rolling stock.

The Utica, Ithaca & Elmira Railroad, later named the Elmira, Cortland & Northern, now a branch of the Lehigh Valley, entered Elmira over the rails of the Erie road until the branch from Van Etten was built to Elmira.

The Elmira & State Line Railroad, now the Tioga division of the Erie, was completed in 1876.

The Delaware, Lackawanna & Western Railroad entered Elmira with its first train April 2, 1882.

The Southern Central was completed from Auburn through Freeville to Owego in 1869, in which year a charter was secured for the Ithaca & Cortland Railroad to meet the Southern Central at Freeville and to pass on to Cortland.

In 1870 a charter was granted for the Ithaca & Athens Railroad to Athens, Pennsylvania, to connect with the Lehigh. These three roads later merged with the Lehigh.

The Geneva & Ithaca Railroad opened in 1872 and the same year the Cayuga Lake Railroad from Ithaca to Auburn. These, too, were taken over by the Lehigh and now operate.

Swinging over the eastern section of the Central New York counties, early roads are there found operating.

The Salina & Port Watson Railroad Company was incorporated in 1829, the charter permitting the propulsion of cars by steam or animal power. In the spring of 1836, agitation was revived to secure a railroad, resulting in the incorporation of the Syracuse, Cortland & Binghamton Railroad Company. The same year an incorporation was effected to build a railroad between Cortland and Owego. It was not until the completion of the Syracuse & Binghamton Railroad, opened for traffic October 18, 1854, that anything was done in railroad construction in Cortland County.

Enthusiasm was stimulated in 1865 over prospects of a Midland connection direct from Auburn. Four years later the Ithaca & Cortland Railroad Company was formed and a road completed between those communities, now a part of the Lehigh Valley system, which was opened in 1872 and eventually extended to Elmira. A charter for the Utica, Chenango & Cortland Railroad Company, dated April 9, 1870, was obtained with the idea of operating a road to connect with the DeRuyter and Norwich branch of the old Midland (New York, Ontario and Western) Railroad, which was then operating, but has since been abandoned.

Interesting little anecdotes are numerous in the story of early railroading in the region. One such is connected with the Sodus Point and Southern Railroad, projected in the fall of 1851 from

Stanley, thirty-four miles northward to Sodus Bay to tap the Lake Ontario shipping trade. Interested parties had difficulty keeping the project alive and it was not until 1876 that work was completed and trains placed on the tracks. The road was acquired by the late E. H. Harriman and the first train run was a light engine sent to Stanley to take Mr. Harriman to Sodus Point. On arrival at Sodus, Harriman gave the engineer ten dollars with instructions to divide with the fireman, John Bayless. This road was sold to the Northern Central branch of the Pennsylvania and is now the Sodus Bay division.

The Geneva & Southwestern was originally built from Naples to Stanley. It now traverses Middlesex in Yates County, Naples in Ontario and was originally intended to have its southern terminal at Hornellsville on the western border of Steuben County. The road was finally bought by the Lehigh. Great excitement prevailed at Stanley when the line was to cross the Northern Central Railroad. An engine was held in readiness to pour hot water on the workmen should they attempt to cross the right-of-way of the Northern Central and the operator on duty was instructed to report each hour the progress that the opposing road was making. After a time friendly feeling overcame the differences and both roads united to lay the crossover at Stanley.

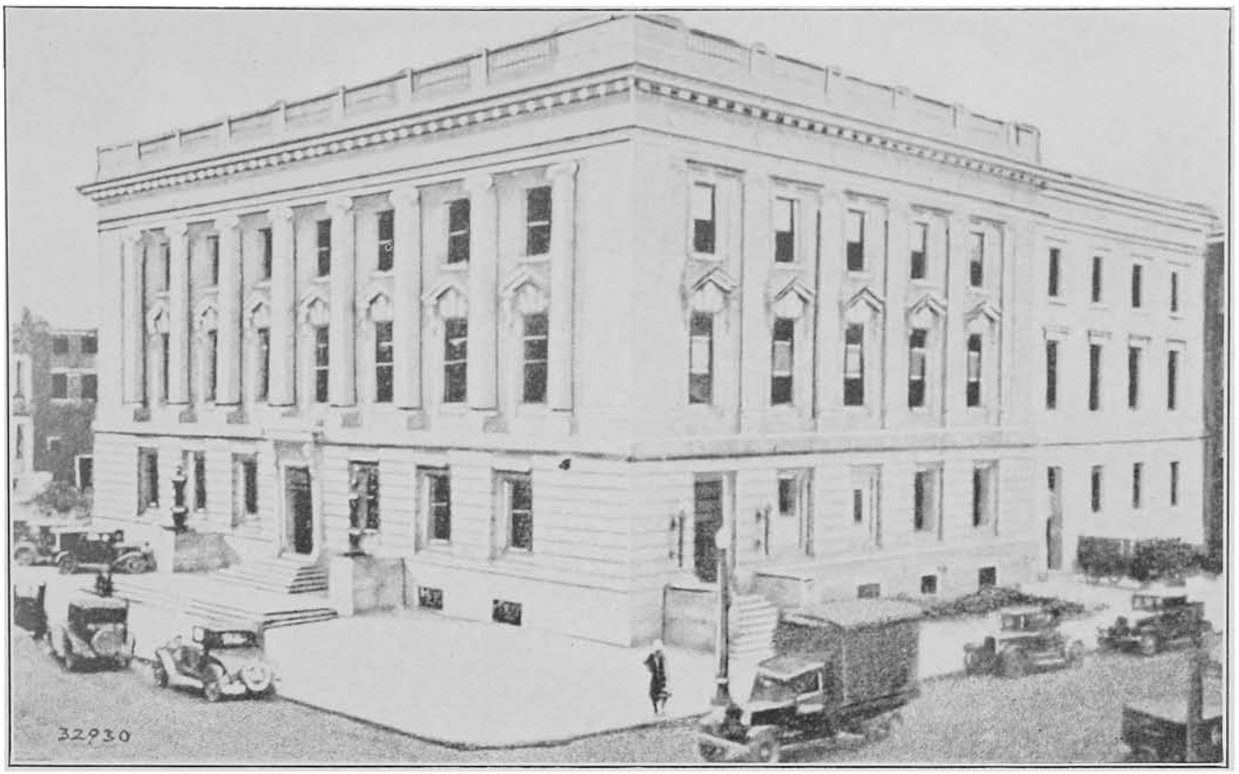
About one mile south of Hall Station on the Pennsylvania railroad is a pine tie placed in service April 28, 1875, and is still in use. This tie is reputed to be the oldest in active service on the Pennsylvania system and perhaps in the United States. It was placed by Jeremiah Driscoll, section foreman for more than forty years.

