## EARLY COTTON MANUFACTURE OF THE UNITED STATES.

HE tracing the development of a great industry is always a matter of interest. It is installed. ways a matter of interest. It is invariably the story of energy and enterprise, with a few favoring conditions. At the inception of the cotton manufacturing industry of this country, in an extended and organized form, both foreign competition and legislation of a hostile character had to be encountered. In the early part of the last century, the fabrics worn in this country were of a coarse character, chiefly stuffs, kerseys, linsey-woolseys and flannels, a large proportion being of domestic production. A letter from the New England Board of Trade, dated 1708, and quoted by Lord Cornbury in his official report of that year to the English Government, states that the importation of these articles has fallen off £50,000 per annum. Much of the woolen cloth made by the country people, and sold in the stores, was worn without pressing or other finish. Linen manufacturers succeeded the woolen, being made first in New Hampshire and Boston, where a number of Scotch-Irish had settled. The richer classes wore, in the warm season, East India calicoes and their London imitations, and the production of these was the succeeding branch of textile industry undertaken in this country. The intimation in 1764 that a stamp duty was to be laid on India and China goods, with the interruption of English trade with the colonies which enhanced the price of cotton cloths, gave the needed impulse to the production of these. English legislation, however prohibited the introduction of machinery, cards and patterns; but several provincial assemblies offered premiums for cotton cards, and in 1775 the manufacture of these was commenced by Nathaniel Miles, at Norwich, Conn. The first spinning jenny was introduced into Philadelphia in the same year by the Pennsylvania Society of Manufacturers and Arts, which offered to receive subscriptions of £10 and upwards for "establishing factories," the subscribers to be the owners, and to be controled by a committee of manageoperations The society recommended the cultivation of cotton in the South, where it had been raised when prices were lower, and offered a reward for rolls for spinning. A premium for calico printing offered by it, led to the first establishment of the kind in the United States, by John Hewson, who received a loan of £200 from the state of Pennsylvania, "to enable him to carry on the business of calico bleaching and printing." The subscriptions, which amounted to £1,327, were partly put to account in making "flowered cottons," and plain cotton cloth, the price of cotton then ranging from 2s. 3d, to 2s. 10d. per lb. Olive colored jean, with a linen chain, the material of which cost 2s. 5d. per yard was sold by the society for 3s. 3d. per yard. The manufactory was in time furnished with a set of Arkwright machinery for spinning cotton, but after some years was destroyed, with its contents, by fire. Meanwhile the domestic cotton production was everywhere increasing, together with the importation of cottons, nankeens and silks from India and China. To drive India goods from the market, Great Britain supplied cottons in unlimited quantities and on the easiest terms.

Often the movements of an individual affect in an important degree the movements of a great industry. The first cotton mill successfully put into operation in this country was one at Pawtucket, for which the machines were constructed by Samuel Slater, "the father of the American cotton industry," who came over to this country in 1768, stimulated by a reward that had been given by the Pennsylvania Legislature for carding cotton. The machines were made for Messrs Almy & Brown, without original patterns, suitable materials or skilled workmen.

In Massachusetts, Rhode Island, and New Hampshire, numerous cotton mills came into operation in the couse of twenty years. Of one factory at Boston for turning out cards, General Washington wrote, October 28, 1789: "They have made 63,000 pair of cards in a year, and can undersell the imported cards; nay, eards of this manufacture have been smuggled into England." Cotton thread at this time was made at Ipswich, which contained 5,000 inhabitants. In 1787 Providence turned out 5,-858 yards of cotton cloth. The spirit of a self-dependent industry animated almost every household, and the home goods were readily sold. The great difficulty was in getting good machines. We find the Legislature of Massachusetts, after the examination of models for carding and spinning, submitted by Thomas Somers. who had "proved his knowledge of adapting the thread for and of weaving of dimities and plain, striped and checked calicoes," voting him £20 to encourage him in a trial.

The first New England cotton factory was set up in Beverly in 1787, a spinning jenny having been made from the State models, and a carding machine imported at a cost of £1,100 (\$5,500). This factory, visited by General Washington in 1789, excited the greatest interest, as being the first attempt in New England to manufacture cloth wholly by machinery. The proprietary, however, who could not turn to account a grant of land, or obtain from the State monetary assistance, incurred heavy losses, and afterwards discontinued the business as a corporate body, private individuals carrying it on. Several rival establishments soon sprang up—one at Worcester, another at Providence, and a spinning frame was built at Bridgewater.

