

THE OLD SLATER MILL AT PAWTUCKET,

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PAWTUCKET

AND THE SLATER CENTENNIAL.

By Rev. Massena Goodrich.

THE city of Pawtucket lies on both sides of the Blackstone River. It takes its name from the lower cataract of that stream. The sound of the word shows that it is of Indian origin, and the name is said to signify "falls of water." The Blackstone, in its course from above Worcester, is chafed by numerous cascades, and makes its final plunge about four or five miles from the head of Narragansett Bay; and it is a noteworthy fact that a larger percentage of its available water-power is utilized than of any other stream in the land. Originally the western part of the city was a part of Providence. Roger Williams came hither in 1636, and called the territory which he bought of the Indians Providence Plantations. It was quite extensive for a single town. It embraced, indeed, all that is now known as Providence County, with the exception of Cumberland, and a part of Kent County.

Pawtucket itself, however,

was originally settled by Joseph Jenks in 1655. Mr. Jenks was a young immigrant from England, and came first to Lynn. Famous as that city now is for the manufacture of shoes, it originally engaged in a different branch of business. Among the colonists who accompanied Governor Endicott to Massachusetts Bay, was a man bearing the name of Jenks. He was an iron-smith, and began the smelting of iron and the manufacture of implements of that metal in Lynn. His Christian name was Joseph also, and he seems to have been a man of inventive genius. At all events, he received the first patent that was granted in Massachusetts. The founder of Pawtucket was his son, and though left in his native land when his father emigrated, followed him in a few years. Of the same craft with his father, he was deterred from remaining in Lynn by a fear that was entertained that the forests in that neighborhood would soon become exhausted. It was before the days of anthracite coal, and iron had both to be smelted and worked by charcoal. If a new iron-master would enter the field in New England then, he must seek some other theatre of labor.

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Williams had come to Rhode Island from Salem, and doubtless left many friends in that neighborhood who kept apprised of his movements. From them or from Williams himself it was doubtless learned that the Blackstone was overshadowed by virgin forests, whose wood would long supply material for charcoal. The younger Jenks therefore resolved to migrate to Providence Plantations, and arrived here in 1655. He speedily built a forge just below the lowest falls, and began operations in the manufacture of iron. He was the father of a large family, four of them sons. Every one of them attained eminence. The oldest son, bearing the name of Joseph, was a veritable son of Anak in stature, and possessed a towering intellect as well. He spent a great deal of his time in public life, and was for four years governor of the colony of Rhode Island. Another son bore the name of Ebenezer, and was a clergyman. For some years indeed he was pastor of the First Church in Providence. It is not necessary to suppose that he was trained

they had piety and native eloquence, their fervor and readiness of utterance made them acceptable preachers. A third son was named William, and was a judge; and a fourth one bore the name of Nathaniel. and gloried in the title of major. Every one of them reared a stone chimney house, two of which remained as landmarks till within fifteen years.

The father and the energetic sons gathered around them a little band of industrious men, and established a hamlet on the western side of the river. Of course they were in peril at times from the Indians. The north part of Providence was burnt by the red men in the latter part of March, 1676, and Jenks's forge seems to have been destroyed in the foray. The defeat and death of King Philip soon after, however, brought peace to the young colony, and the hamlet rose from its ashes. Years ago, in a famous case brought before Judge Story, the judge rehearsed certain facts that had been established in the trial, as follows:-

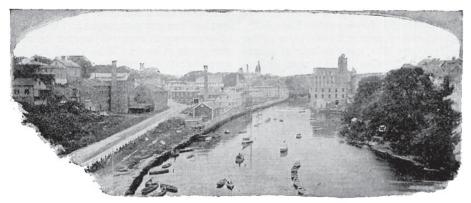
"The lower dam was built as early as



Pawtucket in 1830. From an Old Print.

to any great extent in the learning of the schools; for, as Dr. Benedict once remarked to the writer, many of the Baptist clergymen of the eighteenth century were men who worked at some hand-craft during the week and preached on the Sabbath. If way across the river, and a separate dam

the year 1718, by the proprietors on both sides of the river, and is indispensable for the use of these mills respectively. There was previously an old dam on the western side, extending about three-quarters of the



dam was a substitute for both. About

View of Pawtucket from the Division Street Bridge.

the year 1714, a canal was dug, or an old channel widened and cleared on the western side of the river, beginning at the river a few rods above the lower dam, and running round the west end thereof until it emptied into the river, about ten rods below the same dam. It has been long known by the name of Sergeant's Trench, and was originally cut for the passage of fish up and down the river. But having wholly failed for this purpose, about the year 1730 an anchor mill and dam were built across it by the then proprietors of the land; and between that period and the year 1790, several other dams and mills were built over the same, and since that period more expensive mills have been built there. In 1792 another dam was built across the river at a place above the head of the trench, and almost twenty rods above the lower dam; and the mills on the upper dam, as well as those on Sergeant's Trench, are now supplied with water by proper flumes, etc., from the pond formed by the upper dam."

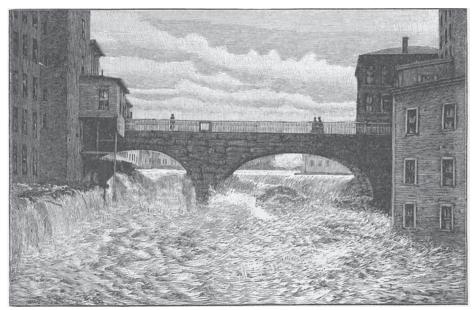
This concise statement by Judge Story shows what means had been employed during a century and a half for utilizing the power of the Blackstone. Suffice it to remark in passing that the trench named caused an immense amount of contention, sometimes to the verge of bloodshed, and of litigation. The substitution of steam for water-power, however, has meanwhile lessened the temptation for controversy.

