

the amount to nearly forty millions, a great but never-to-be-regretted expenditure.

A water tax is imposed on every building supplied, which is graduated according to the size of the structure. A one-story of sixteen feet width is taxed \$4, a five-story with a width of twenty-five feet, \$12 per annum. In manufactories, the Commissioners design to collect one cent for every one hundred gallons used, as nearly as may be. The water tax during 1868 amounted to \$1,232,404.95, and since its introduction in 1842 to over \$18,000,000. In November, 1868, the water was shut off for five days, for the inspection and repairing of the aqueduct. During the suspension of the flow of water, the reservoirs were reduced over nine feet, reminding us that if the supply should be cut off, our hydrants would fail in about fifteen days. The Croton ranks among the purest streams of the world. Its waters are collected in a district of 352 square miles. Mountains and hills of azoic gneiss receive the rainfall, which is filtered by the pure silicious sands and gravels, to gush out in numberless springs and brooks, which flow in sparkling transparency to the lake, the great reservoir. Here the sediments are mainly deposited, before the aqueduct is reached. A stone wall has been thrown around the lake, to isolate the drainage from the surrounding farms. A careful analysis of the water shows that the amount of impurity during a whole summer amounted to but 4.45 grains per gallon, or 7.63 parts in 100,000.

Dublin is the only city in Europe supplied with water as pure as the Croton, and Boston, Philadelphia, and Trenton, only in America. Nine old wells were filled and covered in 1868, though two or three hundred still exist. Their waters are greatly polluted, and are fruitful sources of disease, the only remedy—*filling them all*—should be promptly attended to.

By means of a new purchase of water-right in the spring of 1870, the volume of water during the dry season has been much increased, and the city saved from any anxiety in relation to the supply of this indispensable element.

IX.

THE SCHOOLS AND COLLEGES OF NEW YORK.



HEADQUARTERS OF NEW YORK BOARD OF EDUCATION.
(Corner Grand and Elm.)

The early Dutch settlers of Manhattan were educated in the first common schools known in Europe, and have the immortal honor of establishing the first on this continent, for the education of all classes of society, at the public expense.

The Dutch government bound the company to support ministers and schoolmasters, and the company imposed the same obligation on the patroons, in their respective agricultural colonies. Here, as in the mother-country, the schools were under the direction of the established church; the importance of a secular education for all, controlled by the state, and untrammelled by denominationalism, was not yet understood. The offices of minister and schoolmaster appear to have been united in one person, during the reign of Peter Minuits, the first governor, but were divided at the advent of his successor, in 1633. During the first forty years, the schools were held in such premises as could be obtained. An effort indeed appears to have been made to erect a school-house in 1642, but the funds raised for this purpose were again and again diverted for the common defence against the Indians, who roamed over nearly the whole island, so that no building for school purposes was probably erected until after the English occupation. Peter Stuyvesant evidently took considerable interest in education, for at his surrender of the colony to the English, there were in New Amsterdam, a town of fifteen hundred inhabitants, twelve or fifteen private, and three public schools, besides a Latin school established in 1659, whose reputation had attracted students from various parts of the continent. With the transfer of the government from the Dutch to the English, the public support of the schools (save to the Latin, which continued but a few years) was withdrawn. The sturdy Dutch, however, kept on the even tenor of their way for many years, both in church and school. The "School of the Reformed Protestant Dutch Church," now conducted at No. 160 West Twenty-ninth street, dates back in its origin to the Dutch dynasty, and is probably the oldest educational institution in the country, its managers having, however, imbibed the enlightened sentiments of their cotemporaries. Early in the eighteenth century, English schools became somewhat common in New York, and on Long Island. In 1710, the school still existing and known as

