

5981

SKETCHES

ON

A Tour

THROUGH THE

NORTHERN AND EASTERN STATES,
THE CANADAS & NOVA SCOTIA,

oc
BY J. C. MYERS.

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M. S. M.

PREFACE.

WHILE on a tour to the North and East, during the months of May, June and July, 1848, I took notes on the principal objects of attraction which presented themselves to my view, which, after my return home, I revised at my leisure hours, by prefixing a short sketch of the general aspect of each State, for the sole purpose of refreshing my memory in after days, and for the inspection of several of my friends. To these sketches I added the population of many of the cities, towns and villages, as given by the census of 1840, so that I might the better test their growth in future, should occasion require. I also added several historical sketches, together with occasional remarks.

The memorandum thus sketched, I have been induced by several of my friends to publish, which is done with a good deal of reluctance,—because no thought of such a thing occurred to me during my tour, or I should not have rushed over my route in so short a space of time, but would have supplied myself, (as I would have had abundant opportunities of doing,) with sufficient materials for a work which would have been useful and interesting. While on the other hand, the materials which compose the little volume here offered, were only sketched in a small memorandum book, while in the presence of the object. The notes thus taken during the day, were again sketched assisted by memory, and placed in another memorandum book during the evening, when alone in my room. The reader therefore, must not expect the life and freshness of a finished picture; but mere sketches and outlines,—nor that minute exactness of detail on many subjects, which may be desirable, although I believe that the sketches will be found to be generally accurate. For the truth of the

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CHAPTER I.

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THIS District, in which is situated the city of Washington, the seat of the Federal government, is a tract of ten miles square, embracing within its area the confluence of the east and west branches of the noble Potomac. It is divided into two counties, Washington and Alexandria, and contains two cities, Washington and Georgetown. The whole district is under the immediate control of Congress, and therefore is not represented in that body. This spot it is said, was selected by General Washington, as a proper site for the *Capitol*, as the most central place on the Atlantic bor-

der, being midway between Maine and Florida, and being also at the head of the navigation of a great river. He observed that all the other principal cities eastward of the Alleghany mountains, had sprung up on similar sites.

The city of Washington is situated on the east side of the Potomac, one hundred and twenty miles from its mouth, at the point of junction of the two branches, to which the river is navigable for ships of the line.—The city was laid out under the superintendence of the great man whose name it bears, in 1791, and became the seat of government in the year 1800. The plan of the city combines regularity with variety, and is adapted to the variations of the surface, so that the spaces allotted to public buildings, occupy commanding positions, and the monotonous sameness of a rectangular design is avoided, while all its advantages are secured.

The plan of the city is extensive as well as beautiful. The minor streets run at right angles, but the larger avenues diverge like rays from several centres, intersecting the streets with various degrees of obliquity, and opening spaces for extensive squares. The smaller streets all run in the direction of the four cardinal points of the compass, and are from ninety to one hundred feet wide. The grand avenues, bearing the names of the several States of the Union, are from 130 to 160 feet wide, bordered with trees of the choicest species. Many of these avenues terminate on the hill on which is situated the Capitol, from which they diverge like rays from a centre.

In approaching the Capitol from the city, you ascend the beautiful eminence on which it is situated, by passing through the western square or public grounds, in which are laid out many public walks, the whole adorned with the most graceful trees and the choicest species of shrubbery. The principal walk is beautifully paved with large blocks of grey granite, it being about twenty-five feet wide. On this you approach the building, till within about fifty yards, when you ascend two flights of stone steps, having together fifty-two steps, which brings you to a cistern or reservoir, walled with granite, and the brim or circumference surmounted by an iron railing of great beauty.

In the centre of this cistern, stands a very splendid monument, erected to the memory of the gallant naval officers, who fell at Tripoli, during the war of 1804. The monument is adorned by many beautiful and appropriate devices. On the eastern face of this monument, or that facing the west door of the Capitol, contains the following inscription :

TO THE MEMORY OF
Somers, Cadwell, Decatur, Wadsworth, Dorsey,
Israel.

The love of glory inspired them, fame has crowned their deeds, history records the events, the children of Columbia admire, and commerce laments their fall.

Between this monument and the Capitol, is the fountain which supplies the cistern with water, which is of an excellent quality ; as good as I ever drank. The cistern contains many different kinds of the most beautiful fishes ; those attracting the most attention are of

bright red, being of as beautiful a color as Turkey red. From the level of the fountain, a flight of eleven stone steps will bring you to the floor of the west portico.

In approaching the Capitol from the east, you pass through capitol square, containing 22 acres, also tastefully and handsomely adorned with shade trees. This front of the structure is all that is imposing, grand and sublime in art. The first thing to which the attention is drawn, is the statue of Washington, mounted on a pedestal of about eight feet square and about twelve feet high, on the east face of which is the following inscription :

*Simulagram Istud
ad Magnum Libertatis exemplum Nic Sine Ipsa Duratium.
Horatius Grenough Faciebat.*

This inscription is very beautifully wrought, the letters being large and plain, and present a scene well worthy of admiration. What the different interpretations are, and how many different constructions this inscription will bear, I am unable to say. The best English that I am able to make of it is the following :

*This Statue,
To the great example, and to the duration of Liberty.
Horatius made it.*

On this pedestal is situated the statue of Washington, representing him sitting in an arm-chair, in his left hand a sword or dagger, with the hilt foremost, indicating perhaps, that no sooner were the enemies of Liberty conquered, than he was ready and willing to surrender his sword and commission to the people.—
His right hand extended upward, pointing with the finger toward Heaven, the true indication of which I do

not profess to understand ; it may however, with some propriety be construed to indicate several things,—it may indicate that Liberty, Civilization, the Arts and Sciences will be ever upward and onward ; or it may indicate to this nation, to become truly wise and great, they should worship and obey that Deity whom he adored. The whole statue is a large and powerful figure, well sculptured, of a good quality of marble, except on the throat, directly under the chin, where it has the appearance of being defective. Whether this was sculptured in imitation of the disease of which he died, or whether it was a defect of the marble I was unable to learn. I am however inclined to think the latter is the true cause.

On a platform immediately in front of the portico, on a level with its floor, at a height of about eighteen feet, are placed two statues, one of which represents Columbus, with his right hand extended, on which is placed a globe, which may perhaps indicate, that this was the figure he considered the earth to possess, at a time when all the world was arrayed against him, hurling their scorn at him for his belief.

At his right hand and near the globe, is the statue of a female Indian, looking in the face of the stern old Prince of the Ocean. She is standing in a position as if about to retire, as much as to say, "let us retire to the far west, that this wilderness may blossom as a rose, and become the home of the free and the land of the brave." These two statues have no inscriptions on them, except the name of the artist, L. Persico.

On the front or gable of the portico, about forty feet

above these statues, may be seen three beautiful relievos, representing Washington in the centre, and on his right hand the figure of a man holding up his right hand, in his left an anchor ; on the left of Washington, a female figure, in her right hand a shield, in her left the scale of Justice, holding it up at arm's length. These relievos contain no other inscription than the name, L. Persico.

By ascending a flight of thirty-six stone steps, you arrive in the east portico, where your attention is immediately arrested by three very beautiful relievos just above the door, being situated in a niche. This represents Washington between two Cherubs, each holding over his head a wreath. This presents a scene grand and imposing, and are the handsomest relievos of the Capitol, being sculptured by the celebrated A. Chapellano.

On your right hand, when facing the door, in a great curve or niche in the wall, is placed the statue of the God of War, a strong and powerful figure in Roman armor. On the left, in a like curve or niche, is placed the Goddess of Peace, holding in her hand the olive-branch of peace. Both of these statues are constructed of a very superior quality of marble, and wrought in a most masterly style. These statues are perhaps to indicate to the world, that the motto of the nation is peace and friendship with all nations—ask nothing but what is right, and submit to nothing that is wrong ; national rights, liberty and justice being hers, each of which she will have even at the point of the sword.

The Capitol is a large, magnificent structure, of freestone painted white, being three hundred and fifty-two feet long, and one hundred and twenty-one feet deep. It is of the Corinthian order of architecture, being built in the shape of a cross, with the Representatives Hall and the Senate Chamber in the two wings, and a spacious rotundo in the centre, ninety-six feet in diameter and ninety-six feet high to the top of the dome. The sound of a single voice, uttered in this apartment, is echoed from the top of the dome above, with a rumbling like distant thunder. The rotundo is constructed of white marble, and the floor beautifully tessellated with the same material, giving an imposing effect.

The walls are adorned with a series of national paintings by Trumbull, among which are the Declaration of Independence, Baptism of Pocahontas, Landing of the Pilgrims on the Rock of Plymouth, Landing of Columbus, First Congress at Annapolis, Surrender of Burgoyne at Saratoga, Surrender of Cornwallis at Yorktown, &c. There are also many other paintings situated below those above noticed, among which may be named a very splendid full length portrait of General Taylor and horse,—also portraits of Worth, Shields, and many other heroes of the Mexican war. Above the national paintings are four relievos, placed at equal distances, representing the landing at Plymouth, the treaty between Penn and the Indians, the preservation of Smith by Pocahontas and the adventure of Boone with two Indians.

The Hall of Representatives is in the south wing of the

structure. Its form is semicircular, being ninety-five feet in length and sixty feet in height, lighted from the top by a dome. The gallery is also of a semicircular form and supported by thirty columns. Across the diameter of this semicircle, in rear of the Speaker's chair, are eight columns; immediately in their front, on the Speaker's right and left are six smaller ones, all of which are highly polished. The hall has quite a grand and imposing effect, being adorned with many statues, relievos and other appropriate and highly finished devices. Here I heard a spirited discussion between Mr. Ramsey of New York, and Mr. Roman of Maryland, on a question involving slaves as property. The hall contains seats for two hundred and thirty-four members, which were generally occupied; and much decorum prevailed for such a large legislative body. The decorum presented by this large assembly is not to be wondered at, when guided by such a towering mind as that of Mr. Winthrop, their Speaker; who appears to be not only an ornament to the body over which he presides, but to the whole of the American people.

The Senate Chamber is the same shape of the Hall of Representatives, being a little smaller. It is seventy-five feet long. The gallery of this is supported by thirty columns. In rear of the President's chair is situated the reporters gallery, which is supported by four square and eight round columns, the square ones being immediately in rear of the President's chair. Among the many splendid and appropriate devices which adorn this Chamber, may be named that rich and gaudy curtain which overshadows the President's chair, crown-

ed with the American Eagle with expanded wings, looking down and watching all their deliberations.

The Chamber contains seats for fifty-six members, and in their deliberations the greatest decorum prevails. This however, could not be otherwise;—was there a disposition on the part of any member to do so, he could not transcend the limits of decorum in the presence of that dignified and venerable old gentleman, Mr. Dallas, who presides over their body—whose white head, handsome person, keen and intelligent eye, added to his deportment, will inspire the admiration of all.

In this Chamber I heard a discussion three successive days, on the Yucatan bill. Mr. Cass of Michigan, and Mr. Foote of Mississippi, for the bill, and Mr. Miller of New Jersey, and Mr. Calhoun of South Carolina against it. The day on which Mr. Calhoun spoke the galleries were crowded to overflowing; many persons being excluded for the want of room, from hearing an oration clothed with the animating fire of a Homer, and the thrilling eloquence of a Demosthenes. It was with no little delight I listened with others, in the stillness of the Chamber, to the thrilling words as they dropped from the lips of this great Cicero of the American Senate.

In the west adjoining the rotundo, is the Library of Congress, containing sixteen thousand volumes, placed in a hall ninety-two feet high. I now ascended to the top of the central dome, which is one hundred and twenty feet from the ground. From this place a beautiful prospect is presented to view: embracing the *broad and winding Potomac* for many miles, with all

the pleasing diversity of landscape scenery upon its banks, including large portions of the cities of Alexandria and Georgetown.

At a distance of one and a half miles west of the Capitol, on Pennsylvania avenue, is situated the President's House,—which is also built of freestone painted white, two stories high, with a basement, and has a front of one hundred and eighty feet, adorned with two Ionic porticos. It is magnificently furnished and surrounded with beautiful and extensive grounds. These grounds are ornamented with the choicest species of shrubbery and the most graceful trees our country affords. Within the circumference of these grounds are situated four of the offices of the executive department. On the west are the War and Navy,—in the first of which can be seen the trophies taken during the wars. The most singular however, are those taken during the Tripolitan and Mexican wars: among which are some brass cannon and other weapons of war, and a number of banners, some of which are singular enough, while others are made of fine and excellent material. A few paces in front of the door of this department may be seen a rock of copper ore weighing from four to five tons. On the east of the President's House, are the State and Treasury departments. The latter is a massive structure of granite, three hundred and forty-four feet long, three stories high, together with a lofty basement. The front of the structure has a powerful portico, supported by thirty-one fluted columns about thirty feet high. The same front contains ninety-three windows, besides thirty-one arched windows in the

basement front. The portico is gained by a flight of thirty-two stone steps. The floors of the whole structure are a tessellated pavement, each one containing thirty-six rooms, with a beautiful arched passage the whole length of the building. The structure contains no less than six pair of circular stairs.

The Post Office department is situated about half way between the President's House and the Capitol, in an edifice recently built of white marble, which may be said to be the most beautiful structure in the city. It contains forty-two antas on the front. The building is about two hundred feet long, two stories high, with a lofty basement which contains eighteen semicircular windows. The portico is gained by a flight of thirty-three stone steps, some of the lower ones of which are about thirty feet in length. The floors are a beautiful Mosaic, on which stand a number of splendid fluted columns to bear up the structure.

The Patent Office is situated a short distance to the north of the Post Office. It is a beautiful edifice of freestone, wherein are deposited a rare and highly interesting collection of models. The upper part of this massive structure is occupied by the National Museum—where are deposited rare and highly interesting collections of Natural History and other treasures, collected during the voyage of discovery to the Antarctic regions, the South Seas and California. Among this valuable repository may be seen the hair, clothes, regiments, chest and dishes of General Washington; the printing-press and cane of Dr. Franklin; the military dress worn by the heroic Jackson at the battle of New

Orleans, &c. This great national repository would be invaluable at Philadelphia, New York or Boston; but here there is no University, no classes of students in science or literature, no philosophical societies, no people who seem to have leisure enough to render the collection as valuable as it would be if situated in some larger metropolis. The members of Congress rarely have their town residences in this place; but leave their families at home or in large cities, where they may enjoy perhaps more refined society; and they live here in boarding houses until their political duties and the session is over.

On the eastern side of the city, upon the Anacostia or east branch of the Potomac, is the Navy Yard, situated at a distance of three-fourths of a mile from the Capitol. It contains twenty-seven acres of ground—where may be seen massive designs in naval architecture, in viewing which an hour or two may be spent with considerable interest, where the sound of the hammer, saw and axe are mingled with the song of the jolly workmen.

The Columbian College, delightfully situated about two miles from the Capitol, was incorporated in 1821. The structure occupied by this institution is handsome and appropriate. The next object of interest out of the city, is the Congressional Burial-ground, about two miles from the Capitol, containing ten acres of ground, handsomely enclosed with a strong fence constructed of brick. The ground contains a number of very beautiful tombs and monuments of various styles and height, some of which consist of very splendid obelisk shafts

of considerable height, all wrought with a workmanship which cannot fail in attracting the admiration of the beholder.

Notwithstanding the extent of the city, its population is small, being only 23,364 inhabitants. It appears more like a group of villages than a continuous city, as the buildings are principally situated in three different clusters, viz: in the neighborhood of the Capitol, the Navy-Yard and Pennsylvania avenue. The Potomac, which separates it from Alexandria, is crossed by a bridge more than a mile in length. On the west the city is separated from Georgetown by a flourishing stream called Rock Creek.

Georgetown has a population of 7,312, is situated three miles west of the Capitol, on a commanding eminence, possessing a delightful prospect of the river, the neighboring city and the diversified country in its vicinity. The houses are mostly of brick, and the city is a very thriving place, having considerable commerce; but the navigation is in a degree obstructed by a bar just below the town. There is here a cannon foundry, four banks, seven churches and a Catholic College, said to be a very respectable institution. On my return to Washington, I visited the National Observatory, a high tower on high and commanding ground, affording a charming view of Washington and the surrounding cities, embracing a view of the various scenery bordering on the winding Potomac for many miles,

CHAPTER II.

STATE OF MARYLAND.

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Baltimore—Washington Monument—Battle Monument—Ex-
change—City Hall—State Penitentiary—University—Catho-
dral—Hospital—Washington Medical College—Commerces—
Manufactures—Fort MclHenry—Cheseapeake Bay—North Point.**

IN travelling from the city of Washington to Frenchtown, by the way of Baltimore, I found the maritime part of the State to be penetrated far into the interior by the Cheseapeake Bay, which like a vast river divides it into two distinct portions, called the eastern and western shores. These shores are found to include a low, level and alluvial country, intersected by tide water rivers and creeks. The eastern part of the State being almost cut off by the Cheseapeake bay, forms with the little State of Delaware, a peninsula. The western shores of the Cheseapeake, north and south of the city of Baltimore, contain some very beautiful lands, at once fertile and admirably adapted to the growth of the various kinds of grains and grasses. Above the tide-waters the land again becomes agreeably undulating. Still farther west commence the Alleghany Mountains, with their numerous ridges. The vallies between them are said to be loamy and rich and yield fine wheat and all the products of the Middle States. On my return route I found broad belts of this admirable soil in Washington county.

On the Washington and Annapolis Railroad, about

six miles from Washington, is the town of Bladensburg, quite a thriving town on a fine site, though situated in a poor region of country. The country as far as can be seen from the road, contains much land of an inferior quality, being wooded with scrubby pines, chestnut and shrubs, the soil having a pale, cold appearance, presenting few attractions in agriculture, and, to all appearance yielding a small reward for the labor bestowed. Continuing our course north-east, on arriving in Anne Arundel county, the land was found rapidly to improve in quality.

Annapolis, with a population of 2,792 agreeably situated on the west side of the Severn river, two miles from the Chesapeake Bay, is the capitol of the State. The city is regularly laid out, with the streets diverging from the State House and the Episcopal Church. The State House is the most beautiful and capacious edifice in the city. In this venerable old building the old Congress held some of their sessions during the Revolution; and the Senate Chamber in which Gen. Washington resigned his commission as commander-in-chief of the American army, has been preserved unaltered to this day. Here is also the State Library of 10,000 volumes. The city contains St. John's College, which is a branch of the University of Maryland. The city is well situated to command a large portion of the commerce of the Chesapeake Bay.

Baltimore, with a population of 102,313,* situated in a county of the same name, in the year 1752 contained 25 houses. It received a city charter in 1797.

*Census of 1840 given in all cases.

and is now ranked as the third city in the United States for population, commerce and wealth, being admirably situated as an inland city on the Patapsco river, 14 miles from Chesapeake Bay. The harbour is capacious and safe, and consists of an inner basin into which vessels of 200 tons can enter, and an outer harbour at Fell's Point, accessible to the largest merchant ships. The entrance is commanded by Fort M'Henry.

OBJECTS OF ATTRACTION. Among the first things to attract the attention of the stranger, is Washington Monument, at the intersection of Charles and Monument streets, it being a most splendid structure. It consists of a Doric column of white marble, with a circular staircase inside, by which you ascend to the top of the column. It is supported by a pedestal, fifty feet square and twenty-five feet high. The column is 20 feet in diameter at the bottom, 180 feet high, and surmounted by a colossal statue of the Father of his country.

The Battle Monument, corner of Calvert and Lafayette streets, built of white marble, 52 feet in height, was erected in commemoration of the successful defence of the city against the British in 1814, and as a lasting monument to those whose lives were offered up to secure so glorious a result.

The Court-House, corner of Monument square and Lexington street, is built of marble and brick and is 145 feet long and 65 feet wide. The Merchant's Exchange is a large and handsome structure, 366 feet long by 40 feet wide, with a hall 86 by 53 feet, lighted from the top through the dome, which is a delight-

ful and imposing hall. The City Hall, on Holliday street, is three stories high and has a portico with four massive columns.

The State Penitentiary occupies four acres of ground, and consists of three large buildings, surrounded by a wall 20 feet in height. The University of Maryland, St. Mary's College, the Maryland Institute and the Academy of Science and Literature are celebrated and flourishing institutions. The Cathedral is a beautiful edifice, 190 feet in length and 127 feet high to the top of the dome. It is of the Ionic order of architecture, and contains a very large fine-toned organ. There are also 107 large and elegant church edifices.

The Hospital, a large and splendid structure, erected at a cost of \$150,000, and the Alms House are each well conducted benevolent institutions. The city is supplied with water from Jone's Falls, whence it is conveyed to a reservoir on Calvert street, by an aqueduct half a mile in length. Numerous springs in the city also, contribute to supply the inhabitants, which water is generally good; and even that from the falls is as good as that usually found in large cities.

Washington Medical College, situated on the southeast corner of Market and Hampstead hill streets, on the most elevated ground within the limits of Baltimore, and commanding a magnificent view of the Patapsco river, the city and the surrounding country.—The buildings are constructed in a style of architecture which will vie with the proudest collegiate of our land and is perhaps the most splendid structure in the city. *The buildings of this College will range on Hampstead*

hill street 195 feet, and consist in part of a circular centre building about 40 feet in diameter, having four stories at unequal height, for the convenience of Lecture halls, Library, Museum, Dissecting rooms, &c.— This part of the edifice is flanked at four corresponding equi-distant points, by turrets one story higher, making this part of the structure six stories from the ground. These turrets are castellated with obelisk roofs, and decorated with beautiful Gothic windows and doors.

The wings are five stories in height, and each 60 feet long by 40 wide. They contain numerous apartments which are spacious and lofty, affording ample room for the classification of the patients, and will contain between three and four hundred beds. The apartments appropriated to house students, will contain and comfortably accommodate about fifty individuals; and are most agreeable and inviting to young gentlemen who may prefer to reside in the College edifice. In other portions of the building are apartments especially designed for strangers who may be taken sick in the city, and who prefer being retired from the noise and confusion of a hotel, and wish a place where good nurses, medical attendance and every convenience contributing to their comfort, will be provided. This peculiar feature has rendered this institution very popular with strangers who have taken apartments here, and who had the attendance of any physician they preferred. No person with an infectious disease is admitted at all, and the College presents every feature of one of the most admirably conducted institutions in our country.

The citizens of Baltimore are not more distinguish-

ed for their hospitality and agreeable manners, than for bold and persevering enterprise; as they have the merit of first projecting and commencing the two greatest works of internal improvement in the United States, viz: the Chesapeake and Ohio Canal and the Baltimore and Ohio Railroad. They also have three Railroads branching out from the city: one to Washington, one to Philadelphia and one to York in Pennsylvania.— Baltimore possesses nearly the whole trade of Maryland, and is so situated as to command a portion of the trade of Western Virginia, Pennsylvania and some of the Western States. Its inland communication has been extended and facilitated by the construction of the Baltimore and Ohio Railroad.

The city and neighborhood carries on manufacturing to a considerable extent in cotton and woollen goods, paper, powder, chemicals, pottery, &c. Baltimore also has the merit of being one of the largest flour markets in the world, inspecting annually between eight and nine hundred thousand barrels of flour, besides thirty or forty thousand half barrels. The foreign trade is also considerable, employing a capital of about \$5,000,000. The city has nine banks and nine insurance companies; and in addition to the public buildings already sketched, may be named two large and elegant theatres, one circus and a museum.

From Bowly's wharf a steamer belonging to the citizens Union line, carried us to Frenchtown, by sailing up the Chesapeake bay a distance of 60 miles. Soon after leaving the wharf we passed Fort M'Henry, situated on the left bank of the Patapsco river, about three

miles below the city. This fort is admirably situated for defending the harbour of the city. After entering Chesapeake bay, our steamer soon brought us in sight of North Point, celebrated for the death of Gen. Ron, and the repulse of the British army in their attempt to get possession of Baltimore, after their infamous conduct at the city of Washington, which added an indelible page to the history of their crime.

CHAPTER III.

STATE OF DELAWARE.

Aspect of the State—Swamps—Fruit Trees—Chesapeake and Delaware Canal—New Castle—Wilmington—Manufactures—Arsenal—Hospital.

The general aspect of this little State is that of an extended plain, chiefly favorable for cultivation. Near the centre of the State the country is elevated in a small degree, so as to form a kind of table land. * This forms a dividing ridge about half way between the Chesapeake and Delaware bays. This belt or ridge is a chain of swamps, from which the waters descend in one direction to the Chesapeake and in the other to the Delaware bay. These swamps are generally covered with coarse grass, equatic trees and shrubs, and of course present a wild and cold appearance, and but few if any points of picturesque beauty. These swamps, as all others, are of course filled with frogs and crickets, who by their ceaseless din fill the plain with animation du-

king the summer months. Many of these swamps are beginning to loose the charms of their wildness by draining and the high state of cultivation in the lands which surround them ; and no doubt, in the course of a few years more, they will almost entirely disappear through the agency of man. The northern portion of this little State is generally a fine tract of country, being highly and skilfully cultivated, and well adapted to the growth of wheat and other grains of a superior quality. In a word, this portion of the State presents all that is delightful in agriculture.

Great attention is also paid to fruit trees, especially the Peach tree, which is here found in the most hardy and luxuriant condition ; frequently living twenty and thirty years and bearing annually in great abundance. The soil of the State is a kind of light, warm, sandy loam. The orchards are situated on as much of a Southern exposure as possible, which to some extent protects them from severe bleak winds. They are planted about twenty feet apart. The ground is cultivated almost every year, which is said to be necessary for their growth and bearing. None but the choicest kinds are cultivated, and these are generally inoculated into the seedling when a year old, and transplanted when two years old, The soil and climate are so well adapted to the cultivation of the peach, that it is said the crop of a single proprietor often amounts to \$5,000 annually ; and in some instances far exceeds that sum, which is generally realised in the city markets.

When the yellows, which is one of the most fatal diseases of the peach-tree, is discovered, the tree is im-

mediately removed from the orchard, which is said to be the only means of checking the disease. The grub or peach worm, which punctures the bark of the tree and lays its egg beneath it, at the surface of the earth, is prevented by forming a bank or cone of earth or leached ashes, about a foot high, around the trunk of the tree, which is done about the first of June and removed in October; which is said to afterwards harden the bark below the reach of the fly the following year.

The manufactures of Delaware are more extensive than its commerce. Home-made or family goods are produced to some extent. Two woollen and eleven or twelve cotton factories produce a vast amount of articles. Small as is the State of Delaware, it has about \$1,600,000 invested in manufactures, the principal ones being propelled by the waters of the Brandywine river. The Chesepeake and Delaware canal is an important public work. It commences at Delaware city on Delaware river, and extends 14 miles to Back creek, a tributary of Elk River. It is sixty-six feet wide at the top and ten feet deep, having four locks nearly 200 feet long by 25 feet wide. It unites Chesepeake bay with the Delaware river, being navigable for sloops and steamboats the whole year except when frozen.— This great canal, though only fourteen miles in length, cost the sum of \$2,750,000. This canal is fed by the waters of the Delaware, which presents an appearance as transparent and beautiful as spring-water, which is increased in beauty when viewed at one of the tide-locks, *which when filled with these delightful transparent waters rising to a great height, and bearing up a sloop*

A steamboat, presents a scene worthy of admiration.

The town of New Castle contains a population of 200, is delightfully situated on a handsome site on the east bank of the Delaware river, 17 miles from Frenchtown, with which it is connected by Railroad. This little town has many advantages of becoming a place of some note, being 36 miles down the river from Philadelphia, and having on its west the beautiful and fertile valley of Christiana river. In sailing from this place up the Delaware, the fertile and beautiful lands ordering on the river, presented themselves in all the charms and loveliness of the month of May, while the rays of the noonday sun, falling on the silvery bosom of the noble Delaware, added grandeur to the scene.

The city of Wilmington, with a population of 8367, is pleasantly situated near the junction of the Brandywine and Christiana rivers. It is a well built, growing city, the most important in the State, the Brandywine being navigable to this place for the largest ships. The river above the town has a fall which affords a fine water power, which is occupied in propelling various machinery, among which are four flour mills, said to be among the largest in the United States; also, paper mills, powder mills, cotton mills, woollen mills, iron factories, &c. The city is well located for trade, in which it is largely engaged for a place of its size. It is also engaged in the fisheries, in the whale department of which it has several ships. The city contains an arsenal, a hospital and 16 churches. Water-works in the Brandywine, supply every part of the place with water for domestic uses.

CHAPTER IV.

STATE OF NEW JERSEY.

Aspect of the State—Red Bank—Mud Island—Camden—Burlington—Bordentown—Late residence of Joseph Banaparts—Plains of Monmouth—South Amboy—Strait of Amboy.

