

CHAPTER II.

MANUFACTURING INDUSTRIES, STORES, SHOPS, ETC.

After the *first* mills mentioned in Chapter I, the next increase in manufacturing was on the lower water privilege, on Eel street, now Commercial street. A second sawmill was built about 1820, on the site of the present corn mill of Stratton & Co. This mill was owned by three parties: William and Richard Gage owned one half, Job and Timothy Abbott owned one quarter, and John Eastman of East Concord owned the fourth quarter. It was operated in turn by the owners as follows: The Gages run the mill two weeks, then the Abbotts had it one week, followed by Eastman, who had it for one week.

It would seem possible that the logs, or the lumber, or the profits of this three-jointed concern might have become mixed, but probably Wm. H. Gage, or "Squire Bill Gage" as he was called, kept everything in proper order.

Wm. H. and Richard Gage did a large business in ship timber,—oak frames, oak planking, and pine masts, which they marketed at Boston and Newburyport—rafting the lumber down the Merrimack river and through the Middlesex canal.

After they retired from business at the mill the firm of Gerrish, Gage & Co. was formed, composed of Joseph Gerrish and two sons of Richard Gage, about 1849, and carried on the business for a few years. Gerrish retired soon after 1850, and C. and J. C. Gage remained and conducted the business for about thirty years, doing quite an extensive business here, and for a few years they also operated a sawmill at Ottawa, Canada. The last firm who operated this sawmill was C. M. & A. W. Rolfe, who used it for some few years to get out lumber for their sash and door shop. In 1883 the mill was taken by the flour-mill people, and remodeled for a corn-grinding mill, putting in the latest improved machinery and fitting it up complete for doing an extensive business in that line.

In 1831 Wm. H. Gage built a new carding and clothing mill on the site of the first Kimball & Abbott mill, and did a considerable business for some ten to fifteen years. This mill had a few looms in addition to the carding machines, and manufactured some cloth of "all wool and a yard wide." That mill building is still standing, being now the office and storehouse of the Dustin Island Woolen Mills.

A brick blacksmith shop was built by Warren Johnson in 1825, which remained in use for seventy-three years, until 1898, when it was taken down and the present stone-polishing shop of Anderson & Fox was built on the same location. The old brick shop was notable as being the place where the first wagon axles were made in the village, the beginning of a business which has since grown to large proportions, and which has, more than any other business, made this village known throughout the country. The first trip hammer for forging axles was built in the brick shop by Warren Johnson in 1835, and soon after he purchased a lathe for turning and finishing the axles. He was succeeded in the axle business by Hiram Gage, Gage & Lang, and by B. F. Gage, who was the last axle maker in that locality, his business and machinery being sold to D. Arthur Brown & Co. in 1865, which firm was in the same business at the site of the present Concord Axle Works. In 1852 Ephraim Eaton began the manufacture of anvils in the old brick shop, but remained there only a short time. His anvils were cast elsewhere, but steel plated, finished, and hardened at this shop. The late Dea. T. O. Wilson was another occupant of the brick shop for several years, manufacturing castors, stool screws, etc., and Thop. Blake was associated with him a part of the time.

Just above the brick shop there was erected in 1846 a stone shop, for the manufacture of axes and hatchets by Adams & Rowell, who were probably the first in that line of business in the state. They remained there but one or two years, and then the building was converted into a saw factory, and has been used for that business until the present date. The first firm in the saw business was Leavitt & McDaniel, who were followed by Porter & Rolfe, hardware dealers at Concord, predecessors of Humphrey-Dodge Co.; next by Gage, Hubbard & Co., for a short period, and then the



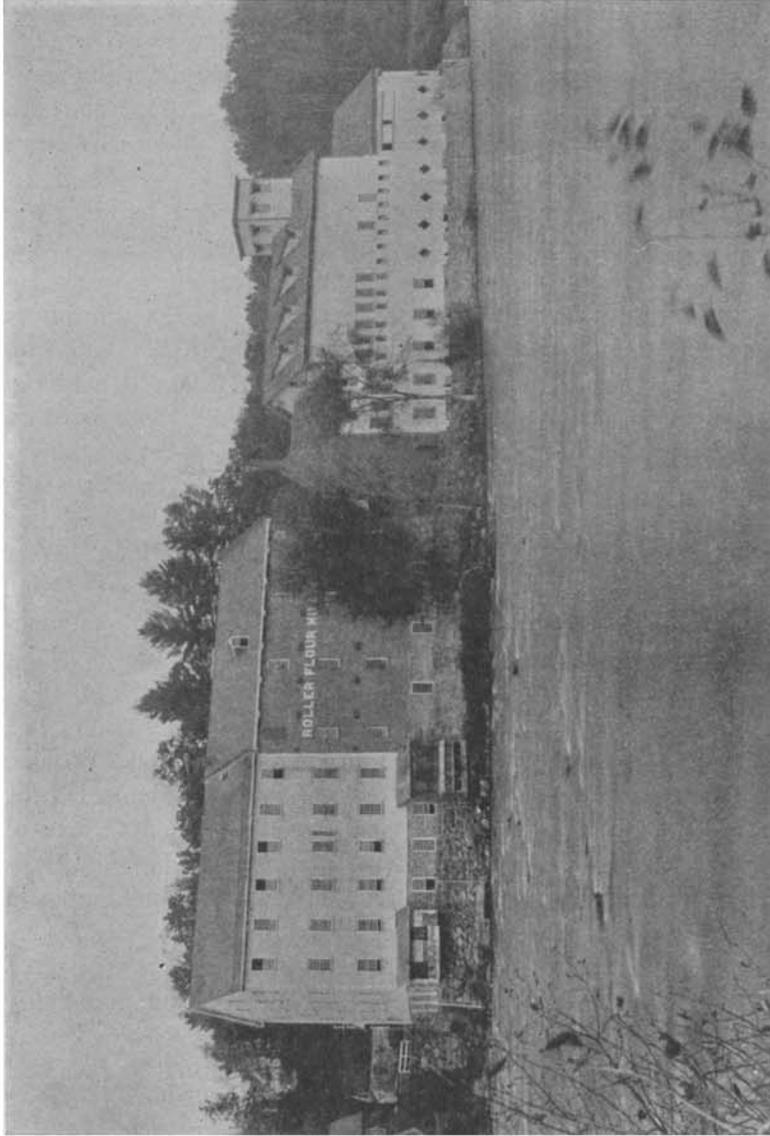
DUSTIN ISLAND WOOLEN MILLS (HARRIS'S).