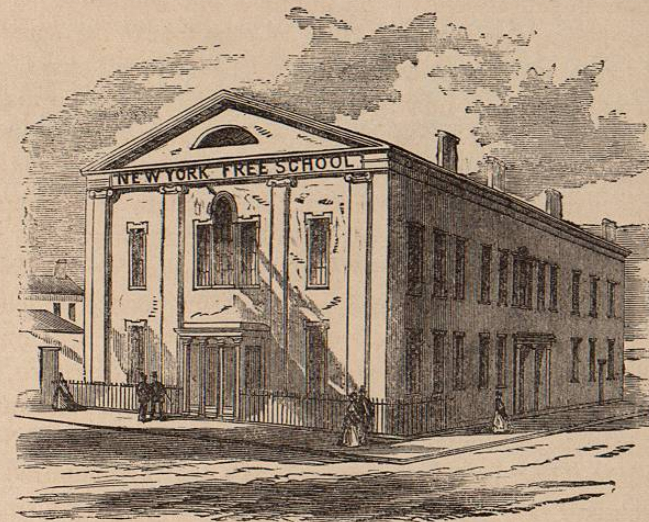
"Trinity School," was established by William Huddleston, under the direction of a society connected with the English church, and in 1754, King's College (now Columbia) was established. The Dutch struggled long and zealously against the extinction of the language and customs of their country, and as late as 1755 imported a zealous Holland schoolmaster, who served them with great acceptability for eighteen years, but was mournfully compelled ere his death to introduce English studies in the school, and to listen to preaching in the English language in the church. The capture of New York by the British, in 1776, was the signal for closing the schools, which continued until the evacuation, seven years after.

It was not until near the close of the last century that the public mind was aroused to the importance of providing the means for the general education of the people. From the establishment of the English government in 1664, down to 1795, all efforts to educate the masses were made by individuals, or by local churches; but in the year last named, in compliance with the recommendation of that enlightened governor, George Clinton, the New York Legislature passed an act, appropriating \$50,000 a year for five years, for the maintenance of schools in the several cities and towns of the State, in which the children should be taught English grammar, arithmetic, mathematics, and such other branches of knowledge as are necessary to complete a good English education. In 1805, the State government set apart the net proceeds from the sale of 500,000 acres of vacant lands, for a permanent fund, for the support of common schools, to be securely invested until the interest thereof should amount to \$50,000 per annum, which sum was to be annually divided between the several school districts, according to the number of their scholars. This fund was further increased by the proceeds of certain bank stocks and of the lotteries authorized by the Act of 1803. The first distribution occurred in 1815. A little previous to this movement in the Legislature,

organizations began to spring up, both in Europe and America, for the education of the poor and the neglected. The "Manumission Society," to improve the condition of the colored race, organized in 1785, was the first in our country, and two years later it established a school in Cliff street, and soon gathered one hundred pupils. This society continued its work for forty years, firmly established several schools, but in 1834, voluntarily surrendered its charge with considerable valuable school property to the State government. These are now the Colored Schools, under control of the Board of Education. A "Female Association for the Relief of the Poor," was organized, and in 1802 opened a school for white girls. This society existed about half a century, proved the feasibility of such undertakings, and led to the organization of the "Free School Society," which afterwards became the "Public School Society of the City of New York." The "Lancaster system," viz.: that five hundred or a thousand children could be properly instructed by a single teacher, then very popular in England, was introduced into this city, and in due time failed. In 1827, a number of ladies organized the "Infant School Society," and the next year the same was introduced into Boston, Charleston, and other places. The movement now looks to us supremely silly. Children were received into these schools in New York at from two to six years of age, and in Boston, always in the advance, at from eighteen months to four years. The system of instruction adopted was the "Pestalozzian," and does not differ materially from the course pursued at present, by most infant-class teachers, in our Sunday schools.

The "Free School Society," afterwards the "Public School Society," incorporated in 1805, managed by many of the wisest and purest men of the State, was for nearly half a century the great educational power of the city, if not of the country as well, and its managers deserve the lasting praise of posterity. Singularly wise in counsel, and economic in management, collecting vast sums among its friends, employ-

ing millions from the public treasury without ever intentionally squandering a dollar, it ran the most unselfish and