In sailing up the Delaware from New Castle to Camden, opposite Philadelphia, and then travelling north-east to Perth Amboy, on the Raritan bay, I found the Southern half of this State to be low and level, and on my return found the Northern part to be hilly. The soil of the State is not naturally well adapted to agricultural pursuits, much of the land being either sandy or marshy. Many large swamps may be seen in this State, many of which are much larger and present ten-fold the wildness of those in the State of Delaware.—Large bodies of land in these regions must have been swallowed up at an early day by those swamps whose great fleeces of green moss, rough grass and aquatic shrubbery must have presented an object of singular wildness to every beholder. Yet with all its swamps and other natural impediments; its proximity to the city of Philadelphia on the south-west and the city of New York on the north-east, two of the largest markets in the United States, the industry of the inhabitants have rendered it exceedingly fertile in all kinds of grain, fruits and vegetables common to the climate. The peach in this State flourishes with almost as much luxuriance as they do in Delaware, the soil being var-

dy and well adapted to the culture of that fruit, which is here a source of considerable profit. The greater portion of the sandy tract of this State is yet covered with extensive pine forests, which afford supplies of fuel to its numerous furnaces and the steamboats of the neighboring waters. The middle section of this State is the most highly improved and wealthy part. It is divided into small farms and kitchen-gardens, which are cultivated with a superior degree of skill, the product being heavy and always rewarding the proprietor satisfactorily for his industry ; all of which finds a ready market in the manufacturing towns of the district, and in the great cities of the adjoining States.

A tour through the various sections of this State is attended with considerable interest, and renders a rich equivalent for the trouble and expense attending it.— This does not consist alone in seeing its various picturesque and delightful scenery, but also in experiencing those thrilling associations which pass in rapid review over the mind when gazing on many of the battlefields, rendered memorable for that martial strife which resulted in the overthrow of British oppression over the colonies, and laid the legions of King George prostrate at the feet of the Americans. In that desperate conflict, this State suffered more than any other in proportion to her population and wealth, as the State was occupied for several years by the British and American armies. At one time the New Jersey militia constituted the principal strength of Washington's army.

On sailing up the Delaware, the principal object worthy of notice was Red Bank, memorable for the

facts stated on my own knowledge I recollect, and the information of others I believe, and many of which I am indebted to some of the gentlemen of the North and East, whom I ever found willing to give information as I could be benefited by it.

The sketches thus collected, being written in a few hours in the manner first described, exclusively to me and several friends, by writing them in a plantation manner, reserving to each State and City their respective scenery as I passed through them. In this same manner they are offered in this volume, not even being written over again or revised, so that the author, for the purpose of dividing them into chapters, was compelled to insert strips of paper, each of which was written the contents of a page, which is of itself a convincing proof that the volume was not originally designed for the public. Had the author signed the materials even thus hastily collected for the public eye, he would have prepared them in a different manner, and not have given them to the public in the manner here presented.

The hurried manner in which these sketches were collected and their private design, it is hoped will be a sufficient apology for the style in which they are written, noticing many cities, towns, villages, and other objects, which might be considered as being more wearisome and tedious than interesting, and also for such remarks as may be here and there together with the absence of proper punctuation and spelling; for the absence of capital letters, and the use of *see*; the classification of correct sentences, and the presence of such errors as may be here and there in the volume.

New Hope, Va., 1849.

death of Count Donop and the slaughter of his Hessians in 1777. This celebrated place is situated on the right bank of the Delaware, 8 miles below Philadelphia.— On the left bank or Pennsylvania side of the river, is a marsh called Mud Island, a poor place indeed for a fort, but the best Washington could find. Here he ordered Col. Greene to erect a redoubt, and also one on the Jersey side at Red Bank, which Greene commanded himself, and placed the gallant Samuel Smith on Mud Island with 230 men, where they prepared for the bloody strife, while the flood-tide of the Delaware was groaning under the enormous weight of the British fleet which was approaching them, who soon poured their thunder and flame upon this Mud Island band.— We are told they stood the shock to a miracle, and threw into the fleet some 32 pounders and bombs, which blew up the Augusta, a 64 gun ship. While her fragments and her crew were yet floating in the air, the Black Bird, another ship, blew up likewise, and went to join the Augusta. Count Donop with his host of Hessians made a gallant attack upon Red Bank where Greene gave them such a tremendous shower of grape shot and spike nails, that the host sunk down by hundreds into the sweet slumbers of death, scarcely sensible of the fatal blow that reft their lives.

The city of Camden, in Burlington county, with a population of 4306, situated opposite Philadelphia, is a beautiful town of 850 dwellings. Several steam ferry-boats are constantly plying between the two cities. *It carries on some branches of manufacturing industry, which appear to be in a flourishing state.* The city

contains a very splendid Court-house and other county buildings, eight churches, an academy and one handsome banking-house. Its trade is considerable, its wharves excellent and the location of the city delightful, commanding a fine view of Philadelphia, from which it is distant three quarters of a mile, which is the width of the Delaware at this place.

Burlington, with a population of 3434, is delightfully situated on the same river, 17 miles above Philadelphia. This city is partly encircled by a beautiful stream of water, over which are four handsome bridges. This place was incorporated as a city in 1784; is regularly laid out, contains some fine private mansions and other buildings, among which are six churches possessing great elegance. The most beautiful building however, is the residence of the Bishop of New Jersey. The town is located in a fertile tract, possessing many delightful little farms, adorned with suitable mansions and farm buildings.

Bordentown, with a population of 1800, is situated on the Delaware, 27 miles above Philadelphia. The town is regularly built on a site 70 above the river.—Steamers from Philadelphia and Trenton touch here several times a day. Bordentown is the most splendid town in the State, being most admirably situated on a commanding eminence, overlooking the Delaware river and surrounding country, at the termination of the Delaware and Raritan Canal. The town is adorned with the princely mansion of the late Joseph Bonaparte (Count de Survilliers,) and brother of Napoleon. This *unfortunate king* after abdicating the throne of Spain,

(a present from his victorious brother,) he sought an asylum in the United States, and erected at Bordentown a splendid mansion which is celebrated for its masterly points of architecture, and for the great beauty, order and taste displayed in the gardens and grounds surrounding the mansion.

The principle object worthy of notice in Monmouth county is Freehold, a town with 6303 inhabitants.— There are many private mansions adorning this town, together with a very beautiful Courthouse, other county buildings and seven or eight churches possessing considerable elegance. Freehold is celebrated for the great battle of Sunday, the 28th of June, 1778, usually known as the battle of Monmouth, where Washington burst in such stern wrath on Gen. Lee for his conduct ; and amid the thunder of artillery and the shouts of the victorious British legions, he rallied his broken and flying ranks, and rolled back the tide of battle with his mighty arm, thus saving the American army from utter route. Lee, stung for his act towards his commander-in-chief, strove heroically to retrieve the laurels lost by his conduct in the commencement of the battle, and was the last man upon the bloody field, striving nobly to save the army. Their sufferings from the excessive heat were unparalleled in the history of any war, the tongues of many of the soldiers being so swollen that it was impossible to retain them in their mouth ; and when the terrible strife had ceased there were found 4 American and 59 British soldiers who *had perished* from the effects of heat alone.

South Amboy, with 1825 inhabitants, situated at the

mouth of the Raritan river, on a bay of the same name. The city has an excellent harbor and is actively engaged in trade. In sailing from this place to the city of New York, we passed through Amboy straits, which separates the main land of New Jersey from Staten Island. This winding channel is in parts only half a mile wide, with many splendid villas and country residences on Staten Island. Its banks are well wooded. The trees were beginning to unfold their leaves, among which were the scarlet maple, the horse chestnut and lime tree in bloom; the Judas tree, conspicuous with its purpleish pink blossoms; the dogwood with its display of white flowers, while the lilacs flowering in the gardens, presented a scene grand and delightful, after having remained leafless for the seven preceding months.

CHAPTER V.

STATE OF NEW YORK.

Aspect of the State—City of New York—Natural Advantages of the City—Throngs of People—City Hall—View from the Cupola—Exchange—Astor House—Custom House—Halls of Justice—Post Office—Battery—Union Park—Castle Garden—Columbia College—Hospital—Asylum—University.

This great State, on which nature has showered with such a liberal hand, those bounties so necessary for a nation's prosperity, is exhibiting to the world one of those amazing examples of growth and prosperity, perhaps nowhere to be found on the face of the globe.—

Her works are executed on a scale of imperial grandeur, the State almost literally executing what Xerxes the Great fancied in his threats to the mountain. We here see her for the purpose of obtaining artificial levels for her Railroads and Canals, hewing down hills and mountains and casting them headlong into sea and ravine, and spanning her noble rivers with bridges and aqueducts. The great trunk which connects the great central basin of the lakes and the St. Lawrence with the Atlantic, is one of the most magnificent enterprises of the age, extending from Buffalo on Lake Erie, through the fertile vallies of the Genesee and Mohawk, to the city of Albany on the Hudson, a distance of 364 miles. The Champlain Canal extends from the south end of Lake Champlain at White Hall, to the city of Troy on the Hudson, a distance of 76 miles. These great canals, with their numerous branches extending in almost every direction through the fertile regions of the State, constructed at a cost of \$13,500,000, which, together with other noble enterprises, have won for New York the applause of the world.

New York is not only distinguished for her untiring enterprise and magnificent public works, but for her sublime and beautiful natural scenery, consisting in part in her water falls, her numerous inland lakes of fresh water. Among these may be named Lakes George and Saratoga in the north and Lakes Cayuga and Seneca in the western part of the State, which are admired by every traveller for their beauty—while Glen's Falls in the north, Trenton Falls and Genesee Falls in the western part of the State are each admired for the gran-

dent they present. These, with Niagara Falls on her western frontier, a part of which she claims as her own, which crowns the known globe in grandeur and sublimity, have been pronounced the most stupendous scenes in nature. After traversing the various sections of the State, every traveller is compelled to come to the conclusion that New York is justly entitled to the proud name she claims for herself—that of Empire State.—Not so much for her size as for the sublime character of her natural scenery, her magnificent public works, large and flourishing cities, towns and villages, her noble enterprise and the high state of her agriculture. The western sections of the State are either level or merely undulating; the soil is of a good quality and finely adapted to the growth of wheat. The central parts are agreeably undulating. The eastern frontier is mountainous, being traversed by the Highland, Catskill and Mohegan ranges; and near the Pennsylvania boundary the country is very hilly.

The city of New York contains a population of 371,223, and is beautifully and advantageously situated on the ancient island of Manhattan, which is formed by the junction of the Hudson and East rivers, 16 miles from the great Atlantic ocean. No city in the world can possess more if equal advantages for foreign commerce and inland trade. The two long lines of canals above named, connect the fertile west and north with the Hudson, by means of which vast trade is shipped to the city. This, with other natural advantages, has rendered it the most wealthy and flourishing of all American cities, and the greatest emporium of the west.

ern hemisphere, and after London, the greatest in the world.

The city is well built and regularly laid out, with the exception of the older part of the city, in which the streets are crowded, narrow, crooked and dirty; but this now forms only a small portion of the city.— It is not so much distinguished for its regularity and beauty as for being the great mart of foreign and inland commerce, from almost every part or section of the world. The stranger on walking its streets, after leaving his quiet home and the fresh atmosphere of the country, finds it a dusty, smoky, noisy, busy, great and animating emporium. In this mighty metropolis, the stranger from abroad may see its fine buildings, its long streets and handsome places; its dense throngs of inhabitants, its immense shipping and its enormous trade. He may observe on the one hand, the princely dwelling, the costly equipage and the splendid appearances; and on the other hand the squalid hut of poverty, of filth, of extreme misery and degradation. He may perceive the eddying throngs gathering and whirling, scattering and hurrying hither and thither, in the activity of commercial pursuits. He may here become confused by the never-ending turbulence and commotion, with the hundreds of mingled notes and noises which are ever arising from the multifarious trades and occupations of its thousands of inhabitants. And among its mingled crowds he may meet Frenchmen, Spaniards, Italians, Austrians, Swiss, Germans, Russians, Chinese, Jews, Turks, Africans, Portuguese, English, Southrons and Yankees: all commingling in the same hour; in

the same street, in the same scene and all of whom, perhaps are numbered in the census of this great metropolis. He here sees that nothing is fixed, nothing is permanently settled—all is moving and removing, organising and disorganising, building up and tearing down; the ever active spirit of change seems to pervade all bodies, all things and all places in this mighty metropolis.

OBJECTS OF ATTRACTION. The City Hall, erected at a cost of \$538,731, is 216 feet in length, 105 feet in width and 51 feet in height, surmounted by a cupola; on which is a figure of justice. From the cupola there is a beautiful view of the city, with her 195 churches with their towering steeples, all presented to your view besides those of the cities of Brooklyn, Jersey and Newark. With the aid of a telescope, you can see far over the surrounding country, and far up Long Island Sound. The Governor's room in this building, is used as a reception hall by the Governor, Mayor and celebrated men who occasionally visit the city. It perhaps contains the finest collection of portraits of distinguished men in the United States. Among them are the Governors of New York, Mayors of the city, naval and military officers, all the heroes of the late war with Great Britain; also, a long writing table formerly used by Washington, and the chair occupied by him when President of the first Congress. The Common Council room contiguous, also contains a number of fine portraits.

The Merchant's Exchange, in Wall, corner of William street, is a very splendid edifice, constructed of

Quincy granite, 200 feet long, 120 feet wide and 124 feet to the top of the dome. The rotundo is 80 feet in diameter, and is upon the whole a very handsome structure. The Astor House opposite the Park Fountain, is a vast Hotel, constructed of Quincy granite, 200 feet long, 150 feet wide, 77 feet high and contains 390 rooms. The whole structure being stone, the floors are beautifully paved with blocks of marble.

The Custom House, situated at the corner of Wall and Nassau streets, extending to Pine street, is built of white marble, at a cost of \$950,000, and occupies the site of the old Federal Hall, where Washington was inaugurated President of the United States. It is open for business and visitors between 10 a. m. and 3 p. m. It is 177 feet long, 89 feet wide and modelled after the Parthenon at Athens. It stands on a basement story, ascended by nineteen stone steps from Wall street, and six steps from Pine street. There are eight Grecian Doric columns at each front, and fifteen columns and an anta on each side, attached to the walls. There is also a second row of six columns, somewhat smaller, back of, and parallel with those of the main front, leaving a space of ten feet between the two rows, and about nine feet between the inner row and the front wall of the building. Back of the two extremes of the inner row, there are two antas; there are also six antas attached to the walls of the rear front, leaving a space of about eight feet between the columns and the antas. There are, according to this order of architecture, 24 outside columns, 5 feet 8 inches in diameter at the bottom and 32 feet high, including the capital; and 18 an-

tas on the two sides, of the same height, five feet wide and nearly four feet projections from the walls. The 6 inner columns of the main front are 4 feet 8 inches in diameter at the bottom and the antas correspond.— The building is two stories high except the great business hall, which is vaulted as high as the roof will permit, and its centre finished with a dome 60 feet in diameter. This hall occupies the centre of the building, and is 115 feet long, leaving a small vestibule at each end to enter from. Being 77 feet wide it leaves beyond the circumference of these dimensions, space where are found six rooms and three circular staircases in the four corners. The two largest rooms are each 24 feet by 21, besides a square staircase in the rear and three vaults for papers, at the two ends of the vestibules.— The same division of rooms is made in the second story. Nearly the same number, shape and size of rooms are found in the basement as in those above, leaving all the area of the same shape and size as the great hall immediately above it, with the addition of 16 fluted columns of the Doric order, which support the vaulting and the pavement under the dome of the great hall.

The Halls of Justice, situated in Centre, corner to Leonard street, is occupied by some of the Courts.— Part of the building is used as a Police Station House. The building is usually known as the Tombs, where in the Police Courts may often be heard rich and amusing trials of persons, arrested by the police for the violation of the laws and regulations of the city.

The Post Office, formerly the middle Dutch Church, is a venerable edifice, which has stood for 116 years.

During the Revolution it was used as a prison for about 3,000 Americans, and afterwards as a riding school for the British cavalry. The North Dutch Church, in William street, was also used for the same purpose.

The Battery, at the southern extremity of the city, is a delightful open piece of ground, containing about 11 acres, well shaded with beautiful trees, commanding a very delightful view of the harbour and its ports, islands, ships, steamers, fishing-boats, &c. The Park is a very beautiful spot of ground, centrally situated, has a handsome fountain, is the site of the City Hall and Hall of Records, which will be noticed in their places. It is also the site of the New York Gallery of Fine Arts. Union Park, at the upper extremity of Broadway, is a handsome piece of ground, neatly arranged, and contains a very pretty fountain. Each of these Parks are enclosed with a strong, handsome iron fence.

Castle-Garden is a place celebrated for pleasure—a structure used in winter as a place for large meetings of a public character, for balls, concerts, &c.; and in summer as a place to promenade. The interior has a very imposing effect to a stranger, owing to the magnitude and neat arrangement of the place, which is considered the largest audience room in the world, being over 700 feet in circumference. Its capacity is ample for the accommodation of between 15 and 16,000 persons. Columbia College, at the foot of Park Place, founded nearly a century ago, has a library of over 14,000 volumes. The New York Hospital is a *large, handsome* and well conducted institution at 319 *Broadway*. The Deaf and Dumb Asylum is located in

30th street. Visitors are received in those institutions by tickets from the managers, on Tuesdays, from 1 to 6 P. M.

The New York University is a splendid edifice of white marble, which truly exhibits a specimen of the handsomest English collegiate style of architecture.— It is situated between Washington Place and Waverley Place, and fronts Washington square towards the west. This structure is 100 feet wide and 180 feet long.— The building on every side that it may be viewed, has a very splendid appearance, consisting of a central building with wings flanked by towers, one rising on each of the four corners of the edifice. This central building or chapel, is 55 feet broad and 85 feet deep, and is truly a masterpiece of pointed architecture and is a model for succeeding ages. At the west end of this chapel is a window 50 feet high and 24 feet wide, by which a large portion of the chapel is lighted. This window contains 8 lights and embattled transoms; the heads of the lights are cinque foiled in a plain arch, and the divisions above are quarter foiled. By ascending a broad flight of stone steps, immediately before the great window, brings you to the principal entrance into the building, just under the window. The entrance is through a richly mounted and deep recessed portal, flanked by buttresses of two stages; the upper stage set diagonally and rising above an embattled parapet, finished in crotched heads, crowned with a pinnacle. The other doors of the building are oak, richly panelled, which have the appearance of being filled *with tracery of open work*, closely studded with bronze.

The principal floor in the building is the one gained by the broad flight of steps above named, which floor contains the rooms devoted to the use of literary societies, one large lecture room and some smaller rooms for classes in mathematics, natural intellectual and moral philosophy, history, civil engineering, and the higher classes in the various departments of learning. On the second floor are the studio of the professor of design, with a cabinet of models, &c. In other parts of the building are seen libraries, antiquities, &c.

The stranger after examining several of the most prominent structures presented to his view, his mind becomes sufficiently composed to receive other and equally agreeable impressions of New York; and he goes forth to satisfy his curiosity among her stately edifices and crowded thoroughfares. The dimensions, extent and colors of the buildings, the strange and various costumes, the number and style of the equipages of this magnificent city, as seen in the light of a summer's sun, never fail to delight the stranger, or call forth his repeated exclamations of amazement. The great Broadway, filled with omnibusses, carriages and footmen, in liveries of every variety and description, are in themselves sufficient to surpass all the expectations of the tourist, if he went no farther, and went away with no other than this passing view to remind him of the great emporium of the western hemisphere. Here he may find numerous gardens, public squares, parks, fountains and churches with walls and towers of every hue, stand forth in fantastic grandeur. On every side, *around him*, for miles and miles extend the *multiform*

and variegated mass of buildings, with chequered walls, red, green and gilded roofs, cupolas and spires without number. He may behold a portion of her streets broad, straight, well paved and beautiful; while on the other hand he will see others dirty, narrow and irregular, turning and twisting in every direction, and in their windings constantly presenting some singular and novel feature,—which being continually thronged with people and equipages passing to and fro in an unbroken stream, and filling with life the narrow windings of ground before him. On the right and left are palaces, cottages, churches and noble halls of various architecture, in red, blue, green and white succeed each other with a rapidity which at first surprises and then bewilders the passing stranger; and it is not until he ascends to the cupola of the City Hall and takes in the whole at one great view, that he is enabled to receive a fixed and decided impression of the greatest of American cities.

The traveller on walking the pavements of these winding streets, which present one of the most singular and animating scenes of any other city in the Union, is often much annoyed by the eager shopmen, who from every door will beseech him with bows and gentle violence, and with many promises to sell cheaper than his neighbors. Among the moving throng he will be able to discover ladies and gentlemen who are bred in the lap of luxury, who employ and practise all the accomplishments and seductive arts that most enchant society. The ladies have much vivacity of mind, *grace of manner* and display the most exquisite taste

in all appertaining to dress. Among the gentlemen may be found some possessing all the moral, intellectual and religious training and cultivation necessary to develop the nobler faculties of our nature, while others may be pointed out, more distinguished for their wit and pliability of mind, than for their attainments in sound philosophy; while still another class may be observed who are almost destitute of every thing calculated to adorn.

CHAPTER VI.

American Museum—Great Collection of Curiosities—Paintings—Scriptural Statuary—Jewish Sandhedrim—High Priest—Caiphaz—Dress of the High Priests—Scribes and Lawyer—Barabbas—Executioners—Figure of the Savior—Roman Council—Pontius Pilate—Pilate's Wife—Mesius Quintus—Position of the Council—Roman Guards—Scriptural Sketch—Affecting Scene—Death Warrant of Jesus—Sketch of its Discovery—Hall of Records.

The American Museum, a very large and splendid marble building, is situated at the corner of Broadway and Ann street. It is said to be the largest in America, containing several large and commodious halls over 100 feet in length, filled with an innumerable quantity of curiosities from every portion of the globe. Here are birds of every variety and clime, from the Ostrich to the hundred kinds of Humming birds; from the Bird of Paradise of the Tropics, to the Penguin of the Polar regions; besides preserved animals and reptiles. The

departments of Conchology, Entomology and Mineralogy are very perfect.

The grand Cosmorama contains a very large number of views of the most celebrated cities, beautiful landscapes, water views and many other things executed by the first artists in Europe. The miscellaneous curiosities include a fine collection of old paintings and rare engravings, many Chinese curiosities, ancient suits of armor, mail and arms, antique coins, splendid fossils, beautiful statuary, finely preserved Egyptian mummies, &c. The picture gallery contains several hundred portraits of the great men of America, the most of whom have passed off the stage of action: such as Franklin, Washington, Jefferson, Madison, Monroe, the Adams and Hancock family, John Jay, Jackson, &c., besides many who are still shining lights in the western hemisphere, as Clay, Calhoun, Cass, Col. Johnson, M'Duffie, Webster, Generals Scott, Worth, Quitman, Twiggs, Pillow, &c. This splendid gallery is one of the most interesting objects to the thousands of visitors of the Museum, both citizens and strangers; and can never fail to excite the admiration of every beholder, whether amateur in painting, or a mere admirer of the whole, as forming a grand gallery of the intelligence and moral worth of our nation. The performances are chaste and interesting, and of such a nature as to secure the patronage of the better classes of community. The Lecture room is large, beautifully and tastefully arranged, and capable of seating about 1200 persons.— The entertainments take place every afternoon and evening and are always of an unexceptionable nature.

Such regulations are established and enforced as to render it perfectly safe and pleasant for ladies and children to visit the Museum at any time, without being accompanied by gentlemen. In different parts of the building various mechanical works and figures are exhibited, affording a great deal of amusement; and their various tables are surrounded by admiring crowds. Amongst the rest is an automaton writer and draughtsman, which gives the population of Paris in figures, writes legibly in French and can draw on paper, birds, butterflies, &c., in very handsome style.

The third floor of this famous Museum contains some very splendid Scriptural Statuary, exhibited in four different groups, representing in figures the size of life, the Birth of Christ, the Last Supper of Christ and his twelve Apostles and his Trial before Caiphas and Pontius Pilate. The whole of this statuary has an appearance as natural as life. The two last named groups are intended to represent that moment in the trial of our Saviour, when Caiphas says to him, "I adjure thee by the living God, that thou tell us whether thou be Christ the Son of God."

As the spectator approaches this statuary, the group on the right represents the Sanhedrim or Jewish Council, of which the High Priest, Caiphas is President.—He is at once recognised by his breast-plate, which consists of twelve gems set in gold, and on each is inscribed the name of a tribe of Israel, which are set in four rows, three in each row, making up the twelve different tribes. This ornament we are informed, was never to be separated from the priestly garment; and

it was called the 'memorial,' because it was a sign whereby the children of Israel might know that they were presented to God, and that they were held in remembrance by him. The second thing which attracts attention is his dress, which is richly ornamented, especially the bottom of the dress, with its bells, pomegranites, &c., together with the cap of the Priest, with inscriptions of 'Holiness to the Lord,' and just above in Hebrew characters, the word 'Jehovah.' The President, Caiphas, is surrounded by Jewish Priests, dressed in rich robes, having caps upon their heads, bearing the same inscriptions as that of the President. The dresses accord in every particular with the description given in the Bible.

Standing on the left of Caiphas, is the Jewish Priest Samach. He is giving great attention to the Scribes and Lawyer, who are at the table, to whom he says— "Be he guilty or innocent, yet because he observes not the law of his ancestors he is not to be tolerated."— Here we have his ideas of justice. Guilty or innocent, it matters not to him. He says Jesus is not to be tolerated because he does not follow in the footsteps of his ancestors. It can be perceived by the expression of their countenances, that the whole Jewish Council were predetermined to put our Saviour to an ignominious death; while the Roman Council on the left, plainly express an anxiety that Christ, who they are satisfied is innocent, should be released.

About halfway between the two groups or Councils, is a table, around which are seated the Scribes and Lawyer. The Scribes are intent upon writing down

the proceedings of the trial, for which purpose they used pointed instruments called stiles instead of pens, and wrote upon parchment, as paper was unknown.— They appear to express no opinion of the merits of the trial, although there is not that appearance of resentment as exhibited in the Priests. They are surrounded by parchment, on which the laws were written, and to which they are referring, and listening to the Priest, who is addressing them in regard to the laws under which Christ is condemned.—But the answer of the Lawyer does not seem to be satisfactory to the hatred which desires his death. Between the Jewish Priest Samach, and the President, is the Priest Ebieres, who is in earnest conversation with the High Priest. He is saying, “be he innocent of this crime, yet shall he die, because he stirs up the people to sedition by his discourses.” They were determined to crucify their prisoner at all events; and if they could not convict him of one crime, they had others ready to lay to his charge.—The Council of the Jews but too much resembled their President, Caiphas, in their injustice and fury against Jesus. At the left of the Priests are Aurelius and Fabrius, two Roman soldiers. To the right of the table already named, are the three Marys, who listen in grief to the cruel proceedings against their dearly beloved Master.

To the extreme left of Caiphas, there is seen a group of great interest, both with respect to the genius of the artist, and the part they sustain. The figures are the centurion, who was despatched to release Barabbas, and Barabbas, who the populace chose should be set free,

rather than Jesus; as Pilate had said, "ye have a custom that I should release unto you one at the passover, will ye therefore that I release unto you the King of the Jews." "Then cried they all again, saying, not this man but Barabbes; now Barabbas was a robber."

The eagerness of the Centurion to execute the will of the people, is admirably shown, as also the emaciated and haggard appearance of the prisoner, Barabbas, who looks like one having suffered imprisonment and become spirit broken.

Directly before the last mentioned figures, are the executioner and his assistant, who are conversing upon the manner of the punishment which is just accorded to Jesus, that of crucifixion. The life-like appearance of these two cannot be surpassed. The assistant has in one hand a hammer, holding a nail in the other, as if about to strike, while he seems to be asking directions of his principal, who appears to be hesitating, and not so willing as usual to perform his duty. There seems to be some feeling of compassion in his countenance. Just before them is a box which contains their tools.

This is a brief sketch of the group on the spectators right, which represents the Sanhedrim or Jewish Council, before which Christ was arraigned and condemned to death. In this representation he is placed just in front of the Scribes' and Lawyer's table already noticed, which is about half way between the Jewish and Roman Councils. Being in front of the table he is thrown in advance of the centre, and is therefore nearer the spectator than any other figure therewith connected; and by walking a few paces to the left, we ar-

five opposite that figure which represents our Lord, the prisoner, the object of the hatred of the Jews.— Here we see the Son of God, the Prince of Peace, the Saviour of the world, the Redeemer of sinners, bound as a criminal, treated like a culprit, guarded by soldiers, arraigned like a felon, clothed in a purple robe, his hands bound by a leather thong, and a crown of thorns upon his head, which is seen has already caused the blood to flow from his forehead. The figure of Christ is most admirable, and his countenance is surpassingly beautiful and heavenly. The artist has almost expressed the attributes of divinity in a human form. It infinitely surpasses any thing ever before attempted in wax, and perfectly accords with the description given of our Saviour.

Thus stands the Saviour, bound and placed in their midst, guarded by the first Centurion, Quirilus Cornelius, who is on the right of the prisoner, and has charge of him as a criminal, with his eyes fixed steadily upon him. He exhibits no particular feeling in the matter, either for or against Jesus: but stands waiting patiently the termination of the trial, when he is ready to obey orders, having hold of the prisoner. In the midst of this agitated scene, and in conformity with his nature, he appears at once a superior being. No anger, hatred, or even impatience in his expression.—

I am the Redeemer, for thee I must die—
The cup is most painful, but cannot pass by.
Thy sins which are many, are laid upon me,
And all this sore anguish I suffer for thee.