firm of Gage, Porter & Co. took up this saw business and continued for about thirty years, Isaac K. Gage, Esq., being the managing partner.

In 1882 this business was sold to J. E. Marden and George S. Locke, who continued the business for five years under the name of Fisherville Saw Co. Mr. Marden retired in 1887, and Mr. Locke has since remained as sole proprietor, under the same name, and managed the business very successfully.

Next above the stone saw shop a long wooden building was erected about 1847, and first used by B. F. Caldwell as a cabinet shop, he occupying the main floor, and the basement was occupied by Henry H. Ayer for the manufacture of bed and furniture castors. This basement was occupied later by J. B. Rand, who manufactured castors and stool screws. Mr. Caldwell sold out his cabinet shop in 1850 to Robinson & Haselton, who carried on the business there about ten years, and then sold the machinery to the Gages. Robinson and Haselton both went West in 1865, to Hastings, Minn., where Robinson is still living. Haselton died in 1900. This wood shop was later occupied by Hiram Fisher for the manufacture of axe handles, etc., for a number of years. C. M. & A. W. Rolfe took this shop after 1880 for the manufacture of sash and doors. It was lastly used for a granite-polishing shop by John Swenson and others. It was taken down in 1899 and a new building erected for the same business.

In 1847 the first part of the present Dustin Island Woolen Mills (the part built of stone) was erected by Dea. Almon Harris, who came from Nelson, N. H., and began the manufacture of woolen cloth on the site of the old carding mill, which business has been largely increased by additions to the building and machinery, and continued successfully to the present day by his sons and grandsons. In 1894 this business was incorporated under the name of Dustin Island Woolen Mills, its location being but a short distance from, and in full view of, the famous Dustin island. Robert L. Harris is the present superintendent, and Almon G. Harris is the treasurer. These managers are enterprising business men, and are keeping their mill well supplied with new and improved machinery. The number of hands employed at present is eighty.



STRATTON & CO., FLOUR AND CORN MILLS.

The flour mill at the lower end of Commercial street, and near the Gage sawmill, was built in 1857 by John H. Pearson & Co., of Concord, who then began a business which has been growing in amount and value to the present day. The ownership of this mill has changed several times, first to Barron, Dodge & Co., then to Whitcher & Stratton, next to Stratton, Merrill & Co., and lastly to Stratton & Co.; but the quality of the product has always been kept up to the highest standard, and this mill is to-day the largest and best flour mill in New England. The office and sales-rooms of the firm are at Concord. The daily production of the mills is three hundred barrels of flour and five hundred bushels of corn meal, which is marketed in New England. This firm has also a large barrel factory and storehouse located near the main line of the Boston & Maine Railroad.

On the south side of the river at the lower falls the next branch of manufacturing, after the sawmill mentioned in Chapter I, was the planing mill of Henry Rolfe & Sons, Nathaniel, Timothy, and Abial, built in 1837, and the sash and door shop of Harvey & Whidden, which was built about the same time. In both of these shops the business of match-making was carried on previous to 1840. About 1850 the Rolfe Brothers added to their mill a box shop, and for several years manufactured a considerable quantity of boxes for use in the shoe and dry goods business. In 1864 William Blanchard of Boston purchased the Rolfe mill property, took down the old sawmill, and erected a commodious factory for the manufacture of excelsior, and was succeeded in that business by the late Isaac C. Boyce.

In 1888 this property was purchased by J. E. Symonds & Co., table manufacturers, who enlarged the buildings, and installed a steam plant to furnish power during seasons of low water. This firm, which began business in 1876, was composed of Joseph E. Symonds, who had been manufacturing tables for three years at Concord, and George W. Abbott, formerly a merchant and traveling salesman, Mr. Symonds being the superintendent of the shop, and Mr. Abbott attending to the buying of material and sale of the goods. This has been one of the most successful business enterprises of the village. It is now a corporation, styled The J. E. Symonds Table Company, J. E. Symonds being president,