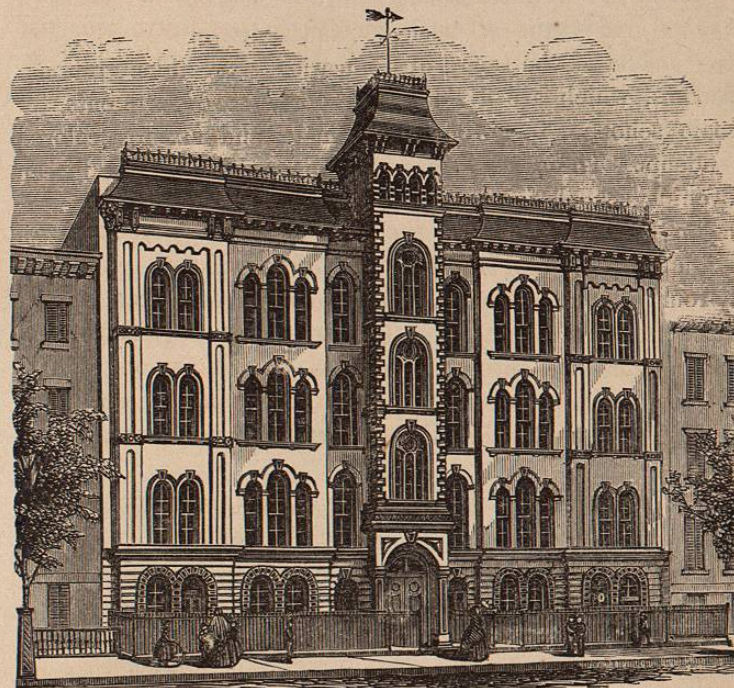
NEW YORK FREE SCHOOL BUILDING, OPENED IN 1809 IN TRYON ROW.

brilliant career in the annals of popular education. Still, it came to be questioned whether the work of a whole community should be surrendered to the few, and whether the State did wisely in committing the funds for the education of the children, and the erection of suitable buildings, into the hands of a private corporation, whose affairs might not always be managed by men as wise and good; and after considerable agitation, in April, 1842, the Legislature passed an act, by which the Board of Education, whose members were, until recently, elected by the people, was organized. During the next eleven years, the two organizations continued their independent operations, but the Public School Society, shorn of its former income from the State treasury, found its embarrassments continually multiplying, until it finally accepted a proposition from the Board of Education, to consolidate the two interests, which was practically accomplished

in 1853. The property transferred by this society to the Board of Education, though somewhat encumbered, amounted to \$600,000, but the fruit of their toil, evinced in the intelligence and virtue of the generations they instructed, was their noblest monument. At the close of the first eighteen years of their operations, they asserted that of the 20,000 poor children instructed in their schools, but one had been traced to a criminal court. During the forty-eight years of its continuance, it had under instruction no less than 600,000 children, of whom over twelve hundred became trained teachers, and one acquainted with its workings declares, that of a class of thirty-two boys in 1835, two have since been judges of the Supreme Court, one a member of the Legislature, one a City Register, several Principals and Assistants in the schools, one an Assistant Superintendent, one a clergyman, and several distinguished merchants. A very remarkable record indeed!

The advantage of thus uniting these great educational interests, and of combining the wisdom and skill of those trained veterans, who had so thoroughly solved these problems, appears in the present condition of the schools of our city, which in discipline and scholarship are second to no other in the world. The Board of Education consists of twelve Commissioners, who have the general supervision of the schools, the appropriation of the moneys set apart for their maintenance, the purchase of sites, and erection of new schools, the furnishing of supplies, books, stationery, fuel, and lights. There are also one hundred and ten Trustees, until recently elected by the people, five for each ward, one being chosen each year for a term of five years. There are also twenty-one Inspectors of schools, who were, until the present year, nominated by the Mayor, and confirmed by the Board of Education. The members of our last Legislature, madly intent on the one-man power, vested the entire school authority of the city in the Mayor. He is henceforth to appoint the Board of Education, the Inspectors, and all the

Trustees in the several wards, completely absolving the people from all responsibility in directing and regulating a



GRAMMAR SCHOOL NO. 56 FOR FEMALES.
(West Eighteenth street; erected 1869.)

matter, more than any other, connected with the happiness and success of their children.

There are now ninety school-buildings owned by the city, besides numerous hired ones, which cover more than twenty acres of ground, and the floors above the basements of the same, about seventy acres additional. The old buildings were plain as will be seen by the accompanying cut, but many of those recently erected cover several lots of ground, are lofty and elegant structures, with several fire-proof stairways, and all necessary apartments for the complete accommodation of two thousand scholars. The second cut repre-

sents the new building in West Eighteenth street, and contrasts favorably with the one erected in 1809.