Near the prisoner are the two false witnesses who testified at this tribunal, and said of the Saviour—“this

fellow said I am able to destroy the temple of God and build it in three days." This was a gross perversion of his language. Jesus said, "destroy this temple, and in three days I will raise it up;" having reference to the temple of his body and his resurrection. His language was thus distorted so as to involve him in the crime of speaking blasphemy against the holy temple. Jesus maintains a dignified silence to these charges, which excites the anger of the High Priest, Caiphas, who, contrary to law, imposes a solemn oath upon the prisoner, by saying to him, "I adjure thee by the living God, to tell us whether thou be the Christ the Son of God." This was a gross infraction of their law, which forbade that the accused should criminate himself.—Christ answers him—"Thou hast said; nevertheless I say unto you, hereafter shall ye see the Son of Man sitting on the right hand of power, and coming in the clouds of heaven"—acknowledging himself to be the Son of God. The High Priest is highly enraged at this answer, which can be distinctly seen, and raises his hands in affected horror, and says, "he hath spoken blasphemy; what further need have we of witnesses. Behold now ye have heard his blasphemy." This is the interesting moment represented in this awful and impious tribunal. The eye of the spectator at this moment is cast upon Caiphas, whose features are distorted with rage against Jesus. With uplifted hands and his countenance depicting the most inveterate anger and revenge, he seems anxious to sacrifice our Saviour to the infuriated mob. He too much resembles the odious *portrait* which the historian, Josephus, has given of

him ; who in a most violent transport of passion, when unable to effect his guilty purposes by the testimony of others, resorts to the most illegal method of compelling the prisoner to criminate himself. We are informed in the 18th chapter of John, that this High Priest declared before he seen or heard Jesus, that he was deserving of death, by saying to his colleagues that it was expedient that one man should die for all.

This same High Priest questions him with regard to his disciples and his doctrine. Jesus answers, "why askest thou me ; ask them which heard me what I have said unto them. Behold they know what I said."— And when he had thus said, one of the officers which stood by struck Jesus with the palm of his hand, saying, "answerest thou the High Priest so." Jesus says "if I have spoken evil, bear witness of the evil, but if good, why smitest thou me." This took place under the eyes of the whole Council, and as the High Priest did not restrain the author of it, he became an accomplice, especially when this violence was committed under the pretence of avenging the alledged affront to his dignity. What a hideous picture is this of the Jewish tribunal, allowing such outrages upon a prisoner not yet convicted or sentenced.

The spectator now leaves the Sanhedrim or Jewish Council, and passes a few paces to the left, which brings him opposite the second group. This represents the Roman Council, before which Christ was brought after the Jewish Council had heaped upon him all the false charges in their power, and who would have gladly put to death their innocent and grossly injured prisoner ;

but they dare not take his life, for the Romans had reserved the power of life and death. So soon as the spectator arrives at this group, the first thing which attracts his attention is Pontius Pilate, the Governor of Judea. He is seated on a throne partially surrounded with a rich canopy, in keeping with his splendid dress. At the feet of Pontius Pilate is Claudia Procula, his wife, who has thrown herself before him, begging her husband to have nothing to do with that just man, for she had suffered many things that day in a dream because of him. This advice from his terrified wife he would have taken, had he listened to the voice of his own conscience. It was customary for the Roman officers to be accompanied by their wives in their circuits; and although the proper residence of Pilate was Cesarea, he was always at Jerusalem during the feast of the Passover, when the city was filled with strangers. Her wife was acquainted with the emergency in which her husband was placed, and the agitation of her mind naturally caused her to dream upon the exciting subject. Common rumor had spread the intelligence of the wonderful character of Jesus, which now mingles with her imaginations in sleep, and excited her apprehensions lest her husband would be forced to condemn him against his better judgment.

On the right of Pilate is Mesius Quintus, a Roman General attached to the Court of Pontius Pilate. He was a distinguished man, as can be seen by his dress and his proximity to the Governor. Concern, marked emotion and almost a desire to rescue the accused, are *marked in his face*. He is listening intently to the an-

answer our Lord makes to Caiphas, President of the Sanhedrim, declaring himself the Messiah ; and although he did not believe the prisoner to be the Son of God, yet he was anxious that full justice should be done him. He says, "is there none in the whole city to defend an innocent man ; if he be right let us go to him, if he be wrong let us banish him from us." So it appears that Mesius Quintus was in favor of preserving his life, even if guilty, and punishing him with banishment only. On the left of Pilate is Subires, one of his Generals, who appears in earnest conversation with him.

Near the Governor is seated Joramus, one of the Roman dignitaries, who belonged to the court of Pontius Pilate. He is evidently very anxious and his sympathies are with Christ. His brow is knit and his whole face shows anxiety for the fate of Jesus. He appears astonished too, that the prisoner, after having so long remained silent should declare to Caiphas that he should see the Son of Man sitting at the right hand of power, and coming in the clouds of Heaven. The surprise and astonishment of Joramus at these words, are not confined to him alone ; they will be seen to pervade the whole group, except perhaps the centurions. He feels that Christ is unjustly accused and exclaims, "why should we suffer this man, being innocent to be condemned." He sees that the charges against the Saviour are not sustained, and says, "this man is not proved guilty of any crime, wherefore should we keep him bound." At the left of our Saviour is seated Simeondus, one of Pilate's Council. He is looking very earnestly and partakes of the feeling of Joramus, who is

standing close by, which is, that Christ is unjustly accused, and his sympathies are with him.

Zoradius, Achius and Marcellus are Roman Guards, standing in the same group. The same indifference of expression with regard to the result of the trial, may be seen in their faces, as is denoted in that of the first centurion, Quirilus Cornelius, who has already been noticed as holding Christ. Their countenances indicate no malice or anger, neither do they exhibit any sympathy for the prisoner. They look upon the proceedings with apathy, and stand ready to execute the orders of their Governor, and lead our Saviour to the place of crucifixion without the least emotion of sorrow. Such are evidently the obdurate hearts these Roman guards and centurions possessed.

The spectator after viewing the position and countenances of the members of this Council, his attention is again drawn to the Governor. His countenance is dignified, but his feelings are violently agitated on this trying occasion. The emotions of his soul he tries hard to suppress. He is anxious for the fate of Christ, and would have released him had he listened to the dictates of his own conscience; for he was perfectly satisfied of his innocence, as all his declarations prove. When the Saviour was first presented to him and accused, he questioned him and the witnesses closely; and after a thorough, searching investigation of his case, finds no fault in him. He asks, "what evil hath he done;" and they cried out the more, saying, "let him be crucified."

When Pilate saw that he could prevail nothing, but that rather a tumult was made, he took water and wash-

ed his hands before the multitude, saying, "I am innocent of the blood of this just person; see ye to it:"— They answered, "his blood be on us and our children:" What an awful imprecation! and how fearfully fulfilled in the siege and destruction of Jerusalem; when 1100,000 Jews were sacrificed; and among them, no doubt were some of the same individuals who were present at the trial of our Saviour, as it occurred in the year 70, about 36 years after the crucifixion; and suffered the same death they were so eager to inflict upon our Lord. It does not appear that Pilate was malignant: We see the efforts he made to save Jesus. But he was a public officer; he was intimidated by the outcry which the Jews had raised against him; calling in question his fidelity to the Emperor of Rome, under whom he held office; and for fear of a dismissal from office, he disregarded the voice of his own conscience and the entreaty of his own wife, yielded to the Jews, gave them a warrant for the execution, and thus sacrificed his innocent prisoner to an infuriated mob, which innocent prisoner he at every hazard was bound to protect. How affecting is the condition of the prisoner; he is the object of bitter hatred and the victim of merciless cruelty. His judges are controlled by the worst passions of the human heart. When reviled he reviles not again; he alone is calm and meekly submits; while he has all the power, and could instantly call legions of angels to his aid, he allows his foes to execute their unholy purposes, that he may give to the world an *example of patience under wrongs*, and offer himself a *ransom for the sins of man*; and lead a guilty world to

love and worship the Father. He illuminates the benighted mind with the splendors of truth ; he converts the habitations of woe into palaces of peace and praise. How truly then, is he worthy of the love and honor of all hearts, and the unceasing gratitude of a redeemed world ! He is despised that we may be loved ; he is rejected that we may be accepted ; he is condemned that we may be justified ; he dies that we may live ; he found no comfort any where that we may be filled with all comfort ; he is made a curse that we may be blessed ; he is led out of the city that we may be brought unto the heavenly kingdom.

There is no feeling in the spectator's heart of deeper, holier sympathy, than that awakened by the contemplation of the sufferings, persecution and death of our blessed Saviour. Our very horror and detestation of the cruel authors of his doom, is lost in the admiration excited by the patience and humility with which he endured their cruelty. He is derided and insulted, and every artifice is resorted to, to extort one sign of human passion. He who could command the powers of heaven to his aid, submits with meekness, that the word may be fulfilled ; and to the last, under the agony of a death most painful, still on his lips lingers the prayer, "Father forgive them, they know not what they do. If then, the mere mental picture recorded in the sacred volume excites such lively emotions in the heart, how vividly must they glow when gazing on the almost breaking reality ! What a great moral lesson is written in the meekness of that face of super-human beauty ! There is nothing on profane record

can compare with this, the most enduring suffering of the martyr of any age. There is no pride of heart in sustaining pain, but it is the holiness of the living God breathing in his Son.

O let us to that Saviour fly,
Whose arm alone can save; ;
Then shall our hopes ascend on high,
And triumph o'er the grave.

On the table around which the Scribes are seated the spectator can see among the parchment, a copy of the sentence rendered by Pilate against the prisoner which sentence was originally engraved on copper plate. On one side is written these words: "*A similar plate is sent to each tribe,*" and on the other side are the following words:

DEATH-WARRANT OF JESUS.

Sentence rendered by Pontius Pilate, acting Governor of Lower Galilee, stating that Jesus of Nazareth shall suffer death on the Cross.

In the year seventeen of the Empire of Tiberius Caesar, and the 25 day of Marck, in the city of holy Jerusalem, Anna and Caephus being Priests and sacrificers of the people of God, Pontius Pilate Governor Lower Galilee, sitting in the Presidential Chair of Prætorium, condemns Jesus to die on the Cross, between two thieves; the great and notorious evidence of the people saying:—1 Jesus is a seducer; 2 he is seditious; 3 he is an enemy of the law; 4 he calls himself falsely the King of Israel; 5 he entered into the Temple followed by a multitude bearing palm branches in the hands. Order the first, Centurion Quirilus Cornelius to lead him to the place of execution. Forbade all persons whomsoever either poor or rich, to oppose the death of Jesus.

The witnesses who signed the condemnation, are as follows: 1 Daniel Robani, a Pharisee; 2 Joannes Zorobatal; 3 Raphael Romani; 4 Capet, a citizen. Jesus shall go out of the city of Jerusalem by the gate of Struenus.

The above sentence, as before stated, is engraved on a copper plate. It was found in an antique vase of white marble, while excavating in the ancient city of Aquila, in the kingdom of Naples, in the year 1280, and was discovered by the Commisaries of Arts, attached to the French armies at the expedition of Naples. It was found enclosed in a box of ebony, in the Sacristy of Chartrem. The vase is in the chapel of Caseira. The French translation was made by the members of the Commission of Arts. The original is in the Hebrew language. The Chartrem earnestly requested that the plate should not be taken away from them. The request was granted as a reward for the sacrifice they had made for the army. M. Demon one of the Savans, caused a plate to be made of the same model, on which he had engraved the above sentence. At the sale of his collection of antiquities, &c., it was bought by Lord Howard for 2,890 francs.

The next object worthy of notice in this city, is the Hall of Records or Register's Office, situated on Chatham street, east side of the Park, a few yards east of the City Hall. It is appropriated for city and county purposes, and is one of the most chaste specimens of architecture of which this great city can boast. It is 80 feet deep, 62 feet in width and 48 feet in height, with two porticos, one at each end, which are supported by six marble columns, each from the great quarries

of Singing. The walls of the building, which are of stone, are stuccoed on the exterior in imitation of marble. The style is Grecian, the model being that of the Temple of Ephesus. It unites strength to beauty and simplicity. The building is entirely fire-proof, the floors being supported by arches of stone. It contains the offices of the Register of Deeds, the City Comptroller, Surrogate, Collector of Assessments, &c.

CHAPTER VII.

Effects of Steam—Book Bindery—Arsenal—Trinity Church—Grace Church—Broadway Tabernacle—Croton Water-works—Coaches—Brooklyn—Atlantic Dock—Greenwood Cemetery—East River.

While visiting the various portions of the city of New York, I had an opportunity of seeing the wonders of Steam, which is here substituted for human exertion. It is here that it relieves man from the greater portion of physical toil, under which he with the rest of his fellow-men has groaned ; it is here that steam is changing everything, and everything for the better ; it is here arming man with a power that is irresistible, and at the same time the most pliant—one which can uproot a mountain, and yet be controlled by a child ; it here imparts motion to a large portion of the arts.—Here its effects can be seen on the one hand, by spinning and weaving threads as fine as those of the *gossamer*, and forging tons of iron into single bars with almost equal rapidity and ease ; while on the other hand

are seen scores and hundreds of steamers, urged through the watery element, with the velocity of wind, in spite of the raging tempest and rolling waves. It is here connected on every hand with the manufacturing of paper and with the printing press, and is perhaps doing more to rouse and exercise the moral and intellectual energies of our nature, than any other city on the globe.

What a proof is steam of the high destiny that awaits our species! The most fervid imagination cannot realize the importance of those discoveries in science and the arts, of which it is merely the forerunner. The first is that new catalogue of agents that are ordained to change the condition of men, and to regenerate the earth; for all that is yet done is but as the twilight that ushers in the orb of day. Hitherto man has been comparatively asleep, or in a state resembling it, insensible of the rich inheritance which the Creator has placed at his disposal, in the elastic fluids, and of their adaptation to impart motion to every species of mechanism. How few persons are aware that the grand invention of imparting motion to a piston by steam, is the pivot on which the chief affairs of this world is destined hereafter to turn; and by the noble progress of the sciences, the time is not distant when by means of it the latent energy of the gasses, or other properties of inert matter, will supersede in a great degree, the drudgery of man; will perform nearly all the labor which the bones and sinews of our species have hitherto been doomed to accomplish. There are persons however, with minds biased by the eternal bondage in which the mass of our race has always been held, who will startle at the

idea of their becoming an intelligent and highly intellectual body. They cannot conceive how the affairs of life are to be continued, the execution of innumerable works which the constitution of society requires, should be performed, if these helots become free. But can they, can any one seriously believe that the all-wise and benevolent Creator could possibly have intended, that the highest class of beings which he has placed on this planet ; the one capable of appreciating his works, and realising correct ideas of his attributes ; that the great portion of these should pass through life, in incessantly toiling for mere food, and undergoing privations and sufferings to attain it, from which the lowest animals are exempt ? Assuredly not. Had that been his design, he would not have created them with faculties expressly adapted for nobler pursuits.

Among the many things of the city worthy of notice, is Mr. Walker's Book-bindery, in whose employ are a number of persons, and among them about fifty females whose weekly earnings vary from \$2,50 to \$7,50, who are principally employed in folding and sewing sheets. The folder sits before a table, on which she spreads out the sheets in succession ; in her right hands she holds a small ivory folding-knife, with which she flattens the folds of the sheets ; which is a process requiring considerable accuracy, so as to make the top and bottom lines of the print range. The sewer is seated somewhat obliquely at a little machine, called the sewing-press ; which consists of a flat table, from which rise *two end-bars*, connected at the top by a cross-bar.—*Three or more strings*, according to the size of the book

fastened by loops to the cross-bar, and are tightened down by a simple contrivance at the bottom. The sewer has her left arm passed round the left vertical bar; and proceeds to sew the various sheets to the bands or strings, her left hand being behind the strings, bearing down the half of each successive sheet as she spreads it flat on the sewing-press, with the back edge in contact with the strings, in which position it is held and the middle fastened to the strings by passing a threaded needle backward and forward through the centre fold of the sheet, each thread after passing from the inside to the out, being made to loop or twist round one of the strings, before entering the sheet again. As soon as one sheet is fastened, another is laid down and fastened in a similar manner. A curious kind of stitch called 'kettle stitch,' is made near the top and bottom of each book, as a means of allowing the thread to pass from one sheet to another. There are many other processes in a book-bindery worthy of notice. The great variety of patterns to book covers is given by a cylinder machine, with heated rollers having the various patterns engraved on them, under which the covers pass, after which they are fastened on the sewed sheets, in various ways, owing to the style of binding. A strip of iron is then inserted between the book and the back, which keeps the sheets all square, when it is placed in a cutting machine, which cuts the edges smooth and square. In the extra finishing shop it receives its various devices. It is first coated with size, then two or three times with white of egg, after which it is slightly touched with a piece of oil cotton when the gold is laid on.

The State Arsenal, open every day to citizens and strangers, is situated on the corner of Centre and Franklin streets, and well worth a visit. The trophy room contains many interesting objects taken during the wars.

Trinity Church, in Broadway, opposite Wall street, is a very elegant structure, built entirely of sand stone. Tower and spire 283 feet high. The Organ is of the very largest class, weighs 40 tons, and cost \$10,000. The church is the highest and most splendid in the State of New York. It is open daily for public religious services, and cost, including furniture and all other expenses except the clock, the sum of \$368,629 64.

Grace Church, in Broadway, above Tenth street, is a splendid edifice of white marble, which cost the sum of \$145,000. Here is to be seen the Monument erected by order of Congress, to the memory of the noble and daring General Montgomery, who fell in the assault upon Quebec during the revolutionary war; his bones being removed from Quebec in the year 1818, and deposited beneath this monument, which bears appropriate inscriptions. Among the many tombs and monuments in the church yard, can be seen a very tall but slender obelisk, erected to the memory of the celebrated Emmet, of Ireland.

Broadway Tabernacle, in Broadway, above Anthony street, erected in 1836, is 100 feet square; and is capable of seating comfortably, 2500 persons, being the most spacious building of the kind in the city. It is frequently let for public meetings, lectures and concerts, the rent money being applied to the discharge of the mortgage on the building, which was purchased in

1840 by the society now worshipping there. The churches named are the most conspicuous ones in the city; there are, however, 193 other large, fine and splendid churches in this metropolis.

The Croton Water-works is one of the most magnificent enterprises of the age. The aqueduct of this mighty work is built of stone, and commences 5 miles from the Hudson river, at a dam built over the Croton river, a distance of 40 miles from the city. The water crosses Harlem bridge, in an iron pipe laid as an inverted syphon. A massive structure is however nearly completed over the river, called the High bridge, over which the water will be permanently conveyed. The bridge is 1450 feet long and 114 feet high, and will cost the sum of \$900,000. The receiving reservoir, at 86th street, 38 miles from the Croton dam, covers 35 acres of ground, and contains 150,000,000 gallons. The distributing reservoir, at 40th street, about 3 miles from the City Hall, encloses an area of 4 acres and contains 20,000,000 gallons. From this reservoir the water is distributed through the city in 150 miles of iron pipes. The cost of the whole, by the time the new bridge is completed and the pipes laid thereon, will exceed the sum of \$13,000,000. The cheapest conveyance to the reservoirs is by the cars of the Harlem Railroad, which leave the depot in Centre street, every 15 minutes during the day. Fare 12½ cents each passenger.

Hackney Coach and Cab fares are most unfortunately influenced by the distance and number of passengers. *In this particular, New York has the worst arrange*

ments of any city in the Middle and Eastern States, whose cities regulate by law, the fares of the different carriages belonging to their respective cities. In this great metropolis, however, numerous as they are, they are allowed to charge what they please, which is generally pretty heavy, and demanded of the passenger with a very good grace. There are no less than 427 licensed hacks and cabs, 327 omnibusses, who are thundering over the streets from daylight till 10 o'clock at night, in addition to which there are 3033 licensed drays. Each drayman is required to own a horse and cart. After visiting the principal objects of attraction in the city, a beautiful ferry-boat carried us over East river to Long Island, landing us on the pier of another city.

Brooklyn, with a population of 59,558, is beautifully situated at the west end of Long Island, on commanding ground, just opposite the city of New York. This city holds the second class in population in the State, is handsomely and regularly laid out and contains several beautiful buildings. The Heights, a precipitous bank on East river, afford a very delightful view of the city and harbour of New York. There is in this place a City Hall in process of construction, which, when completed, will be a grand ornament to the city. The United States Navy Yard, on Walabout Bay, covering about 40 acres of ground, contains many objects of interest. Here a large and splendid Dry Dock has been constructed, of very beautiful stone, at a cost of \$1,000,000. The Marine Hospital is a very large and beautiful building, having about 33 acres of ground attached,

which is highly and skilfully cultivated in the various plants suited to the climate.

The Atlantic Dock, at the southern extremity of the city, where can be seen ships of the very largest class crowded together, with their towering masts, which, when viewed from the tower of some of the commodious warehouses built on the piers, have a most imposing appearance. The dock with the piers and warehouses cost \$625,000. Greenwood Cemetery, about 2 miles from the city, covers an area of 200 acres, possesses eminent natural beauties, and is richly worth the trouble and expense of visiting it. It is perhaps the most beautiful, neatly laid out and tastefully ornamented with shade trees and flowers of any cemetery in this or any other State. The city contains 30 very large and beautiful churches, among which is the elegant and superb structure called Holy Trinity, the most magnificent edifice in the city. A large number of steam ferry-boats connect the city with New York, by running across East river continually during the day and night with little intermission.

This city is well situated for trade and partakes largely in the commercial activity and prosperity of its neighbor, being washed on its northern bank by the waters of East river, and on its southern bank by the Atlantic ocean, while a railroad extends from the city to Greenport, 96 miles, at the eastern extremity of Long Island, which forms a portion of the nearest route to the city of Boston. After remaining in Brooklyn a few hours, I again crossed East river for the city of New York, while the right and left of the ferry presented all the charms that a *great forest of ship masts* could possess.

CHAPTER VIII.

Departure—Competition on the Hudson—Tarrytown—Sleepy Hollow—Sing Sing—State Prison—Palisades—Stony Point—Historical Sketch—Mountain Peaks—Forts Clinton and Montgomery—West Point—Military Academy—Halls and Buildings—Fortifications—Delightful Location—Monument of Kosciusko—Mountain Peaks—Newburg—Towns—Hudson city—Shipping—Athens—Catskill—Catskill Mountain—Hotel—Prospect.

I now felt a desire to leave the noise and uproar of New York and those mingled masses who crowded her streets, and seek the pure air of the country, and her exceedingly beautiful scenery, which I flattered myself would have a better effect in recruiting my health.— For this purpose I determined to go from this city north, by sailing up the Hudson, and halting at some of the principal places of interest, on the banks of that noble river, until I would get as far north as the city of Troy, a distance of 156 miles from the city of New York; and after some perambulations in the vicinities of the cities of Albany and Troy, travel west to the Falls of Niagara. For this purpose I left my kind host of the Croton Hotel, in Broadway, and repaired to the wharf at the foot of Cortland Street; and on my arrival was surprised to find that I could get passage on board a steamer for nothing, owing to the great opposition on the river; where one company would take a passenger on board their boat for no fee whatever, before they would suffer him to take passage on board a boat belonging to their opponents, which is a course

pursued by one company for the purpose of breaking up the other. The wharf was so crowded with runners, who are employed by the respective agents of companies, where the passenger is met by Tom, Dick, Harry and Jerry, all thrusting a ticket in his face, slandering the boats of his opponents, and so perfectly crowding his way, that he finds it impossible to proceed, until he gives them to understand by the most desperate frowns or hard words, that they had better give vent.

On board the beautiful steamer Henrick Hudson, we sailed up the river, where we found the scenery interesting and delightful. We soon arrived at Tarrytown, which has about 1000 inhabitants, beautifully situated on an eminence overlooking Tappan bay, 27 miles north of the city of New York. Tarrytown is famous as being the place where Major Andre was captured by the three militia men, on his return to the British lines, after a visit to Gen. Arnold at West Point. Adjoining the north part of the village commences the famous Sleepy Hollow, on which Washington Irving founded his entertaining legend, bearing the name of "Sleepy Hollow."

I here found it necessary to keep the notes of the scenery of the east bank separate from those of the west bank. Therefore, the counties and the side of the river they occupied were first noted alternately, and then their respective scenery as they were passed.

Sing Sing, a town with a population of 2,500, is delightfully situated 33 miles north of the city of New York, from which steamboats and vessels ply daily to

Sing Sing, which has four excellent landings. The main body of the town is situated on high and uneven ground, rising to an eminence of 180 feet above tide water. From this point the view is extensive and varied, overlooking Tappan and Haverstraw bays, the Hudson and Croton rivers, and the surrounding country, including a distant view of the Palisades and the Highlands. Sing Sing was incorporated in 1813. It is said to derive its name from the Indian word, Ossin-Sing, meaning the place of stone. It is now celebrated for its marble quarries, which are worked to a great extent by the State Prison convicts, of the Mount Pleasant State Prison, situated about half a mile south of the town. The prison grounds consist of 130 acres of land. The villages of Sparta and Peekskill, are situated one below and the other above Sing Sing.

Rockland County, (west side.)—The Palisades are a lofty range of precipitous rocks, extending along the west bank of the Hudson river, for a distance of about 20 miles. At Fort Lee, in the State of New Jersey, they first approach the immediate margin of the river, varying from 300 to 500 feet in almost perpendicular height, extending north to Piermont, at the commencement of Tappan bay. The definition of a palisade appears to be, pales set out for an enclosure; and these giant rocks stand, and will stand as long as the sea knows its bounds and the earth keeps its foundation, to restrain on one side the majestic waters that roll onward to the ocean.

Stony Point is a point of land extending a considerable distance into Haverstraw bay, on the highest part

of which stands a light house. This rocky point of land is celebrated for having been the scene of one of the most gallant exploits during our Revolution. These rocks here stand as a lasting monument to the most brilliant action in the whole life of the heroic Wayne. This point of land is washed on two sides by the waters of the Hudson. The fortress was situated on a considerable hill, on the west lay a marsh which every tide overflows. With all these natural defences the intrepid Wayne only demanded of Washington a corps of moderate strength, which we are told Washington gave with considerable hesitancy, by remarking to Wayne, that he feared the expedition would not be successful; to which Wayne replied, "General, if you will only plan it, I will storm hell."

On the memorable night of the 15th July, 1779, Wayne put in motion two charging columns, one commanded by Col. Henry and Major Stewart, the other under his own command, they coming in opposite directions without firing a gun, while storms of balls and grape were hurled in their faces.—Yet the shout of Wayne was heard above the din of the tumult, summoning his followers on, and pressing furiously forward through the morass, over every obstacle, up to the very mouths of the cannon, and up the rocky acclivity, they stormed on, crushing every thing in their passage. Towering at the head of his shattered column, pointing still upward and onward with his glittering blade, and sending his thrilling shout back over his heroes, Wayne strode steadily up the height, till at length struck in the head by a ball he fell back amid the ranks. Instantly

rising on one knee, he cried out, "march on! carry me into the fort, for I will die at the head of my column!" And those heroes put their brave arms around him, and bore him onward, taking the rapid volleys on their unshrinking breasts, over the living and dead, smiting down the veteran ranks that threw themselves in vain valor before them, till they reached the centre of the fort, where they met the other column, which over like obstacles had achieved the same triumph. At the sight of each other one loud shout shook the height and rolled down the bleeding lines; was again sent back till the heavens rang with the huzzas of the heroic patriots, while Col. Henry struck the British flag, and planted the American stripes upon the celebrated height.

A few miles above Stony Point is the peak of Gibraltar, a mountain peak running into the Hudson, near which is Cadwell's Ferry, famous for the wreck of Kidd's vessel. These mountains present a scene of some interest, not only as being picturesque and romantic to behold, but as being connected with the history of that celebrated pirate.

Putnam County, (east side)—This side of the Hudson, so far as this county extends, is famous for its towering mountain peaks, among which are Anthony's Nose, 1128 feet in height, Sugar Loaf Peaks, two of which are of considerable height. The village of Cold Spring is situated in a gorge in the mountains, near the edge of the Hudson, which is ornamented by several peaks of towering mountains near it. A few miles above are Bull Height, a peak 1486 feet in perpendicular

lar height ; Breakneck Heights are two ridges running to the edge of the Hudson, being 1187 feet high.

Orange County, (west side.)—Here are forts Clinton and Montgomery, situated on the banks of the river ; one of which is located above and the other below Bare mountain, a peak 1350feet in height. About 5 miles farther up the river, is the memorable spot known as West Point, containing a population of 900 inhabitants. It is romantically situated in the Highland range of mountains, where they were cut asunder that the waters of the Hudson might pass quietly on its course to the ocean. The river here makes a turn, forming an angle of about ninety degrees, the mountain forming a like angle. On this angle is situated West Point, at an elevation of 186 feet above the Hudson.