J. E. SYMONDS TABLE CO.'S FACTORY.

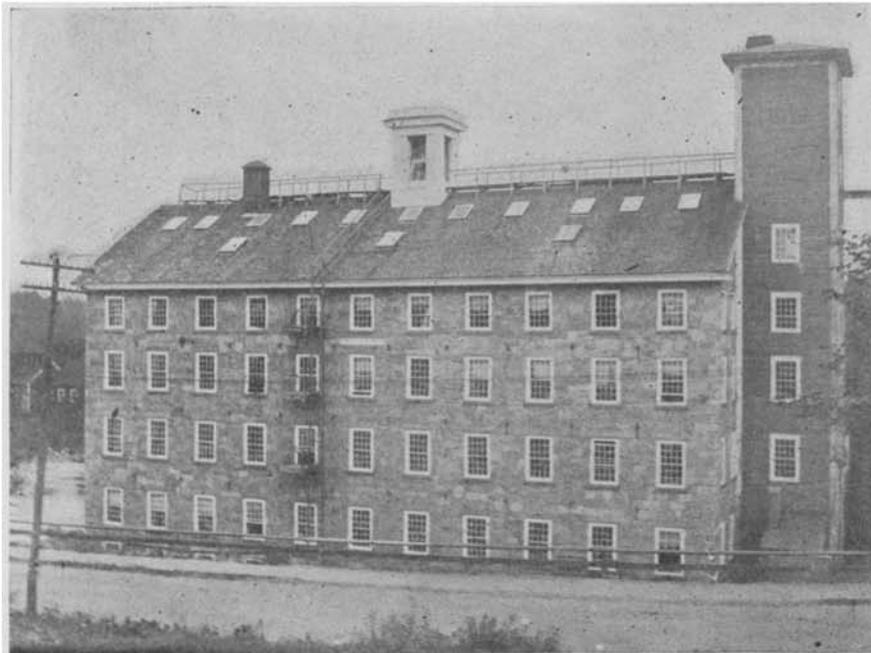
and Arthur C. Stewart treasurer. The number of workmen is forty, and the specialty of manufacture is dining-tables, of which there is made a large variety of styles.

In 1860 James Crowther built a two-story frame shop, for woodworking business, on Depot street, where he manufactured doors, etc., for a few years. That building is now a part of the Rolfe Sash and Door factory. C. M. & A. W. Rolfe began business in the old Rolfe shops, succeeding the firm of H. Rolfe & Sons. They moved over to the shop on Commercial street the same year, and remained there on the north side until 1880, when they returned to the Concord side of the river, into the neighborhood of the original Rolfe shops where this line of business was begun by the grandfather of the present proprietors. Taking the Crowther shop for a beginning, they have added more buildings from year to year as their business has increased in volume until now they have quite extensive works, employing fifty or more hands. The members of this firm are among the most enterpris-



ROLFES' SASH AND DOOR MANUFACTORY.

ing and industrious of the business men of the village, and well maintain the honor of the old family name. In addition to their shops at the lower falls, which, by the way, are run partly by water power and partly by steam, they operate a sawmill at the Borough, where they get out lumber to be manufactured into sash and doors at their lower shops, and at the sawmill they manufacture a large amount of cases for the dry goods trade.



CONTOOCCOOK MILL, 1836.

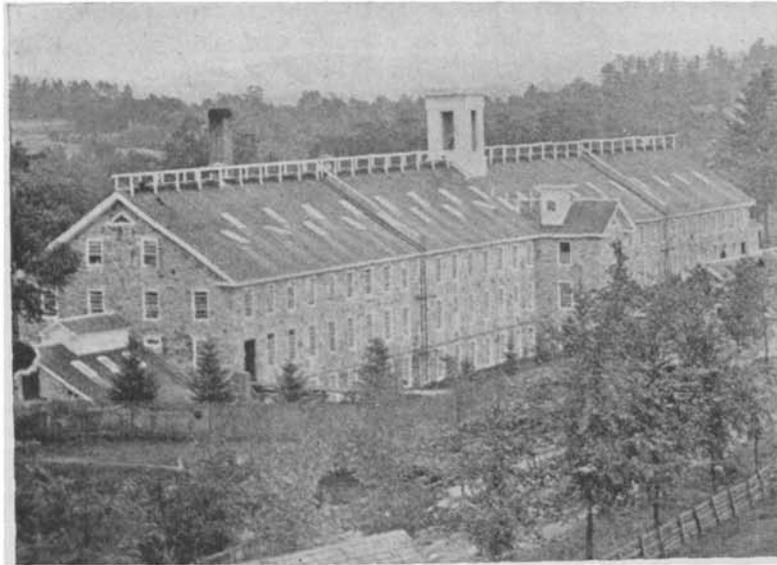
In the central part of the village, the next movement in the line of manufacturing, after the erection of the grist-mill mentioned in Chapter I, was the purchase of the land and water power from the lower falls up to the Borough rapids by the Contoocook Manufacturing & Mechanic Company in 1835. This company immediately began building the Contoocook mill, which was completed in 1836. This mill was occupied in part for a few years by Messinger & Winn, who manufactured a coarse cloth, which was marketed at the South to make up clothing for the slaves.

Previous to 1840 a small part of this mill was used for the manufacture of matches. In 1841 this Contoocook mill was leased to H. H. & J. S. Brown, who had previously been in the cotton manufacturing business at Attleboro, Mass. The Browns filled the mill with new machinery, and began making cotton cloth in 1843. The machinery was brought from Chelmsford and Lowell, Mass., on canal-boats to Concord, as there was no railroad to the village at that date, and from Concord was hauled on wagons to the mill. Leonard Morrison and Asa M. Gage did that large job of teaming. Mr. Gage relates that in loading the machinery the wagons were backed down into the water to the side of the canal-boats, so that the machines were rolled directly from the deck of the boats to the wagons. In February, 1844, the two upper stories of this mill were destroyed by fire. With no engine in the village or nearer than Concord, no force pump or other fire apparatus at hand, it seems wonderful that the fire could be put out before burning the whole mill. The building was immediately repaired, new machinery bought, and the mill was again running in full before the close of that year.