The Revolutionary War introduced a new branch of business in Pawtucket. At the very beginning of that war Stephen Jenks, a lineal descendant of the original settler, manufactured muskets for several companies of the colony, and doubtless continued to furnish a supply during the eight weary years of that strife. At the close of the Revolution a new actor appeared on the stage. Oziel Wilkinson was an energetic blacksmith, who for years lived in Smithfield. He did a great deal of work for merchants in Providence, and obtained much of his stock thence. Convenience dictated, therefore, that he remove to the hamlet of Pawtucket; but as the British long held the lower part of the state, and might make a foray at any time, Mr. Wilkinson remained further up the stream. But peace removed apprehension, and the sturdy Quaker came to Pawtucket. He had five sons, all blacksmiths, and they began with energy to increase the business of the place. Obtaining a part of the water-power, they began to make anchors and other heavy articles. As the steamengine had not then been introduced into our land, trip-hammers run by water-power were in requisition to perform cumbrous work. Pawtucket was therefore famous for its iron manufactures.

In half a dozen years, however, after the removal of the Wilkinsons hither, another worker appeared, whose fame was finally to eclipse that of the earlier manufacturers. If iron had been king, a rival monarch was to challenge ascendency. Cotton was to give Pawtucket enduring renown. Samuel Slater came to this city, hamlet as it then was, in 1789, and from the next year his fame and that of Pawtucket were inseparable. What was the precise service that he rendered to Pawtucket and our country? He was not an inventor, yet he conferred as substantial a boon on the

United States as though he had devised some wonderful implement. Everybody knows that our country, at the close of the Revolutionary War, was destitute of manufacturing skill. Our fathers were industrious farmers and bold navigators; some of them were ingenious mechanics; but it had been the policy of the parent government during their colonial existence to keep the colonies dependent on Great Britain. Even the most liberal of the British statesmen, anterior to the Revolu-

veniences which had ceased to be luxuries, and had become necessaries? On grounds of economy it seemed cheaper to make our goods at home. Who could tell how extravagant the profits he was paying, unless he knew the real cost of the wares? Our fathers were anxious to diversify industry, and to share in the gains of manufacturing. Hence the purpose was formed in the outset to give manufacturing a local habitation and a name this side of the Atlantic. The second measure to which



Pawtucket Falls.

tion, avowed it as their policy to discourage all manufacturing in the colonies. Raw materials the colonies might supply,—the more liberally the better,—and exchange them with the mother country; but to that mother-land must they look for all clothes save homespun, and for every adornment of the home.

Though the Revolution sundered the political ties which bound the United States to Great Britain, the British were determined to hold our country in industrial vassalage. Our fathers were of course anxious to establish manufacturing here. Not only would it save them from costly outlay, but it would secure genuine freedom. War might break out again; whence, then, could we obtain those con-

Washington gave his sanction, an act approved on the 4th of July, 1789, was introduced by this preamble: "Whereas, it is necessary for the support of government, for the discharge of the debts of the United States, and for the encouragement and protection of manufacturers, that duties be laid on goods, wares, and merchandise imported."

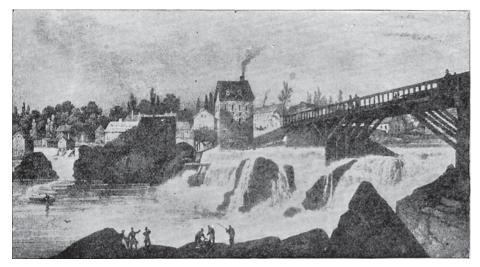
Anybody ignorant of the condition of affairs in the world a century ago would ask, was not manufacturing immediately established in America then? In our day the foreign inventor hurries to the United States to secure a patent and establish a branch of his business west of the Atlantic. The prospect of an extensive market gives speed to his movements. Were

there not scores of Englishmen a century ago ready to respond to our fathers' overtures, and transport their machinery hither? Doubtless there were, but a lion stood in their path. There was far less of popular liberty in Great Britain a century ago than now exists. As has been said, the magnates of that land were determined to keep us in industrial vassalage. They had a monopoly of certain branches of industry, and were determined to maintain Nobody, therefore, was allowed to impart information to any foreigner about any branch of manufacturing. Stringent laws, threatening fine and imprisonment, forbade any artisan, inventor, or manufacturer to send abroad any machine, model, or device that could enlighten others as to any branch of British industry.

American capitalists were meanwhile

the words of President Jackson, "The Father of American manufactures."

Most people know the salient facts in Slater's earlier history. He was born in Belper, in England, in 1768. At fourteen years of age he was bound as an apprentice to Jedediah Strutt, a manufacturer of cotton machinery at Milford, not far from Belper. Strutt was a partner of Sir Richard Arkwright for several years, and young Slater had therefore an opportunity to master the details of the construction of the cotton machinery then used in England. To perfect his skill, indeed, he served as general overseer, not only in making machinery, but in the manufacturing department of Strutt's establishment. Already he had dreams of emigration. He learned from an American paper that fell into his hands of the bounties offering in our land, and he laid up in a retentive memory every



The Falls and Vicinity in 1815.