On this high and commanding point is situated the United States Military Academy, established by an act of Congress, in March, 1802, for the instruction of young men destined for the army. The number of cadets is limited to 250 ; and in choosing among the applicants, the sons of the revolutionary officers are allowed the first claim, and the children of the deceased officers of the last war with Great Britain, the second. The age of the pupils on admission, must be between 14 and 22. The professors and instructors are 30 in number. Each cadet costs the government \$336 annually. They are required to decamp six or eight weeks during the year. The course of study is completed in four years, and includes French, Drawing, Natural and Experimental Philosophy, Chemistry, Mineralogy, Geography, History, Ethica, National

Law, Mathematics, and the whole system of strategy, tactics, artillery and engineering. The annual expense of the institution is \$150,000.

The buildings belonging to this great institution are two stone barracks, one of three and the other of four stories in height, an academic hall, a large three story stone building, 275 feet in length by 75 feet in width, used for military exercises in winter and as a repository of the chemical apparatus, models of fortification, artillery, machines, architecture, &c. ; a very beautiful two story stone structure on the Elizabethan gothic style of architecture, which contains the library and philosophical apparatus. This great structure is 150 feet in length by 60 feet in width ; the north front has three towers, two of which are suited in the usual way for astronomical apparatus, while the centre tower is surmounted by a dome 30 feet in diameter, the whole of which revolves on its verticle axis, adapting it to the use of a large equatorial telescope. There are also 17 separate dwellings, occupied by the officers of the institution, a chapel, a hospital, a mess hall, two cavalry stables, several workshops and storerooms, to which may be added a magazine, a labratory, soldiers barracks, a store and about 25 dwelling houses occupied by families connected with the institution.

On the extreme eastern point of this military position, at an elevation of 160 feet above the Hudson, is situated Fort Arnold ; and on Mount Independence, about 500 feet above the river, and about 1000 yards to the south-west of the Academy, is situated Fort Putnam. There are also numerous other redoubts and bat-

teries, crowning the various eminences in the vicinity, built under the direction of the celebrated Kosciusko as engineer.

No place in the Union probably, exceeds West Point in regard to its beauty of location, and the stirring incidents connected with its early history ; being hallowed by the footsteps of Washington and Kosciusko during the revolutionary struggle. In the year 1777, immediately after the capture of Forts Clinton and Montgomery by the British army, West Point was occupied by the American army and fortified at the instance of Governor George Clinton, of revolutionary memory. In August, 1780, it was placed under the command of Gen. Arnold, who in September, basely agreed to surrender it to the British. But his treason having been discovered by the capture of Major Andre, his object was not effected. Close to the shore of the Hudson, stands a large white marble Monument, bearing the name of Kosciusko, which is a very beautiful structure. There is also here a spacious and well kept hotel where visitors will meet with every accommodation that a kind host can bestow.

At the distance of about 5 miles up the river, are Crow's Nest and Butter Hill, two high and beautiful peaks ; the former being 1410, and the latter 1529 feet in height, above the waters of the Hudson. They are situated opposite Breakneck Peak, the last of the range of Highlands on the east side of the river. The profile of a human face (called Turkis face,) can be seen on the point of rock which projects farthest out. A few miles above this is the town of Windsor, a flourishing

place, near which is Newburg, with a population of 8,933, a city very beautifully built on the declivity of a hill. It probably makes a better appearance from the river than from any other point. The place however, contains many fine houses and some handsome streets, being also a place of considerable trade having a number of boats and several excellent pier and warehouses. About a quarter of a mile south of the town stands the old stone house, in which Washington held his quarters, at the time the celebrated Newburg Letters made their appearance.

Duchess County, (east side.)—The towns of Fishkill, with a population of 10,437, Hamburg and Barneget are each pleasantly situated between the Breakneck Peak, the last of the Highlands, and the city of Poughkeepsie; having in their rear a rich agricultural region of country, and may be said to be in a prospering condition. They possess some points of interest for river towns, especially Fishkill, memorable for the headquarters of Washington during a portion of the campaign of 1780.

In passing through the mountain gorges, which give passage to the waters of the Hudson, we were at times overshadowed by the towering peaks of the Highland range, and at others the eye could range over a prospect, which for variety is rarely surpassed. The scenes which skirt the margin of the Hudson until it reaches the Catskill mountain, consist of numerous objects of romantic interest, where is presented a checkered landscape of hill and dale, meadow and thicket, as well as the graceful forest tree, with the earth beneath it cov-

ered with a profusion of wild flowers. After emerging from those picturesque and attractive gorges, and leaving behind us the last peak of the Highlands, on the east side of the Hudson a broad and beautiful valley spread its verdant bosom before us with all the charms of vegetation, while in the distance the blue Catskill mountain reared its towering summit conspicuously to our gaze. Poughkeepsie, a town with 7500 inhabitants, attracted attention, being situated with the highest regard to beauty of location, the buildings and grounds displaying much taste. Its importance as a river town is considerable, as it has an extensive back country to support its commerce. The eye of the passenger is met in succession by the towns of Hyde Park, Straatsburg, Rhinebeck, Redhook, Claremont, Marlborough, Milton, Paltz, Pelham, Kingston, Columbus, Glasgow, Bristol, and a number of others presenting activity and beauty.

Columbia County, (east side.)—The city of Hudson, With 5472 inhabitants, is situated on a high and commanding eminence, overlooking the river, being advantageously located 116 miles north of the city of New York. The city has in its employ seven or eight whale ships and four steamboats, with a number of freight barges, besides several sloops employed in the transportation of produce and merchandise to and from different places. The city has in its employ a steam ferry-boat which plies regularly between the city and Athens on the opposite side of the river. The city was first settled in 1783, and received a charter in 1785. It contains a large and beautiful Court House, 116 feet in length, and other county buildings; and the

Hudson Lunatic Asylum, situated on State street, facing the Court House on the south, with delightful grounds attached, adorned with the choicest species of flowering shrubbery. A spring at the foot of Becraft's mountain, two miles from the city, supplies it with water.

Greene County, (west side.)—Athens has a population of 2387, is situated opposite the city of Hudson, with which it is connected by a steam ferry-boat which runs regularly every hour during the day, in a canal which has been cut through a low, marshy island in the river, between the two places. The town is located on a very beautiful plain, gently sloping towards the river. A large number of sloops sail from this place; the wharf presenting a busy scene indeed for so small a place. The inhabitants show many signs of having received lessons on commerce at New York or some other great mart. The town is adorned with numerous mansions of private gentlemen.

The next town worthy of notice is Catskill, a place with 2800 inhabitants. It is located on both sides of the Catskill creek, near its junction with the Hudson; the principal street being situated about half a mile west of the steamboat landing. The town contains some fine churches and dwellings, especially on its principal street; which are ornamented with handsome avenues of trees of various species, many of which presented a graceful appearance. A most beautiful Pine orchard or grove, to the southwest of the town on Catskill mountain, is a favorite resort of travellers in the warm months. A handsome hotel has been erected there several years *on the brow of a great rock, at an elevation of about*

1200 feet above the Hudson ; which commands a most charming view, embracing about 70 miles from north to south on the valley of the Hudson and the hilly country to the east, including a number of peaks of the Green mountain range, in Massachusetts and Vermont, which presented the most romantic and sublime appearance in the distance. During my visit to this mountain, a thunder storm could be seen passing down the valley of the Hudson. It seemed to be below a level with the hotel, and presented a scene grand and awful. The air was cool, which is said to be the case during the year. Two ponds in rear of the hotel unite their streams, and the water falls 175 feet and soon after again 85 feet into an immense ravine between two ridges of mountains.

CHAPTER IX.

Albany—Erie and Champlain Canals—Basin—Boats—Site of Albany—Heights—Prospect—Capitol Square—City Hall—State Hall—Academies—Capitol—Public Buildings—Old Buildings—Public Squares—Streets—Greenbush—Railroads—Troy—Public Buildings—Institution—Manufactories—Steamboats—Water power—Railroads—Streets—Mounts Olympus and Ida—Prospect—Landslip—Quaker Village—Dress and mode of worship—Scenery of the Hudson—Departure for Buffalo.

The city of Albany with a population of 41,339, is the capitol of New York, being one of the oldest cities in the Union. The place was originally called Beaver Wyck or Beavertown, after which it received the name of *Williamstadt* ; not receiving the name of Al-

bany till the year 1664, in honor of James, Duke of York and Albany, afterwards James II, in whose reign Governor Dongan chartered it as a city, July 22, 1686. It is situated on the west bank of the Hudson river, 150 miles north of New York city, and is classed the second city in the State in population, wealth and resources. It is indebted for its prosperity to the enterprise of its inhabitants, and the impulse given to its trade by the Erie and Champlain Canals, which enter the Hudson river at the north end of the city, previously uniting eight miles north of the centre of the city, and terminating at a basin, which is formed in the Hudson river by a pier, one mile and a quarter in length, furnishing a safe harbor for vessels of all descriptions, and securing them from injury by the ice, which in the spring freshets comes down the river in immense quantities, sometimes causing great damage. In this splendid basin, sloops, tow-boats and canal-boats are brought side by side, or have their cargoes exchanged over the pier.

The city is commanding in its situation, and appears to great advantage from the river. There are three ravines running from east to west, known as the Foxes Rill, the Rutten Rill and the Beaver Rill, on either side of which the land is high, being at an elevation of from 150 to 160 feet high, which is gained by a gradual ascent from the Hudson. The view from these heights is picturesque in the highest degree. To the north may be seen the city of Troy and the adjacent villages, and in the distance the hills and mountain peaks of Vermont; to the east the beautiful extent of country lying beyond the Hudson river, and to the

south are the bold Helderberg and Catskill mountains, with the noble Hudson gliding at their base, whose transparent bright waves, mingling with the golden rays of the sun, appeared like liquid gold in the sunlight, while rolling in sublime grandeur at the base of the towering Helderbergs.

The Capitol occupies a delightful elevated situation at the head of State street, being located in the midst of a large and splendid square, formed by Capitol and Academy Parks, which are enclosed with a substantial iron fence erected on stone cappings, and are laid out with walks lined with ornamental trees of the choicest species. A more delightful square in summer, is not to be found in any city in the Union. There are a number of public buildings facing this splendid square, among which are the City Hall, facing the west. This is a noble edifice of white marble, 110 feet long and 80 feet wide, surmounted by a gilded dome 40 feet in diameter. This structure is occupied at certain periods by the Courts of the United States Circuit, of Common Pleas, the Mayor, &c. The State Hall, for the accommodation of public officers, is a massive and elegant structure, 140 feet long and 90 feet wide, erected at a cost of \$350,000. The Albany Academy, having 400 pupils, is a very splendid edifice of red freestone; and the Female Academy, erected in 1834, a building possessing many attractive features, are among the beautiful buildings facing the capitol square.

The Capitol itself, is situated in the centre of this great square, facing the east. It is a large and superb edifice, built of hewn sandstone, having a large and

splendid gilded dome, surmounted by a cupola or circular lantern, which is in turn surmounted by a statue of Justice, holding overhead a large gilded scale. The east and west fronts of the Capitol are adorned with a heavy and powerful portico, each containing twelve massive fluted columns. The interior of the building contains two spacious and richly furnished chambers for the Senate and Assembly. Much taste and grandeur is displayed in the chambers and the whole of the capitol of the Empire State. In addition to the chambers, are rooms for the Supreme and Chancellor's Court, an office for the Governor, rooms for committees, jurors, &c.

In addition to the public buildings noticed, the city contains 19 others, all of which are large and possessing much elegance, among which may be named, the Albany Exchange, a massive granite structure, containing four wholesale stores, the Post Office, &c. The Medical College occupies a building admirably adapted for the purposes of its design. This College possesses one of the most valuable museums in our country.—The Albany Orphan Asylum, St. Joseph's Orphan Asylum, (a Catholic Institution for females only, under the charge of the Sisters of Charity,) the Museum, Stanwix Hall, Knickerbocker Hall, two beautiful halls. The ceiling and walls of the latter are very tastefully ornamented in the Italian style. The ball-room of Stanwix Hall is the largest in America, and is lighted by a dome 60 feet high, supported by four columns and eight *antas*. The Athæneum, the Commercial and *Penn Buildings* are among the great buildings of the city.

Albany was founded by the Dutch as early as 1623, who appear to have had singular ideas of architecture, at least so far as we find them displayed in Albany; as the city contains many of those old, antiquated, gable-ended, top-heavy houses, whose singular points of architecture, with a great fleece of moss clinging to their roofs and walls, which time has woven around them, causes them to present an ancient and gloomy appearance; among which may be seen several old churches, whose walls according to the inscriptions on the rock above the doors, have received the tempests of those regions for more than two centuries. The whole number of church edifices is 31, a large portion of which are of considerable elegance, some being situated adjoining the public squares, of which the city abounds, there being no less than 11 delightful public squares distributed through the city for the accommodation of the inhabitants. Albany contains many rough and narrow streets. Their roughness is owing in a considerable degree to the rising ground the city occupies and their being paved with round river rock, which are always kept bare by the action of the rains. Over these rough streets are constantly thundering scores of omnibusses, cabs and drays, which is somewhat annoying to a stranger from a quiet home in the country.

The town of Greenbush, with 3700 inhabitants, is situated on the east bank of the Hudson, opposite the south port of Albany, with which it has a regular communication by steam ferry. The Boston and Albany Railroad terminates in the north part of this town.—
The road forms an uninterrupted communication with

the city of Boston, and is one of the greatest links between the eastern and western States ; a railroad being constructed from this town to the city of Troy, where it unites with the Troy and Schenectady railroad, thus forming a regular connected railroad line from Boston to Buffalo on Lake Erie, a distance of 530 miles.

Troy, with 26,709 inhabitants, is pleasantly situated on the east bank of the Hudson, at the head of tide water and steamboat navigation, six miles above Albany, and 156 north of the city of New York. Its existence as a village may be dated from 1790. It was incorporated as a city in 1816, and has recently been made a port of entry. The inhabitants are mostly engaged in commerce, trade and manufactures, especially since the completion of the Erie and Champlain canals, which unite the waters of the Lakes with those of the Hudson at this place, to which the city is indebted for the rapid increase of its wealth. Here are situated a fine Court-House, built of marble, on the Grecian Doric order ; a Jail, constructed of brick ; a county Poor-house, to which a farm containing 200 acres is attached ; the Rensselaer Institute, founded by the Hon. Stephen Van Rensselaer, where the sciences are practically taught to young men under the charge of Professor Green ; the Troy Female Seminary, a flourishing chartered institution ; the Troy Academy, also an excellent classical and chartered institution, for the education of boys ; besides several select schools for males and females.— Troy contains two new, finely modeled and extensive market buildings, 8 Presbyterian churches, 4 Episcopal, 3 Baptist, 4 Methodist, 2 Roman Catholic, 1 Uni-

versalist, 1 Friend's meeting-house, 2 Jewish Synagogues, 5 Banks, 1 Mutual Insurance Company, 1 Lyceum of Natural History, with a choice scientific library, and an extensive collection of minerals and collections in various branches of natural history, a young men's association for mutual improvement, with a large library, an extensive reading room, and a select cabinet of curiosities, 20 Hotels, 34 importing houses, and 400 dry goods and groceries, and other stores.

In the manufacturing line may be named, 4 cotton factories, 2 woollen factories, 10 flour and plaister mills, 1 saw-mill, 2 paper mills, 3 extensive iron rolling and slitting mills, 4 furnaces, 8 fulling mills, 7 tanneries, several large factories for boots and shoes, 3 breweries, 1 distillery, 1 pottery, 5 stage coach, railroad car, carriage and wagon factories, 6 printing offices, 10 hat and fur cap factories, 2 steam planing mills, 1 brush factory, 4 looking glass and picture frame factories, 1 hammer and hoe factory, a large number of tin, sheet iron, stove, chair and cabinet factories, besides factories and workshops of almost every description. Here are owned about 60 masted vessels, 7 large passage steam-boats of the first class, among which may be named the Troy and Niagara, which are 296 feet in length and 62 feet in width; the diameter of their wheels is 31 feet and 13 feet wide; the Niagara has one vertical engine 600 horse power, with one cylinder 5 feet in diameter, giving 11 feet stroke to the piston. The boat draws only 4½ feet, with wood and water on board for passage, whose tonnage is 770 tons. The Troy is of the same dimensions and has the same tonnage, with

two of Mr. Wm. A. Lighthall's patent horizontal piston's (a great improvement,) attached, with only 300 horse power, and yet it impels it with as much rapidity as the other, as the power of the piston acts directly upon the crane. Besides these boats there are 22 barges, with 6 steam tow-boats which ply between Troy and New York, transporting annually an immense amount of produce and merchandise.

The waterpower at Troy is immense, and a large portion within the limits of the city is still unoccupied. About a mile east of the Hudson, a tunnel has been excavated by Mr. Benjamin Marshall, extending a distance of 800 feet, from the Poestenkill, giving a fall of 130 feet. Several large mills and factories to be supplied with water from this fall, were in progress of erection. Near the northern part of the city, a dam has been built across the Hudson by the State, which here makes a fall of 11 feet, and creates an uncalculable amount of hydraulic power. This city is abundantly supplied with wholesome water, brought from the Piskawin creek through iron pipes, with hydrants at the corners of the streets for the extinguishment of fires. A great reservoir is situated in the north part of the city, about half a mile east of the Hudson, about 90 feet above the tide waters of the river. The water is carried by the force of its head, above the highest house in the city, and is used for domestic purposes as well as for the extinguishment of fires. The Rensselaer and Saratoga railroad commences at this city, crossing the Hudson river by a substantial bridge, 1650 feet in length, to Green Island; thence it continues

north across several branches of the Mohawk river to Waterford, following the valley of the Hudson, until it reaches Mechanicksville, where it diverges to the west and continues to Ballston Spa, a distance of 24 miles, and unites with the Saratoga and Schenectady railroad; while a branch runs directly to Schenectady, forming the line already noticed from Boston to Buffalo. The city of Troy has long been celebrated for its beauty and healthiness; the streets are laid out at right angles, are generally wide, remarkable for their cleanliness and planted with beautiful, and in the hot season, most grateful forest and shade trees. From Mount Ida on the east and Mount Olympus on the north, an extensive and charming prospect is presented: embracing a view of the Valley of the Hudson for many miles; the city of Albany on the rising ground it occupies, with its glittering domes and steeples, presents a scene delightful in the highest degree, while the towns of West Troy, Lansingburg, Waterford, Cohoes, Cohoes Falls, with a landscape presenting more beauty and a greater variety of scenery than can possibly be described; among which can be seen a curious landslip which took place in 1842, which consists of the western side of Mount Olympus, together with a contiguous portion of Mount Ida, having slid down in the Hudson, and caused the death of several persons who were unable to escape the sliding mount.

While at this city, curiosity induced me to visit a Quaker village, several miles distant, which I found to possess much order, neatness and beauty. The village consists of a common domain or stock, in which each

have an equal share. The Quaker's dress is either grey or drab chiefly of a fine quality, often made somewhat like a waistcoat, without plaits on the sides and without buttons on the pockets or sleeves; their hats broad-brimmed and horizontal, the socks white with a neat shoe, rarely wearing a boot. The dress of the women is brown or some plain dark color, generally fine. All the politeness they aim at is an open, frank access and natural easy conversation. Meditation, prayer, recollection, contemplation and reading the Bible are the chief devotions which the Quakers use at home. Their outward exercises of devotion consist of a profound contemplation, often resulting in a sullen silence for two or three hours, till some one of them, man or woman rises either with a composed motion or in a kind of transport, as if actuated by an irresistible power, and often with sighs, groans and tears. This is caused as they pretend, by the impression of the spirit, which often awakens these stupified persons, after several hours spent in entering into a serious consideration of the state of their own souls, during which meditation according to their doctrine, the spirit prepares to itself hidden ways to penetrate into the hearts of the faithful; then it breaks forth in sermons and exhortations or psalmody, during which those not inspired to speak, remain in a state of recollection, examining themselves, attended with sighs and groans. From the inward conflict of the spirit against the flesh, proceed those bodily motions, those shakings and tremblings with which the faithful are seized, which seldom fails to extend to the whole Quaker congregation.

fore their dismissal, and the shaking, trembling, jumping, and singing is entered into with such ardor that the whole assembly-room or house of worship presents a scene which almost seems to be agitated by an earthquake or some other convulsion of nature.

After a few hours spent in the Quaker village and house of worship, which presented scenes as interesting as they were singular, we ascended a second time, Mount Olympus and Ida to enjoy the magnificent prospect their summits afford, then returned to Troy, according to our determination when in the city of New York, having halted at the principal places of interest along the shores of the noble Hudson, and on one occasion left the river for the purpose of visiting Catskill and several other places on the left bank of the river, whose margin is a continued scene of interest. The scenery of the Hudson, on the east and west banks, became extremely grand and picturesque soon after leaving the city of New York. On the western bank of the river, commence those lofty and grand precipices of columnar basalt, which are from 400 to 600 feet in height, called the Palisades, which are extremely picturesque, and the scenery on all hands imposing. On arriving at the Highlands the winding of the channel is closed in by steep hills on both sides, and the vessel often held her course as if bearing directly on land.—The stranger cannot guess in which direction he is to penetrate the rocky gorge; but he soon emerges again into a broad valley, when the blue Catskill mountains appear in the distance, which are found on a nearer approach to be very imposing and picturesque in their

appearance. The grand scenery of the noble Hudson deserves all the praise which can be lavished upon it.

From the city of Troy, my route lay west up the famous Mohawk Valley by the city of Schenectady, by way of Trenton Falls, the city of Utica, and Rochester, continuing west to the city of Buffalo on Lake Erie, which route I found to contain scores of the most flourishing cities, towns and villages to be found in the Union, all situated in the most fertile and highly cultivated portion of the State of New York, which was but a few years ago a perfect wilderness, filled with marshes and swamps and in every way, had all the charms of savage wildness.

CHAPTER X.

Schenectady—Historical Sketch—Mohawk Valley—Erie Canal—Bridge—Union College—Towns—Little Falls—Utica—Site of Fort Schuyler—Historical Sketch—Lunatic Asylum—Bridges—Plains of Oriskany—Trenton Falls—Imposing Scenery—Rome—Reflections on the great Progress of the Country—Towns—Syracuse—Salina—Onondago Salt Springs—Towns—Auburn—State Prison—Cayuga Lake—Bridge—Seneca Lake—Seneca Falls—Villages—Genesee Valley—Rochester—Great Aqueduct—Genesee Falls—Manufactures—Public Buildings—Erie Canal—Bridges—High State of Agriculture—Le Roy Falls—Towns.

SCHENECTADY COUNTY.—The city of Schenectady, with a population of 6,555 is beautifully situated on the south bank of the Mohawk river, 16 miles from the

city of Albany, with which it is connected by the Hudson and Mohawk railroad. This place is celebrated as being once the headquarters of the Mohawk Indians; and also for the dreadful Saturday night of February, 1690, when the inhabitants were inhumanly massacred by the French and Indians, directed by Count Frontenac, Governor of Canada, against the colony of New York. It appears the inhabitants of the place were warned of their danger; but thinking themselves secure, as the season was dreadful cold and the snow so deep that it was deemed impossible for an enemy to approach.—But the attack was made in the dead hour of night, while the inhabitants were in a profound sleep; not a sentinel was awake to announce the approach of the savage monster, who was stealing through the streets of their delightful village, arranging his bloody demons at every door; when alas for slumbering Schenectady, they were aroused by the appalling war-whoop of the savage monster, who at a given signal fell upon his awaking and terrified victim, when men and women with their slumbering infants, were dragged from their beds, and inhumanly murdered. It is scarcely possible to describe that awful scene. Sixty persons perished in the massacre; thirty were made prisoners, while the rest of the inhabitants, mostly naked, fled through the deep snow, either suffering extremely or perished in the cold; while every house was set on fire, and the Indians rendered frantic by the wild scene, ran through the streets slaying those they chanced to meet. And thus was the colony of New York, for her own negligence, called upon to mourn the sad fate of her

beautiful Schenectady, so handsomely situated in the famous Mohawk valley.

The present city received a charter in 1798, and is now a very flourishing and handsome place, situated in a very beautiful valley, all in a high state of cultivation and a region of country possessing many attractions as well as the city. It is connected with the city of Troy by a railroad, called the Schenectady and Troy railroad. The Erie canal passes through this place.—The Hudson and Mohawk railroad crosses the river near the city, by a long and splendid bridge. The city contains a number of large and handsome dwellings; it being well laid out; the streets are broad, well paved and ornamented with shade trees. The Union College at this place, is a celebrated literary institution, located about half a mile from the city, was founded in 1795, is truly handsomely situated, the grounds tastefully laid out and the buildings large and handsome.

Montgomery county.—In passing through this beautiful county, I passed through a number of very flourishing villages, among which are Hoffman's Ferry, Cran's Village, Amsterdam, having a population of 5,333, Tribe's Hill, Fanda, Yost, Spaker, Palatine Bridge, Fort Plain, Palatine Church and St. Johnsville, all remarkable for their prosperity. The town of Amsterdam is beautifully situated on the north bank of the Mohawk river, about 15 miles up the river from the city of Schenectady. The town is well laid out and contains some fine private dwellings, and several beautiful, well built churches, situated on fine streets. The town is finely situated for business, the Utica and Sche-

nectady railroad passing through the place. *Herkimer county* contains the towns of Manhiem, Little Falls, Frankford and Herkimer, containing nearly 4000 inhabitants each, all beautifully situated on the Mohawk river; the village of Herkimer being at the junction of the northern and western branches. The towns are in a very flourishing condition. At the town of Little Falls, there is a considerable waterfall, which is admired to some extent, notwithstanding its proximity to Trenton Falls.

Oneida county.—The city of Utica, with a population of 12,190, is delightfully situated on the western branch of the Mohawk river, on its southern bank, on the site of Fort Schuyler, which appears to have been a fort of great importance during our revolution. It was to the noble and patriotic Gansevoort, commander of this fort, then situated in a perfect wilderness, that St. Leger, the British commander, after the bloody battle of Oriskany, sent a messenger with a summons for its surrender. The daring commander coolly read the haughty summons, which threatened him and his garrison with the Indians, if he did not voluntarily surrender the fort. The same daring Gansevoort wrote the British commander a stern reply, refusing thereby to comply with his request; and when handing it to the British messenger, looking him full in the face, said with all the sarcasm he was made of, “after you get out of the fort, you may turn round and look at the outside, but never expect to come in again, unless you come a prisoner. I consider the message you brought a degrading one for a British officer to send, and by no

means a reputable one for a British officer to carry.— For my own part, before I would consent to deliver this garrison to such a murderous set as your army by your own account, consists of, I would suffer my body to be filled with splinters and set on fire, as you know has at times been practised by such hordes of women and children killers, as belong to your army.”

Thus was saved Fort Schuyler, by the noble daring of its commander; and while the heroic Stark was striking Gen. Burgoyne a staggering blow at Bennington, in Vermont, the commander of this fort broke up his plans with regard to St. Leger, who was to descend the Mohawk river, crush every thing in his passage, and meet him at the city of Albany, on the Hudson river. Thus Burgoyne, by the valor of fort Schuyler, did not succeed in hemming in the American army, as he anticipated; but found himself locked in on every side, and the heavens gathering blackness over his head, till the intrepid Arnold gave him the finishing blow on the bloody plains of Saratoga, where he was compelled to surrender soon afterwards.

The city which now occupies the memorable eminence on which stood the fort, received a charter in 1830. The city contains many fine dwellings and several splendid public buildings, among which may be named the State Lunatic Asylum, built of grey stone, one of the largest and best conducted institutions of the kind perhaps in the United States, being 550 feet in length, 50 feet deep and cost about \$350,000. The Erie canal passes through the city, and is crossed by a number of beautiful and substantial bridges.

While at this city I visited the plains of Oriskany, situated near this place, which is celebrated for the complete surprise of the Americans under the command of Gen. Herkimer, by the British and Indians under the command of St. Leger, during the siege of fort Schuyler. This bloody field is a semicircular in form, and the road on which Herkimer was marching dipped into a deep ravine, crossed by a causeway of logs, over which he had passed, when the Indians with a terrific yell, closed in his rear, and took possession of the causeway, and thus cooped him up in a little semicircular spot of woods, in which took place that terrible conflict which will forever stand as a monument of American valor.

At the city of Utica I left my main route, which was west, and went up the north branch of the Mohawk river, a distance of about 10 miles, for the purpose of seeing Trenton Falls, which is truly a grand waterfall. The town of Trenton contains a population of 3178, and is a very beautiful town situated within a mile of the Falls. The Falls can be viewed on either side of the river, there being a path constructed down each of the precipices, by blasting the rocks; this path, however, at some places is very narrow, at which places there is a chain let into the rock, which answers as a kind of banister, to which the passenger can hold, to make his ascent or descent more secure. After following down this dangerous path some distance, it brings him below the Falls, where the scene impresses him with awe; the waters roar through very deep chasms between two *walls of rock about 150 feet in perpendicular height*

and not more than 40 or 50 feet wide. The strata of the rock are so equally divided that they appear like a solid wall of masonry to the height of 60 or 70 feet above the rushing waters. Above that height, the precipice presents a rough appearance, and contains some small bushes, which continue to near the summit, which is crowned with splendid forest trees, some of them inclining over the mighty chasm, as if they would peep into the abyss below, and witness the tumult of the waters. As the stranger stands in this deep narrow chasm, he is hid from the sight of all, except those who accompany him. Owing to the height of the precipices, which are arched by the towering forest trees above, but a small portion of the heavens can be seen, and what little can be seen, is not blue, but of a misty, murky grey. In this condition the first sensation is that of dizziness, and confusion, from the unusual absence of the sky above, and the dashing frantic speed of the angry boiling waters at your feet.— This part of the scene is called the rapids, and I considered them much grander than the Falls themselves; for here is one rapid confined down in a deep narrow chasm, between two river rocks, which is painful to look upon and watch its deep and mighty plunge and with what irresistible force the waters dash down, & then return to their own surface, apparently as if struggling and out of breath.