The Contoocook Manufacturing & Mechanic Company began a more extensive development of their property in 1845 on the Concord side of the river, where they built a new dam on the site of the original Varney dam. The work on this dam was in charge of "Boston John" Clark, a man quite noted in those days for work of that kind, and that structure stood for forty years, then it was rebuilt by Calvin Gage in 1886. At the same time with the dam the Penacook canal was built, the work being in charge of a Mr. Thompson. Work was also begun that same year on the Penacook mill, which was built under the direction of H. H. and J. S. Brown, and finished in the following year, 1846.

On completion of this mill the Browns leased it, and immediately purchased new machinery for the west half of the building, and began the manufacture of cotton cloth on a more extensive scale.

In 1849 the Browns moved their machinery from the Contoocook mill, and filled up the east half of the Penacook mill. This removal of the machinery was marked by a serious accident; when about to lower a spinning frame from the third floor of the



PENACOOK MILL, 1846.

old mill, the rope broke just as the machine was leaving the floor; John S. Brown was just leaning over the frame looking down, so was carried with the frame; he had the presence of mind to spring forward just as his feet left the floor, and that carried him beyond the machine, otherwise he would have been crushed to death in the wreck of the spinning-frame. He came to the ground on his feet, shattering the bones of one ankle, and crippling him for life.

After the removal of the Browns' machinery from the Contoocook mill, that building was leased to Archibald Kennedy, who filled up the mill with machinery, and, with his son, Samuel Kennedy, carried on the business of manufacturing cotton cloth for several years. About 1855 Mr. Kennedy sold his machinery to H. H. & J. S. Brown, which firm operated both mills, the Penacook and Contoocook, until 1865, when the firm was dissolved by mutual consent, and the company property was divided. H. H. Brown took the property at the Contoocook mill, the machine-shop property, and the larger part of the woodland, houses, and house lots. He then took his sons, Henry F. and D. Arthur, into

the business, forming two new firms, but with the same ownership in both, the firm of H. H. Brown & Sons taking the cotton manufacturing business, and the firm of D. Arthur Brown & Co. the machine shop and foundry business.

John S. Brown, at this division, took the Penacook mill property and continued the cotton manufacturing business in his own name until 1885, when he sold his machinery to the Contoocook Manufacturing & Mechanic Company. He, however, continued the management of the business as agent for four years more, his son, Stewart I. Brown, serving as cashier and bookkeeper until 1889. H. H. Brown died in 1873, and the business at the Contoocook mill and machine shop was continued by his sons, the surviving members of the firms, under the same firm names, Henry F. Brown assuming charge of the cotton manufacturing and D. Arthur Brown continuing in charge of the iron works. In 1880 the Contoocook mill machinery was purchased by the Contoocook Manufacturing & Mechanic Company, which corporation continued the business under the superintendence of Henry F. Brown until 1890.

In 1891 a corporation was formed under the name of Boscawen Mills. The principal stockholder was Samuel S. Kimball of Concord, president, and Hon. Samuel C. Eastman was elected treasurer. This corporation purchased the old Contoocook mill, and the old brick grist-mill adjoining, together with the surrounding land and water power. The mill was filled with machinery, the largest part of which had previously been owned by President S. S. Kimball, and operated in a mill in one of the southern states. The machinery was placed in the mill and prepared for operation by Albert H. Drown. When ready for starting up, Mr. T. B. Wattles took charge of the manufacturing as agent. Mr. Wattles had a long, practical experience in the manufacture of yarns and cloth, and was known as an "expert" in that business. This mill being fitted for manufacturing yarns, the management devoted their labors to the production of the highest grade of yarns for use in fire hose, also yarns of lighter grade for use in hosiery and underwear. The number of hands employed in this mill is about fifty.

Mr. Wattles died in 1898, and the manufacturing has since

been under the direction of Jeremiah Mahoney as superintendent. A son of Mr. Wattles is also connected with the management. Mr. S. S. Kimball, the principal owner of this concern, died in 1899, and was succeeded in the corporation by his son, Dr. George M. Kimball, under whose direction the business remains in a prosperous condition.

On the retirement from business of Mr. J. S. Brown in 1889, after a term of over fifty years' service in manufacturing, his son, Samuel N. Brown, took charge of the Penacook mill as agent, and operated it for two years. He had previously been employed at this mill for several years, and had managed a cotton mill at Memphis, Tenn.

This mill was closed down in 1891 for a season, but was again started up in 1892 with Henry F. Brown as agent. He was succeeded in 1892 by Albert H. Drown as manager, who ran the mill until 1896, when the business was abandoned, as the machinery was mostly too old to be run successfully. This Penacook mill then remained idle until the year 1899, when the building, machinery, land, and water power were sold to a new

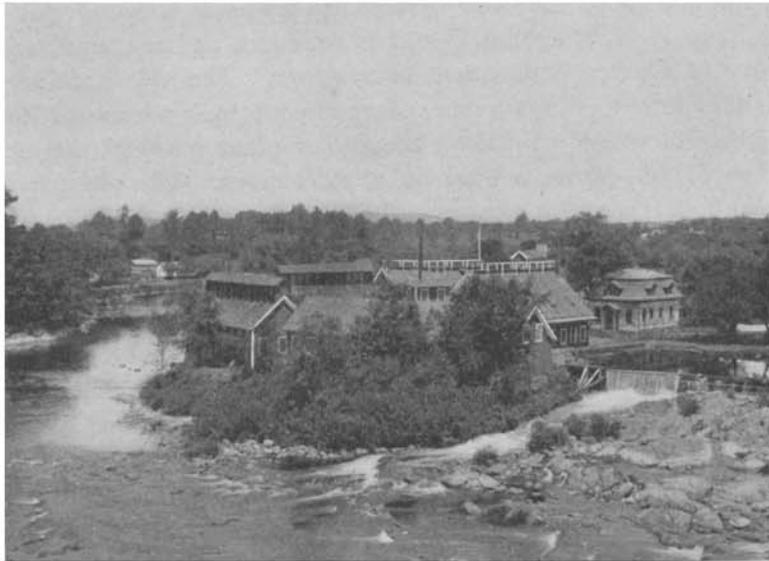


NEW HAMPSHIRE SPINNING MILLS.