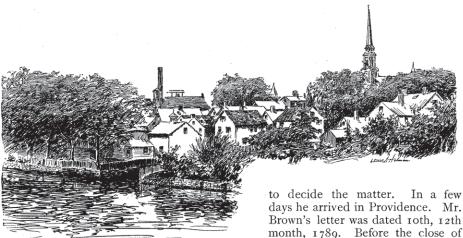
FROM AN ORIGINAL IN THE POSSESSION OF HON. OLNEY ARNOLD.

very anxious to introduce the spinning of cotton by power into our land. States proffered bounties. Advertisements appeared in newspapers, inviting artisans to seek our shores. In vain, for a time. Great Britain maintained her embargo. Inventors and artisans trying to embark for our shores were arrested, their models confiscated, themselves thrown into prison. But Samuel Slater foiled the restrictive arts, landed safely on our shores, reproduced the Arkwright machinery, and became, in

detail of the business in which he had been trained. He knew the risk of being detected with any model or drawing, and therefore took not a line that could betray his purpose. Almost by stealth he left England, in September, 1789, and reached New York within a couple of months.

His first experience was in New York, but the water-power in that neighborhood failed to satisfy him. Providentially he made the acquaintance of the captain of a Providence packet. The steamboat had not then been devised, nor had the days of railroads arrived, and vessels not only carried all the freight along the coast, but furnished to travellers transportation. The captain informed Mr. Slater that Moses Brown in Providence was making efforts to spin cotton, and the young immigrant quickly wrote to him. "I flatter myself,"

man's ability. He therefore gives him assurance that if he is willing to come and work Almy & Brown's little mill, and have the credit as well as advantage of perfecting the first water-mill in America, "we should be glad to engage thy care so long as it can be made profitable to both, and we can agree." It did not take Slater long



The River, below Exchange Street Bridge.

he wrote, "that in the business of cotton spinning I can give the greatest satisfaction, in making machinery, and in making yarn either for stockings or twist, as good as any that is made in England.'

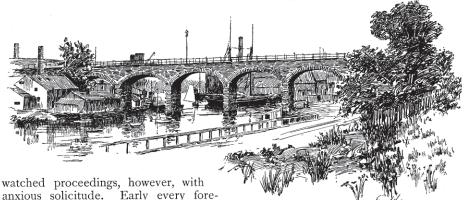
His letter brought a response from Mr. Brown. The worthy Quaker informs him that he had transferred the business to Almy & Brown, and speaks in a somewhat discouraging strain. "As the frame we have is the first attempt of the kind that has been made in America, it is too imperfect to afford much encouragement; we hardly know what to say to thee; but if thou thought thou couldst perfect and conduct them to profit, if thou wilt come and do it, thou shalt have all the profits made of them, over and above the interest of the money they cost, and the wear and tear of them. We will find stock and be repaid in yarn, as we may agree for six months. . . . We have secured only a temporary water convenience, but if we find the business profitable, can perpetuate one that is convenient."

In spite of his caution, the good Quaker was evidently anxious to test the young December he had taken Slater out to Pawtucket. There had been a change in the municipal relations

of this hamlet. A quarter of a century before a strip of Providence Plantations had been torn from the original town, and made a new town. It bore the name of North Providence, and Mr. Slater became a resident of the village of Pawtucket in the town of North Providence.

Mr. Brown committed his young friend to the hospitality of a man by the name of Sylvanus Brown, and left him for the night. On the next morning he appeared in Pawtucket, and submitted the machines of which he had written to the young Englishman's inspection. Slater was not enamored of them. "When Samuel saw the old machines," says Mr. Brown, "he felt downhearted, shook his head, and said, 'These will not do; they are good for nothing in their present condition; nor can they be made to answer." He was not the only disappointed one. The worthy Quaker's spirit, however, rose to the occasion, and he reminded his new friend of what he had written in his letter: "Thee said thee could make the machinery; why not do it?" The young man was ready for the attempt, but he prescribed certain conditions. A skilful carpenter must be furnished to perform the wood-work, and he must be put under bonds neither to steal the patterns nor reveal the operations. A proper room must be provided and secrecy secured. "Under my proposals," said the confident youth, "if I do not make as good yarn as they do in England, I will have nothing for my services, but will throw the whole I have attempted over the bridge."

There was no delay in beginning. A dollar per day was allowed Mr. Slater for subsistence; a shop was obtained just off of what was then called Quaker Lane, now East Avenue; Mr. Sylvanus Brown was engaged as the desired wood-worker, and operations were begun with the beginning of the new year. The building was secluded from prying eyes by blinds, and the doors were kept carefully locked. An old colored man, bearing the name of Primus, or Primus Jenks, as he had once been a slave of one of the Jenks family, was selected to supply the needed power by turning a wheel. Afterwards David Wilkinson, a very ingenious blacksmith, a son of Oziel, was called in to furnish such iron work as was needed, and all others were carefully excluded. Moses Brown machines, and the drawing and roping frames necessary to prepare for the spinning; and soon after he added a frame of forty-eight spindles. He surveyed the machines, and they exactly answered to those on which he had worked in Great Britain. But how small a circumstance may sometimes blight the fondest anticipations! Slater had obtained his cards from Worcester, from a reliable manufacturer, and they were adjusted in their place. But when the power was applied to the machines, it was found that the rolls of cotton would not drop from the cards, but clung fondly to them. Slater was amazed at the unlooked-for result. Half in despair, he dreaded reproach as a mere adventurer and arrant knave, and even thought of running away. But Sylvanus Brown dissuaded him from so rash a step. He asked, "Have you ever seen one of these carders work in your own country?" "Yes," was the prompt reply. "Then it can be made to work here." It so happened that it was about dinner time when the unwelcome experience occurred. Mr. Brown went to his house, and found that he must wait for a minute or two before eating. A pair of hand-cards that his wife had been using lay on the table, and he



The Division Street Bridge.

anxious solicitude. Early every forenoon his carriage was seen approaching
from Providence and turning into Quaker
Lane. It was a goodly vehicle, drawn by
two horses, and driven by a colored driver.
Meantime Slater taxed his memory, chalking on boards and planks the outline of
his machines, and Sylvanus Brown executed
his directions.