The stranger in standing over this angry rapid, gazing over its wild career, and listening to their roaring, and marking the madness of their speed, he will feel a sensation of awe, an inward acknowledgment of

the tremendous powers of Nature. He now leaves the angry rapid and ascends the narrow path, till he arrives at the lower falls, which generally extends over only about half the rock, the other being bare, till it is overflowed by a freshet. Over half the rock pours a very rapid column of water, with the greatest impetuosity. Above the fall is a wooden bridge, over which a person may pass to the other side; the bridge passes over a series of little falls, resembling a staircase, which is truly very picturesque.

The stranger may now ascend the river to the upper falls, or he may climb up a ladder, perhaps one hundred feet long, which will bring him to a footing, from which he has a fine view of the upper falls which seem tame, after witnessing the savage impetuosity of the rapids below, from which footing he may descend again the same ladder, or he may ascend another one of considerable length, which will bring him to the summit, where he will find a path marked out by the broad chip of the woodman's axe, which he may follow to the upper falls, where he will find the scene splendid, the mountain rising high on one side of the river, while he casts his eye down the deep chasm, with its black perpendicular rocks, between which are a succession of falls, while his ear is saluted by the roaring of the mighty rapids below, which are overshadowed with tall forest trees rising toward the clouds, while through their majestic boughs, the vapor ascends in sublime grandeur, from the falling waters beneath them.

The faces of many of the rocks about the falls, are as

is usually the case scribbled over, by those who would obtain cheap celebrity; many of the scribblers have a name and nothing more, as many of their productions are more gross than witty. From one of these rocks which form the mighty precipice on each side of the deep gulf, a very sad accident happened a few years ago. A young lady from the city of New York, came with some of her friends to see the falls; she approached the edge of one of the highest rocks, and while looking down into the awful chasm beneath, and her friends not being near enough to protect her, she fell from the verge of the cliff on which she was standing, to a great depth below, and was instantly killed by the fall.

From Trenton Falls, I again steered my course west where I arrived at Rome, having a population of 5680, which is beautifully situated on the western branch of the Mohawk river, in an attractive and fertile region of country, being situated on the Utica and Syracuse railroad, and at the junction of the Black river Canal, with the Erie Canal, it therefore has a communication with Lake Ontario, by the way of Sackets Harbour, & Lake Erie in the west and the Hudson river in the east, by means of the Erie canal. The town is a busy, handsome and flourishing place, well built and laid out, containing several large and elegant church edifices.

By the time I arrived at this place, I viewed with surprise the numerous handsome and flourishing cities, towns and villages which I passed through since leaving the city of Schenectady, situated down the Mohawk valley about 90 miles. My surprise was still increased, when informed that they were more numer-

ous from Rome westward, than on the Mohawk, the route I had just came. Here then, I had another opportunity of reading in bold characters, the noble enterprise and industry of the northern man. Here I found the country, as it were almost one continued rambling village, which have sprung up as by enchantment, in a region a few years ago a dense forest, spotted with swamps, covered with aquatic trees and shrubs, where but very few if any points of picturesque beauty met the eye; the whole presenting nothing but a perfect charm of savage wildness. When we reflect on these highly cultivated regions, bespangled with the most flourishing cities, towns and villages, whose foundations were laid by persons still living, and which region already numbers a population greater than the whole of the aboriginal hunting tribes, who possessed the forest for hundreds of miles around, we soon cease to repine at the extraordinary revolution in the history of those tribes, however much we may commiserate the unhappy fate of the disinherited race.—Because here now the noble enterprise of the white man has so changed the aspect of this region, that upon every hand attractive beauty meets the eye; and here now far and wide the aboriginal forest has lost its charms of savage wildness, by the beauties of cities, towns and villages, and the intrusion of railroads and canals.

But there are also other objects of intense interest to enliven or excite the imagination of every traveller.—Here, instead of dwelling on the past, he sees signs of pomp and splendour, filling the mind with images of *coming power and grandeur*. The vast strides made

by one generation in a brief space of time, naturally disposes us to look forward with an eager eye, to the rapid rate of future improvement. The contemplation of so much prosperity, such entire absence of poverty or want, so many schoolhouses and churches rising every where within his view in this new region, and such a general desire of education ; with a consciousness that a great continent lies beyond, which has still to be appropriated, fill the traveller with cheering thoughts and sanguine hopes. He may, however, be reminded that there is another side to the picture ; that where the success has been so brilliant, and where large fortunes have been hastily realised, there will be rash speculations and bitter disappointments ; but these ideas do not force themselves into the reveries of the passing stranger. He sees around him the solid fruits of victory, and forgets that many a soldier in the foremost ranks, has fallen in the breach ; and cold indeed would be his temperament if he did not sympathize with the freshness and hopefulness of a new country like this, and feel as men past the prime of life are accustomed to feel, when in company with the young who are full of health and buoyant spirits, of faith and confidence in the future.

We found our route from Rome to the city of Auburn, through the counties of Madison and Onondaga, one continued scene of interest, being lined with flourishing towns and villages, whose enterprising inhabitants were busily engaged in profiting by the impulse given to trade by the Erie canal and the Utica and Syracuse railroad ; among which are Verona, Oneida, on

a lake of the same name, celebrated for its beauty, being 21 miles in length with pure transparent water.— Also, the towns of Wampsville, Canastota, Conasara-ga, Chittenango, Kirkville, Manlius, De Witt, all containing from 3000 to 6000 inhabitants; Syracuse, with 6500 inhabitants; Salina, with 11,113 inhabitants, with the towns of Liverpool and Geddes, constitute the seat of the famous Onondaga Salt works, which are the property of the State. The manufacturers pay the State a duty of six cents a bushel. These four towns produce over 3,000,000 bushels of salt annually, of which Syracuse makes between 7 and 800,000 bushels; every forty-five gallons of water yielding a bushel of salt. A large quantity of the salt manufactured at these springs is sent out of the State, and finds consumers in perhaps every State in the Union, as the article of Liverpool salt is popular with almost every person. The Erie canal carries it east and west from the salt works, and the Oswego canal carries it north; the two canals forming a junction at the Salt Springs; between which and Auburn are the towns of Brookway, Camillius and Skaneateles, the latter on a lake of the same name, famous for the beauties of its waters and the scenery of its borders.

Auburn, with 6171 inhabitants, is delightfully located on Owasco Lake, 26 miles from the Salt Springs. It is a very flourishing town, regularly laid out, containing broad streets, finely ornamented with avenues of shade trees. The Empire State has here one of her *Penitentiaries*, which was erected at a cost of \$500,000. *This structure occupies a large extent of ground, sur-*

rounded by a stone wall 3000 feet in length, 30 feet in height and four feet thick; on the top of which are erected six or eight watch towers, so constructed that by opening the doors facing the walls lengthwise, the guard can pass and repass on the top of the wall around the enclosure. A small fee will procure admittance, and the scenes presented to view return a rich equivalent for the pittance required. By ascending to the top of the building by means of a spiral stair-case, a very delightful prospect is presented, which embraces a view of the whole surrounding country, which presents all that a rural population can make it; while the fine public buildings and dwellings, with their ornamental trees, whose graceful boughs and verdant leaves presented a scene alike charming and enlivening. A walk or two around the top of the wall in company with the guard, is also interesting, who in their promenade round the walls, take a delight to all appearance, in entertaining and delighting the stranger, who in his rounds has fine opportunities of seeing many of the convicts at their labor; it also affords him a view of that part of the town immediately around the wall.— The prison-house is constructed of a species of rough grey stone, well hewn, so that the walls of the building present a handsome appearance for a building of the kind. The town also contains a Theological Seminary, founded in 1821, which is said to be in a very flourishing condition; a large and splendid Court House, with a strong and handsome Jail near by; together with *other county buildings* possessing considerable elegance, *adding in a great degree to the beauty of the town.* A

is still more improved by a large and elegant Museum, filled with a choice collection of curiosities, several handsome banking houses and eight or ten churches.

To the west of Auburn are Lakes Cayuga and Seneca, situated nearly due north and south, 36 miles in length and from 3 to 4 miles in width, running parallel with each other, having a belt of land between 4 or 5 miles wide, which constitutes the county of Seneca, possessing soil of the most admirable quality, which is tilled with a superior degree of skill and intelligence. Lakes Cayuga and Seneca are admired by every traveller for the beauty and grandeur they possess. A more delightful trip no man can possibly take than a ride up and down these handsome Lakes, on board one of the elegant little steamers which sail regularly over their beautiful waters, while the golden rays of the meridian sun add sublimity to the bright transparent waters, spread out in a smooth expanse, glittering on every hand almost with the brilliancy of liquid gold; while beyond the glittering bosom can be seen a landscape, possessing all the charms a rural scene can present.— The waters of Lake Seneca are drawn out by Seneca river, soon after which they fall perpendicularly a considerable height, creating an immense water-power; where is situated a town of 4281 inhabitants, who have largely employed the power thus afforded, in propelling various factories and machinery. The town is well built and possesses many attractions, being situated in a delightful region of country, whose inhabitants appear to be possessed of a due proportion of the great *prosperity of western New York.*

Ontario county.—The town of Geneva, with inhabitants, a place most admirably situated at the northern extremity of Lake Seneca, is built on high and commanding ground, embracing a delightful view of the Lake and surrounding country. This flourishing town was incorporated in 1812, and is now one of the most delightful towns in the State. This county, as well as all others in western New York, is adorned with numerous cities, towns and villages, among which are Oak Corners, East Vienna, West Vienna, Clifton, Tonawanda, Chapansville, Victor and Canandaigua, which has 5652 inhabitants, and is a place of some note; situated with great taste at the northern extremity of the outlet of Lake Canandaigua, another delightful place with fresh water, 15 miles in length and several miles also distinguished for its beauty. There is perhaps no region of the same area in the world, that can be distinguished by a greater number of beautiful inland lakes of fresh water than can western New York.

Monroe county.—This county contains a portion of the far-famed valley of the Genesee, so much celebrated for its superior quality of wheat, and for its skillful and excellent mode of agriculture. This great valley may be called a great, luxuriant meadow, chequered with patches of wheat, corn and other grains, presenting hills, rocks, bluffs nor ravines; but an expanse of most luxuriant verdure that a great valley can present. It is populated by inhabitants from whom the traveller may learn many valuable lessons in the science of agriculture; a valley, rendered by the busy intelligence and population in the agricultural art, so perfect, that

profession of the farmer is envied by the travelling lawyer, physician and merchant.

Rochester, with a population of 25,265, is handsomely situated on the Genesee river, 7 miles from its junction with Lake Ontario. In the year 1812, the site was occupied by two wooden buildings only. The city is divided by the river into two parts. The river is crossed by three very beautiful bridges. The Erie canal passes through the city, and crosses the Genesee river by means of an aqueduct 804 feet in length, constructed at an expense of \$80,000, which splendid aqueduct is built on ten arches of hewn stone, which perhaps is not excelled in beauty and strength for its kind in the United States. The Genesee Falls are at this place, and have a fall of 215 feet, which distance it falls in three successive leaps, of 90, 20 and 105 feet, and create an immense water power, a part of which is employed in running 22 of the largest flour mills in the world, at least so claimed by the city.

There are also at this city, several large and flourishing cotton and woollen manufactories, which are themselves a sufficient curiosity for several hours interest to a stranger, in addition to which there are a great number of other manufacturing establishments propelled by this great water power. The city contains 6 large and splendid banking houses, 23 large and superb churches, a very celebrated museum, a very flourishing Collegiate institution, together with several other public buildings. The city is well situated for commerce, the Genesee river being navigable up to the Falls for vessels, together with the famous Erie canal,

which passes through the heart of the city, which is crossed by a great number of the most beautiful arched bridges. The city presents attractions, which many others of equal size do not possess, as there is no other of equal size which can boast of a more fertile, highly and skilfully cultivated region, inhabited by a rural population, alike celebrated for their intelligence, hospitality and enterprise.

Genesee county.—The lands of this celebrated county, with the famous proprietors, deserve all the praise that can be lavished upon them; for here the stranger finds all order, neatness, fertility, prosperity, intelligence, hospitality, enterprise and industry; the lands and inhabitants to all appearance, are destitute of nothing that is calculated to adorn and beautify either the one or the other.

LeRoy, with a population of 4323, is a very beautiful town, situated on the western branch of the Genesee river, at which place is situated the LeRoy Falls, a scene possessing many beauties, which will richly repay the trouble and small expense incurred by the traveller, in leaving the railroad a few miles for the purpose of paying it a visit. It is a very beautiful little cascade of considerable height, which is seen to have been cutting its way backwards through the rocks, as is usually the case with waterfalls. This cascade has hollowed out a deep ravine, with perpendicular sides of very considerable height.

In addition to LeRoy, are the towns of Batavia, Alexandria and Attica, having each 3500 inhabitants, being promising, handsome towns, containing many fine

dwelling, with 5 or 6 very elegant churches in each, adorned with the choicest species of shade trees, which gives the towns an attractive and delightful appearance, around which the country is possessed of a large portion of the same system of order and neatness for which the region is so much celebrated, which has already been faintly sketched. The soil is of admirable quality. The country also contains many flourishing villages, which have just sprung up as by enchantment; which may be said of all the cities and towns in western New York, with all other improvements in so high a state of perfection. The principal cities, towns and villages only have been noticed, they being so closely situated, that in places the traveller scarcely leaves the suburbs of one town before he comes in sight of another, which have arisen by the great impulse given by the Erie canal and railroad, and has thus made western New York literally a theatre of towns.

CHAPTER XI.

Buffalo—Location—Destruction by the British—Erie Canal—Lake Erie—Commerce—Breakwater—Churches—Literary institutions—Orphan Asylum—High State of Agriculture—Dwellinghouses—Dairyhouses—Barns—Tanks—Muck Heap—Barn Yards—Manures—Reflections—Ashes—Mode of using Ashes—Lime—Agency of Lime—Modes of using Lime—Mode of preparing land for Wheat—Advantages of subsoil plowing—Kinds of Wheat—Spring crop—Rotation in crops—Remarks on the state of Agriculture.

Erie county.—Near the city of Buffalo are the villages of Lancaster and Cheektawaga, noted for their

prosperity, which two villages partake largely of the life and bustle of that celebrated city. The surrounding region is animated by a population, who are cheerfully doing their part towards sustaining and carrying forward the great agricultural improvements of their region, in which they pride as the most healthy, the most useful and the most noble employment of

Buffalo, has a population of 29,773. This great city is advantageously and beautifully situated on a commanding eminence, overlooking Lake Erie, on its eastern extremity it is situated. The city is regularly laid out and well built, and contains a great number of very large warehouses and manufactories. This city, with many others in western New York, sprung up, with surprising impetuosity, in the bosom of the wilderness. It was not till so late as the year 1801, at which date it was first laid out, and a whole destroyed by the British during the late war with England, for which unfortunate disaster, the sufferers received from the General Government, the sum of \$80,000. The present city therefore, has sprung up since that event, viz : the year 1815.

The great prosperity of the city is chiefly caused by the Erie canal, which connects it with the city of Albany. In addition to the canal, the trade on Lake Erie is very extensive. The city as before said, is advantageously situated and regularly laid out ; as far as I am capable of judging, it is destined in a few years to rival our third class cities ; as it has already about 60 steamboats employed in running to and from its port to different ports on the Lakes. In addi-

which there are 360 sloops, schooners and brigs on the Lake, most of which exceed 200 tons burden, the larger portion of which frequent the port of Buffalo, where scores of them can be seen at a time.

At the mouth of Buffalo Creek, there is a Breakwater erected for the purpose of protecting vessels from the high waves of the Lake, during the time they remain in the harbour. This great improvement consists of a stone pier, 1500 feet in length, on which is situated a lighthouse. The city contains 20 large and splendid churches and Exchange, a costly and superb structure, a massive building occupied as a Theatre, several thriving literary institutions, and a well conducted Orphan Asylum.

By the time I arrived at this place from the city of Albany, by travelling up the Mohawk valley & through western New York, I had an opportunity of viewing many splendid farms, skilfully and highly cultivated, and of examining some farm buildings with their various appendages, which I generally found to be substantial, well planned and answering a good purpose. I found the hospitable and intelligent proprietors had no disposition to conceal any part of their excellent mode of agriculture; but to all appearance were ever as ready and willing to give information as the stranger could possibly be to ask it, in all matters concerning their prospering system of agriculture. The following are a portion of the facts learned from this agricultural and enterprising people.

Having ever considered it to be entirely consistent with the character of a farmer, to be a man of taste, ~~and~~

I never could see any reason why ornamental fire should not be cultivated, as it is not inconsistent with the highest regard to profit to embellish our gardens and habitations, and to render our homes as beautiful as a simple and most refined taste can make them. And on my route through this fertile and agricultural region, I found that I was not alone; but while only thinking on the matter, they were executing many plans which never had originated with me. Here I found every attention paid to this matter, every thing being neatness, order, taste and comfort. The stranger observes among other things, that the greatest attention is paid to adorning and beautifying, every man his own domicile.

Dwelling Houses.—These are constructed of the best materials, and attention paid to location; a naked and disagreeable exposure equally with a dreary one are avoided. It generally occupies a position easily accessible to the other buildings and fields, and yet within convenient distance of the highway. Many of the buildings are protected by a light scene of trees, which in the summer season afford an excellent shade, and add considerably as an ornament to the building, which is always tastefully built and always has an excellent view.

The Dairy.—There are very few of these to be seen above the ground, as they are generally situated on a hillside, entirely under ground. They are strong and neatly walled with stone or brick, which is sufficiently tight to exclude the frost. When there is no hillside in which they can be placed, they are constructed on level ground, by sinking them 3 or 4

in the ground, the walls raised high enough above to give all the room wanted, the excavated earth is banked around the house, rendering it more elevated and pleasant, which embankment is well sodded ; the whole so constructed as to admit light and air through it by means of small windows, which have a curtain of wire gauze to exclude the flies.

The *Barn* is considered the most important appendage of the farm ; and its size and form depends very much on the particular wants of the owner. They are however large enough to hold all the fodder and animals on the farm. Not a hoof about the premises is allowed to stand out and brave the northern winters ; but they are all sheltered by a tight roof and dry bed, as they will thrive much faster and consume so much less food when thus protected, that the owner will be ten-fold remunerated. Many of the stable floors are so constructed as to convey the urine of the beasts into a muck heap, situated in the barnyard or near the stables or sheds, where the beasts are stalled ; or it is led off by troughs in a tank, which is constructed for holding liquid manure, which are convenient to the stables and yards. These generally receive every particle of the urine and drainage from the manure. These tanks are variously constructed ; in compact clay they may be made by simply excavating the earth, and the sides can be kept from falling in by a rough wall, or planks supported in an upright position, by a frame work of joice. These tanks or cisterns in all cases are closely covered, to prevent the escape of the ammonia which is developed while fermenting. In sand or gravelly

soils they are constructed of stone, brick or wood,—in the first materials a cement is necessary.

When these are partially filled with liquid manure, fermentation will soon commence in the tank, especially in warm weather; in this case they throw in gypsum or charcoal to absorb the ammonia. This however, is not always done. A few days after decomposition takes place, it is pumped or drawn out and carried on the land. If they intend it for watering trees or plants, they dilute it with water, so as to make it sufficiently weak to prevent injury to them. When applied to land, the quantity will depend on the strength of the liquid. Many of the stables and troughs which lead to the tanks, are frequently sprinkled with gypsum, which absorbs much of the ammonia which would otherwise escape. Some loss of the volatile matter must be expected, and the sooner it is used after proper fermentation or ripeness, as it is termed, the better will be the economy. The muck heap before named, consists of earthy and vegetable substances, such as rich turf, the wash of the roadside, tan-bark, saw-dust, weeds and grass or refuse vegetables of any kind that may be had, which is or should be frequently sprinkled with gypsum or charcoal. This heap is protected by a rough open shed or roof, to prevent drenching from rains.—This heap is so placed, that the urine and liquid manure can run on to it, or is deposited where it can be poured over it. When fully saturated with the urinary salts, and all is properly decomposed, it may be carried out for use, or covered with earth till wanted.

The Barn Yards are generally formed so as to

dishing towards the centre, so that the liquid will all draw to that place, from which it is led off on the muck heap or into the tank or cistern. If the barn yard be sandy or gravelly, it is puddled as they call it, or covered with clay, to prevent the leaking and escape of the liquid manure. The yard is well enclosed, and if possible water is conveyed into the yard for the stock, so that they may not be removed. When this cannot be done, large cisterns are made, and the rain-water from the eaves of the buildings, by means of troughs is conveyed into them, from which it is pumped for the use of the beasts. Every means is used to prevent the loss of manure. In addition to their excellent mode and arrangements for saving and accumulating manure, they use and recommend the use of ashes of any kind, lime, marls, shell sand, green sand marls, gypsum or plaister of Paris, bones, (ground or crushed) phosphate of lime, (sometimes known as apatite phosphorite,) salt, glauber salts, saltpetre, old plaster, broken brick, burnt clay, charcoal, broken glass, spent lye of the asheries, ammonical liquor, guano, soot, fish, seaweed, peat, &c.

It becomes then a matter of the highest consequence to the farmer to understand, not only what substances may be useful as manures, but also how to apply them in the best manner to his crops, so far as they can be made profitable; as it is well known, or at least should be, that all fertile soils must have not less than 15 or 16 different simple or elementary substances, in various combinations with each other. It is therefore obvious, that such principles as all fertile soils furnish to *vegetables, must be contained in the manure. Hence*

it should be the object of every farmer, to understand the substances which go to form the plants he is about to cultivate, in order that he may know how to supply such substances to the soil, as are found to be the inorganic constituents of the plant he proposes to grow.

It strikes me that there is nothing that our farmers understand so little, as the economy of manures. It is generally supposed that the more a field of corn is manured the greater will be the crop, as Indian corn is one of the grossest feeders in vegetable life, it produces in proportion to the aliment it receives; but these enterprising people, aided by their agricultural chemistry, tell us that a large portion of the aliment comes from the atmosphere, therefore a moderate quantity of the most stimulating manure properly applied, with a frequent stirring of the soil, will be found to produce a better growth than a larger quantity of the most active manure with less work. It is generally supposed that when the weeds are subdued, the hoe or cultivator has no office to perform; but nature reverses this decision, as actual experiment invariably proves, the frequent stirring of the earth lets in the oxygen of the atmosphere, which is converted by the humus in the soil into carbonate acid, to be absorbed by the plants; which is a doctrine very well founded.

Ashes is pronounced by this agricultural people, the best of the saline manures. They are also among the most economical, as from our free use of fuel, they are largely produced by almost every household. Good husbandry dictates that not a pound of ashes should be wasted; but all should be saved and applied to the land,

and when they can be procured at a reasonable price, they advise that it be purchased for manure. Leached ashes though less valuable, contain all the elements of the unleached, having been deprived only of part of their potash and soda. They may be drilled into the soil with roots and grain, and sown broadcast on meadows or pastures, or mixed with the muck heap. They improve all soils not already saturated with the principles they contain.

The quantity of ashes that should be applied to the acre, must depend on the soil and crops cultivated.—All roots such as potatoea, turnips, &c., and also clover, lucern, peas, beans, and the grasses, are great exhausters of the salts, and are consequently much benefitted by ashes. They are used with decided advantage for the crops just named, in connection with bone-dust, and for clover and roots, their effects are much enhanced when mixed with gypsum. Light soils should have a smaller and clay soils a heavier dressing; the former from 12 to 15 bushels per acre, and the latter near double that quantity; or if they are leached, the quantity may be increased one-half, as they act with less energy. Repeated dressings of ashes, like those of lime and gypsum, without a corresponding addition of vegetable or barn yard manure, will eventually exhaust tillage lands. Ashes may however be applied to meadow lands for a longer time than to any other crops, and for this obvious reason: the surface of the soil is closely covered with vegetable agents, which are actively employed in drawing carbon from the air and soil, a large portion of which are stored up in the stubble and

roots, which thus makes it less important that the organic matters should be given back to the soil in the shape of vegetable or animal manures.

Lime, next to ashes, is here contended either carbonate or sulphate, has been instrumental in the improvement of the soils beyond any other salinures. Like ashes too, its application is beneficial to every soil not already sufficiently charged with lime. It is truly very highly prized by this agricultural community as a manure, as making heavy land lighter and light land heavier, and gives adhesiveness to creeping or leachy gravel, and comparative openness and softness to tenacious clays; and it has a permanent beneficial effect where generally used in disinfecting the atmosphere of any noxious vapors in it. It not only condenses and retains the organic matters brought in contact with it by the air and rains, but it has the further effect of converting the insoluble matters of the soil into available food for plants. It is considered the key to the strong box of the farmer, securely locking up his treasure till demanded for his own use, and allowing him to draw it out and use it profusely at his demands whenever required. In its influence in drying the land and accelerating the growth of plants, the use of lime is equivalent to an increase of temperature; and the northern farmer declares that he sometimes experiences in effect the same benefit from it as if his land were removed three or two to the south. The influence of lime on uncultivated soils after they have been exhausted, has been very frequent and striking; and it may be stated as a incontrovertible truth, that wherever procurable

prices, lime is one of the most economical and efficient agents in securing fertility, within the farmer's reach.

The northern farmer declares that lime is falsely accused as being an exhauster of soils, that it enriches the fathers and impoverishes the sons. This is true only so far as it gives the occupant of the land the control over its latent fertility; but if he squanders the rich products when within his reach, it will be his own fault. Lime gives him the power of exhausting his principal; if he uses aught beyond the interest, his prodigality is chargeable to his own folly, not to the liberality of his agent.

By the addition of lime to the soil, the insoluble ingredients contained in it are set free, and they are thus enabled to aid in the formation of plants, and larger crops and of better quality are the results. If these be taken from the soil without a corresponding return of manure, exhaustion must follow. And it is known that lime constitutes in all cases, only a part of the entire plant; all the other ingredients must be added, or the fertility of the soil cannot be sustained. But in the very abundance of the crops which lime affords, means are provided for the maintenance of the highest fertility. If they are consumed on the farm, their manure should be returned to the fields to replace the substances from which they are formed.

It is recommended, and the recommendation is a very reasonable one, that the best method is to add, in some form, the full amount of all the materials abstracted by the annual crop. When this is done, the large *dressing of lime will retain the accumulating fertility*

far beyond what the soil would be capable of, were it not for its agency, and it is in this way that the great profit of farming consists.

As it is known to every farmer that large crops only are profitable; the market value of many indifferent ones will hardly meet the expense of cultivation, and it is only the excess beyond this which is profit. It is evident that if 15 bushels of wheat per acre be an average crop, and it requires 12 bushels to pay all expenses of production, 3 bushels is the amount of profit. But if by the use of lime and ordinary manures, the product can be raised to 30 bushels per acre, the profit would be near the value of 12 or 15 bushels per acre, after paying for the manures. Thus the advantage from good management may be five times that of neglect.

The mode of applying lime is various. It may be carried on to the ground immediately after burning, and placed in small heaps; there it may be left to slack by rains and the air; or it is better to reduce it at once with water if accessible, and then spread it preparatory to plowing. A good practice is to place it in large piles and cover it thickly with earth, which gradually reduces it to powder. It may then be carried where it is wanted and spread from the cart or wagon. It is said to be still better if small quantities only are wanted, to have it thoroughly slacked and add it with manure, avoiding fermentation as far as practicable after it has been added, if added to the heap, as its avidity for carbon expels the ammonia, which would lessen its value. Fresh burnt lime it is said does not act on the crops during the first year, and may be prepared for use

tion as well by mixing it with 3 or 4 times its bulk of earth, as by spreading it directly upon the ground.

The amount of lime to be used is said to depend entirely on the soil. Some lands which are strong and fertile, contain over 30 per cent in their natural state, so that it is necessary to be a little cautious, lest such lands be overcharged. The average for the first dressing is from 50 to 75 bushels per acre, which may be renewed every 4 years, at the rate of 20 to 40 bushels per acre. If an overdose has been applied, time or the addition of green manures, such as clover or other grasses, are the only correctives.

To give lime its fullest effect, it is said it should be kept as near the surface as possible, and for this reason it is well to spread it after plowing, and covering it well with the harrow, which will be sufficient; and allow the ground then to remain in grass as long as possible. The weight of the lime and its minuteness gives it a tendency to sink, and after a few years cultivation a large portion of it will be found to have gotten beyond the depth of its most efficient action. It should be spread upon the ground immediately after taking off the last crop, so as to allow all the time possible for its action before the next planting.