Any sketch of railroading in Central New York would be incomplete without mention of the old Fall Brook line locomotive No. 13, more often known as Sam Patch. On August 6, 1873, the engine jumped at full speed into Seneca Lake, at Watkins Glen. At that time there was a double track coal trestle facing the lake. Engineer M. S. Stratton jumped from his cab when the engine bumped some coal cars. The collision opened up the throttle and the engine went up the trestle at a thirty-mile clip

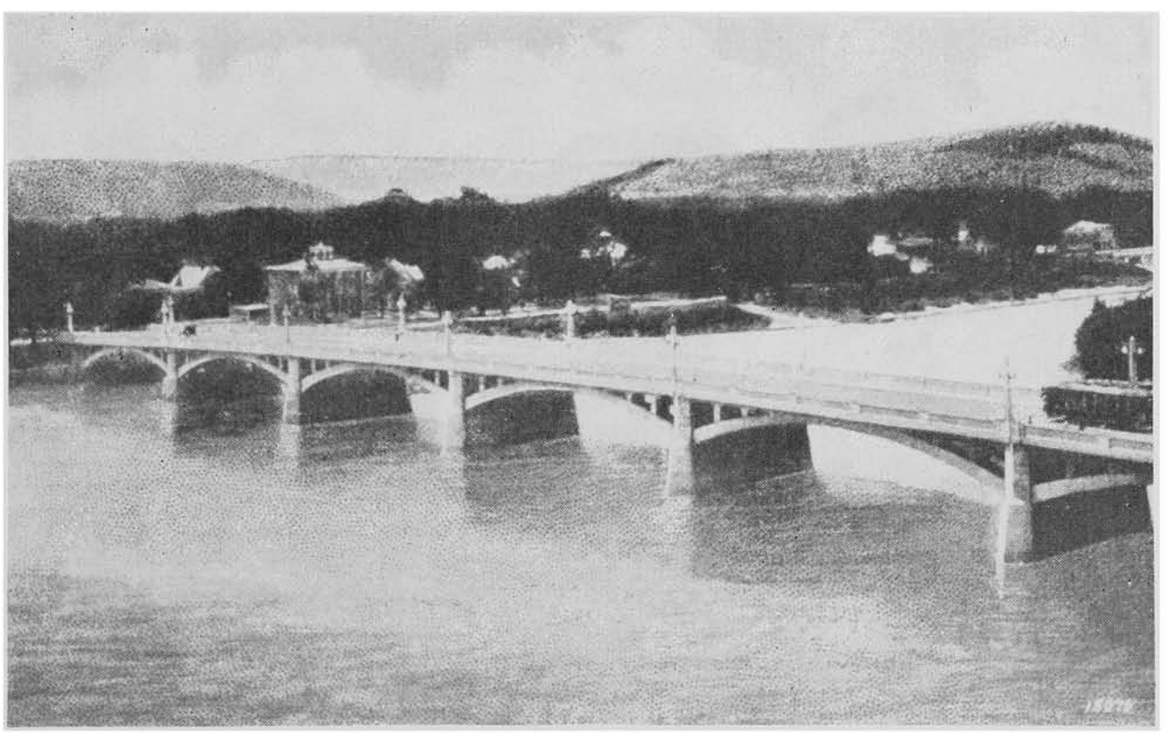
and then dived into the lake, "leaping" over two canal boats and dropping into fifty feet of water.

The locomotive was salvaged and on January 7, 1874, it ran off the track at Tioga, Pennsylvania, stove in the station, moved the structure two feet off its foundations and caused a panic among attendants at a prayer meeting in the depot. Again in 1880 the Sam Patch took to the water, making a plunge into Seneca Lake at Geneva. In the same year, while doing duty as a double-header it left the rails near Post Creek, went down a bank and into a swamp. Then it was overhauled and a great horseshoe forged and placed over the pilot. Thereafter it had no more wild escapades.

The story of other roads which have helped to build the prosperity of Central New York might be chronicled, but those here mentioned give a sufficient conception of the railroad expansion. There have been successes and failures, the latter being exemplified in the Short Line or Central New York Southern Railroad built in 1909 from Auburn to Ithaca and torn up when in receivership in 1924.



UNITED STATES POST OFFICE, ELMIRA, N. Y.



NEW MAIN STREET BRIDGE, ELMIRA, N. Y.

CHAPTER X

AVIATION

HAMMONDSPORT, THE "CRADLE OF AMERICAN AVIATION"—DEVELOPMENTS BY CURTISS—FAMOUS FLIERS AND THEIR CONNECTION WITH REGION—EARLY BALLOON ASCENSION—PRESENT DAY AIRPORTS AND FLYING FIELDS.

Wings that have brought new horizons to mankind fluttered as fledglings over Central New York before the World War demonstrated that man-made machines could roar through night and storm. A world flies today but veteran aviators remember that the "Cradle of Aviation" centered around Hammondsport, Steuben County, at the head of Lake Keuka.

Something happened in that little lake village July 4, 1908. The late Glenn Hammond Curtiss there announced that he would make the first public airplane flight in America. He did. He flew a mile. The boy bicyclist, motorcycle mechanic and racer became the world's greatest developer of aviation. He became a millionaire, but first of all he became a creator of wings and the allied nations in the World War still look upon his Central New York home as the center from which aviators of many nations flew democracy to victory. Today Pleasant Valley, where he experimented, has been proposed for a commemorative airport. A brief sketch of dates and events reveals why Hammondsport has been called the "Cradle of Aviation."

In 1907 Dr. Alexander Graham Bell, close personal friend of Dr. Samuel Pierpont Langley, and an observer of the experiments in mechanical flight carried on by Langley, organized the Aerial Experiment Association for the purpose of carrying on scientific experiments with flying machines.