Labor and patience tell. In a few months Slater had completed a water frame of twenty-four spindles, two carding took them up to examine them. He discovered as he did so that the teeth were bent at a different angle from those in the machines, and the thought occurred, perhaps if those cards be tilted a little, they will work. On returning to the shop he inserted a thin piece of wood beneath the card and the difficulty was obviated.

A new era had now opened for New England and America. Slater had reproduced the Arkwright patents. The avarice of Great Britain was thwarted. That adventurous, self-reliant youth, who for eight years in his native land had been burning into his memory the details of cotton spinning by power, had transplanted to the New World an industry which had made other nations tributary to Britain.

Friend Moses exults. A small mill standing on the southwestern abutment of the wooden bridge just above the site of Joseph Jenks's original forge was furnished, and a water-wheel relieved the muscles of



The Old Slater Mansion.

Primus Jenks. The news soon spread through Rhode Island and Massachusetts that the problem was solved, and the country might hope for freedom from industrial vassalage to either Great Britain or any other land. A great many other inventions were yet to be made, indeed, before cotton spinning was perfected, but this was a stride in progress.

As illustrative of the fact that many other inventions were needed, it may be mentioned that the picker had not yet been devised. American cotton was as yet scantily produced, and it was but poorly cleaned. Slater preferred the West Indian cotton for some time on that account. It

was the practice in the outset, indeed, to send out bags of cotton to be picked. It was often beaten by a stick, to free it from the seed. Judged by modern standards, however, this was a costly process. The cotton was sent out into the country, to Attleboro, Rehoboth, and other towns, and the manufacturer was compelled to pay four cents per pound for the picking, and he complained that what the pickers stole doubled the expense. It spite of such drawbacks, however, the cotton yarn of Almy, Brown & Slater found a market at a price fixed below what had been the previous cost. To be sure, there were

times when the market seemed glutted, and at one time, when five hundred pounds had accumulated, Friend Moses wrote in consternation to his dar- $\begin{array}{ll} ing \ young \ part-\\ n\ e\ r\ : \ \ ``T\ h\ e\ e \end{array}$ must shut down thy wheels, Samuel, or thee will spin all my farms intocotton yarn."

The shop in which Mr. Slater made his first experiment no longer stands, we suppose. Twenty years ago or more the son of Sylvanus Brown,

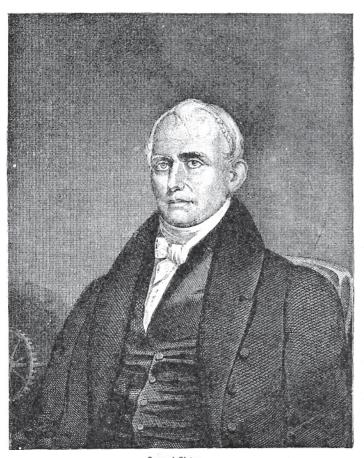
the proprietor of a large machine shop in Pawtucket, bought the building and proposed to set it up in the rear of the lot containing his works; but his death probably hindered the accomplishment. The diminutive mill wherein the machinery was first put in operation has also disappeared. It was swept away by a freshet in 1807. Before that, however, a new mill, now known as the Old Slater Mill, was reared just below the upper dam, and a few years afterward a second mill was built on the eastern side of the river.

A word or two as to the municipal relations of that eastern side may here be allowable. The Indian Sachem Philip

granted, in 1668, to Stephen Paine and others, a stretch of territory eight miles square. As the aborigines were not very accurate in measurement, the region was nearer ten miles square. It was called by the colonists Rehoboth. According to Gesenius, the word signifies streets, wide places, ample room. The town remained undivided till 1812. At that time a line

in Rhode Island. When Slater migrated hither, however, the territory lying to the east of the river was called Rehoboth.

An alienation took place in the course of a few years between Mr. Slater and Moses Brown. The young Englishman had meanwhile won the love of a daughter of Oziel Wilkinson and married her. This circumstance led to closer intimacy between



Samuel Slater. FROM THE PORTRAIT IN WHITE'S LIFE OF SLATER.

drawn north and south divided it into two parts, and the western portion obtained the name of Seekonk. In 1828 the latter town was divided by a line drawn east and west, and the northern portion took the name of Pawtucket. For years this town was in the Bay State, so that there was a town of Pawtucket in Massachusetts, and a village of Pawtucket in North Providence,

the Wilkinsons and Mr. Slater, and the second mill in what is now Pawtucket was built by them. It was in Rehoboth, however, and an advertisement is extant under date of July 15th, 1801, headed "Samuel Slater & Co.," wherein the partners, Oziel Wilkinson, Samuel Slater, Timothy Greene, and William Wilkinson — the latter two brothers-in-law of Slater — speak of "having

erected an extensive Manufactory at Rehoboth, Massachusetts, near Pawtucket Falls, four miles from Providence," and offer to supply "any quantity of yarn, of almost every number and description, as Warp, Filling, 2 and 3 threaded Stocking yarn, suitable for weaving and knitting, whitened or brown, wholesale or retail, at a short notice." This mill was built in 1799.