In addition to its other good effects, lime like ashes, is useful to meadows in destroying the mosses and decomposing the accumulated vegetable decay on the surface. For this purpose it may be spread on them unmixed, after having passed into the state of carbonate or effete lime, to prevent injury to the grass. *If no such necessity requires its use in this form, it may*

be combined advantageously with the muck, and scattered broadcast over the meadow.

In preparing land for wheat and other grain, the ground is plowed about 12 inches deep, each furrow being 16 inches wide; and such as are appropriated to gardens and horticultural purposes is deepened to 18 inches, in each case to the manifest profit of the proprietors. But whatever may be the depth of the soil, the plow is required to turn up the entire mass, if within its reach, and what is beyond is thoroughly broken up by the subsoil plow, and some of it occasionally incorporated with that of the surface. The subsoil is never brought out of its bed, except in small quantities to be exposed to the atmosphere. If much of it was brought to the surface it would have to receive an application of such fertilizers as are necessary to put it at once into a productive system.

Subsoil plowing is a practice of great popularity with these agricultural people, who contend that it is attended with signal benefit from the increase and certainty of the crop. It is performed by subsoil plows, made exclusively for the purpose. The objects to be accomplished are to loosen the hard earth below the reach of the ordinary plow, and permit the ready escape of the water which falls upon the surface, the circulation of air, and a more extended range for the roots of the plants or grain, by which they procure additional nourishment, and secure a crop against drought by penetrating into the regions of perpetual moisture. When all the circumstances are favorable to the use of the subsoil plow, an increase of 20, 30, and even 50 per cent.

has been attributed to its operations. I was thoroughly convinced, not by argument alone, but seeing the admirable operation of the plow, that subsoil plowing would be attended with great profit in all lands, except such subsoils as are naturally too loose and leachy.

The wheat land being thus prepared, a sufficient quantity of lime is added, except it is known to contain naturally a sufficient quantity. When the ground has been thoroughly mellowed by rolling and harrowing, the seed is sown and thoroughly harrowed in, and the ground afterwards rolled, which is considered a good practice, as it presses the earth closely upon the seed and facilitates germination. As soon as the ground is rolled, the water furrows if any, are cleaned out, which is again done late in autumn and early in the following spring.

The time for sowing is from the 10th September to the 1st of October. The quantity sown per acre, is from 5 to 6 pecks, the latter quantity most frequently. The seed is prepared with the utmost care, after it is thoroughly cleaned. The seed, previous to sowing, is washed for about five minutes in a strong brine, made of salt and soft water, taking care to skim off all light and foreign seeds. If the grain is smutty, this washing is repeated in another clean brine, when it is taken out and mixed with one-twelfth its bulk of fresh pulverized quick lime. This kills the smut, cleans out weeds from the grain, and insures early & rapid growth. When the seed is not smutty, it is frequently prepared by soaking or sprinkling it with stale urine, and afterwards well mixed with the lime.

Numerous are the kinds of wheat cultivated in this famous wheat region. The following are the principal kinds, each of which stand high in public favor: The Improved Flint, the Old Genesee Red, Chaff, White May of Virginia, Wheatland Red, Kentucky White bearded, Canadian flint, English velvet beard or Crête, English flint or Soules wheat, White Provence, Blue Stem, Mediterranean, Egyptian, Smyrna, Reed, Many spiked or Wild Goose, Spring, Black Sea, Siberian, &c.

The clay lands for a spring crop are generally plowed in the fall, so that the tenacity of the soil may thus be temporarily broken up by the winter frosts, its particles separated, and the whole mass reduced to a finer tilth than could possibly be effected in any other manner. It is also contended that there is still further and important advantages from this practice, which ensues from the attraction existing between the clay and those gasses that are furnished from the atmosphere, snow, rains and dews. In consequence of being thus thrown up and coming in contact with them, it seizes upon the ammonia, carbonic and nitric acids which are in the air, and holds them for the future use of the crop.

These grounds are generally manured, and those put in corn, in planting receives about half a gill of ashes and gypsum mixed at the rate of two of the former to one of the latter, put in the hill, and an equal quantity of pure gypsum after the corn is first hoed; the ground is afterwards well stirred by harrowing, cultivating and plowing. The lands for oats and barley receive a *dressing of lime* and ashes. If lime alone, it is added at the rate of 20 to 30 bushels per acre, ~~over a broad~~

cast after the oats or barley and harrowed in ; each of which are afterwards sown down in wheat in the manner already given, except that the oats and barley grounds do not receive a dressing of lime.

The rotation of crops is a very popular practice with the people of this renowned agricultural region. The following are a small portion of the reasons given why a rotation in cropping should be practised : Many choice secondary bottom lands and others munificently supplied by nature, with all the materials of fertility, have by a long succession of crops, been reduced to a condition of comparative sterility. Yet it will have been found in the progress of this exhaustion, that after the soil ceased to give an adequate return of one crop, as of wheat, corn or tobacco, it would still yield largely of some other genus, which was adapted to it. These lands when thus reduced and turned out to the commons for a few years, will again give crops much larger than those which closed their former bearing career ; proving that nature has been silently at work in renovating the land for further use. The whole course of her operations is not known ; but this much is satisfactorily ascertained, that she is incessantly engaged in producing those changes in the soil which enable it to contribute to vegetable sustenance. Enough of lime, or potash, or silica may have been disengaged to yield all that may be required for one crop, which by that crop is principally taken up, and if another of the same kind follows in quick succession, there will be a deficiency, yet if a different crop succeed, there may be found enough of all the materials it needs fully to ma-

ture it. A third now takes place, demanding materials for nutrition, in forms and proportions unlike either which has preceded it, and by the time a recurrence to the first is necessary, the soil may be in a condition again to yield a remunerating return. These remarks apply equally to such soils as have, and such as have not received manures.

Another benefit of rotation is by bringing the land into hoed crops at proper intervals, it clears it of troublesome weeds which may infest it. A still further advantage may be found in cutting off the appropriate food for insects and worms, which in the course of time by having a full supply of their necessary aliment, and especially if undisturbed in their quiet haunts, will oftentimes become so numerous as seriously to interfere with the labors of the farmer. A change of crops and exposure of the insects to frost, and by the change of cultivation which a rotation insures, will make serious inroads upon their numbers, if it does not effectually destroy them.

From all that has hitherto been learned on the subject of rotation, either from science or practice, two general principles may be assumed, as proper to guide every farmer in his course of cropping,—1st, to cultivate as great a variety of plants as his soil, circumstances and market will justify; and 2nd, to have the same or similar species follow each other at intervals as remote as may be consistent with his interest. From the foregoing observations on the subject, it is evident that the proper system of rotation for any farmer to adopt, must depend on all the conditions by which he

is surrounded, and that it should vary according to these circumstances.

In travelling over this great agricultural region, I could not but feel a regret that the renowned Old Dominion should be found so far in the rear in the great agricultural art, and especially after having been admonished by the intelligent farmers of the north, in relation to their excellent mode of agriculture, by their numerous newspapers, cultivators, books, &c., as well as experience, which has shown that wheat should not follow wheat, or tobacco a crop of tobacco, for these, as well as many other crops following in succession, will speedily exhaust the constituents of the soil. If we take these constituents from the soil we should return them before we again tax it to ruinous production, by artificial manuring with such manures as would most readily and cheaply effect the object, an object easily effected by a little care and a small expense, to make the necessary appendages to barns and stables for the purpose. Why the farmers of Virginia do not practice as a general thing, a better mode of agriculture I am unable to say, unless we attribute it to negligence. Would that the famous Old Dominion would wake from her slumber on the subject, and no sooner than she would, we would hear no longer the great cry of westward, westward.

But unfortunately for this renowned old State, at present there are many fields to be found whereon the plant does not grow luxuriantly, and sometimes refuses to vegetate, or if it starts upon its vegetable existence, it does so apparently with the greatest reluct

ance and suffering, and ekes out a puny, thriftless career, unattended with a single advantage to its owner. This is simply the result of the exhaustion of one or more of the indispensable elements of the plant.

While on the other hand a great country like Virginia, possessing a climate suited to nearly all the cultivated crops, deserves to be fostered and improved.—The present age must make the beginning, else we will entail the horrid curse of national poverty upon those who follow us. With the proper energies and the application of the proper principles to her agriculture, we could make her the garden spot of the world.

CHAPTER XII.

Theory of pasture lands—Pasturing Meadows—Clover—Timothy—Feeding Stock—Steaming Apparatus—Plows—Drill barrow—Rollers—Under-draining—Advantages of under-draining lands—Canadian Thistle—Birds—Cutting Timber—Planting Fruit Trees—Mode of Culture—Pruning—Kinds of Fruit.

The general theory adopted by farmers in regard to pasture lands is, that they are manured sufficiently by the animals feeding on them. These celebrated farmers tell us this opinion is only partially correct. Pastures wear out less than other lands, but it is contended when milch cows and working animals are fed upon them, they carry off much of the produce of the soil which is never returned to it. Even the wool and carcass of the sheep, with the ordinary escape of the *salts* by the washing of the rains, will after a long time

impoverish the land. How much more rapidly when much of the manure, all the milk, which is rich in all the elements of plants is daily carried from the soil.— There is much phosphate of lime in milk, it is therefore recommended that crushed bones, ashes, salt and gypsum be used for manuring dairy pastures, each of which are considered of the highest value for pasture lands. From the peculiar action of these manures instead of growing poorer, pastures may become richer through every successive year. But instead of thus keeping up pasture lands for the want of proper reflection, it is generally said it will enrich itself by the droppings of the animals pastured on the land ; but this has not the desired effect, because they yield the soil nothing which they did not drain from it. The grass and weeds upon which they live, spring from the soil, and that which they return in voidings must according to the laws sustaining animated nature, be less in quantity than the amount originally derived by them. The fields therefore under this system of grazing, can gain nothing, on the contrary the land must have lost some of its contents.

There is here no objection to feeding off meadows in early autumn, while the ground is dry and the sod firm. The roots of the grass they say, are rather benefited than injured by the browsing. But they should never be pastured in the spring. It is said by these excellent farmers that it is economy to purchase hay at any price rather than spring pasture meadows.

Their time for cutting clover is after having fully blossomed and assumed a brownish hue. The swarth,

unless very heavy, is never stirred open ; but allowed to wilt on the top ; it is then carefully turned over and when thus partially cured, placed in high slender cocks, where it remains till sufficiently dry. It is then removed to the barn, where it is sprinkled over with from 10 to 20 quarts of salt per ton, which is a very good practice, as it thus secures the hay against damage from occasional greenness. There is no waste of the salt, as it serves the double object after curing the hay, of furnishing salt to the cattle and the manure heap.

The time for cutting timothy is when the seed is formed, when the seed is between the milk and dough state, and will nearly ripen after cutting ; as it is here declared that timothy affords nearly double the quantity of nutriment in the seed that it does in the flower, and is then much more relished by stock. Orchard grass on the other hand, although it possesses two-sevenths more nutritive value for hay in the seed, yet as it is more tender, and preferred by stock when cut in flower, and as it continues to grow rapidly afterwards, should be always cut at that time.

The mode of feeding stock, not only for market but also the stock during winter, is by having the food ground, crushed or steamed ; as it is contended, and that very logically, that the crushing or grinding of the grain insures more perfect mastication, and is performed by machinery at much less expense than by the animals consuming it. The steaming is also the final step towards its easy and profitable assimilation in the animal economy. With a capacious steaming box for the reception of the food, the roots and grain or meal,

and even cut hay, straw and stalks, are here thrown in together, and all are thus effectually prepared for nourishment. There is still another advantage claimed, as resulting from this practice ; that is, there is less animal heat expended in warming the food than would be otherwise required.

The steaming apparatuses here used are variously constructed. Many of the larger ones consist of a circular boiler $5\frac{1}{2}$ feet long by 20 inches in diameter, made of boiler iron, laid lengthwise on a brick arch. The fire is placed underneath and passes through the whole length and over one end, then turns in contact with the boiler, through side-flues or pockets, where it enters the chimney. This gives an exposure to the flame and heated air of about 10 feet. The upper part is coated with brick and mortar to retain the heat, and 3 small test cocks are applied at the bottom, middle and upper edge of the exposed end, to show the quantity of water in it ; and two large stop cocks on the upper side for receiving the water and delivering the steam, completes the boiler. The steaming box is an oblong, 7 or 8 feet in length, by about 4 feet in depth and width, capable of holding 60 or 70 bushels, made of plank, grooved together and clamped and keyed with 4 sets of oak joist.

The smaller apparatuses used for the same purpose, consist of a large circular tub, strongly bound by wagon tire, and holding about 25 bushels. The covering of both apparatuses is fastened securely ; but a safety valve is allowed for the escape of steam, which is simply a two inch auger hole. Into these the steam is

conveyed from the boiler, by a copper tube attached to the steam delivery cock for a short distance, when it is continued into the bottom of the box or tub by a lead pipe, on account of its flexibility and to avoid injury to the food from the corrosion of the copper. The end of this lead pipe, which is in the steaming box or tub, is guarded by a metal strainer to prevent its clogging from the contents of the box.

With these apparatuses they find no difficulty in cooking about 25 bushels of unground corn or other grain in the smaller apparatus, in the course of three or four hours, and in the larger one, 60 or 70 bushels of grain or roots, hay, straw or corn stalks, in the course of a few hours longer, with a small expense of fuel. For swine, fattening cattle, sheep, milch cows, and working horses and oxen, these great farmers contend without a doubt that a large amount of food is saved by the use of such or similar cooking apparatuses. The box it is said may be enlarged to triple the capacity of the foregoing, without reducing the operation, and even with a boiler of the same dimensions; but it would take a longer time to effect the object. If the boiler were increased in proportion to the box, the cooking process would be increased also, and of course accomplished in the same time.

The next thing I deemed worthy of notice, was their farming implements; their plows for almost every situation and soil; among which are several varieties exclusively for the subsoil, some are for heavy lands and some for light, some for stony soils, others for such as are full of roots, some are adapted to deep and some to

shallow plowing, some are for plowing around a hill and throwing the furrows either up or down or both ways alternately, others again throw the soil on both sides, and are used for plowing between the rows of corn or roots. Every farmer is here supplied with such plows as are entirely adapted to the different operations required.

It is not here as is too much the case in Virginia, where has been adopted a kind of penny wise and pound foolish policy by many of the farmers in their neglect or refusal to supply themselves with good tools to work with. They thus save a few shillings in the first outlay, but frequently lose ten times as much by the use of indifferent ones, in the waste of labor and the inefficiency of their operations. A farmer here estimates the value of his own and his laborer's time, as well as that of his teams, by dollars and cents, and if it requires one-tenth or even one-hundredth more of either to accomplish a given object, with one instrument than another, he before buying one of inferior quality, carefully computes the amount his false economy in the purchase will cost him before he has done with it. They contend that those persons who wish to thrive can ill afford the extravagance of buying inferior tools, at however low a price. The best are always considered the cheapest; not those of high and extravagant finish, or in any respect unnecessarily costly; but such as are plain and substantially made on the best principles and of the best and most durable materials. Among the many excellent plows I saw, is the *Drill Barrow*, which is truly a useful thing for dibbling.

in seeds ; and after the ground is mellowed by rolling and harrowing, the drill barrow will open the furrows, for the reception of the seed, and drop and cover and roll the earth firmly over it. The whole operation is well performed, the horse walking about as fast as he usually does in the shovel plow. The smaller ones are trundled along like a wheel-barrow, by hand. They are each suited to the smaller seeds, being also arranged for planting corn, beans and peas successfully.

Rollers for rolling land, are variously constructed. The simplest form is a single wooden shaft, with gudgeons at each end, which rest in a square frame, made by fastening four square pieces of timber, a tongue for drawing it being placed in one of its sides. A box is attached to this frame for the purpose of holding stones and weeds picked up in the field, and for weighting the roller according to the work required. When a roller exceeds 8 or 10 feet in length, it is divided in the middle, and has an iron axle passing through each part upon which it revolves, having the friction diminished by means of thick washers in the ends of the rollers. Some rollers have stout angular teeth for to tear up and loosen the old turf and moss of meadows.

The swampy or otherwise wet lands are reclaimed by a system of under-draining, which consists in sinking the drain about 4 feet deep, and using baked clay or tile pikes, 2 inches in diameter and 18 inches long, connected by allowing the descending end to enter the next below it as a socket. The trifling opening at each joint, with small holes perforating the top of the tiles is found to be sufficient to admit all the water

which falls into the drain, while the increased depth at which the drainage takes place, draws the water from a much greater distance. These drains are placed where the ground is low and wet, about 50 or 60 feet apart, which drain the land very admirably.—The expense is about twelve dollars per acre.

The advantages of under-draining are numerous and important; they take away all the surplus water which exists in heavy and tenacious soils which in wet seasons are a serious impediment to the successful growth and perfection of vegetation; thus always insuring a full crop when frequently not one-fourth of a crop is matured on similar undrained soils. They allow of early cultivation in spring and late in autumn, by furnishing a dry warm soil, which would not admit of cultivation except in the warm part of the season; thus enabling the farmer to grow a greater variety of products, where only a few were adapted to the soil before, and to these it gave several weeks additional growth. It also saves all the trouble and waste of surface drains and open furrows, which require that much of the land be left almost in an unproductive state to serve as conductors of the surplus water.

The Canadian Thistle is the only weed which has taxed the ingenuity of these vigilant farmers in effecting its removal. This is however within their power. The plant is allowed to grow till it comes into flower, when they are cut down with a hoe, or if the patch is large they are all turned down with the plow, after which the hoe is used in cutting them off, when they soon disappear.

Birds are considered by these intelligent farmers as of great utility. This was something which appeared strange to me, especially when it was declared that birds are among the most useful of the farmer's aids in securing his crops from insect depredation; and yet manifest as this is to every observing man, they are frequently pursued and hunted from the premises as if they were his worst enemies. It is among these farmers considered an absurd custom and folly in the extreme, to have scare-crows in cornfields and orchards; but on the other hand it is contended that martins, the swallow and wren, which may almost be considered among the domestics of the farm, and the sparrow, robin, blue-bird, thrush, oriole, and nearly all the gay songsters of the field, accomplish more for the destruction of noxious flies, worms and insects, (the real enemies of the farmer,) than all the nostrums ever invented.

The time these people choose for cutting timber for fencing and building, is in autumn. It is here denied that winter is the proper time for cutting timber, which is in Virginia as well as many other States, generally supposed to be the proper time; as it is supposed the sap is then principally in the roots of the trees. If that was the case, they assert it would make the thing worse, which however they deny to be the condition of the tree; they hold that nearly the same quantity of sap is in the tree at all seasons, only being less active in winter, and like all other moisture, is congealed during the coldest weather, yet when not absolutely frozen, circulation is never entirely stopped in the living tree. Therefore, the time claimed by New York, is

PLANTING FRUIT TREES.

from the first of July to the first of November for cutting timber in its perfection. Certain it is, they have cut timber within this period, which has exhibited a durability two or three times as great as that cut in winter, when placed in precisely the same circumstances.

The mode of planting fruit trees is by digging the holes from three to six feet in diameter, and from 12 to 18 inches deep, according to the kind of soil and the size of the tree; the more compact the soil, the deeper and larger the hole. When ready to plant, enough of the best or top soil is thrown into the bottom of the hole, so that the tree may stand about one inch lower than when removed from the nursery. The tree is taken up so as to injure the roots as little as possible; if any are broken they are cut off either square or obliquely, with a fine saw or sharp knife; as it is contended, if left in their bruised or broken condition, they will canker and decay in the ground; but if thus cut off numerous rootlets will spring out at the termination of the amputated root, which strike into the soft earth and give increased support to the tree:

If the soil is not as rich as it is thought it should be, the roots are covered only with that soil, and the holes filled up with good earth. It is strongly contended by these people, if the hole in which a tree is planted, be small and the surrounding land hard, and the roots bent up and cramped, the tree cannot grow, or if after a long time of doubt and delay it finally survives, it creeps along with a snail's pace, making little return to the planter. If the tree be crooked, it is confined with a straw band to a stake firmly planted in the

ground. This is considered the best ligature, as it does not cut the bark, as small cords often do, and it gradually gives way as the tree increases in size. When thus planted, well manured and looked after subsequently, the tree thrives, and in a few years rewards the owner with its delicious and abundant fruit.

The season for planting may be any time after the fall of the leaf by frost, in autumn, till its reappearance in the spring, provided the ground be not frozen. Early in the spring is preferred for planting stone fruits; for other fruits, if one time be equally convenient with another, they recommend fall planting, as the earth then becomes settled about the roots of the tree early in the season. This is particularly advantageous when the spring is succeeded by a severe summer's drought. So important is the operation of planting, that it is contended, better have one tree well planted than three planted badly; and more fruit may be anticipated within the first ten years if not forever, from the first one than from all the others.

The trees are never planted in the apple orchard at a less distance than 2 rods, and 40 feet is the distance for apple trees most frequently. Close planting prevents the trees from receiving the requisite quantity of sun and the free circulation of air, both of which are essential to the size, flavor and perfection of the fruit. Forty trees will plant an acre at the distance of two rods apart. The consequence of closer planting is the premature decay of the trees, and an inferior quality of fruit. A previously uncultivated or virgin soil is said to be the best for an orchard, but if such cannot be had

that which has long been in pasture or meadows is most suitable.

The most efficient manures are swamp muck, decayed leaves and vegetables, rotten wood, chip manure, lime, ashes and gypsum. Trees, like any other vegetable, draw their own specific food largely from the soil; and to supply the elements of their growth in abundance, the earth should occasionally be renewed with those materials which may have become partially or wholly exhausted. When carefully plowed and cultivated in hoed crops, orchards thrive most rapidly, care being always taken to protect the trees from damage, either to the trunk or roots. When the lands are kept in grass, a space of three to six feet in diameter, according to the size and age of the tree, is always kept free from grass and turf around them. This is to give the roots of the trees their share of benefit of the sun and rains, which with the aid of manure, is of the greatest service to the rapid growth of the trees.

The pruning is commenced at the planting of the tree, the top of which is always in proportion to the size and number of the roots. If the top be high and splindling, it is shortened, so as to throw the lateral shoots into a graceful and branching form. The limbs are allowed to commence about six feet from the ground. The pruning is done annually, as the labor is then trifling and the expenditure of the vital force in maturing wood, which would if delayed afterwards have to be cut off is thus saved, and the branches thus removed being small, the wounds are readily healed. In this case *no covering is required*, for the wound is small and one

season's growth will heal it. The tree is so trimmed that the top is sufficiently open to admit the sun and air. The time recommended as best for trimming is when the tree is in bloom and the sap in full flow. The proper instrument is a fine saw or sharp knife, and the limb is cut off close to the remaining branch. The sap is at this time active and is readily converted into new bark and wood, which speedily forms over the cut. If pruning is delayed, it is recommended that the wound be secured by an efficient covering of salve. Old trees or such as are growing vigorously and have been long neglected, often require severe trimming, which should always be done in May or June, and when the wounds are large they should be covered with a coat of thick Spanish brown paint or grafting wax. If they are left exposed, and the growth of the tree be slow, decay will often take place before they are healed. Too much care cannot be used in these operations.

We here seen no less than 30 different kinds of apple trees, each of which it is desirable to cultivate.

Summer Apples.—Early Harvest, Red Astracan, large Yellow Bough, Williams' Favorite,

Autumn Apples.—Golden Sweet, Fall Pippin, Gravenstein, Jersey Sweeting, Pumpkin Russet, (known by some as Bellebonne,) Rambo.

Winter Apples.—Westfield, Seek-no-farther, Baldwin, Black Apple, Yellow Bellefleur, Detroit, Hubbardston, None-such, Green and Yellow Newtown Pippin, Northern Spy, Blue Pearmain, Peck's Pleasant, Rhode Island Greening, American Golden Russet, English Russet, Roxbury Russet, Swaar, Ladies' Sweeting,

Lalman's Sweeting, Esopus Spitzenberg, Waxen Apple and Wine Apple.

Among the pears I noted in their order of ripening, a dozen choice kinds, the cultivation of which has thus far been thoroughly successful and the quality universally approved, as promising more durability, hardness and perfect adaptation to climate and soil.

Summer Pears.—Bloodgood, Dearborn's Seedling, Bartlett or Williams' Bon Chretien, Steven's Genesee,

Autumn Pears.—Beurre Diel, Dix, White Doyenne or Virgalieu, Duches D'Angouleme.

Winter Pears.—Beurre D'Aramborg, Columbia, Winter Nelis, Prince's St. Germain.

The peach orchards are not so prospering and profitable in New York as they are in the States of New Jersey and Delaware. There are however numerous peach orchards which are frequently cultivated as the stirring of the ground is necessary for their growth and bearing.

The best kinds in succession from early to late, are the red and yellow Rareripes, Makacatune, Early York, Early Tillotson, George the fourth, Morris' Red and White Rareripes, Malta and Royal George. These succeed each other from August to October.

The kinds of plum are the yellow, green, autumn, Bleecher's, Imperial, Prince's yellow, Frost, Purple & red gages, Coe's golden drop, Jefferson, Grange, Washington, Columbia, Smith's Orleans & red magnum bonum.

Cherries.—The varieties most in use are the common red Kentish or pie Cherry, familiar to every one, English Mayduke, black Tartaxian, Bigarreau, Grafton, large red Bigarreau, Elton, Belle d'Choisy, & late Duke.

CHAPTER XIII.

Education of the Farmer—Hospitality—Desire for agricultural knowledge—Remarks on the progress and science of agriculture—Departure for Niagara Falls—Black Rock—Niagara River—Ferry-Boat—Approach of the Falls from Black Rock—Navy Island—Bridge—American Rapid—Goat Island—American Fall—Width of Goat Island—Great or Horse Shoe Fall—Narrow Rapid—Tower—Grand Scene—Platform over the verge of the American Fall—Point View Garden—Chinese Pagoda and Camera Obscura—Delightful prospect—Ferry stair-case—Foot of the American Fall—Ferry-Boat—Towering Cliffs—Sublime scene—Canadian shore—Table Rock—Prospect—Foot of the Horse-Shoe Fall—Passing behind the Fall—Terrific sounds—Height of the Fall—Retraction of the Cataract.

After I had examined to some extent, the mode of agriculture and the splendid farms on the same ground which was but a few years ago a perfect wilderness, and now blossoming as a rose, animated by a rural population whose busy intelligence in the agricultural art, more thoroughly convinced me that a perfect system of agriculture cannot be understood without the application of scientific principles, as the whole system is based on the exact acquaintance with the means of vegetable nutrition.

Here I found a large majority of the farmers who have acquired an elementary knowledge of mechanics, botany, chemistry and geology, and also some acquaintance with anatomy and physiology, together with a complete practical understanding of the manual operations of the farm, the best manner of planting, cultivating and securing crops. They are familiar with the

proper management, feeding and breeding of animals, the treatment of the soils, the application of manures, and all the various matters connected with agriculture. In each of these departments of knowledge I received some valuable information, which I before said these intelligent farmers are ever as ready to give as a stranger can be to ask it. With these great farmers this is but the commencement of their education, as they are also learning from their own experience, which is the most certain and complete knowledge they can obtain, as they ascertain all the circumstances which have led to certain results. I was here truly delighted to observe the enterprise, and the noble desire of these farmers for agricultural knowledge; every one is found to learn from his own experience as well as that of his neighbors; and his observations on every subject that comes within his notice. He is particularly assisted by the cheap agricultural journals of the present day, which embrace the latest experience of some of our best farmers throughout remote sections of the country, on almost every subject pertaining to his occupation; and is thus supplying the only link remaining in the thorough education of the farmer.

These people endow and foster every institution which has a tendency to raise and improve the intellectual, moral and social condition of the people, which appears to ever be their cherished policy. Yet up to this time, to the regret of this people, no institution expressly designed for the professional education of farmers, has ever been established in this country, an institution much desired, as they declare that they are as

yet only upon the threshold of the great temple of agricultural science, whose ample and enduring foundations have been commenced by the united efforts of the men of genius throughout both hemispheres. They are however aiding with every means in their power in laying the foundations broad and deep, to elevate its superstructure, to rear its mighty columns and adorn its graceful capitals; which to the stranger from afar appears to be steadily and delightfully advancing, and seems to be entirely within the province of these intelligent freemen, the great business of whose lives is the practice of agriculture.

When we reflect on the great developement which agricultural chemistry is now making for the benefit of agricultural economy, the now progressive march of our moral population in mental culture, we cannot but feel a regret that this renowned old Dominion has not as yet adopted more extensively the mode of agriculture carried on by the people of western New York, and the Yankees of the east. It is the more to be regretted, as we are satisfied that the intelligent people of Virginia are aware of the indispensable necessity of an advanced agriculture, to the comforts and wealth, and indeed to the very existence of a great nation, renders it an object peculiarly worthy the attention and regard of the legislative power.