corporation called the New Hampshire Spinning Mills, of which company Hon. Marcellus Gould is president and manager, and Harry H. Dudley of Concord is treasurer. The old machinery was thrown out as soon as the new company took possession, the building thoroughly repaired, the power plant renewed, the roof removed, and the walls built up another story. The picker and wheel houses were built over entire, and the mill fitted up complete with new and latest improved machinery for making fine cotton yarns. This assures a new lease of life and prosperity for one of the largest manufacturing properties in the village.

Shortly after the Penacook mill was built, about 1847, there was a small factory built on the back canal by a Mr. Palmer, and was used for the manufacture of cotton batting for a few years. This was purchased about 1850 by J. C. Martin, who with his son-in-law, George P. Meserve, manufactured pine tables there for several years. That mill was burned in 1852, and a new building erected by Martin on the same ground, where he continued the table business until 1868, when he sold the property to D. Arthur Brown & Co., and the building is now used as a warehouse by the Concord Axle Company.

In 1858 the first part of the machine shop (48 by 32 feet) of the Concord Axle Company was built for L. & A. H. Drown, who had previously been in business at the machine and blacksmith shops of the Penacook mill, where they had manufactured the wagon axles, and had begun the manufacture of looms for the Penacook mill. That work was continued at the new location by the Drowns until the breaking out of the Civil War in 1861, when Leonard Drown enlisted a company of volunteers, and with them joined the Second New Hampshire Regiment. He was commissioned captain of the company, and was killed at the battle of Williamsburg, Va., in May, 1862. Albert H. Drown, the other member of the firm, served as quartermaster of the Sixteenth Regiment, New Hampshire Volunteers. In 1863 the machine shop property was purchased by A. B. Winn & Co. (D. Arthur Brown being the junior member), which firm continued but one year, being dissolved by the death of Mr. Winn. In 1864 the firm of D. Arthur Brown & Co. took up the business, and soon began advertising the "Concord Axles,"



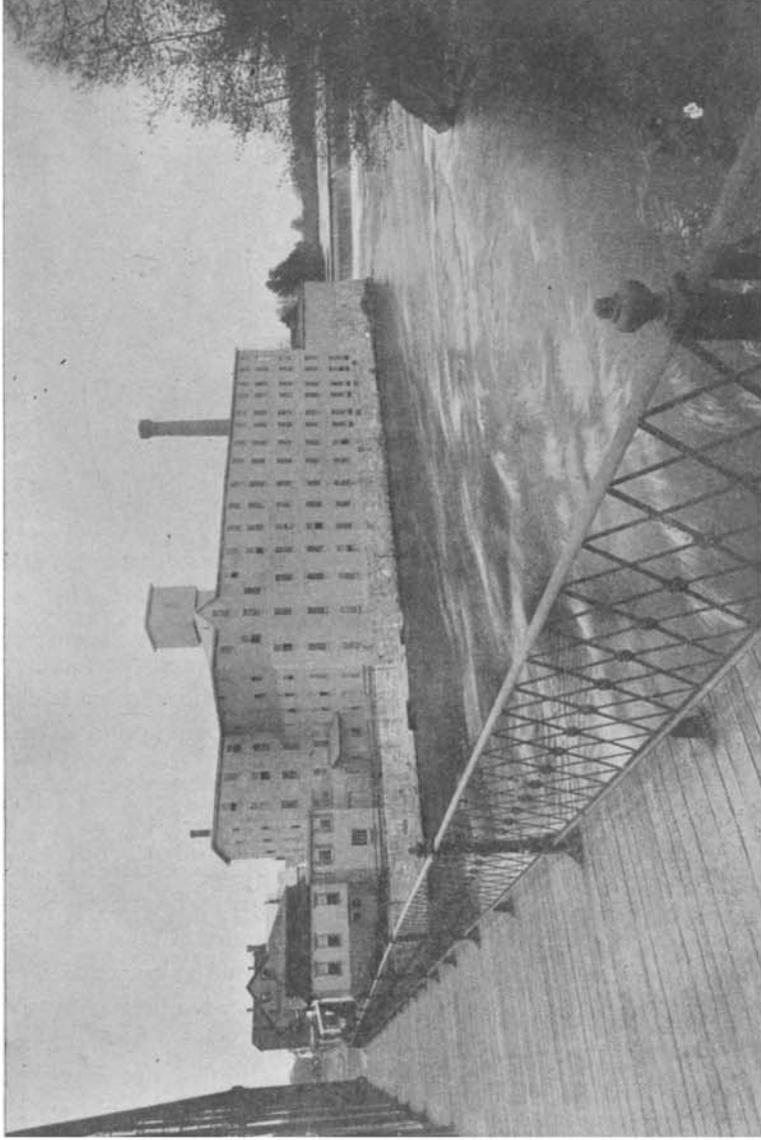
PARTIAL VIEW OF CONCORD AXLE WORKS.

they being the first to advertise and sell wagon axles to the trade under that name.