But Pawtucket was not allowed to retain

estimated at four-fifths of the raw material. The mills within the state employ upwards of one thousand looms, most of which are in private families, and wrought by females unoccupied by their domestic concerns. The cotton is picked by private families in the neighborhood of the mills, and in this state this branch gives employment to more than four hundred families a considerable portion of the year, to whom is paid



The Old Slater Mill.

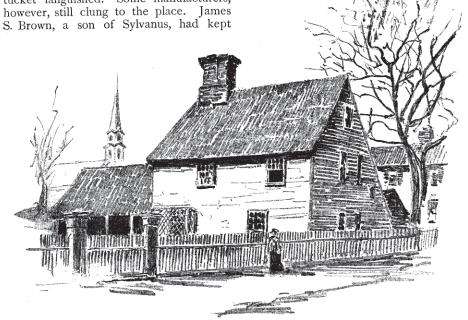
a monopoly of the business of cotton spin-Before the mill just named was erected, a mill was built in the town of Cumberland in a valley known as Robin Hollow. Other towns, of course, soon desired to share in the profits of the new industry. Ten years after the Rehoboth mill was reared, an intelligent observer writes in the following strain to a friend: "There are in this state (Rhode Island) sixteen cotton mills in operation, and seven more erected which have not yet begun to spin. Also outside the state, and within about thirty miles of this town (Providence), there are ten at work, and six not yet in operation. . . . The mills within the state contain between thirteen and fourteen thousand spindles, and consume about twelve thousand pounds of cotton weekly. The produce of yarn is upwards of twenty thousand dollars annually."

Beside the two cotton mills already mentioned, others were built in Pawtucket by Oziel Wilkinson and other enterprising citizens. Lack of space forbids mentioning them in detail, but the names of Croade, Tyler, Starkweather, Walcott, Slack, Dr. Billings, Pitcher, Hovey, Arnold, Gay, Rand, and a score of Jenkses, recur to the memory of older citizens, or linger in tradition as active manufacturers or skilful inventors in the earlier portion of the century. They rest from their labors; but a letter from David Wilkinson, now extant, speaks of the variety of business done by himself and his associates. "We built machinery to go to almost every part of the country, — to Pomfret and Killingly, Connecticut; to Hartford, Vermont; to

Waltham, Norton, Raynham, Plymouth, Halifax, Plympton, Middleboro, and other places in Massachusetts; for Wall & Wells, Trenton, New Jersey; for Union & Gray, on the Patapsco; for the Warren factories, on the Gunpowder, near Baltimore; to Tarboro and Martinsburgh, North Carolina; to two factories in Georgia; to Louisiana, to Pittsburg, to Delaware, to Virginia, and other places. Indeed, Pawtucket was doing something for almost every part of the Union."

In 1829, however, there came a serious reverse. Business was entirely prostrated, and many of the most enterprising manufacturers forsook the place. Meantime large towns and cities had been built up, availing themselves of the experience of Slater and his contemporaries, and Pawtucket languished. Some manufacturers, however, still clung to the place. James S. Brown, a son of Sylvanus, had kept

But a conviction gradually fastened itself on the minds of enterprising citizens that it was desirable to diversify the business of Pawtucket. One of the first to act on this conviction was Colonel Jacob Dunnell. As early as 1836 he commenced printing calicoes, and gradually expanded his works, till at the time of his death, a few years ago, they were the largest perhaps in the country. With almost peerless skill and energy he perfected processes, and provided works for both printing and bleaching that are hardly rivalled in the land. They were about four acres in extent, but were largely consumed by fire about the middle of August, the present year. While smoke yet rose from the



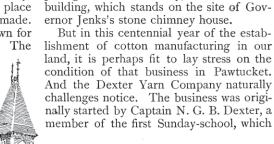
Governor Jenks's Old Stone Chimney House, now destroyed.

making inventions for facilitating the manufacture of cotton, and built an extensive machine shop on the west side of the river. That shop is still carried on by his son. Mr. Zebulon White obtained possession of the patterns of the Wilkinsons, and established a foundry not far from the railroad station. It is now carried on with many enlargements by his son, Mr. Joshua S. White.

ruins, however, preparations began for rebuilding, and the works will probably be in running order in the close of September. During the last fifty years others have followed the same policy. Darius Goff and associates built extensive wadding works, which have become the largest in the country; the Pawtucket Haircloth Company established the manufacture of hair seating; Darius Goff & Sons have reared

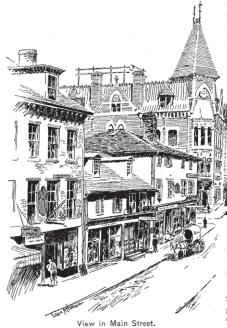
large buildings and supplied machinery for making plush, and almost every kind of manufacturing is carried on in the city. It were hard to find in the land a place where so large a variety of goods is made.