He invited as a member of that group Glenn H. Curtiss, who since 1903 had been the outstanding American designer of light engines. Since 1903 Mr. Curtiss had held National motorcycle

championships; in 1904 he had established a world's speed record for ten miles that stood for ten years; one of his engines had been fitted to Capt. Thomas S. Baldwin's dirigible, the "California Arrow." All dirigibles in the country were using Curtiss engines. All of them were made in Hammondsport. This work had attracted the attention of the United States Government and an order was placed with Captain Baldwin for the first big dirigible balloon for the Signal Corps and marked the beginning of military interest in aeronautics in America. This balloon was built and tested in Hammondsport, in 1905. It was driven by a four-cylinder Curtiss engine designed for the purpose. Curtiss and Baldwin operated the machine on its test flight.

Because of his prior experience with engines and aeronautics, Dr. Bell made Mr. Curtiss director of experiments for the Aerial Experiment Association. Each member of organization was to build and fly a machine after his own designs. The other members of the organization were: J. A. D. McCurdy and Casey Baldwin, young Canadian engineers; Lieut. Thomas Selfridge, United States Army, observer for the United States Government.

March 12, 1908, first public flight made by Casey Baldwin over the ice of Lake Keuka, in aeroplane Red Wing, designed by Lieutenant Selfridge.

May 22, 1908, Curtiss flew aeroplane White Wing a distance of 1,017 feet in nineteen seconds on the old Champlain Race Track at Pleasant Valley. Machine designed by Casey Baldwin, July 4, 1908, Curtiss flew the June Bug for a mile to win the first leg of Scientific American Trophy. This was the first pre-announced flight in America and was observed by all who cared to come. Aero Club of America was represented by Stanley Y. Beach, Allan R. Hawley, Augustus Post, Charles M. Manley, chief of Doctor Langley's engineers, Christopher J. Lake, George H. Guy, secretary of the Engineering Society of New York, and many others.

July 17, 1909. Curtiss won second leg for Scientific American Trophy, flying nineteen times around a circular course, a distance of twenty-four and seven-tenths miles, at Mineola.

August 29, 1909. Curtiss won Gordon Bennett International aeroplane contest at Rhiems, France, with machine and motor designed and built at Hammondsport, thus bringing to America the first international aviation speed trophy.

May 31, 1910. Curtiss flew from Albany to New York down the Hudson River, winning Scientific American Trophy for the third and final leg, also New York World's $10,000 prize.

During 1910 the first flights from and to the deck of a battleship were made by associates of Glenn H. Curtiss.

November, 1910, the Secretary of the Navy accepted Mr. Curtiss' invitation to send some officers of the United States Navy to him for instruction in flying, at no cost to the government.

During 1909 and 1910 numerous experiments with water-flying machines conducted by Curtiss on Lake Keuka.

January 26, 1911, first successful flight of hydro-aeroplane.

July, 1912, demonstration of the first real flying boat on Lake Keuka.

May, 1913, flights of the first Amphibian type of machine, designed to start from and alight on either land or water. Flown by Lieut. B. L. Smith, United States Marine Corps.

April, 1914, first tests of the twin-motored flying boat, "America," built for the late Rodman Wanamaker for a trans-Atlantic flight test, later developed into the famous NCs or Navy-Curtiss machines.

May, 1914, flight of the rehabilitated Langley machine which was wrecked in launching in 1903. Brought to Hammondsport from the Smithsonian Institution, restored and flown under the supervision of Dr. Charles D. Walcott, secretary of the Smithsonian Institution; Dr. A. P. Zahm, scientist, of the Smithsonian Institution; and Charles M. Manley, one of the Langley engineers who supervised the original construction of the machine.

In this short sketch there is no room for description of the many experiments with tetrahedral planes, helicopters, ornithopters, and other types worked upon at Hammondsport; nor of the work done here by the officers of the United States Army and Navy, who had their first taste of aviation at the Curtiss camps.

To complete the record of the Curtiss Hammondsport accomplishments it is necessary to go a little beyond the World War. Overlooking the fact that the machine produced and used in greatest numbers by World War aviators was the little Jenny, there remained one thing Curtiss had started which was not accomplished until after the war. That was the trans-Atlantic crossing in comparative safety.

Following the Armistice the United States Navy assigned Commander John H. Towers to prepare a fleet of flying boats to make a crossing of the ocean from America to Europe. This was not to be a desperate hop in the dark but the flight of a squadron of machines to make the trip on schedule. He worked with other commanders and with the advice of Curtiss produced the fleet of Navy-Curtiss flying boats. Starting from New Foundland the N-Cs 1, 3 and 4 flew safely to within a short distance of the Azores. There they encountered fog and two of the boats descended and were unable to rise again, owing to the rough sea. The N-C 4 reached Horta in safety. The N-C 4 continued the flight to Spain and thence to England without mishap; the first time that a scientifically scheduled trip across the Atlantic had been made with a flying machine.

One landed in the sea and was damaged but all occupants were picked up unharmed.

Today some of the aviation devices made at Hammondsport are being carried to the two poles.

When Commander Richard E. Byrd, and his three companions, bound for Paris in the great monoplane America, were spilled into the sea off the French coast, they put out from the wrecked plane in an Airaft, manufactured by Airships, Inc., of Hammondsport. The Airaft is a portable rubber boat that was part of Commander Byrd's equipment, not only on the New York to Paris flight, but on the expeditions in which he flew over the North Pole and the South Pole. Lindbergh carried an Airaft on his famous New York to Paris flight as did the Chamberlin-Bellanca expedition.

As a publicity stunt for the Finger Lakes Association on June 30, 1926, from the Hammondsport flying field a hundred carrier

pigeons were released as a plane roared skyward. Both men and birds headed toward Auburn, the pigeons taking a fifty-mile air-line path and the plane a sixty-two-mile route, in the first pigeon-plane race in America. The first bird in reached its Auburn cote just three minutes after the plane landed. The same day the results of the race appeared in the press of America and radio announcers in California recounted the victory of Curtiss' wings over those of the birds.

Generations ago, when even the gas balloon was in its infancy, the lake district witnessed one of the first aerial flights in America, when for an hour and a half John Wise, one of the pioneer aeronauts on this continent, soared above the region at a height of two miles, from which thirteen lakes were visible. So far as known this ascension from Auburn, July 24, 1847, is the earliest described in detail by any aeronaut. However, Humboldt experimented with a balloon in this country a few years before Wise, and the first balloon ascension in the world in which human beings went up was in Paris in 1783, only sixty-three years before the Auburn ascension.