In looking to the history both of ancient and modern times, we find that wherever a people have risen to enduring eminence, they have sedulously encouraged and *protected* this right arm of their strength. Would that *it* was adopted over the length and breadth of our land,

and to the same perfection that it is carried on in the State of New York. Then instead of travelling a mile over the most fertile portion of the earth, without seeing more than two or three human tenements, with fields and fallows, whose unpromising appearance hardly redeem them from the desert, we should find every highway a continuous rambling village, animated by a rural population, whose busy intelligence in the agricultural art, would offer to the eye of the beholder the interesting spectacle of the maximum of vegetable production. The problem would then be solved, of what an acre can be made to produce, by examples without number.

In view of its intricacy, its magnitude and its importance to the human race, we cannot fail to be struck with the peculiar wisdom of Deity, in assigning to man this occupation, when a far-seeing and vigorous intellect fitted him to scan with unerring certainty and precision, the visible works of his Creator, and trace their causes and effects through all their varied relations.— It was while in the sinless perfection of his original nature, when the Lord God put him into the garden of Eden, to dress it and to keep it, and agriculture was his sole occupation, that his godlike intelligence enabled him, instinctively to give appropriate names, indicative of their true nature or character, to all cattle, and to the fowl of the air, and to every beast of the field; and so just and accurate was his perception, that whatsoever he called every living creature, that was the name thereof.

In our present imperfect condition, a beneficent

Providence has reserved a moderate success in agriculture exclusively to the exercise of a high degree of intelligence. His laws have been so kindly framed, that the hand even of uninstructed toil, may receive some requital in remunerating harvests, while their utmost fullness can be anticipated only where corporeal efforts are directed by the highest intelligence.

The agricultural life may be incompatible with the high pursuits of science; these require the exclusive devotion of the life, for in this as in all other cases, he who would woo the muses, must bid farewell to professional eminence. But there are many practical farmers, as there are practical men in all other departments of life, who have distinguished themselves in knowledge and literature. Thompson and Cowper have sung the charms of rural life. How powerfully are rural pursuits adapted to awaken a strong interest!

The pastoral life has always been deemed favorable to high and religious conceptions. One shepherd has poured forth his soul in the holiest and loftiest strains: "When I consider the heavens, the work of thy fingers, the sun and moon, which thou hast ordained, what is man, that thou art mindful of him, and the son of man that thou visitest him."

While travelling through this great agricultural region, I could not but feel a desire that some of the intelligent and more enterprising farmers of the old Dominion would visit western New York, and take lessons from these great farmers, and return using their influence and exertions in sustaining and carrying forward the great agricultural improvements of this region.

To agriculture, the most healthful, the most useful, the most noble employment of man, rather than to any other or perhaps all others combined, must we look for the permanent strength, glory and happiness of our great Republic.

I therefore hope there is a day coming, and that at no remote distance, that the length and breadth of our land will raise the profession of agriculture to its proper dignity, and not allow a lawyer or merchant to think that he loses caste by becoming a farmer. There are, it is true, impediments to so desirable a result.— In other pursuits men are stimulated by the rewards of applause or fame. In these highly cultivated regions, I was delighted to see that the farmer was not received by the lawyer, the doctor and the merchant with that cool courtesy and scorn, which is unhappily too often the case in Virginia. Perhaps she could remedy this, by raising the profession of agriculture to its proper dignity, by following the footsteps of New York, which would have a great tendency to disarm such of those personages of many of their whims, who meet the farmer with scorn. This ends the sketch on the agriculture of New York, or at least that part of the State between the city of Troy, on the Hudson, and the city of Buffalo, on Lake Erie.

After remaining several days in Buffalo and viewing such objects as I considered worthy of notice, the most prominent of which have already been given, I took the cars for the purpose of visiting the Falls of Niagara, at a distance of 22 miles, in going to which place, *I passed through the towns of Black Rock, which con-*

tains a population of 3625, and Tonawanta, with a population of 1216. The former is beautifully situated on Niagara river, at the distance of 4 miles from the city of Buffalo. The town is well situated for trade, as the Niagara is navigable to this place, and as far down as Chippewa on the Canadian side of the river, at which place it becomes endangered by the rapids occasioned by the Falls. At the town of Black Rock there is a ferry-boat. The river is here about a mile wide. The water issues forth in a very deep and impetuous current, and the ferry-boat describes a very considerable curve before reaching the Canadian shore. Here in a manner commence the beauties of the mighty cataract.

Niagara Falls.—The power of language in describing the imposing grandeur and sublimity of this wonder of wonders, is just like the faint glimmering of a taper, when contrasted with the bright effulgence of the meridian sun. The most that man can say in the matter, is that it is the most sublime and stupendous scene in nature. It is situated on the Niagara river, 14 miles above Lake Ontario. The river is the outlet of all the waters of 4 great and powerful lakes, which immense body of water is here wedged into a channel only three quarters of a mile wide. It issues from the northeast end of lake Erie, forms the boundary between the U. S. and Upper Canada, and falls into lake Ontario, which is 400 feet lower than lake Erie, being situated apart, at a distance of 36 miles, which distance is occupied by the Niagara river, which is from half to 3 miles wide, which carries the waters of those powerful lakes in a tolerable steady current for 18 miles.

From Black Rock the stranger passes down the American shore ; he shortly arrives opposite Grand Island, produced by the forking of the river. Each arm of the river is here more than a mile wide, and the western channel forms the boundary between Canada and the State of New York. Passing this and Navy Island, the stream becomes about $2\frac{1}{2}$ miles wide, and Chippewa as before noticed on the Canadian shore, terminates the navigation of the upper part of the Niagara, for the rapidity of the stream soon becomes so strong that vessels cannot with safety venture farther down. Passing this a short distance, the traveller will observe at a distance the agitated billows, and soon after the white-crested breakers. Passing on he comes opposite Goat Island, standing like a wedge in the centre of the stream, which divides the river into two currents, wherein the roaring and tumbling billows roll with terrible impetuosity to their respective leaps. Passing down the shore of the American rapid, till within about 300 yards of the fall, there is a bridge over the rapid to Goat Island. In passing over this bridge, about midway we have a fine view of the American rapid ; though much smaller than the rapids on the Canadian side of the island, yet the troubled billows roll beneath your feet with fearful grandeur, in their hurried course to the brink, where they in part display that awful grandeur which is beyond the power of language to express. On arriving at the shore of the Island, we were requested to fork over 25 cents toll, and register our names in a book kept for the purpose, which entitles us to a passage for twelve months from that date.

After passing through the gate, immediately before you is a large and elegant building, containing a splendid collection of Indian curiosities. But the traveller hastens on, deafened by the far-famed cataract, whose thunders cause him to hasten his pace to get a glimpse at the wonder. He turns immediately to the right and a few paces brings him to the American fall on its right bank, and places him on the verge of the precipice between the two falls. After the astonishment excited in the mind abates to some extent, he will see the farther extremity of the semicircle, breaking in a broad white sheet of foam, upon a heap of rocks below. Close by its inner extremity is a gush of water which in any other situation, would appear a considerable cascade, but here it seems only a fragment of the larger cataract, separated by a small island or rock in the bed of the river. The whole of this fall is 1140 feet wide.

The eye is drawn upon the precipitous end of Goat Island, supporting a scanty covering of earth & crowded to the edge with pines, which is 984 feet or 328 yards to the edge of the Great Fall. In passing through this island of pines, which conceal at intervals portions of this scenery, and the deep hollow thunder of the cataracts, mingled with the roar of the long and angry rapid, will cause the traveller to quicken his pace, and he soon arrives at the most stupendous fall on the face of the globe. The astonishment here excited in the mind at the magnitude and grandeur of this scene of scenes, is without a parallel. After collecting himself sufficiently, he will pass over a bridge constructed over a rapid about 100 feet wide, when he arrives at a tow-

er erected on a great rock, at the very edge of the Great or Horse-Shoe Fall, so called as it bears some resemblance to the form of a horse-shoe. From the centre of this fall rises a prodigious cloud of mist, which rolls heavenward in sublime grandeur, while the rays of the sun add sublimity to the scene, which travellers say can be seen at the distance of 50 miles. Here also on the very brink of the precipice, is given a more appalling impression of the horrors of the scene, as the view from the edge of this rock is certainly without a parallel. The next move of the traveller will be to ascend the tower.

As I am here the tower I now ascend,
 While proud Niagara's waters round me bend;
 Up the steps till I gain the utmost verge—
 Far, far below, behold the angry surge;
 Beneath your feet the rainbow's arch declines,
 Gleaming with richer gems than India's mines;
 And deep within the gulf yet farther down,
 Mid mist, foam and spray, behold Niagara's crown.

After viewing this grand scene from the top of this tower, the traveller will return in the same way that he came to the American shore; after recrossing the bridge over the American rapid, he will turn to the left, and follow down the left bank of the rapid, about 300 yards, brings him again to the American fall, on opposite bank from which he viewed it before. Here is a platform erected with long timbers well framed, with a strong railing, which is placed obliquely over the edge of the precipice; the end nearest the bank being well balanced down with rock, while the other end extends about ten feet over the verge of the precipice. From this the stranger can look down into the awful abyss beneath, and behold a cloud of mist as

ending in sublime grandeur toward him. At a distance of about 80 yards from this fall, is situated Point View Garden, tastefully and handsomely laid out, in which and near the precipice is situated the Chinese PAGO and Chimera Obscura. On arriving at this, the traveller is requested to pay over 25 cents for admittance, in doing which and registering his name, he is entitled to promenade the garden, and the use of the Pagoda during his residence at the falls. This splendid garden is elevated 30 feet above the fall; the Pagoda is 75 feet high, the top of which is gained by a circular staircase.

Strangers by first visiting the top of this edifice will save themselves much trouble and fatigue, as almost every object of interest on either side of the river from Grand Island to the Whirlpool rapids, are in view from this building. The proprietor, Mr. Robinson, will point out to travellers, the nearest road to each, and the easiest mode of access to the very point from which they can be seen with pleasure and advantage. The top of the Pagoda is crowned with a chimera obscura, not perhaps surpassed, if equalled for minute and living delineation, by any other in the world; exhibiting in all its brilliant coloring, the splendid scenery of the falls, the chain bridge, 1½ miles below, the numerous picturesque islands that stud the river, the rapids above and below the mighty cataract, the rich amphitheatre of the Canadian shore; in short, a panoramic view of every thing stationary or in motion, that is in sight, there *being* a revolution of the mirror, which delineates in *succession* the grand scenery of the surrounding country.

And while I am on Pagoda's lofty height,
 I stop to rest, and rapture fills the sight ;
 The tranquil Lake above, in foliage rich I view,
 Following the scene the whirlpool rapids too,—
 That watery mist that forms the radiant bow,
 Is nature's, yes nature's sublimest show !
 Oh ! rapturous gaze, yet had I Shakespeare's pen,
 I would not, could not take the prospect in.

The traveller on leaving the Pagoda for the Canadian side of the river, will observe the Ferry Staircase, immediately to the south of the garden. This staircase consists of steps from near a level with the garden, down into the gulf on a level with the water, with a grade of about forty degrees ; the steps being on the right and a railway on the left, running parallel with each other. The whole is under roof, and walls on each side, the better to protect it from the weather.—The railway contains a small car for two persons, which is let down and drawn up on the track, by means of an engine propelled by water power near the falls ; by which car or staircase the most nervous and timid person may descend to the bottom of the cataract with ease and safety, though about 250 feet in perpendicular height.—Here the traveller may turn to the left, go up the stream a few paces, and climb over some rocks at the foot of the towering precipice which overshadows him. This path is a rough and wet one ; but soon brings him to the foot of the American Fall, a most beautiful sheet of water, and well worthy to hold the rank of the second wonder of the world of this kind, although it cannot be compared to the Horse-Shoe Fall in grandeur and sublimity. It is about 1140 feet in breadth, as before stated, and either from its rocky bed being composed of harder materials, or from

the greater weight of water coming down the Canadian side, and wearing away that channel more rapidly, it is about 20 feet higher than the Horse-Shoe fall. It does not fall into a gulf or caldron as the Horse-Shoe fall does, but among huge rocks where it dashes itself into an ocean of foam, and then rushes with tremendous velocity to join its former companion.

We now return to the foot of the staircase from which we came, and there take a boat for the Canadian shore. On reaching the middle of the river, the attention is engaged by the surpassing grandeur of the scene. Look to the right, you see the milkwhite surges rolling onward and onward in awful grandeur, in this deep narrow chasm of only about 600 yards wide, with towering banks of about 300 feet in perpendicular height.—Look to the left, and behold within an area of a semicircle of cataracts more than 3000 feet in extent, and while floating on the creamy surface of an awful gulf, raging, fathomless and interminable, majestic cliffs, splendid rainbows, lofty trees and columns of spray are the gorgeous decorations of this theatre of wonders; while a dazzling sun shed refulgent glories upon every part of the scene. Surrounded with clouds of vapour, and stunned into a state of confusion and terror by the hideous noise, the traveller looks upward to the height of 167 feet, where are vast floods, dense, awful and stupendous, vehemently bursting over the precipice, and rolling down, as if the windows of heaven were opened to pour another deluge upon the earth.

*Tho' nerves may tremble and fears may alarm,
Yet I glide these milky waves secure from harm.—*

I left old Augusta, my friends and home,
 Mid this sublime theatre of scenes to roam.
 Wondrous sublime, transcending all I've seen ;
 Here's something more than language can explain ;
 Those sparkling torrents falling from these heights,
 Gilded with the sun by day and moon by night.

To add still more to the awful grandeur presented to the traveller, as he stands in his little boat, gazing on nature's grandest scene, are the loud sounds resembling discharges of artillery or volcanic explosions, which are distinguishable amid the watery tumult, and adding terror to the gulf in which he has moored his little boat, which has more the appearance of floating on the surface of milk than of water. Draw your mind from these terrific sounds, and you again behold with delight, the sun looking majestically through the ascending spray, while it is encircled by the most radiant halos, and the rainbow which apparently have tenfold the brilliancy and gaudiness of those viewed in the heavens, can here be seen raising their majestic arches over the mighty gulf or caldron into which that stupendous cataract of water falls, together with numerous fragments of smaller ones floating on every side, which would momentarily vanish, only to give place to a succession of others, very often more brilliant than those just vanished.

The traveller can now have his little boat moored on the Canadian shore, where there is a cabin ready for him, which will take him to such place as he may wish to go, by ascending the towering cliff by means of a road hewn obliquely up the side of the precipice. Once out of the mighty gulf, we direct our driver to take us to the Table-Rock, which is consider-

ed by travellers the best point which can be gained, as it affords the spectator a complete view of this fall, commandig at the same time the whole of the furious rapid above, from the first tumultuous roll of the waves down through its foaming course, till it subsides in the middle of the curve into momentary smoothness, and then dashes below in that awful grandeur so often repeated. From the rising ground above the Table-Rock there is perhaps a better view of the various features of the landscape. I however, did not consider it so good for viewing the falls as some do, because one is elevated considerably above the most important objects; a situation highly disadvantageous to powerful impressions, while almost every other point of land from which the falls can be viewed on either the American or Canadian shores, possess the power of exciting the mind to such an extent, by the magnitude and grandeur of the scene, that for the first time the traveller can scarcely collect himself sufficiently, to be able to form a tolerable conception of the stupendous scene before him.— It is impossible even from the Table-Rock, the best view that can be had, for the eye to embrace the whole of the scene at once; it must gradually make itself acquainted in the first place, with the component parts of the scene, each of which is of itself an object of wonder. It is said by persons who have an opportunity of contemplating this scene at their leisure for years together, that they think every time they behold it, each part appears more wonderful and sublime, and that it has only been at their last visit to the cataract, that *they have* been enabled to discover all its grandeur.

The traveller can now leave the Table Rock and approach the Horse-Shoe falls, immediately below which there is a strong and powerful staircase, whereon he may with perfect safety descend again into the mighty gulf near the foot of the fall. At or near the foot of the staircase is a small building, at which he can procure a change of clothes, and a guide who will conduct him in behind the mighty flood, which is vehemently bursting over the precipice. The traveller on leaving this little building with his guide, for the purpose of entering in behind the dazzling veil of water, is placed in a position where he can more adequately appreciate the vastness of the foaming cataracts, their tremendous sound, the terror of the impending precipice, and the boiling of the mighty flood. He now enters in behind the great curtain, where he has room enough to pass between the towering precipice on the right and the main body of the water on the left. His path is a rough rocky one, besides being very wet, as the mist which issues from the grand curtain of water on the left, keeps the path and also the cliff on the right constantly wet. As the traveller follows on after his guide, he is frightfully stunned by the appalling noise which fills his ear, while passing through this isle of the sublime theatre of wonders; yet he follows on, while clouds of spray sometimes envelope him, and suddenly check his faltering steps. After scrambling over piles of huge rocks that obstruct his way in some places, he gains a considerable distance in this alley of scenes, where he stands obscured from the eye of all, save the eye of his God and the guide whom he followed. He

stands here surrounded at times with clouds of vapor, and stunned into a state of confusion and terror by the hideous noise. The astonished stranger looks up between the mighty precipice and the sublime veil of wonders which hides him from the world. In this situation the soul of the stranger can be susceptible only of one emotion, and that is fear.

The traveller now follows his guide back over the rugged path which he came, and by the time he gets out of the curtained alley, which he had been passing through, his clothes will be thoroughly steeped by the mist and clouds of spray which sometimes enveloped him on his journey. On arriving again at the little building from which he started, his kind guide demands only the small sum of 25 cents for his services and the use of the suit of clothes worn on the journey. The traveller has now a long staircase to ascend, which is attended with some fatigue, which places him again on the Canadian bank, where he can again visit the Table Rock, upon which Mr. Robinson, the proprietor of the Chinese Pagoda and Chimera Obscura on the American shore, is building a splendid establishment, and also an Observatory, from which can be had the best views on either shore, for which he will be indebted to Mr. Robinson; let him view the falls on the American or Canadian shores or both. The falls, with one mile of the rapids above, is 224 feet in perpendicular height; the main fall being 167 feet in perpendicular height, and the one mile of rapids above a fall of 57 feet, which together make 224 feet.

That the Falls of Niagara were at one time lower

down the river than they are at present, is a fact that can be proven by reason and observation. The quantity of water that falls over this precipice, is estimated at 120,000,000 tons an hour; which would make the enormous quantity of 30,240,000,000 gallons of water, which passes over this awful precipice in the short space of one hour. The rapidity with which the continual attrition of so large a body of water wears away the hardest rocks, is known to every one, and has been exemplified in the changes which Niagara Falls have undergone, both in form and position during the short time they have been under the observation of civilized beings. Most of the oldest inhabitants agree in their statements respecting the alteration which has taken place in the shape of the Great or Horse-Shoe cataract, within their recollection.

The most ordinary man, with a cursory glance at what is now taking place at the falls, would have not a doubt on his mind, that the great cause of the comparatively quick retrograde movement of the falls, is the loose and soft material on which the limestone rock rests, and the destructive action of the water upon it. The water also penetrating the crevices between the strata of solid limestone, detaches them from each other and disposes them to fall. At present the limestone rock projects considerably over the shale at the falls, and it is this projection which makes it practicable to pass between the dazzling curtain of water and the rock, nearly half way under the Horse-Shoe Fall.

CHAPTER XIV.

Remarks on the Recession of the Falls—Goat Island—Ob-
 sected channel—Devil's Hole—Bloody Run—Excavat
 Plains of Chippewa—Historical Sketch—Burning Spri
 Village of Niagara—Departure—Suspension Bridge—V
 pool Rapids—Boman's Run—Awful Scene—Leiston—
 ans—Queenstown Heights—Brock's Monument—Pros
 Welland Canal—Lake Ontario—Refraction or Mirage-
 ronto—High Ridge—Military Importance of Toronto—
 ties of Lake Ontario—Ducks and Loons—Oswego—Mar
 tures—Steamer British Empire—Sackett's Harbour.

It has long been the popular belief from a mere
 sory inspection of the district, that the Niagara
 flowed in a shallow valley across the whole platf
 from the present site of the Falls to the Queens
 Heights, where it is supposed the cataract was fir
 tuated; and that the river has been slowly eatin
 way backwards through the rocks for a distance
 miles. According to this hypothesis, the falls
 have had originally nearly twice their present he
 and must have been always diminishing in gran
 from age to age, as they will continue to do in fu
 so long as the retrogade movement is prolonged.]
 comes therefore, a matter of no small curiosity an
 terest, to inquire at what rate the work of excav
 is now going on; and thus to obtain a measure for
 culating how many thousands of years or centuries
 been required to hollow out the mighty chasm all
 excavated.

It is an ascertained fact as before stated that the

do not remain absolutely stationary at the same point of space, and that they have shifted their position slightly during the last half century. Every observer will also be convinced that the small portion of the great ravine, which has been eroded within the memory of man, is so precisely identical in character with the whole gorge for seven miles below, that the river supplies an adequate cause for executing the task assigned to it, provided we grant sufficient time for its completion. The top of the precipice over which the water falls being a mass of limestone, about 90 feet thick, beneath which lie shales of equal thickness, as the water at the foot of the falls is said to be very deep. Those shales, owing to their softness, are continually undermining by the action of the spray, driven violently by gusts of wind against the base of the precipice. In consequence of this disintegration, portions of the incumbent rock are left unsupported and tumble down from time to time, so that the cataract is made to recede southwards. So that I think I am safe in advancing, that in the course of a few centuries, Goat Island which now separates the falls, by the wearing away of the rocks, will be isolated in the midst of the fallen flood, as a colossal pillar, carved by the resistless hand of nature, and a splendid and astonishing monument, from which posterity by turning to the records of the present day, may learn what progress the cataracts have made toward lake Erie within a certain period of time. The Island has lost several acres in area within the last ten years. I have no doubt that this waste *neither is nor has been* a mere temporary accident,

since I found that the same recession was in progress in various other waterfalls which I visited.

I also found an old river bed, running through the drift parallel to the Niagara, its course still marked by swamps and ponds, such as we find in all alluvial plains, and only remarkable here because the waters of Niagara river never run at a lower level by 300 feet. This deserted old channel occurs between the Muddy river, and the Whirlpool rapids a distance of 4 miles below the falls, which in this case deserves notice. It is 100 yards wide, near which I discovered with no small delight, at the summer-house above the Whirlpool, a bed of stratified sand and gravel, containing fluviatile shells in abundance. Fortunately, a few yards from the summer-house a pit has been recently dug for a cellar of a new house, to the depth of nine feet in the shelly sand, in which I found shells identical in species with those which occur in a fresh state in the bed of the Niagara, near the ferry.

There is also a notch or indentation called the Devil's Hole, on the right or American side of the Niagara, half a mile below the whirlpool, which deserves notice, for I think there are signs of the great cataract having been once situated here. A small streamlet called the Bloody Run, from a battle fought here with the Indians, joins the Niagara at this place, and has hollowed out a lateral chasm. Ascending the great ravine, we here see facing us, a projecting cliff of limestone, which stands out forty feet beyond the general range of the river cliff below, and has its flat summit bare and without soil, just as if it had once formed the

eastern side of the great fall.

The old deserted channel above named, and the patches of fluviatile strata occurring between the old banks of drift and the precipice, and not having been met with on other parts of the platform at a distance from the Niagara, this of itself, I think, would confirm the theory previously adopted on independent evidence, of the recession of the mighty cataract from Queenstown southward. The narrowness of the gorge near Queenstown, where it is just large enough to contain the rapid current of water, accords well with the same hypothesis; and there is no ground for suspecting that the excavation was assisted by an original rent in the rocks caused by some convulsion of nature, because there is no fissure at present in the limestone at the falls, where the moving waters alone have the power to cut their way backwards toward lake Erie.

Thus I leave the mighty cataract, and the river Niagara, so far as it was noticed in connection with the recession of the falls from Lake Ontario backwards toward Lake Erie, which I considered so plain that I could not help making a note of it. The notes on the river Niagara, below the falls, were of course taken after I left the falls for lake Ontario; but they were bro't forward for the purpose of having the notes concerning the falls all in succession.

From the Table-Rock on the Canadian side of the Niagara, I passed up the right bank of the river several miles, for the purpose of visiting Chippewa, celebrated for the great battle of July, 1814, between the *Americans*, commanded by Gens. Brown and Scott,

and the British under Gens. Drummond and Riell.— In this great battle, it is said the towering plume in the cap of the gallant Scott, was the rallying point for the American soldiers. On this famous battle-field I was reminded of one of the charges made upon the enemy by the heroic Scott; who on hearing the British saying they are good at long shot, but cannot stand cold steel, called immediately on his soldiers to give the lie to that slander, and the command “charge!” was given. The charge thus ordered is said to have decided the day. There is here a town, which is beautifully situated at the junction of Chippewa river with the Niagara. It is situated on both sides of the river, and has considerable trade, as the river Niagara is navigable from lake Erie, as far down as this place, which however, is attended with some danger, owing to the increasing rapidity of the current, caused by the great rapids and mighty cataract a few miles below.

On my return from Chippewa to the Falls, I called at the burning Spring. This is situated at the edge of the Niagara, just above the rapids, where carburetted hydrogen, or in the modern chemical phraseology, a light hydro-carbon rises from beneath the water, out of a limestone rock. The bituminous matter supplying this gas, is supposed to be of animal origin. The visible gas makes its way in countless bubbles through the clear, transparent waters of the Niagara. On application of a lighted candle it takes fire, and plays about with a lambent, flickering flame, which seldom touches the water, the gas being at first too pure to be inflammable, and only obtaining sufficient oxygen, after min-

gling with the atmosphere, at the height of several inches above the surface of the stream.

I now returned to the village of Niagara, on the American side. This is beautifully situated near the falls, and contains a population of 1277. The town is well laid out, and contains some large and well conducted hotels, some fine residences and churches. A portion of the inhabitants can view at their leisure part of the falls from their respective residences, while the whole town is filled with the noise of the mighty waters, whose thunders are said to fill an area of seven hundred square miles.

On my way to Lewiston, I passed the great Suspension Bridge over the Niagara, about one and a half miles below the falls. This famous bridge was just building, and looked like a work of peril. There were here a number of workmen employed, some working in wood, some with iron, while others were plating the long wire cables, which were in part to form the mighty bridge. This celebrated work was under the direction of a Mr. Ellet, a noted workman. On both of the awful precipices is a strong, high and powerful frame, which is firmly planted in the solid rock of which the precipices are composed. These two frames are 800 feet apart, which is the length of the bridge. Across this mighty gulf were suspended only four of the wire cables, which are to bear up this great bridge; the first of which was drawn over the gulf by means of a great rope, which was also drawn over by a smaller cord, which last was carried across the river by means of a kite. After one of these great cables was secured to
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its place, the others were easily drawn over by means of a pully. These cables hang in the air at the height of 230 feet, over a vast body of water, rushing through a narrow gorge at the rate of 30 miles an hour. These four great wire cables had more the appearance of that much cobweb suspended over a great space, than that much toward a great bridge.

On two of these cables was suspended a little car, capable of holding two persons. This was so constructed as to roll on the cables by means of pulleys; which little car was drawn from precipice to precipice with two persons snugly seated in it, and passed on this frail gossamer-looking structure, in perfect safety, with the roaring, rushing, boiling Niagara, 230 feet beneath them, while their heads grew dizzy on looking down into the fearful chasm, where rolled the milky Niagara in awful grandeur. The bridge when completed, will be, perhaps the most sublime work of art on the continent, although it is not probable that one person in twenty, will have the nerve to cross it.

The Whirlpool Rapids are situated below the bridge. The river at this place makes a turn at an angle of about ninety degrees on the American bank, and on the Canadian bank there is a very considerable curve, giving the Niagara here a singular shape. The whirlpool is in the curve, and principally on the Canadian side. The whole of this scene presents an awful appearance. In a southwestern direction are seen two streamlets approaching the whirlpool, which are thrown in cascades over the limestone precipice, after cutting through superficial red drift, about 25 feet thick. On the west

of the curve is a very considerable stream, thrown in a like cascade over the precipice. This stream is Boman's Run. On the north is a great gully, between which and Boman's Run, the cliffs consist of drift. In the angle on the American side, is situated the summer house, where sand and fresh water shells rest on the top of the precipice, which was named in the notes of the falls. About half a mile below this place, is the notch or indentation called the Devil's Hole, which is also a considerable curiosity. This place was also noticed in connection with the falls. The whirlpool, I repeat, presents a grand and awful appearance; while standing on the towering precipice which surrounds it, and see how completely the current is carried round in the circular whirlings, that water assumes in any vortex, having a large outlet at its base, that trees, beams and branches of wood are carried round and round for hours in succession in its centre, sometimes descending out of sight and reappearing again near the same place, broken into fragments. It can with propriety be called a second maelstrom, although on a smaller scale than the celebrated maelstrom of Norway, judging from the accounts given of the latter. The great suspension bridge will afford an excellent view of this grand scene.

The town of Lewiston, with a population of 2540, is beautifully situated on high and commanding ground, on the American bank of the Niagara river. This town possesses a delightful view of the surrounding country, embracing Queenstown Heights, on the Canadian shore. *The town of Lewiston is well situated to carry on*

trade, as the Niagara is navigable from its mouth up to this place for steamers. It is also connected with Lockport and the city of Buffalo by railroad. There is a settlement of Tuscarora Indians at this place, who are an energetic people, possessing some ingenuity; the women in particular, who manufacture some fancy articles; and those containing needle work are wrought in a very superior style. These squaws can be seen in the neighboring towns, some of whom I saw as far up the river as the city of Buffalo, where they were selling baskets, trinkets and fancy articles of various styles. The whole of these Indians can speak sufficient English to be understood. They are intelligent, and appear as friendly to the stranger as the white inhabitants. The prevailing vice with these Indians, and particularly with the men, is drunkenness; their chief motto appears to be whiskey, whiskey.