The advertising, together with the superior quality of the goods, soon produced an increasing demand for "Concord Axles," and the business increased steadily up to 1880, when a corporation was formed under the name of Concord Axle Co. At that time the business took a fresh start and soon doubled the former capacity of the works. New buildings and new machinery were added from year to year, and the corporation in 1899 was doing the largest business in the whole life of this industry. The present plant consists of fifteen buildings including storehouses and pattern houses, the main buildings being the forge shop, 65 by 65 feet; the axle shop, 120 by 48 feet; the foundry, 140 by 50 feet. This corporation has a commodious and well-fitted office building opposite the work-shops, with best modern appliances for the convenient dispatch of their still growing business. Hardly a year has passed that has not seen considerable additions to their machinery and tools, while the present year shows a radical improvement in their process of manufacturing. While

this shop was the first to enter the market with "Concord Axles," at the present time nearly every axle shop in the United States makes the same class of goods, but none has excelled the original manufacturers in quality of product, the goods of the Concord Axle Company being still the "standard" for style and quality. Their axles are marketed mostly in the middle west and on the Pacific coast. The average number of hands employed is eighty, and the product of the works includes some 900 tons of wagon and carriage axles, 300 tons of iron hubs for vehicle wheels, and 500 tons of castings. Since 1864 the management of this concern has been in the hands of D. Arthur Brown, this being probably the longest term of active management by any manufacturer now in business in the village. The officers of this corporation are president, Hon. John Whitaker; clerk, Hon. E. H. Brown; treasurer and superintendent, D. Arthur Brown; directors, in addition to these officers, George Henry Chandler of Manchester, Josiah E. Fernald of Concord, George E. Shepard of Franklin, and John H. Moore of Penacook. In 1859 a foundry was built for Myron H. Sessions on the ground now covered by the finishing shop of the Concord Axle Co. He carried on the foundry business until 1862 when his father, Horace Sessions, bought the property, and continued the foundry business until 1869 when he sold out to D. Arthur Brown & Co. That building was torn down in 1882 on the completion of the new foundry on the opposite side of the street.

In 1848 there was a stone foundry building erected by T. W. Pillsbury at about the present location of the boiler house of the cabinet shop. This was sold in 1849 to Ames, Gerrish & Co., who carried on a stove manufacturing and general foundry business until the great freshet of 1852, when their building was destroyed by the flood. This building was about 100 by 50 feet on the ground, the longest side running about parallel with the Penacook dam, and the walls were battered down by logs coming over the dam endwise, the water being so high as to carry the logs up to about the height of the windows. One large log which struck between two windows made a hole through the stone wall nearly six feet in diameter, and in a few hours the whole river side of the wall was battered down, and the building ruined.



THE CABINET SHOP.

A wooden building used for a pattern house and setting-up shop was connected with the foundry, and was washed from its foundation and started down stream; fortunately it did not reach the bridge, but swung around into an eddy near the present office of the cabinet shop, where it was secured by ropes, and after the flood subsided it was torn down. This was the first iron foundry ever built in the village, and it was never rebuilt.

The cabinet shop at the center of the village was begun in 1851 by Benjamin F. Caldwell, who erected a one-story building which is now a part of the big shop; this big shop was later built over and around it. Mr. Caldwell had previously been manufacturing pine furniture on Commercial street at the lower end of the river, and moved his machinery to the new shop. Two years later he took H. H. Amsden and Samuel Merriam as partners, the firm name being Caldwell, Amsden & Co. This firm continued until 1862 when Mr. Merriam sold his interest to the remaining partners, and the firm name was changed to Caldwell & Amsden. This concern was very prosperous for several years under the management of H. H. Amsden in the financial department, with B. F. Caldwell at the head of the manufacturing department. The business increased rapidly, the shops were enlarged, and for several years this firm employed more men than any other industry in the village.

Mr. Caldwell retired from the business with a competency in 1867, and the business was continued by H. H. Amsden & Sons. Mr. H. H. Amsden died in 1869, and George H. Amsden, his oldest son, died in 1872, leaving the management of the business in the hands of the younger son, Hon. Charles H. Amsden, who increased the business to much larger proportions. He practically rebuilt the shops in 1886, installed a steam engine and boilers to furnish additional power, and an electric plant for lighting the works. These shops cut up about 3,000,000 feet of lumber annually for the last twenty years that they were running. Mr. Amsden retired from business in 1892, and the shops remained idle for a few years, but in 1897 the property was purchased by the Penacook Manufacturing Company and started up for the manufacture of bath-room fittings, employing some thirty hands. In 1899 the name of the company was changed to

Plumbers' Woodworking Company, continuing in the same line of work. In 1901 this company moved their business to West Concord.

Soon after the cabinet shop was built there was an old two-story building moved over from Canterbury and placed on the ground now covered by the dry-house of the cabinet shop. This was done by a Mr. Brett, who fitted it up with machinery for the manufacture of shoe pegs. He carried on quite a large business in that line for several years. This peg mill passed into the hands of Caldwell, Amsden & Co., who used it for a few years in the manufacture of tubs and pails, under the management of Samuel Merriam, the junior member of the firm. Later on this shop was used for the furniture business in connection with the cabinet shop. This peg mill building stood until the freshet of 1869, when the water pouring over the stone breakwater washed out the foundation, turned the building partly round and ruined it, and it was soon torn down.

When the Penacook canal was built there was a blacksmith shop standing where the office of the cabinet shop is now located. In this shop the stone drills used in cutting the canal were sharpened by Jeremiah Haynes, a good workman, and a very pious man. After the canal was completed this shop was moved to the yard at the east end of Penacook mill, where it remained until 1896, and was then torn down. This shop was used about 1855 to 1858 for forging axles, having two trip hammers, which were run by Capt. Leonard Drown, and which were in 1858 moved to the new machine shop.