On January 24, 1925, an astronomical expedition from the University of Michigan attempted a balloon ascension at Geneva in a fifty-mile gale to photograph the total eclipse of the sun that day. Just before the start, the 80,000 cubic foot gas bag tore and the aerial photographic test was over.

The village of Waterloo claims as a resident the first woman ever to have been married in an aircraft. She was Mrs. Mary A. Boynton, who was married to Dr. John F. Boynton, celebrated geologist of Syracuse, in Prof. Thomas S. C. Love's balloon "United States," on the eighth day of November, 1870.

On May 21, 1917, the government established at Cornell University, Ithaca, a United States Army School of Military Aeronautics, a "ground school" to train officers for service in Europe. Cadets there received in the war period eight weeks of intensive training, with instruction given in thirty subjects under these main divisions: Descriptive and military studies, engines, aeroplanes, aids to flight, gunnery, aerial observation, signalling and wireless.

Paul R. Redfern, who hopped off in the late summer of 1927 on a 4,600 mile flight to Brazil and was never seen again, was once a Central New York pilot. While stationed that same summer at the Finger Lakes Airport, Geneva, he made eighty-three flights in one day, carrying as many passengers.

William S. Brock, pilot of the "Pride of Detroit," which made a trans-Atlantic flight from Newfoundland to Croydon, London, received his early training in Ithaca. He entered Thomas Brothers Aviation School as a pupil when it was connected with their factory in Bath. In 1916 when the company and school were transferred to Ithaca, he went there to complete his aerial training. Brock was a pupil of Frank Burnside, former Ithacan and later a United States air mail pilot.

The biggest air fleet which ever visited Central New York up to that time descended at the Finger Lakes Airport, Geneva, on June 28, 1927, when about forty planes and 150 pilots stopped on the National Air tour, which had started from Detroit the previous day.

Elmira, Chemung County, has become known as the "Glider Capital of America" and the "Wasserkuppe" of this continent, because in 1930 and 1931 it was the scene of the first two National Gliding and Soaring Contests in this country. As this is written the third such national contest is slated for Elmira on July 18-31, 1932. The peculiar lay of the land and the nature of the air currents make the Chemung Valley community one of the most ideal in the world for this pastime of piloting motorless planes.

Today airports and landing fields dot Central New York. Many of the smaller private ones are not listed by the federal authorities. The Airway Bulletin issued September 1, 1931, the last issued by the aeronautics branch of the United States Department of Commerce, lists the following airports and landing fields in Central New York, with the descriptions given below:

Corning.—Scudder Field, auxiliary, one mile west of Corning, and one-half mile south of Painted Post, New York. Altitude, 925 feet; field rectanguar; 140 acres; dimensions, 2,300 by

1,500 feet; surface, sod; slightly rolling; natural drainage. Trees on all sides; buildings on east. No servicing facilities.

Cortland.—Cortland County Airport, municipal. One mile west. Altitude, 1,125 feet. Irregular shape, 155 acres, 4,000 feet N./S. and 1,600 feet E./W., gravel, level, natural drainage. Cortland Airport on hangar roof. Trees on northwest and northeast edges, pole line on west. Facilities for servicing aircraft, day only.

Elmira.—Elmira Airport, commercial. One mile south of business section. Altitude, 857 feet. Rectangular, eighty-seven acres, 4,200 by 2,800 feet, sod, level, natural drainage; two runways, 3,100 feet NE./SW. and 2,800 feet NW./S.E.; entire field available. *Elmira* on hangar. Pole line to west and trees to east and south. Facilities for servicing aircraft, day only. Radio, receiving set only.

Geneva.—Finger Lakes Airport, commercial. One-fourth mile west, at junction of two concrete highways. Altitude, 544 feet. L shape, fifty acres, sod, level, tile drainage; two landing strips, 3,000 by 1,800 feet; entire field available. Pole line to east, trees and houses to southeast, woods to west, pole line to north, orchards to north and west. *Geneva* on hangar. Facilities for servicing aircraft, day only.

Hammondsport. — Mercury Field, commercial. One mile southwest. Altitude, 750 feet. Rectangular, eight acres, 1,500 by 250 feet, sod, level, natural drainage; fields to north and south, also available for landings when not in cultivation. Trees to south and southeast. Facilities for servicing aircraft, day only.

Hornell.—Hornell Airport, commercial. Two and one-half miles north. Altitude, 1,170 feet. Irregular shape, sixty-five acres, 2,635 by 1,754 feet, sod, level, natural drainage; entire field available except extreme southwest. *Hornell* on hangar roof. Pole line, trees, and buildings on north, depression to southeast, trees to southwest. Facilities for servicing aircraft, day only.

Ithaca.—Ithaca Airport, municipal. One and one-half miles northwest of center of city, at south end of Cayuga Lake and west of inlet. Altitude, 400 feet. Irregular, 115 acres, 2,600 by

900 feet, sod, level, natural drainage; two runways, 2,600 feet N./S. and 3,000 feet NW./SE.; entire field also available. Hill to west, woods to west, south and east. Facilities for servicing aircraft, day only.

Newark.—Department of Commerce intermediate field, site 28B, Cleveland-Albany Airway. One and three-tenths miles northwest of city. Altitude, 465 feet. Irregular, forty-three acres, 1,850 feet NW./SE., and 1,650 feet E./W.; sod, slight slope; natural drainage. Pole line to north; blinker tower in northeast corner. Directional arrow marked "28B C-A." Beacon, boundary, approach, and obstruction lights. Beacon, green, flashing characteristic "8" (— . . .). No servicing facilities. Teletype.

Red Creek.—Red Creek Airport, municipal. One-half mile southeast, just north of Red Creek Lake. Altitude, 355 feet. Rectangular, forty-seven acres, 3,150 by 2,000 feet, sod, level, tile drainage; three landing strips, 2,200 feet NW./SE. and NE./SW., 2,000 feet N./S., all 100 feet wide; entire field available except for portion to west. *Red Creek Airport* on hangar roof. Orchard on south, cemetery in southwest corner. Hangar, minor repairs, aviation fuel, day only.

CHAPTER XI

INSTITUTIONS OF HIGHER EDUCATION

CORNELL UNIVERSITY—STATE COLLEGES AT CORNELL—STATE VETERINARY COLLEGE—GENEVA EXPERIMENT STATION—AUBURN THEOLOGICAL SEMINARY—HOBART COLLEGE AND WILLIAM SMITH COLLEGE—WELLS COLLEGE—ELMIRA COLLEGE—KEUKA COLLEGE—STATE NORMAL SCHOOL AT CORTLAND.