There are now besides the thirty-six corporate schools of the several benevolent societies, and which are partly under the control of the Board of Education, sixty-three Grammar schools, which are divided into forty-six departments for male scholars, forty-four for female, and six for colored students. There are fifty-six Primary departments, fifteen evening schools for males, eleven for females, and three for colored children. There are two Normal Schools, and one High School. The Board of Education employs over twenty-four hundred teachers, over two thousand of whom are females. The number of scholars on register during 1869 was 237,325, with an average attendance of about 103,000. The annual expense of the public schools amounts to about \$3,000,000. The Board of Education appoints its President and Clerk, also the City Superintendent, and his assistants. The Superintendent grants two grades of certificates, to persons of suitable age, who have completed the course of study, after which they may be appointed to teach. The books and other requisites are purchased by the board in large quantities, stored at a central depot, and distributed to the several schools when needed.

In 1866, the Free Academy was, by Act of Legislature, erected into the College of the City of New York, and became a separate corporation, the members of the board of Education being *ex officio* members of its board of trustees. Advanced students from the public schools are admitted with free scholarship, and the trustees are authorized to draw on the Board of Supervisors, who shall raise by general taxation a sum not exceeding \$125,000 per annum, to defray the expenditures of the institution. Besides these general provisions for the benefit of advanced students, there are several Academies and Colleges belonging to the Roman Catholics, taught by Jesuits, and various orders of Brothers and Sisters. Columbia College, the oldest in the State, is situated on

Fourth avenue and Fiftieth street. It has departments for law and mining, and a separate college for Physicians and Surgeons. It is under the control of the Protestant Episcopal church, and has a property of several millions. The New York University, a large four-story Gothic structure of free-stone, at Washington square, was founded in 1831, has the several departments, and has graduated many students. There are two extensive theological seminaries in the city.



RUTGERS FEMALE COLLEGE.
(Fifth avenue and Forty-first street.)

The "Union Theological Seminary" (Presbyterian), founded in 1836, and open for students from all denominations who have graduated at a college. The trustees of this Seminary last year purchased four acres of ground on St. Nicholas avenue, between One Hundred and Thirtieth and One Hundred and Thirty-second streets, and are now erecting new and more commodious buildings, which it will require several

years to complete, and will involve an expense of about half a million. The students will occupy buildings distinct from the Professors. The library room is to be fire-proof, and will contain about 28,000 rare and valuable works. The city contains also the "General Theological Seminary of the Protestant Episcopal Church," established at New Haven in 1819, afterwards removed to this city, and located on Twentieth street, between Ninth and Tenth avenues. There is prospect of this being removed to Westchester or to some other location out of town. There are beside these, ten Medical Colleges and Academies, several Business Colleges, and a number of institutions of a high order for girls, Rutgers Female College, on Fifth avenue, opposite the reservoir, ranking among the first. An effort is being made at this writing to secure an endowment of \$500,000, to greatly enlarge and improve the facilities of the Institution. Much has already been secured, and the complete success of the undertaking is confidently expected by the friends of the enterprise.

Besides the schools just enumerated, there are over 320 independent ones, large and small, of a sectarian and miscellaneous character, with more than 1,500 teachers. It is to be regretted that so many parish and other schools, not controlled by the Board of Education, have come into existence for the perpetuation of antagonistic creeds and nationalities. The school property of the Board of Education has cost over five millions, and is now worth twice that amount. A careful examination has proved that 40,000 more scholars than ordinarily attend could be seated in the present buildings; this is probably as many or more than are taught elsewhere. We need but one system, and one organization, to control the ordinary branches of education. Our "*Free*," "*Public*," and "*Common*" schools, notwithstanding all these diversions, have been the chief glory of our city for sixty years, and are eminently so to-day. Every movement toward the division of the School Fund, for the promotion of sectarian interest, should be zealously resisted by every thoughtful

American. Sectarian schools of a high order supported by private corporations, for a few advanced students, are eminently proper; but the State should always control the secular education of all the children, compelling their attendance. Our children, representing, as they do, nearly every nationality, should study the same books, in the same buildings, and play in the same yards. Thus only can that homogeneity be secured that shall give security and permanency to the Republic. The State also should ever, as now, encourage the reading of the Bible in the schools, that great and only true educator of the conscience; not, indeed, in any sectarian spirit, but from great and manifest civil considerations.