A leading event in the United States cotton industry was the raising of a successful crop of sea-island cotton in 1789, at Hilton Head, near Beaufort, S. C. Carolina planters at this time clothed their slaves in homespun, the produce of their cotton fields, the spun material being sent to the nearest weaver. In 1789 also, cotton was manufactured on a small scale at Baltimore. In view of the advantage offered by the Falls of the Passaic, a company was organized among individuals of New York, New Jersey and Pennsylvania, in 1791, with a capital of 5,000 shares of \$100 each, for the purpose of establishing there the manufacture of cotton cloth, and for setting up "a great emporium of manufacturers." They were granted extensive privileges including a city charter over a district six miles square, and containing about ten houses, which they named Paterson, in honor of Judge William Paterson, the Govenor of the State.

To manufacturers and artisans who desired to settle there, water privileges were granted, and they were aided with capital. The company was not at first successful in its immediate purpose but it has the credit of having established a flourishing centre of industry. The manufacture of cotton goods was at this time progressing in Connecticut, and success was there being attained in the printing and dyeing of the goods.

It may be noted as a curious fact that a cotton mill established in 1795, at Warwick, R. I., and which was an extensive concern, was followed in the fifteen successive years by one cotton mill annually—a proof of the flourishing character of the business. The year 1803 saw the first cotton factory erected in New Hampshire, the location being Ipswick, the second cotton factory in Massachusetts, and the third cotton factory in Providence, R. I. In 1804, cotton was first carded and spun in Pittsburgh, by the carding machine and spinning jenny; and the first regular factory in this State was established at Union Village, Washington Co., and it

continued up to 1849 the largest factory in this country. It was conducted by Samuel Slater, who had acquired his knowledge in the pioneer establishment at Pawtucket. The quantity of cotton manufactured in the United States in 1805 was 1,000 bales; the price for Nos. 12, 16 and 20 of cotton twist yarn was respectively 99.115 and 131 cents. The number of spindles in Slater's cotton mill was increased in 1806 to 900. It is always pleasant to learn of genius and industry rewarded. Slater, on removing to Smithfield, R. I., accumulated a large fortune in the cotton and iron business. By the interruption of our foreign trade in 1807, and the suspension of imports, a vast impulse was given to the United States cotton manufacture, and powerful corporations, with large capital made their appearance. The first lot of cotton goods printed in the United States by engraved rollers and machines, these superseded the process of block printing previously in use, were produced in 1810 at the block and print works of Thorp, Liddell & Co. six miles from Philadelphia. Their arrival in that city created a sensation. It was announced that one man and two boys were able to print 10,000 yards of cloth, or 50,000 children's handkerchiefs in a single day. Up to 1813 the weaving generally had been done by hand looms, the cotton mills being principally for spinning, but the Boston Manufacturing Co., organized in that year, proceeded to combine the two. The stock was principally held by Mr. Lowell, after whom Lowell was named. The factory was at Waltham and the first goods made were heavy unbleached sheetings of No. 14 yarn, 37 inches wide, 42 picks to the inch, and weighed somewhat under three pounds per yard.

The general success of cotton manufacture, with the improvements in machinery and the rapid immigration of cotton operatives caused great activity in the securing of water rights, particularly in Massachusetts and Rhode Island. Providence, R. I., had in 1813 no less than 120,000 spindles, which comsumed in a year 6,000,000 lbs. of cotton. The year 1823 witnessed the organization of the Waltham Manufacturing Co., the most extensive in the Union, and which, by its operations, was able to divide yearly 12 per cent. on its capital. With the design of introducing the manufacture and printing of calicoes on a large scale, the present site of Lowell was selected and purchased by the principal shareholders in the company, these disposing of a portion of the shares to it. At Lowell, the manufacture of calicoes was commenced in 1822. The cotton crop of the United States reached in 1821 to 210,000,-000 lbs., of which more than half was exported. The Waltham and Lowell undertakings stimulated further enterprise, and on the Brandywine, American chintzes were turned out in seven or eight colors, fast and brilliant, and jaconet muslin of Bengal and Surat cotton. A cotton factory capable of running 1,000 spindles came into operation at Fayetteville, N. C., in 1824. In short, the cotton industry had now assumed a magnitude which excluded all prospect of foreign competition, and was the prelude of a production which now exceeds the home demand, and successfully competes with English goods not only in England itself, but in foreign markets.