With five colleges or universities and one theological seminary, as well as a state normal school, Central New York is provided with unusual advantages in higher education. The oldest institution is Auburn Theological Seminary, having been founded in 1818 and the newest is William Smith College, Geneva, the women's school connected with Hobart College. This was opened in 1908.

In connection with Cornell University, one of the largest in the country, are three state colleges, an outline of which is given in this chapter.

CORNELL UNIVERSITY.

Cornell University, founded in 1865 and opened to students in 1868, now has a staff of instruction, research, and extension numbering more than 1,100 persons and an enrollment of 5,600 students. Its campus of 360 acres in the eastern part of the town of Ithaca contains more than sixty buildings devoted to the university's work. Altogether, including land acquired and used for purposes of experiment and demonstration, the university owns 4,000 acres in Ithaca and near it. A part of this domain is the Arnot Forest of 1,800 acres in the town of Cayuta.

The university comprises a graduate school, a college of arts and sciences, a medical college, a law school, and colleges of engineering and architecture, besides the three New York State colleges of agriculture, home economics, and veterinary medicine

and surgery. The State Agricultural Experiment Station at Geneva, with experimental farms in Chautauqua County, in the Hudson River Valley, and on Long Island is also a part of Cornell University. Recently the medical college, which was established in New York City and Ithaca in 1898, has become associated with New York Hospital in a new medical center at York Avenue and Sixty-eighth Street overlooking the East River.

Established on New York State's share of the Federal land grant of 1862, the university owes its foundation in a larger sense to Ezra Cornell, who devoted a large part of his own fortune to it and whose management of the university's lands realized a net return of $4,000,000 in endowment. The present endowment is about $20,000,000. The university's annual income, including State and Federal appropriations, is about $7,000,000. Its total equipment is valued at $14,000,000. The library comprises 750,000 volumes.

Associated with Ezra Cornell in the foundation was a fellow State Senator, Andrew D. White, who drew up the plan of organization and became the university's first president. He retired in 1885 and devoted the rest of a long life to scholarship and to public service, holding several important diplomatic posts. His successor was the late Charles Kendall Adams. From 1892 till 1920 the president was Jacob Gould Schurman, later the American ambassador at Berlin. Dr. Livingston Farrand has been president since 1921.

In recent years the university has received large gifts from George F. Baker for a chemistry laboratory and for dormitories, from Myron C. Taylor for new buildings for the law school, and from the late Payne Whitney for the medical college's buildings and equipment in the new medical center. Alumni and others have contributed funds for a beautiful building in memory of the 250 Cornell men who lost their lives in the war. Four large residence halls for women are nearing completion, the gift of two anonymous donors.

STATE COLLEGES AT CORNELL.

Until 1893 the State, while allotting to Cornell University the funds received under the federal acts in support of agricul-

ture, did not itself contribute to the university. There was nevertheless a College of Agriculture in the university and with the aid of federal funds an Agricultural Experiment Station was established in 1879. In 1893 the state made its first contribution in the form of a dairy building. In 1894 the state undertook the support of the New York State College of Veterinary Medicine at Cornell University and in 1904 and 1906 the College of Agriculture was similarly adopted. Work in Home Economics was introduced in 1907 and it has had a large development leading, in 1925, to a separate organization known as the New York State College of Home Economics.

There are thus three state colleges in the university, supported very largely by state funds. The Colleges of Agriculture and Home Economics receive also federal funds, mainly for extension and research, and the university also contributes a considerable amount in administration furnished free and in instruction furnished at less than cost.

The three state colleges are noteworthy in the development of research. It is estimated that from a quarter to a third of the resources of these institutions is devoted to research, and all branches of the agricultural industry, as well as the activities of rural homes, have been affected thereby.

The state colleges conduct also an extension service, cooperating with organized local units of men and women and of boys and girls in all the communities of the state. The teachings of the colleges are further made available by a series of bulletins and by a daily radio program. In February there is held a Farm and Home Week bringing to the campus upwards of five thousand farm people. In addition there are conducted during the year short schools varying from a few days to three weeks in duration, conducted for special groups desiring to be brought up to date in their various fields.

STATE VETERINARY COLLEGE.

To protect the human race from animal diseases and to save animals for human food, the New York State Veterinary College at Cornell University was founded in 1894, providing a higher

veterinary education. In that year Governor Roswell P. Flower recommended to the Legislature the establishment of such school, utilizing the facilities of Cornell. In 1895 the Legislature appropriated $100,000 to complete construction authorized the preceding year and the college opened September 21, 1896, with an entrance requirement of four years high school, or its academic equivalent, and a three-year course of study. It had a faculty of eight and an entering class of eleven.

In 1928 the Veterinary Experiment Station was established on land purchased by the university, so that animals might be kept for study and experiment. In 1908 the Ambulatory Clinic was provided and the following year the department of Materia Medica and small animal clinics was added. From an entering class of eight, the number has grown to between thirty and forty. From a faculty of four professors, two assistant professors, one instructor and one assistant, the teaching force has grown to eight professors, ten assistant professors, five instructors, two regular assistants and five student assistants.

Total appropriations for construction and equipment of the first buildings were $150,000. Since that time appropriations aggregating $366,000 have been made for construction and equipment, the grand total reaching $516,000. The first appropriation for maintenance was $25,000 in 1896-97. That in 1929 was $178,955.

Students have come from nearly thirty states and eight foreign countries and up to 1929 the college had graduated 676. Beginning in 1916 the course of study has covered four years, so that the college is recognized as one offering the finest advanced course in the world. Its research work has been as notable as its training.

Dr. V. A. Moore served as dean from the college opening until 1929 when he retired and became emeritus professor. Dr. P. A. Fish was chosen as his successor and served until his death, February 19, 1931, when he was succeeded by Dr. Earl Sunderville.

GENEVA EXPERIMENT STATION.

The New York Agricultural Experiment Station in Geneva, Ontario County, was the fourth station to be established in the

United States through legislative action, and the sixth to organize and begin research work. It opened its doors March 1, 1882. The five men who began work then did not know what they were expected to do. The act establishing the station became a law June 20, 1880, organizations most active in securing it being the State Agricultural Society, the State Grange, Central New York Farmers' Club, Western New York Horticultural Society, Elmira Farmers' Club and Cornell University.