In 1857 the Contoocook Manufacturing & Mechanic Company built a three-story stone machine shop and a stone foundry building on the line of the canal, a few rods east of Main street, and leased them to James B. Rand (an early class leader of the Methodist church) for the manufacture of pianoforte hardware, and piano stools.¹ He soon was doing a large business in those lines, and employed some twenty to thirty men. Two years later the Contoocook Manufacturing & Mechanic Company built another building for him; that is now standing over the canal and is known

¹This machine shop and foundry is shown in the cut of the old covered bridge on page 14.

as Chadwick's block. In this building Mr. Rand went into piano making, but continued only a few years, and then removed to Concord.

The machine shop building was next leased to Jonathan Walsh in 1866, who manufactured woolen goods there for some five or six years. It was next occupied for about two years by Charles Black, for the manufacture of tables. In 1876 this shop was leased to Jos. E. Symonds and Geo. W. Abbott, who, under the firm name of J. E. Symonds & Co., manufactured tables there until 1887, when the shop and foundry were destroyed by fire.

Another enterprise which may be classed under the head of manufacturing, is the Penacook Electric Light Co. This is a corporation organized in 1891, under the general laws of New Hampshire, the incorporators being Charles H. Sanders, Edmund H. Brown, George W. Abbott, E. E. Graves, William W. Allen, and John Whitaker. The original board of officers was as follows: President, Charles H. Sanders; treasurer, Edmund H. Brown; directors, in addition to the president and treasurer, William W. Allen, E. E. Graves, and G. W. Abbott. The first amount of capital stock was \$15,000. The company immediately purchased the land, and leased the water power of the Contoocook Manufacturing & Mechanic Co., which had formerly been used by J. E. Symonds & Co.'s table factory. They erected a one-story stone building on the foundation of the burned table shop, took out the old water wheel and flume, replaced that with three modern wheels of fifty horse-power each. They also built a large chimney stack, and put in a steam engine of seventy-five horse-power with a boiler of eighty horse-power, making a complete steam plant to run the works whenever water power was not available. The dynamos first put in were for the Edison three-wire direct system of lighting, and for the first year were used for lighting stores and dwelling houses only. A year or two later contracts were made with the Ward one (light) precinct, and the Boscawen (light) precinct, for lighting the streets. The business increased steadily up to the year 1900, when the company made an important step in advance. At that date the capital of the corporation was increased to \$20,000, and the company purchased the large tract of land and water power at the upper dam on the

“outlet” at the borough, formerly known as the Amsden property; this purchase included the sawmill, formerly known as the Whitaker mill; the fine new dam across the outlet, and the large three-story factory building and power house, known as the electric mill. The Electric Light Co. needed the use of the power house only, and so leased the sawmill to C. M. & A. W. Rolfe, and the electric mill to the Whitney Electric Instrument Co. In the power house there were already two water wheels of one hundred horse-power each, and the company installed a complete new system of electric lighting, using the alternating current. On the completion of the new plant the company installed a new system at the old factory on Canal street to correspond with that at the Borough; the wiring at the two factories being so arranged that the village can be lighted from either factory separately, or by both combined. The president of this company (1900) is George W. Abbott, and Charles H. Sanders is the treasurer and manager.

At the upper falls, at the Borough, the next mill, after those mentioned in Chapter I, was a sawmill, built in 1833, by Eben Elliott, on the location of the present sawmill occupied by C. M. & A. W. Rolfe. Mr. Elliott operated his mill until about 1865, when the property was purchased by Caldwell, Amsden & Co., who took down the old mill and erected a larger one in 1866. This new sawmill was constructed by Theodore Elliott, a millwright of the old school who laid out all the work “in his head,” as the saying was, making no drawings on paper. When he had prepared a very elaborate frame for this mill it was set up without alteration of a single stick of timber. When Theodore Elliott died the trade of millwright seemed to go out of existence, at least in this vicinity. This new sawmill was furnished with both gang and circular saws and all modern appliances. The firm of J. Whitaker & Co. was formed to operate the mill, and under the energetic management of Hon. John Whitaker sawed some 3,000,000 feet of lumber per year, nearly all of which was used at the cabinet shop in making fine furniture. Mr. Whitaker retired from the business in 1890, with a well earned competency, and has since employed his time in looking after his investments, being president of the Concord Axle Co., the Concord Cattle Co., and director in several other corporations. During the summer

months he devotes much time to his fleet of pleasure boats on the upper pond of the Contoocook river.

In 1890 the electric mill, so called, was erected on the north side of the outlet opposite the Whitaker sawmill, by Hon. Charles H. Amsden. This is a wooden building about fifty by one hundred feet, three stories high, having two water wheels for power, which take water from the same pond which supplies the sawmill. This property passed from Mr. Amsden to the Loan and Trust Savings bank of Concord, and in 1900 was purchased by the Penacook Electric Light Co.



THE WHITNEY ELECTRICAL INSTRUMENT CO.'S PLANT.

The Whitney Electrical Instrument Company, which occupies the main building of this mill, was incorporated in 1891, by Manchester, Lowell, and Boston capitalists, for the purpose of manufacturing electrical measuring instruments, under patents granted to Dr. A. H. Hoyt, who was retained by them as electrician. Space and power which at the time was considered ample for the purpose, was secured at Manchester, but before their product had been upon the market a year the business had increased to such

an extent that it became necessary to procure more space and increased facilities for manufacturing, so a factory site with ample water power was secured at West Penacook, and in October, 1892, the business was located there where it has since remained.