Pawtucket retains its ancient renown for manufacturing both iron and cotton. The



years ago the Lieutenant-Governor of Rhode Island. He reared the most im-

posing edifice in the city, the Music Hall



cotton business has given shape to much of the iron business. Beside Mr. Brown, who has already been spoken of, the Fales and Jenks Machine Company carry on an extensive machine shop and foundry. The Jenkses are descendants of the founder of the city. Mr. White has been already mentioned. Haskall & Company make great quantities of nuts, bolts, and like articles; and the Pawtucket Manufacturing Company, incorporated in 1882, manufacture bolts, cold punches, nuts, washers, and set screws. Other establishments, on a somewhat smaller scale, furnish many of the articles needed in the manufacture of cotton. The E. Jenks Manufacturing Company may be particularly named. Its specialty is the manufacture of ring-travellers and mill wire goods. Of the former they send forth millions annually. Of a different character is the establishment of the L. B. Darling Fertilizing Company. Mr. Darling, who gives name to the company, was a few

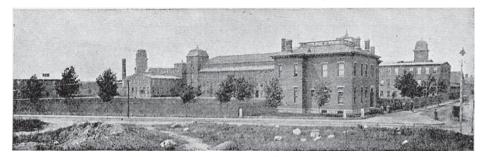
Mr. Slater established ninety-one years ago. On Captain Dexter's decease, less than a quarter of a century ago, two of his sons carried on the business for years, and still have an interest in the corporation. The Slater Cotton Company, too, demands mention. While it helps perpetuate the name of Samuel Slater, it can boast of making some of the finest cotton goods of the land. Conceived and started by W. F. and F. C. Sayles, it contains 52,000 spindles and 1125 looms, and employs about 600 persons. The same energetic firm started the Lorraine Mills seven or eight years ago. These mills are two in number, one manufacturing fine cotton dressgoods, the other fine worsted dress-goods. They run about 750 looms and employ about 750 workers. And it may be allowable to remark, as the Messrs. Sayles are citizens of Pawtucket, that they carry on a bleachery in a village about a mile from the city, which has won national fame from the excellence of the work it performs. The establishment is the largest of the kind in the world, and gives employment to 1500 laborers. Another large cotton mill is that of Greene & Daniels, which manufactures chiefly warps. The Littlefield Cotton Manufacturing Company,

and the U.S. Cotton Company, which has a large mill on Division Street, also are important corporations. And last, though not least of the larger establishments, is the Conant Thread Company. This was started in 1869. The parties originally constituting the corporation were beginning on a small scale; but a representative of the celebrated Scotch firm of J. & P. Coates, seeking a place to plant a branch of the Coates establishment, proposed to build a larger mill. The first venture was so successful that larger investments were made, and the entire plant is now simply a branch of the Coates works. There are four huge mills and seven storehouses, dyeing-mills, The mills contain about 100,000 spinning spindles and 90,000 twister spindles, and give employment to 2000 persons. It shows the facilities that Pawtucket proffers for manufacturing, that so shrewd a manufacturer as Mr. Coates should decide to invest his capital here.

There are other manufacturers of cotton goods in Pawtucket whose works would challenge description, were this intended for an exhaustive account. The Lebanon Mills, R. B. Gage & Co., and other parties, can be simply mentioned. And a host of enterprising workers in other branches must be passed over.

It will have been noticed that chief stress has been laid in this essay on the industrial history of Pawtucket. It is for its enter-

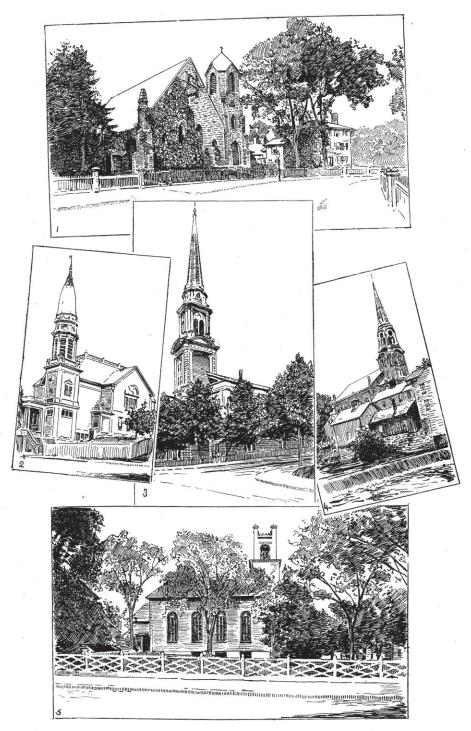
essential to the spinning of a fine thread, and Pawtucket is near the southern shore of New England, where the influence of breezes from the Gulf Stream is felt. The city boasts not, to be sure, of extensive water-power; but the steam-engine has become a rival of the cataract. If coal can be obtained cheaply, steam supplants the cascade. Now Pawtucket is situated but four or five miles from the head of Narragansett Bay, and the stream to the south, which is but a continuation of the Blackstone River, is navigable for schooners and coal barges. The general government is engaged in the work of broadening and deepening the channel. The end proposed is to furnish a mean depth of twelve feet of water at low tide, seventeen feet at high water. The estimated cost is about \$400,-000, a part of which has already been expended. Two bridges have obstructed the navigation of the Pawtucket River, but their draws have been widened. Already the navigation of the river has become large. It is a pleasant sail down the stream, and local steamers in summer make daily excursions. Great quantities of coal, iron, and lumber, for the use not only of Pawtucket, but of contiguous and remote towns, arrive by water. The draw-tender of one of the bridges gives the number of craft passing to and from Pawtucket in 1887 as 684 steamers, 2356 tow-boats, 334 schooners, 492 barges, not to mention sail-boats. He



The Conant Thread Mills.

prise, indeed, and for its good fortune in welcoming or developing new branches of industry, that the city is chiefly eminent. A question may therefore arise as to what facilities it has for fostering new kinds of business. The region will probably remain indeed a centre of cotton manufacturing. A certain humidity in the atmosphere seems

opened the draw over 2000 times. In the specification of the imports, in the year 1882, a committee reports 86,000 tons of coal, 5300 tons of iron, 2,000,000 feet; of long lumber, 9,000,000 feet; of short lumber, 3,000,000 feet; and of spool lumber, about 2,000,000 feet, to have arrived; and these figures become larger every year.