Dr. E. Lewis Sturtevant, first director, took possession of the station property and began his duties as head of an institution founded primarily for investigation. In 1887, in accordance with an act of Congress approved March 2, 1887, the Hatch Act became a law. Under its provisions the Experiment Station in each state received $15,000 annually for research. Eventually this sum was divided between Cornell and Geneva, whereby Cornell received $13,500 and the Geneva station $1,500. The Adams Act, approved by Congress March 16, 1906, provided the additional sum of $15,000 annually. Of this, $13,500 goes to Cornell and $1,500 to Geneva. The Federal Congress approved the Purnell Act, February 4, 1925, which provided an additional $60,000 a year, of which $54,000 goes to Cornell and $6,000 to the Geneva station. Total federal funds available for the station are $9,000 yearly. State funds in 1932 total $428,480 for maintenance. In 1923 the station became a part of Cornell University.

The original farm purchased in 1882 contained 130 acres, to which was added in 1911, a second farm of eighty-seven acres and in 1916 a city block of one acre, a total of 218 acres. Besides this home tract, the station rents 138 acres. There are twenty-seven buildings on the home tract, of which four are laboratory and administration structures, eleven are farm buildings and ten are residences. These have been erected at a cost of $532,390.

The institution has maintained for a quarter of a century one of the largest, if not the largest collections of hardy tree, bush, vine and small fruits in the world. There are usually about 5,000 named varieties of fruits in the station's fruit plantation, with perhaps an average of 10,000 seedlings in close-set rows, each seedling a prospective new variety.

The station has published in the fifty years of its existence 135 bulletins on chemistry, bacteriology and manufacturing of dairy products; 401 bulletins having to do with growing of fruit and vegetable crops, including knowledge of the control of insect pests and fungus diseases; it has published 120 bulletins on the inspection of feeds, fertilizers and seeds, and thirty-eight bulletins on general bacteriology, a total of 694 bulletins.

It has published ten monographs on fruits and vegetables. The first syndicated news story was sent from the station January 28, 1922. Since then, one or more stories have gone out every week. The total number of these short articles sent out to December 31, 1931, was 2,253. In addition numerous articles were prepared for farm bureau publication, for radio broadcast and as special features. The syndicated news is being sent to 131 daily papers, 275 weeklies and 101 farm journals and trade papers. Based on returns from clipping bureaus, a conservative estimate of the total circulation of papers using station news items in 1931 will exceed fifty million a year.

Directors of the station in its half century of service have been: E. Lewis Sturtevant, 1882-'87; Peter Collier, 1887-'95; Lucius L. VanSlyke, 1895-'96; Whitman H. Jordan, 1896-1921; Roscoe W. Thatcher, 1921-'27; Frank B. Morrison, 1927-'28; Ulysses P. Hedrick, 1928.

AUBURN THEOLOGICAL SEMINARY.

Auburn Theological Seminary was established in 1818 when the City of Auburn, though having few more than 1,000 inhabitants, was the metropolis of Western New York. At that time locomotion was dependent upon horse power, candles furnished light, Monroe was president and Abraham Lincoln was studying law before log fires.

The Synod of Geneva on August 6, 1818, resolved "that the theological seminary be and hereby is located at or near the Village of Auburn," and appointed trustees to hold the property and others to collect funds for the institution. The seminary was incorporated by the State Legislature, April 14, 1820, and opened for students October 15, 1821. Convicts in Auburn prison

aided in breaking ground and other work of this character at the start.

The seminary's Summer School of Theology opened in 1911 and the Summer School of Religious Education began in 1913. The full term of School of Religious Education, in connection with the seminary, was authorized in 1921.

Eleven men were sent out from the Seminary in 1824 and ever since that time Auburn graduates have taken their places as ministers, missionaries, teachers, religious educators, serving ever new and changing communities in all parts of the world. This long line of successful graduates has indelibly inscribed the name of Auburn Seminary on the hearts and minds of Christian people everywhere.

Comprising some seventeen acres in all, and covering four city blocks, the campus is one of the distinguishing characteristics of the Seminary. Artistically laid out and well cared for, it is always a source of inspiration and admiration.

While Auburn is rated as a Presbyterian Seminary, its enrollment is interdenominational, seven different denominations being represented in the Seminary and nine in the School of Religious Education.

The original building was erected in 1821-22 and taken down in 1892. The Dodge-Morgan Library building was erected in 1872, the dormitory, Morgan Hall, in 1875; the Welch Memorial building and the Willard Memorial Chapel in 1892-94; Hubbard Hall and Condit Hall of the School of Religious Education were added in 1921 and 1922 respectively, and the three residences now on the campus, the Huntington house in 1862, the Richards house in 1876 and the President's house in 1908.

The original endowment, given by the citizens of Auburn and vicinity, consisted of ten acres of land for the campus and $35,000. Its present endowment is approximately $1,200,000.

HOBART COLLEGE.

Hobart College, which for the first thirty years of its history bore the name Geneva College, was founded in 1822, largely through the efforts of Bishop John Henry Hobart. It was the