The phenomenal growth of the electrical industry during the past decade is a matter of history, and no one branch of the science probably required more painstaking investigation and research than the art of measuring the wily fluid, and this was especially true in connection with alternating currents transmitted under very high tension. That the apparatus manufactured by this company ranks high in the estimation of those foremost in the electrical profession is testified to by the fact that about every university in the United States and Canada has purchased Whitney instruments for laboratory measurements, and in many of the largest and most important installations of electrical machinery these instruments are prominent.

Early in 1894 Dr. A. H. Hoyt was made general manager, a position he has filled satisfactorily to the stockholders and with credit to himself continuously since.

During the winter of 1895-'96 he turned his attention to X-ray work, and developed a complete line of apparatus for this purpose, which is still being successfully used by many of the leading hospitals and surgeons in the country. A modified form of this apparatus is now being supplied for use in connection with long-distance wireless telegraphy.

In 1900 this company placed a complete line of recording instruments on the market, and already the returns from them are of a most gratifying nature.

In 1897, owing to the large demands for brass work in connection with the apparatus manufactured by this company, it was deemed advisable to add a brass foundry to their plant, and bronze tablets, marking numerous historic spots in New Hampshire erected by state, towns, and societies, are a lasting testimonial to the character of the work turned out in this branch of their establishment. In addition to their electrical laboratory and foundry already mentioned, the company have their own machine shop, electro-plating, lacquering and enamelling, and wood-working departments.

The policy of the management has been progressive but withal conservative; carefully protecting their own inventions with letters patent, and avoiding infringing upon the rights of others in the field, it stands to their credit to-day that they have never taken any part in patent litigation, a boast that few manufacturing companies in the electrical field can make.

THE CONCORD MANUFACTURING CO.

The Holden Woolen Mill, as it is usually called, located on the north side of the outlet at the Borough, was erected in 1890.



CONCORD MANUFACTURING COMPANY'S MILL, 1890.

The main building is of brick, built according to standard factory specifications, one hundred and forty feet long, sixty feet wide, and four stories high. It contains six sets of machinery of approved construction, employing some two hundred hands. This corporation is in the hands of the Holden family, who have for two generations manufactured woolen goods at West Concord, where one of their mills is still in operation, but the head office of the company is at the factory in Penacook. This corporation owns a valuable water power, which furnishes motive power for

operating the machinery. They employ a larger number of hands than any other manufacturing concern in the village, and distribute a large sum of money in wages.

Daniel Holden, the senior member of the corporation, a life-long successful manufacturer, retained the office of treasurer until his death in 1899, and was succeeded in that office by his son, Paul R., who had for several years assumed the actual labors of the office. Two other sons are connected with the management, Farwell P., who is president of the corporation, and Adam P., who superintends the West Concord mill. Under the management of this strong trio of brothers and their efficient superintendent, James M. Masson, the business has been constantly increasing in volume since the mill was built, and several additional buildings have been added to the establishment.

SHOE FACTORIES.

Another industry of the early days was the manufacture of shoes. The first shop of note in this line was that of John Batchelder, which was located in the Batchelder Store block, now known as the Chadwick Store block, which formerly stood on the east side of Washington square, in front of the Asa Morrill homestead, now occupied by J. Irving Hoyt. There the business was carried on from 1850 to 1860, and furnished employment to some fifteen to twenty hands in the shop, also to a considerable number of people at their homes in binding and bottoming shoes. One of the men who worked at this shop as long as the business was conducted there was Elisha Hoyt, but recently deceased, who was a familiar figure on the streets for many years. John Batchelder retired from the shoe business in 1860, selling out to his son, Charles Batchelder, and David Marsh, who carried on the business a few years longer, until the failing health of Charles Batchelder necessitated the closing of the business.

About the year 1855 James K. Brickett moved into the village from Boscawen, and began manufacturing shoes in the upper stories of the old Brown Store building. Shortly after this John S. Brown joined him in the shoe business, under the firm name of Brown & Brickett, and increased the amount of business rapidly. They had the two upper floors of that building com-

pletely filled with workmen, and a part of the ground floor was occupied for a stock room. Probably forty to fifty hands were employed in this shop at one time, and perhaps as many more men and women at their homes, who took out shoes to make or to bind. This shop was a popular place for the boys, a considerable number being employed to peg shoes by hand. This work, done by the piece, gave good wages to the boys who were smart and willing to work. Two of the smartest boys were William and John Flanders, sons of Samuel Flanders, who resided in the house at the west end of Canal street. Both of them were afterward soldiers of the Union army in the War of the Rebellion. John died while in service at Hilton Head, S. C. William served three years, and was a brave and faithful soldier. He died in Illinois in 1891. His widow and several children now reside in the village.

The business of this shoe shop was somewhat disturbed (as the writer well remembers) by the Second Advent excitement of 1857. Several of the hands were earnest believers in the Second Advent doctrine, and were free to expound their belief and to urge their fellow-workmen to prepare for the coming of Christ, the Batchelders, father and son (from Loudon), being especially active in the matter. About two weeks before the expected day they left work, gave up what property they possessed, and prepared for the great event. After the day had passed these sadly-disappointed men returned to the shop and began work again, poorer, if not wiser, men.

There have been smaller manufacturing enterprises in the village from time to time; one of these was the manufacture of coffins by John Johnson, in a shop on the south side of Queen street, which shop was burned in 1867. There was a small manufactory of leather wallets here about 1848, owned and operated by F. B. Brockway, in a small building in the rear of Granite block, but Mr. Brockway left the village about 1850, and the business was not continued. Another of the earlier enterprises was the harness shop of John A. Coburn, which was conducted in the Coburn block, over the canal, for many years.