PAWTUCKET CHURCHES.

1. Trinity Church. 2. Park Place Congregational Church. 3. First Baptist Church. 4. First Congregational Church. 5. St. Paul's Church.

This leads to a few observations about the supply of water for domestic and mechanical purposes. Pure water in abundant supply is obtained from a stream called Abbott Run, flowing from the southern part of Massachusetts. About thirteen years ago the water-works system was begun. A Corliss pump lifted the water into a storage reservoir on Stump hill in Lincoln. That reservoir is 301 feet above tide water, and will hold twenty million gallons of water. As larger demand was made for water, two other pumps were constructed by the late Honorable George H. Corliss of Providence. The present combined capacity of the three pumps is twelve million gallons daily, though the average daily consumption is only four million. Besides supplying her own population, Pawtucket supplies the village of Central Falls, in Lincoln, the villages of Valley Falls, Lonsdale, Ashton, and Berkeley in Lincoln and Cumberland, and the village of Watchemoket in East Providence.

subservient to the protection of the city from fire. Numerous mains are extended and hydrants provided, so that seventy streams can be poured on a fire at once, and a pressure of eighty pounds be maintained without diminishing the supply of water for the city. Superintendents of other water-works in the country acknowledge their inability to rival this. To ensure an ample quantity of water for prospective needs, the board of water

commissioners purchased a lovely valley in the town of Cumberland for a storage basin. A broad road was thrown across the outlet for the accommodation of travel, and suitable gates were constructed to hold the water in check or allow its escape. That reserve basin has a capacity of 1,600,000,000 gallons. Half-a-dozen years ago, when a threatening fire in a timber and coal yard rained sparks in

showers on both Pawtucket and Central Falls, setting many a roof in flames, fifty streams of water poured without tiring, and saved the city from a grave conflagration. It may be added that the water is filtered through three feet of gravel and charcoal. Reference has been made above to the protection afforded by the waterworks against fire. It must be added that the city has an effective paid fire department.

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While Pawtucket can claim to be the mother of Lowell, Lawrence, Manchester, Holyoke, and Lewiston, it challenges fame for Samuel Slater as the starter of one of the first Sunday-schools in the land. Pawtucket knows no place which can claim precedence of her in this matter. Mr. Slater established such a school in September, 1799. One Sunday morning, as he was going from his house, he heard debating about going to Smithfield to rob a farmer's orchard. Time was hanging heavy on their hands, and they proposed



Residence of Hon. Olney Arnold.

that diversion. Mr. Slater caught one of their remarks and asked, "Boys, what are you talking about?"

"Bill proposes that we go up to Smithfield, and rob Mr. Arnold's orchard; but Nat says he don't think it right to go off Sunday robbing orchards."

"No, nor I neither," said Mr. Slater. "I can tell you something better than that. Go into my house, and I will give you as

many apples as you want, and I will keep a Sunday-school."

They went in, and Mr. Slater kept a school after Raikes's pattern. Said Captain Dexter, years afterward, "Our lesson-books were five Wester's spelling-books, and our library consisted of three New Testaments." As common schools were not established in Rhode Island till nearly thirty years afterward, it was a boon to those lads to be instructed in reading, writing, and arithmetic,—the branches which Mr. Slater taught. After one of those boys had attained greater experience and skill, Mr. Slater hired him for two years to keep a Sunday-school for the lads in his mill.

No New England town is content with simply material advantages. The richest of cities would quickly become a Sodom, did it lack religious institutions. Pawtucket is not destitute of churches. The earliest church to organize in Pawtucket was a Baptist church, and there are now four churches of this denomination in the city. Besides these there are three Episcopal churches, four Roman Catholic, two Congregational, two Methodist, a Universalist church, a New Jerusalem church, one or two Quaker churches, and one of the body calling itself "Christian." There are altogether twenty-two churches, nearly every one of them having a house of worship; and in addition there are a number of chapels occupied by mission bodies. Many of the church buildings are spacious and handsome structures.

But religion in New England demands with itself general intelligence. "Beside the church spire stands the school." Where ignorance prevails, piety degenerates into superstition. What agencies has Pawtucket then for education? She has a good system of common schools. She boasts a high school, capable of fitting youth for college or for business; she has several grammar schools of good reputation, and an abundance of schools of lower grade. The city has made large outlays for good school-houses, and can say of her children as did the Roman matron, "These are my jewels." The city maintains four newspapers. The oldest is the Gazette and Chronicle, which boasts of an existence of over half a century and is published weekly. There are two dailies, the Times and the Tribune, and another weekly, the Record.