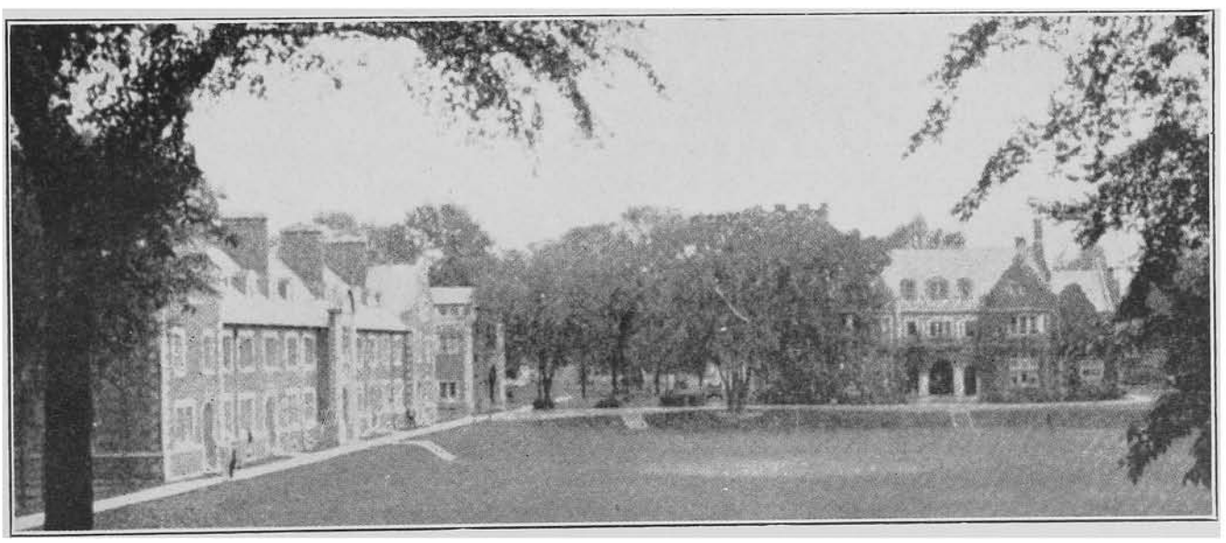
successor to Geneva Academy, a school that had begun serving the thinly settled territory of Western New York a quarter of a century before, and its founders were actuated by a strong desire to extend larger educational opportunities to the people of that region. Their plans, perhaps because of this, were exceptionally broad and farsighted for the times.

There was ample precedent for the inclusion of restrictive clauses in the charter. One restriction only was written into it by its predominantly Episcopalian framers, and that was a guarantee of complete religious liberty to all members of the college, regardless of denomination. Liberality was carried still further when, at the first meeting of the corporation, the trustees instituted a democratic type of education new to America. This was described as an "English Course," totally distinct from the usual Classical Course. It was intended to train "farmers, mechanics, manufacturers and merchants" "in direct reference to the practical business of life." This course, the forerunner of the modern Scientific Course in American colleges, has been maintained at Hobart to the present day.

As might be expected, the sparsely populated frontier country in which the new college had been established was barely able to provide sufficient funds for the maintenance of the institution. Had it not been for the tenacity and devotion of the original Trustees, it is certain that the college would have foundered. They succeeded, however, in overturning all obstacles, and when the last surviving member of the first board died in 1882, after sixty years of continuous service, Hobart College enjoyed a secure, though not affluent position. Credit for progress in this early period is due also to Presidents Hale and Jackson (1836-1867), under whose leadership the college built up an efficient plant and withstood the shock of the Civil war.

The later history of Hobart has been marked by two periods of growth. The first of these extended from 1897 to 1912, during the successive administrations of Presidents Jones and Stewardson. Both of these men were keen students of educational problems and both were determined builders. Not contented with raising the standards of the college to remarkably high

WILLIAM SMITH COLLEGE AND CAMPUS, GENEVA, N. Y.



QUADRANGLE HOBART COLLEGE, GENEVA, N. Y.

levels, they added greatly to its equipment. Under President Stewardson, William Smith College was opened by the Hobart Corporation in 1908 as a coordinate division for the separate education of women. Following the World war, through which Hobart was providentially guided by Dean William P. Durfee, as acting president, Dr. Murray Bartlett, formerly president of the University of the Philippines, became chief executive of the college in 1919. He serves today. In the same year the late Bishop Charles H. Brent was elected Chancellor of the institution. Under the unusually able direction of these two men Hobart has achieved a growth in size, facilities and reputation that has placed it among the leading small colleges in the country.

Just before his death Bishop Brent urged the trustees of the college to secure this position by raising a fund of $2,000,000 for needed buildings and instructional facilities. The depresson starting in 1929 halted plans for such development.

WELLS COLLEGE.

Wells College for women is situated in the little village of Aurora, immediately on the shore of Lake Cayuga. Adjoining its campus is the Payne Creek Gully, familiarly known as Moonshine, and just beyond the strange geological formation known to scientists as Pumpkin Hill.

The founder, Henry Wells, was also the founder of the romantic Wells Fargo Express in the East. One of the college treasures is a genuine old Wells Fargo coach. Mr. Wells' home Glen Park, is now one of the academic buildings of Wells College.

Other gentlemen associated with the College in its early days were Col. Edwin Barbour Morgan, the first president of the New York Times Association and Lewis Henry Morgan, the anthropologist, whose grand nephew, William Fellowes Morgan, is at present the chairman of the Board of Trustees.

The founders' original gift of one building and eleven acres has now expanded to 350 acres and twelve academic buildings, besides residences for its staff, dairy farm, etc. The endowment fund amounts to $1,500,000. The several departments are well equipped, especially Art, Music, the Natural Sciences and Health

Education. In addition to the usual outdoor athletic fields, the college has its own nine-hole golf course.

Wells College from its inception has been both home and school. For this reason it has remained small, (240 students, thirty-seven on the faculty), as no more students are accepted than can be received into the college home. Less than one half of these are from the Empire State, the others come from all parts of the United States and a few foreign countries. The president is Dr. Kerr D. Macmillan and the Dean, Mrs. Charles Kirkland Roys.

Twenty-five acres of land and two buildings, one of which is a Dutch colonial house built in 1836, are included in the Wallcourt School estate presented on April 11, 1928, to Wells College by Myron C. Taylor in memory of his wife, Anna Goldsmith Taylor. Mrs. Taylor was a graduate of Wells College, 1854, and was the owner and head of the Wallcourt School from 1901 to 1921.

The original Wells College building was commenced in 1866 and finished two years later. The latest structure is the handsome new half million dollar administration building, the cornerstone for which was laid during the first half of 1932. When the depression of 1929 struck the country, Wells was planning to double in size, under a huge financial campaign, and following the English college plan. Such expansion, as a result of the economic stress, is held in abeyance for the time being.

ELMIRA COLLEGE.

In historical interest Elmira College holds a unique place, for it was the first college in the United States and probably the world, to grant degrees to women for the same standard of work as that offered in the best colleges for men.

Elmira's first curriculum was modeled upon that of Yale University. Its charter stated that "no degree of literary honor shall be conferred without the completion of a course equivalent to the full ordinary course of college study as pursued in the colleges of this state."

The records show that the movement for the founding of Elmira College was initiated at Albany in 1851. The necessary funds to launch the undertaking, $40,000, were advanced by Simeon Benjamin, a business man of Elmira. Later he contributed $25,000.

With the name of Simeon Benjamin, first benefactor, is associated the name of Elmira's first president, Rev. Augustus W. Cowles, D. D., LL. D., president, and president emeritus from 1856 until his death in 1913, a length of service unprecedented in college history. During his administration the traditions of the college were formed and its field of effort was defined.

The institution opened with a staff of fourteen and an enrollment of 242. Of these students thirty-nine were in the collegiate course, 205 in the academic courses which it was necessary to provide in order to prepare students for the college work.

The difficulties and prejudices encountered at first are in our day difficult to realize. A letter in 1861 to Dr. Cowles, first president of Elmira, by the newly appointed president of Vassar contains a list of twenty-one questions regarding duties and responsibilities of the faculty and courses of study about which he wished advice, saying, "I desire to avail myself of the experience of our most eminent practical educator."

The first class was graduated from Elmira in 1859. Seventeen completed the full four years' course and were granted A. B. degrees. Elmira has now over 2,000 graduates who have been successful in various fields of service. They are eligible to membership in the American Association of University women. Their Alma Mater is on the list of colleges recommended to foreign universities.

While non-sectarian it is a Christian college where the religious note is emphasized. Above all, Elmira College is trying to train her daughters to make better wives and mothers. There is student self-government, which is functioning well. The spirit prevailing is democratic. While keeping up with the best in modern methods of education, Elmira retains her early ideals. Conservative standards of conduct prevail. Students from another

college or university applying for entrance must furnish a certificate of honorable dismissal and credentials of scholarship.

At the center of a population of about 2,000,000 people, Elmira has been a persistent summons to a life of higher usefulness through training to hundreds of young women who would have been unable to afford a higher education at distant and more costly institutions than this one.

Since 1918 the number of faculty members has increased from thirty-one to fifty-seven; the student body from 300 to 600; the number of buildings from ten to twenty; the endowment from about $240,000 to over $1,000,000 and the property value has increased from half a million to nearly $2,000,000.

KEUKA COLLEGE.

The story of Keuka College is one of interest to all who follow the development of institutions and movements. In 1891-92 a large brick building, now known as Ball Memorial Hall, was erected on the west shore of the east branch of Lake Keuka, four miles from Penn Yan. A portion of a farm was set aside for building lots and the place named Keuka Park. In 1892 a provisional charter was granted. A co-educational college and a preparatory school were established. George H. Ball, D. D., was the first president. For many years these schools rendered splendid service with but limited means. In 1915 it was decided to suspend instruction until adequate support could be obtained. The late Z. A. Space, D. D., and Rev. Z. F. Griffin approached the Northern Baptist Convention and later members of the Board of Education of that Convention voted to recommend the reopening of the school as a college for women.

In 1919, A. H. Norton, the vice-president of Elmira College, became the president of the new institution. The trustees voted to reopen the college in September, 1921, thus allowing the new president two years to study other colleges for women, secure a competent faculty, and organize the school.

On September 20, 1921, the college opened with a freshman class of thirty-six and a staff of eight. A high standard was set and from the very first the college attracted the attention of

educators. In three years the capacity of the plants was reached and it was necessary to erect a new dormitory, now known as Richardson Hall.

The same year, 1924-25, John Rogers Hegeman Hall was given for classroom and administration building. The capacity of these new buildings was soon reached, and the number of students limited. The college numbers over two hundred students and twenty-eight faculty members.

In less than ten years from the date of opening, the new college was fully accredited by the Regents of the University of the State of New York, by the granting of an absolute charter. The college is fully accredited by the Association of Schools and Colleges of the Middle States and Maryland. It is a member of the Association of American Colleges, the American Council on Education, the American Association of Collegiate Registrars, and the American Association of University Women.

The net assets of the college have increasec from less than two hundred thousand dollars in 1921 to over a million dollars in 1931. The valuation in 1932 was $1,100,000. The college farm is of fifty acres and the campus covers twenty acres.

STATE NORMAL SCHOOL.

The State Normal School at Cortland, New York, was established in 1866 and opened in 1869. The first class was graduated in 1870. From the beginning, the school has graduated nearly 7,000 young men and women prepared for teaching. Of this number, representatives today are working in practically every state in the Union and about 1,300 are located in or very near Greater New York.

Dr. James H. Hoose was the first principal. With the exception of a few months he held this position from 1869 to 1891, when he left to accept a position in the University of California where he subsequently became Dean of the School of Education.

Dr. Francis J. Cheney was principal from 1891 to the time of his death in 1912. His successor was Dr. H. DeW. DeGroat who in August, 1932, completed his twentieth year in the position.

The campus of thirty-one acres is situated near the center of the city on a hill from which the seven valleys converging at Cortland are visible. The building and grounds represent an investment of a million and a quarter of dollars.

The present enrollment of the school is 900 professional students pursuing the usual courses for preparing young people to teach in the elementary schools of the state and also a special course for those preparing to become directors of physical education. The classes in physical education that have graduated from Cortland since 1926 have furnished one sixth of the physical directors now working in the public schools of New York State outside of Greater New York.

CHAPTER XII

STATE INSTITUTIONS.

ANCIENT AUBURN PRISON AND ITS WOMEN'S PRISON—ELMIRA REFORMATORY—WILLARD STATE HOSPITAL—NEWARK STATE SCHOOL—BATH VETERANS' HOME—STATE SANITORIUM.

No region of equal area in the state boasts so many state institutions within its limits as do the Central New York counties. In capital investment and in the total number of patients, or inmates these institutions bulk larger than those of any district of the same size. Millions yearly are spent in the maintenance and improvement of these institutions. In their administration some of the greatest experts in their line in the country are employed. And the fame of many of the state corrective, research or welfare centers is nation-wide. Federal aid is supplied to some of the institutions.

AUBURN PRISON.

When Auburn was a village of 200 houses with 1,000 inhabitants, there came into being in the little Cayuga County community an institution which is known today on every continent—Auburn prison, oldest in New York State and for more than a century a laboratory for experiments in penology. The village itself was incorporated but a year before the prison was started. It was only a year before the construction began that the community was so small its sidewalks were mere slabs thrown down in summer and consumed for fuel in winter.

When the need for such an institution was seen, back in 1816, citizens of Auburn offered to donate a site and John H. Beach swung sufficient votes in the Legislature to bring the institution to Auburn, despite concerted competition elsewhere.