Pawtucket has also a public library. This institution was originally called the Pawtucket Library Association, and was chartered as a private institution in 1852. In 1876, however, the association disbanded, and gave its collection of books to the town of Pawtucket for the establishment of a public library. The number of volumes thus given was four thousand. A public-spirited citizen, G. L. Spencer, gave a room, rent free, in his spacious block, for five years. An adjoining room was hired, and furnished for a reading-room. Singularly enough, many looked on the movement as an experiment, but from the day of opening the library, September 1, 1876, doubt was seen to be superfluous. The library contains about eleven thousand well selected volumes, and the annual circulation is forty-five thousand; it has a reference department of twenty-five hundred volumes, which is constantly in request. The value of the library to the public schools cannot be estimated, but the teachers gratefully acknowledge the assistance and stimulus afforded by it to their pupils. The reading-room, supplied as it is with illustrated books of the best character, is both a favorite resort and a powerful educating agent. Visited as it is daily by scores of well-behaved children, ranging from six to fourteen years of age, it may justly be reckoned one of the conservative influences of the city.

Pawtucket has many conveniences which add to its attractiveness. Situated so near to Providence, it has facilities for access to that city. Horse-cars run every ten or fifteen minutes, and the steam-cars run oftener than hourly. A double track running past the station affords accommodation to both the Old Colony and the New York, Boston, and Providence railroads. The New York and New England forwards its trains from Valley Falls by the latter road. A hundred and fifty-four trains, including passenger and freight trains, daily pass the railroad station.

Of financial institutions Pawtucket has no lack. There are three national banks, one of which bears the name of Slater. Besides these there are three savings banks, having quite large deposits; and there is a Mutual Fire Insurance Company.

Something has already been said concerning the municipal history of Pawtucket. The part west of the Blackstone

was first a part of Providence Plantations. and then from 1765 a portion of North Providence. The portion east of the river was originally a hamlet in Rehoboth, then a part of Seekonk, and finally made a distinct town. All this time it was a part of Massachusetts. In 1861, however, Massachusetts and Rhode Island made an exchange of territory, and the township east of the Blackstone became a part of Rhode Island. Everybody has heard the ancient proverb, "Lands separated by a narrow frith abhor each other"; and it was long a matter of notoriety, as well as of regret, that the town of Pawtucket and the village of Pawtucket had an antipathy for each other. Though such was the case, however, it was found that necessities are mightier than rivalries. It was so obvi-, ously for the benefit of each section that the two be united, that consolidation was finally secured. By permission of the General Assembly of Rhode Island, the new town began its existence on May 1st, 1874. Population steadily increased, and in a few years there began to be a desire for a city form of government. So strong was the attachment, nevertheless, for the old-fashioned town government, that for ten years the place remained a town. But town-meetings became clamorous and unwieldy, and conservative citizens yielded their prejudices. About five years ago the town accepted the charter granted by the Assembly, and Honorable Frederick C. Sayles was chosen the first mayor. He was succeeded by Major A. K. Goodwin; and the latter was succeeded by Hugh J. Carroll, the present mayor.

The present population of Pawtucket is a little less than 28,000. Since the consolidation of the town and village there has been an increase of about fifty per cent. The people generally understand the true grounds of prosperity, and appreciate the dignity of labor. One happy circumstance is that most of the owners of the various mills and shops live in the city. The chief capitalists are men who earned, not inherited, their wealth. The profits of business have been largely invested or expended at home. This has contributed to thrift in the past, and gives promise of prosperity in the future.

A century has passed since Slater succeeded in his enterprise, and Pawtucket has grown from a little hamlet to a popu-

lous city. She has not had any very exciting experiences. Is there not, however, a common proverb, "Happy the people that have no annals"? There may be startling incidents in a town's career, of destructive conflagrations, of invasions and grave outbreaks of passion, but such a town is not to be envied. Pawtucket has had a soberer career, but she is not on that account to be despised. Here honest industry has energetically labored; here invention has been stimulated and enterprise shown. Good, honest, hard work has here been done, and the city has sent forth to other communities arts and contrivances that have given men larger control over natural forces, and added to the conveniences and comforts of home. Peace has her victories no less than war. By bringing to our land a knowledge of one of England's industries, by hastening manufacturing here, Slater conferred a boon which no arithmetic can estimate.

What of the future? There is nothing to forbid the hope that Pawtucket will win larger prosperity. She has an intelligent population, trained to habits of industry. She has produced inventions in the past, and can count on others in the future. She has large capital, and skilful manufacturers to suggest how it can best be utilized. She has energetic churches and good schools. She has scores of appliances to make labor effective. She has facilities for obtaining raw materials, and for shipping abroad the fruits of her toil and skill, and the prestige of past success encourages to new enterprises. About twenty-six years ago the Rev. Dr. Taft, overtaking the writer, said: "The sight of yonder horsecars wakes some reminiscences. Forty years ago I came to this place, and was one day passing up this street. I found a pair of bars obstructing my path about where Exchange Street now cuts North Main Street. I took them down, and went up a cart track to the chocolate mill in Central Falls. At that time people were saying," he continued, "that Pawtucket had attained its growth. All the waterpower had been used up, and no increase of population could be looked for. But the town has kept on growing for forty years, and I know not why it may not grow equally rapidly for forty years to come." The good doctor's forecast was prophetic. Pawtucket has made steady strides for the

last quarter of a century. Central Falls, which was a little hamlet when the doctor made his first visit, has become a village of almost ten thousand inhabitants, and is not unlikely, ere many years, to be a part of Pawtucket. A rapid growth like that of some of the western cities is neither to be expected, nor perhaps to be desired.

Enough, if with the thrift confidentially to be reckoned on, the sons of such sires shall be emulous of their fathers' renown, and illustrate the truth of the ancient prophecy:

"The work of righteousness shall be peace.

"My people shall abide in a peaceable habitation, and in sure dwellings, and in quiet resting-places."