At this town I took a ferry-boat, and again crossed the river for the Niagara district in Canada, where I visited Queenstown Heights, which is celebrated for the desperate battle and capture of the Americans, on the 13th of October, 1812, and for the death of the British General Sir Isaac Brock. The spot on which he fell is marked by a monument, erected to his memory. It is 126 feet high, and stands 270 feet above the level of the Niagara stream, which runs just below it; so that it commands a noble view. To the left a prodigious sweep of forest terminates in blue Canadian hills; on the right is the American shore. There stands the village of Lewiston, with its winding descent to the ferry, while at our feet lay Queenstown, its waddi-

ness being lost in distance, and its long streets presenting a beautiful appearance. The mighty Niagara, whose angry surges are rushing between its lofty banks, beautifully adorned with trees, which awful chasm suddenly widens at Queenstown, causing the waters to spread and relax their speed, while making their way with three or four bends to the lake ; while in the distance the traveller beholds the white church of Niagara village, rising above the woods some miles off, and beyond the vast lake, its waters grey on the horizon. There was truly life in this magnificent scene. The ferry-boat was buffeted by the waves, and groups of persons were in waiting on either side the ferry. While looking over the surrounding country, teams could be seen in the fields at their labor, and persons at their respective occupations. Immediately after passing the elevated plateau of Queenstown Heights, the land shelves abruptly toward the shores of Lake Ontario, distant five or six miles, in a manner which must at once arrest the attention of the geologist. The tableland, 300 feet high, is broken by a precipice parallel to the lake. There is little doubt that this was once the boundary of its southern shore.

The Welland canal, 42 miles long, connects the two lakes, so there is an uninterrupted navigation between lakes Erie and Ontario. This great canal is situated considerably west of Queenstown Heights, and so large that vessels can pass and repass from lake to lake, notwithstanding the great obstacle placed by nature between the two Lakes, viz : the cataract. The district through which this canal passes, contains many fertile

and highly cultivated farms; the mode of agriculture being similar to that of the State of New York.

At the town of Lewiston, I left the State of New York, by sailing on board the steamer *St. Lawrence*, across lake Ontario to the city of Toronto, in the Home district, in Upper Canada. Not long after we had passed the American fort Niagara, at the mouth of the river, we were in the very bosom of lake Ontario, and after sailing for some time I was surprised at seeing the city of Toronto in the horizon, and the low wooded plain on which the town is built. By the effect of refraction or mirage so common on this lake, the houses and trees appeared drawn up and lengthened vertically, so that I should have guessed them to be from 300 to 400 feet high, while the gently rising ground behind the town had the appearance of distant mountains. In the ordinary state of the atmosphere, none of this land, much less the city would be visible at this distance, even in the clearest weather.

After arriving at the city and traversing its streets, I found it to be pleasantly and beautifully situated, and learned that it contained about 21000 inhabitants.— The town is regularly laid out and contains a number of fine buildings. This place was formerly the seat of the provincial government, being transferred to this place from Kingston; but since the union of Upper and Lower Canada, it has been removed to the city of Montreal.

Toronto is located on a bay of the same name. The plain in which the city stands, has a gentle and to the eye, imperceptible slope upwards from the lake, and is

still covered for the most part with a dense forest, which is however beginning to give way before the axe of the new settler. In the direction due northward, there seems to be a perfectly level plain for a mile, when you come to a ridge, the base of which I was informed was 108 feet above lake Ontario. This ridge rises abruptly with a steep slope towards the lake, and is about 30 feet high. Its base consists of clay, and its summit is sand, which is covered with pines.

This city when the capitol of Upper Canada, better known by the name of York, was the great depository of British military stores, whence the western ports were supplied. This famous capitol was captured by the Americans under Gen. Dearborn, on the 27th of April, 1813, with all its stores.

I again took passage on board the same steamer, and sailed down and across the lake to the city of Oswego, in the State of New York, a distance of 170 miles.—The weather was cold and disagreeable on the Lake. The beauties of this splendid lake, caused us frequently to leave the stove in the cabin and stand on deck, viewing the delightful waves, till we were compelled by the effects of cold again to retire to the cabin. The beautiful waters of this Lake appear to change their hues almost every moment; the shades of purple and green fleeting over it, now dark, now lustrous, now pale like a dolphin dying or to use a more exact comparison dappled, and varying like the back of a mackerel, with every now and then a streak of silver light dividing the shades of green. Magnificent, tumultuous clouds came rolling round the horizon, and the lit-

the graceful schooners falling into every beautiful attitude, and catching every variety of light and shade, would pass by our steamer and courtesying as it were, as they passed, while hundreds of wild ducks and great black loons could be seen skimming and diving, and sporting over the bosom of the lake, which of course would raise a terrible squall when compelled to leave by flight.—And in the vicinity of the shores, numerous little birds in gorgeous plumage of crimson and black, were fluttering about the banks and above the surface of the lake. There appeared to be life, and light, and beauty in every thing the stranger beheld, in this northern region, after being released from the prison in which he was locked up by the chilling blasts of this cold region.

The city of Oswego contains a population of 4665. It is beautifully situated at the junction of the Oswego river with the lake, and is a place of very considerable trade. A vast quantity of wheat is brought down the lakes and ground at this place, as there is here a number of large flouring mills. The Oswego river furnishes an inexhaustible water-power, which is very extensively used for the above purposes, as well as for propelling factories of other kinds. There is here an excellent harbour, protected by piers constructed by the United States government. I remained part of a day at this city waiting the arrival of the British Empire, one of the British line steamers from Montreal. This beautiful steamer sailed first into Sacket's Harbour, at the eastern end of lake Ontario. This deep, safe and splendid harbour belongs the State of New York, is noted as an important naval station and is strongly fortified by the United States.

CHAPTER XV.

UPPER CANADA.

Departure for Canada—Kingston—Rideau and Grenville Canal—Wolf and Long Islands—Point Henry—Harbour—Naval Depot—Plateau—Magnificent view—Bridge—Streets—Fortifications—Public Buildings—Granite region—Lake Cataraqui or Thousand Isles—Picturesque Scenery—Fright of the Passengers—River St. Lawrence—Johnstown District—Brockville—Ogdensburg—Ruins of Prescott—Late Canadian Revolt—New York Sympathisers—Wind-Mill—Eastern District—Cities and Towns—Cornwall—Complaints against the New York Sympathisers—Lake St. Francis—Coteau Du Lac—Cascade Rapids—Scenery—River St. Lawrence—Lake St. Louis.

At Sacket's Harbour, I again left the State of New York for Canada, and the steamer touched the State only at Ogdensburg; at which place I did not land. On leaving Sacket's Harbour we sailed direct for the city of Kingston, on the northern shore of lake Ontario, in the Midland district. The city of Kingston is situated near where the St. Lawrence opens into the great lake, and is the most important entrepot between western Canada and the great ports of Montreal and Quebec.

Kingston is well situated, and has great trade, is 260 miles from the city of Montreal, by the celebrated Rideau and Grenville canal, which commences at this place, and unites the Ottawa river with Lake Ontario. This is a ship canal, of 135 miles in length. Opposite the city the river or lake is divided into two channels, by Wolfe and Long Islands, the centre of which forms an elevated *ridge*, covered by a magnificent forest.—

The town is situated on the western bank of a short estuary, into which the Rideau canal communicates.—Point Henry, a promontory rising 100 feet above the level of the lake, and crowned with strong fortifications, commanding a narrow channel of the river, is on the opposite side of the estuary.

On approaching the city from the lake, a dangerous shoal renders it necessary to make a considerable sweep, before entering the well sheltered harbour, in the course of which the town, with the public storehouses built of white stone, the barracks, and other public buildings, become visible, and the naval bay, the depot of the naval force on the lakes is passed. The houses extend above a mile and a half along the shores of the lake, which form a gentle acclivity, the summit of which consists of a plateau of limestone rock, from which there is a magnificent view, embracing the lake, the river, the islands and forests. A wooden bridge, built in fifteen feet water, and 600 yards long, is thrown across the estuary. Vessels drawing fifteen feet water come close to the wharves, and Kingston is a principal rendezvous of the large steamers which navigate lake Ontario. The principal streets are sixty-six feet wide, run from north to south and from east to west, and are soon dry after the heaviest rains, in consequence of the favorable nature of the site. The fortifications have been excavated from the granite and limestone rock. Among the most important public buildings are the late provincial capitol, the provincial penitentiary, and a large and splendid public hospital. Kingston contains a population of about 9,000. The country around the

town must always be comparatively barren, as much of the soil consists of granite and granite detritus ; and I predict that it never will become a great metropolis, such as the city of Toronto might be made, or such as many of the cities in the United States, which I had passed through.

On sailing from Kingston for the river St. Lawrence, after passing Wolfe and Long Islands, we entered that part of lake Cataraqui, sometimes known as the lake of the Thousand Islets. This lake is studded with 1692 islets, which are chiefly small, and present a very splendid appearance in the bosom of this delightful lake ; the whole of which present a scene picturesque and beautiful. In passing between two of these islands, the steamer struck, which caused some alarm among the ladies ; the jar however was not a very hard one, and on examination the boat was found not to be injured, as it was found to be a log over which the boat had passed, which fortunately only jarred it enough to upset the chairs, and throw several persons off their feet who were standing at the time.

After passing those beautiful green islands, and sailing down the majestic river St. Lawrence for several hours, we landed at Brockville, in the Johnstown district. The town is well laid out, contains fine dwellings, and several elegant churches. The country in rear of the town is rocky ; the farms are small and highly cultivated ; the land is very fertile in this district ; wheat is produced of a very good quality, though not so good, and to so great an extent as in the districts westward. The town of Brockville is advantageously

situated on the St. Lawrence, and carries on some business in the commercial line.

On sailing down the St. Lawrence from this place, I found the scenery fine on both shores of the river, till our boat run into the harbour of Ogdensburg, in the State of New York, which is situated at the junction of Oswegatchie river with the St. Lawrence. This city contains a population of 2526, and has very considerable trade, which passes down lake Ontario, the river St. Lawrence, and from the western States to this place. In addition to this, there is a communication far into the fertile country, by the Oswegatchie river, which is the outlet of Black Lake. This city is famous as being the place from which the sympathisers of New York sallied forth, and embarked for Prescott, just on the opposite shore of the St. Lawrence, during the troubles and revolt in Canada, a few years ago, whose sad fate is well known.

On the opposite side of the St. Lawrence stands the town of Prescott, in ruins, except the great wind-mill which stands close by, which was not destroyed. This place is celebrated for the capture of the New York sympathisers and Canadian revolvers, during those troubles. After they were defeated by the British troops, they took shelter in this town, where it appears they were besieged and captured. Many of the houses were stone, in the walls of which can be seen a number of holes produced by the cannon shot from the royal troops. The walls of the great wind-mill, however, could not be broken. The town after the capture, according to the mode of British warfare, was set on fire.

The eastern district, so far as can be seen from the river, contains very beautiful lands, which have the appearance of being skillfully cultivated; and the shores of the St. Lawrence are lined with flourishing cities, towns and villages, among which may be named Matilda and Moulinette; while on the left bank, the last, or among the last views we had of New York, were the cities of Madrid and Lisbon, each with about 6000 inhabitants; which little cities, though in their infancy, yet in such a flourishing condition, that the proud capitols of Spain and Portugal, whose names they bear, have no occasion to be ashamed of them as their namesakes.

The farther we sailed down the St. Lawrence, the more imposing, grand and picturesque became the scenery; and after passing the Long Sault, we landed at the city of Cornwall, a splendid town on the river.— Here we remained several hours. At this place, several of the Canadians with whom I was in conversation, concerning the late troubles of the province, on which they all would converse, in a kind and friendly manner, except, however, that they complained that the New York sympathisers were, as they thought, allowed by the Governor of the State, with too much impunity to take cannon out of a public arsenal and invade a friendly territory, in time of peace, who they contended poured in by thousands to aid the insurgents, and whose intervention alone, rendered the rebellion formidable for a time. The only answer I could make to this complaint or charge was, that the Governor could not *have foreseen* and provided against so sudden

a movement along so extensive a frontier ; that neither he nor the federal government had troops enough at their command to act as a sufficient police, and that it was too much to expect of them to maintain permanently, a large standing army, for the sake of being prepared for such rare emergencies, which they acknowledged in part, and the matter dropped. These were the only persons I heard assailing the Governor of New York, or in any way blaming the authorities of the State in the matter, though spoken of in the western districts frequently.

After leaving the city of Cornwall, we entered lake St. Francis, and after passing through this lake the scenery rapidly increases in grandeur ; not only the scenery on the land, but the beauty of the majestic river itself. The scene was truly grand and imposing, in sailing down the Coteau Du Lac and the Cascade Rapids, which are nine miles in length ; and while passing down these rapids, several of us stood on deck and looking ahead we could see the rolling, dashing and plunging of the mighty billows, which appeared impossible for the boat to pass through, without being swallowed up. But our splendid steamer would ascend and descend with the rolling billows, in awful grandeur, gliding up and down, somewhat resembling a bird flying in the air, which I considered the richest and most entertaining scene that I had witnessed, except the great cataract.

The St. Lawrence, in its course from lake Ontario to Montreal, has a wide extent of low ground on both sides of it, a portion of which is rocky, but handsomely

and highly cultivated ; and as far as can be seen from the river when sailing down it, the shores are densely populated ; which perhaps is not the case farther in the country. In many places I had opportunities of seeing far into the country, in which cases I satisfied myself that the country in those places at a considerable distance from the river, were not so thickly settled as was the case nearer the shore, where it appeared to be almost one continuous village, from Lake Ontario to the mouth of the Ottawa river.

The St. Lawrence, in its course from lake Ontario, to the foot of the Cascade rapids above named, is said to fall nearly 300 feet, descending by a succession of rapids, of which the above named ones are the most prominent. Between these succession of rapids are the lake-like expansions of the waters, which form those beautiful lakes, one or two of which have been named, whose transparent green waters present a very beautiful appearance. Immediately below the abovenamed rapid, we entered lake St. Louis, in sailing through which, brought us to the city of La Chien, at the mouth of the Ottawa river.

CHAPTER XVI.

LOWER CANADA.

La Chien—Approach of Montreal—French Language—French Porters—Ottawa Hotel—Montreal—Location—Montreal Mountain—Cote de Neige—Prospect—Marine Shell—St. Henri—Cote St. Pierre—Trade—Wharves—St. Patrick Church—French Cathedral—Towers—Banking—House—Provincial Capitol—Hall of Representatives—Rotundo—Paintings—Fortifications—Desertion—Guard House—Nelson Monument—Streets—Canadian Horses—Cab—Rapid gait of driving Horses—Scene on the Wharves—Island of Montreal—High state of cultivation—Country Dwellings—Barns—Fences—Departure—Steamer Lord Sydenham.

The city of La Chien is situated below the junction of the Ottawa river with the St. Lawrence, which river is navigable to the city of Bytown in the Ottawa district, from which town boats take the great Rideau canal, already noticed, which was constructed at a cost of upwards of \$5,000,000, for the purpose of reaching lake Ontario at Kingston; as the St. Lawrence cannot be navigated up stream above the city of La Chien, owing to the succession of rapids already noticed. The Ottawa river is the division line between Upper and Lower Canada, or as it is more properly called, East and West Canada.

At the city of La Chien, I took the cars and passed through 7 miles of very beautiful country, to the city of Montreal. In passing through this region, and approaching Montreal, we seemed more like entering a French province than a British one. The language and costume of the peasant, and of the old beggars, the

priests with their breviaries, the large crosses on the public roads, with the symbols of the crucifixion, the architecture of the houses, with their steep roofs, large casement windows, and lastly the great French Catholic Cathedral, rising in state with its two lofty towers which seemed to pierce the clouds.

While thus passing from La Chien to Montreal, which had so much the appearance of a French province, I was informed by an intelligent and kind Englishman, that the French spoken in those provinces of the mother country, is often far less correct, and less easy to follow, than that of the Canadians, whose manners are prepossessing, much softer, and more polite, than those of their Anglo-Saxon fellow-countrymen, however superior the latter may be in energy, and capability of advancement. On arriving at the depot, and scarcely had we stepped out of the car, before we were surrounded by a troop of porters from the hotels, who were chiefly Frenchmen, holding in one hand their ticket, in the other a carriage whip, and crying "*Monsieur, voulez-vous, avoir voiture ;*" which words they would repeat in such quick succession, attended with such politeness that it rendered the scene to a stranger more amusing than disgusting, which could not generally be said of like scenes in cities in the United States; owing to the rudeness of the porters, who frequently rendered a scene of this kind disgusting to a stranger. After witnessing the diversion of the depot, I proceeded with my polite Frenchman to the Ottawa Hotel, on Great St. James Street, where I found the proprietor, Mr. George Hall, a kind and hospitable host, ever ready to

give information, and entertain the stranger as far as in his power.

The city of Montreal contains a population of 40,134, and is very beautifully situated on Montreal Island, in the district named Montreal. The city stands at the base of a mountain rising abruptly from a broad plain, where the valleys of the St. Lawrence and the Ottawa meet. This mountain is said to be 740 feet high above the St. Lawrence. It terminates in two summits, one considerably higher than the other, and is capped with a mass of greenstone which has been found to be 80 feet thick. In the hollow between the two eminences of this celebrated mountain, is a place called Cote-de-Neige, at a height of more than 500 feet above the St. Lawrence, where may be found a patch of gravel full of sea shells, which appears somewhat strange at first sight, to find them at so great a height, and causes one almost to suppose that this mountain had risen up out of the great and majestic St. Lawrence. From these summits the stranger has a very delightful prospect of the Island of Montreal, and the great and noted valley of the St. Lawrence, both up and down the river; and he has here an opportunity of beholding with delight, that king of rivers rolling its beautiful waters in awful grandeur towards the ocean.

At the base of the mountain on its eastern side, in the suburbs of Montreal, we find clay and sand, in which marine shells occur. This deposit forms a terrace which ends abruptly in a steep bank, facing the river-plain and running parallel with it for three or four miles. It varies in height from 50 to 150 feet, above

the St. Lawrence. A good section of this modern deposit is to be seen at Tanneries, a village in the parish of St. Henri, in the suburbs of Montreal, where excavations had recently been made for a new road, exposing horizontal beds of loam and clay, in one of which at a height of about 70 feet above the St. Lawrence, I observed great numbers of muscle, the shells retaining both valves and their purple color.

About 40 feet above the section of the road above mentioned, and about 100 feet above the St. Lawrence, at the Cote St. Pierre, also in the suburbs of Montreal, and near the house of a Mr. Brodie, gravelly beds appear in which shells are abundant, retaining both valves. This terrace or shelf containing these remains, is intersected here and there by deep narrow gullies, one of which terminates at the Tanneries. In the channels of the small streams draining these gullies, I found fossil shells washed out of the clay and sand. Almost every portion of this Island presents appearances of being once overflowed.

The city of Montreal is situated 180 miles above the city of Quebec, by the river St. Lawrence; is now the capital of Canada; it is the centre of the fur trade; of the commerce with the United States, and is the largest and most commercial city of British America. Its wharves are excellent, being chiefly constructed of stone. The city contains many elegant buildings which are chiefly constructed of stone. A large portion of the buildings are covered with tin, which causes the city to present a handsome appearance, more especially when viewed at a considerable distance.

The city also contains a number of very large and splendid churches, which are chiefly Catholic, the most elegant of which is the St. Patrick situated on commanding ground, and is of the most extravagant finish of any church I ever entered. Near the centre of the city, at the head of Great St. James street, facing Notre Dame, is situated the far-famed French Cathedral, being of a pointed Gothic style of architecture, which is said to cover 7 acres of ground, and to the top of its towers, nearly 300 feet. After entering this mighty structure, I was amazed at its size, being much larger than it appeared to be before entering it. Although large and powerful as it is, I could not persuade myself that it covered 7 acres of ground; about one acre was as much as I was willing to allow it, judging from its oblong appearance, though having no way of ascertaining by measurement.

This tremendous building is constructed of granite; its fronts face the north and south, and on each of the corners of the west end, is constructed a tower of the same materials; the tops of these two towers are nearly 300 feet from the ground; in the inside of each of these towers is a circular staircase, by which the top of the tower can be gained; from this there is a delightful view of the city and valley of the St. Lawrence, although not so good as is the view from Montreal mountain. In one of these towers there is a powerful bell, at nearly 300 feet above the ground. The windows of this edifice are between 30 and 40 feet high, and their width in proportion. The interior of the building is well finished, and presents a very elegant

appearance. At the west end there is a powerful portico, with a number of massive columns. The floor is gained by 7 stone steps, each of which is about 100 feet long.

On the opposite, at the head of the same street, is the **Montreal Bank**, a very splendid granite edifice, with a superb portico supported by 8 highly polished fluted columns, of very beautiful proportions.

The capitol is situated toward the eastern extremity of the city, on the lowest ground in the city. It is built of granite, and is a very splendid edifice, having a rotundo in the centre, and two wings facing the St. Lawrence, which adorns its northeastern front. The wings are only two stories high. The representative halls are in the upper stories, which are very beautifully ornamented; and in addition to the windows they are each lighted from the top by two small domes.— The floors are covered with very handsome red carpets; the seats are cushioned and dressed with red velvet; immediately on the right and left of the Speaker's chair is a lion facing the chair, and immediately above it is suspended the British crown. Other portions of the hall are ornamented with British emblems, and the hall presented quite a gaudy and elegant appearance.

The rotundo is lighted by a large dome; the floor is also covered with red carpets; the walls are adorned with a number of very splendid paintings; the most beautiful of which is a painting of George III, which alone cost \$3,500. Among the others I noticed the *Governor Generals of Canada*, such as Sir Guy Carlton, Sir J. Burgoyen, Sir George Prevost, &c.; in ad-

dition to these were many other military characters of Canada; a row of celebrated navigators, at the head of which stood Sir Henry Hudson. The person having charge of the capitol is a perfect gentleman to all appearance, and takes a delight in showing and explaining every portion of the building. This Englishman on learning that I was a Virginian, appeared to be the more delighted in entertaining and giving me such information as was consistent with his post, which I was also happy to witness in many of the cities of the United States, where I learned the high estimation in which the State of Virginia is held by the States and cities which surround her.—And here, entirely alone, a perfect stranger, and in the midst of a British province, I also had opportunities of witnessing new proofs of the high pinnacle of esteem on which stands Virginia. I therefore as a matter of course, could not help feeling my pride increasing, as being a native son of Virginia, and which caused me almost to attribute part of my success to the same cause.

The next objects of attraction in Montreal, are the fortifications which protect the city, where are large bodies of troops on duty, which appears to be the case in all the forts of Canada since the revolt. I was informed by a gentleman that the officers had an irksome task to perform, in maintaining strict discipline in their corps, and prevent the desertion of soldiers. A number of poor fellows I saw in the guard-house and prison, some to be punished by imprisonment for ten years and some during their lives, while others are condemned and shot.

In one of these fortifications, on high and commanding ground, is situated the Nelson Monument. It is a column between 40 and 50 feet in height. The column is placed on a pedestal about 8 feet high, and as many feet square. On one face of the pedestal are inscriptions highly applauding the great hero of the navy, the other faces contain appropriate emblems handsomely sculptured out of marble. On the top of the column is placed the statue of Lord Nelson, with his face to the north, the forehead fractured or broken in, no doubt an imitation of the wound which caused his death, as the cavity in the forehead must have been sculptured. The statue being composed of solid marble, it could not possibly have been done by a blow.

The city contains several broad and handsome streets, the principal one is Great St. James street. These are blocked with square blocks of wood one foot long, which are placed on one end and neatly fitted together, which makes a much smoother street than those paved with stone. The streets in the older portion of the city, are chiefly narrow, crooked and dirty, but generally well paved. Except several of the principal streets, the side walks are narrow, which renders it somewhat annoying to a stranger to pass, as the walks rarely exceed three feet in width.

In this city, on the evening of the 25th of May, I received the news by some of the New York papers, of the nomination of Gen. Cass and Butler, as candidates for the Presidency and Vice Presidency; which was only three days after the meeting of the delegates of the *Baltimore Convention*. The news was conveyed

ly telegraph to some of the cities on the frontier of New York, from which it had time to reach Montreal by the evening above named.

Canada is celebrated for its excellent breeds of horses. The Canadian horse is truly a noble animal. I had seen and admired many of these excellent horses by the time I arrived at Montreal, where they appeared to increase in beauty and size, and I did not see an indifferent horse in all the city. In this great metropolis, the draught horse is particularly worthy of notice.— They are large, active and handsome, possessing great power and strength, & are always driven by the French, who always make the horse trot at the top of his speed. The riding vehicle is a cab or calash, in each of which there is only one horse, as omnibusses and carriages are rarely seen in the city. I was considerably amused on several occasions, while sitting in my cab, as the little Frenchman would drive with such impetuosity, that I thought he certainly would drive down every thing before him; and every now and then he would blate out at the top of his lungs, the words "ho, la!" at which words his horse would spring to it again with increased rapidity, until he would become so completely crowded and wedged up in the streets among the cabs and drays, as to compel him to stop; and no sooner than there was again room to pass, I would hear the words "ho, la!" and find my cab passing over the ground with as much impetuosity as the ancient with his war chariot. While standing on a high bank above one of the wharves, which banks are walled up with rock from 40 to 50 feet high, on the lower and upper sides of the

roads, which are cut obliquely down the banks to the wharves, and which are always crowded with carts and drays; and while looking leisurely on the scene at the wharves and the roads leading from them, I saw a horse and cart of sand fall over the wall, down the plank about 30 feet high, on the plank floor of the wharf, and I was not a little surprised to see them get up the horse and cart, again load the sand and drive off as if nothing had happened. This accident occurred through the driver neglecting to be with his horse.

The lands on the island of Montreal are very fertile, and highly and skilfully cultivated. The farms are small, the low lands are well drained, deeply plowed and well pulverized, and have more the appearance of a garden than a cornfield. The houses in the country are generally small, with steep roofs; the barns and stables are large, so as to contain all the fodder and beasts, as neither are allowed to remain out during the severe winters. The fences about the buildings are constructed of plank, which with the buildings are whitened, the whole making quite a handsome appearance. The remainder of the fences are made of cedar posts or stakes, pointed and driven in the ground close enough together to prevent hogs from creeping through. This forms a fence about 4 feet high, and within nine inches of the top, there is a lath or pole secured against each side by pins or withs, and on each side is thrown up a bank of earth, between 15 and 18 inches high, to prevent their raising by the action of the frost; and the ditch thereby made affords a drain.

After remaining several days in Montreal, I took

passage on board the large and splendid steamboat Lord Sydenham, and sailed for the city of Quebec, 180 miles down the St. Lawrence, where I found the mass of the population settled in the valley of the St. Lawrence. Here a person is at no time out of sight of half a dozen dwellings, the most of which are whitened and neatly arranged, and when viewed from our excellent boat, while plowing the waves of the great and majestic river, they presented a very flourishing and handsome appearance.

CHAPTER XVII.

Lake St. Peter—Alluvial flats—City of Three Rivers—Cities and Towns—Approach of Quebec—Point Levi—Cape Diamond—Island of Orleans—River St. Lawrence—Harbour—Quebec—Albion Hotel—Walls of the city—Houses—Streets—Beggars—French Guide—Permit—Approach to the Citadel—Redoubts—Entrance into the Citadel—British Officer—East Wall—Impressions of cannon-shot—Height of the Citadel above the St. Lawrence—West Wall—Battery—Plains of Abraham—North Wall—South Wall—Arsenal—Magnificent view—Grand Scenery—Strength of Quebec—Well of Water—Barracks—Scotch Soldiers—Singular Dress—Coldness of the weather—Guard House—Secret Redoubt—Heights of Abraham—Ascent of Wolf—Strange incidents connected with this affair—Battle-ground—Wolf's Monument—Teams of Dogs—Governor's Garden—Monument.

At the mouth of the river Sorelle commences Lake St. Peter. The St. Lawrence here expands into a lake, bounded by low alluvial flats, which are sometimes several miles broad. These flats are in turn bounded by a

steep bank of sand drift about 40 feet high. In sailing through this beautiful lake, with the handsome alluvial flats bounded in the distance by steep high banks, affords to the stranger a rich scene to behold. Immediately below the mouth of the lake, is situated the city of the Three Rivers, which is located on the north bank of the St. Lawrence, on its south bank opposite the city the St. Francis river and the Ramaska river form a junction with the same, and just below the city the river St. Maurice also empties into the St. Lawrence, which give rise to the name of the town, which is next in importance to Montreal and Quebec.

The city of the Three Rivers is well situated for trade, in which it is considerably engaged. It is located in the centre of the Three River district. By the time I arrived at this place, I had passed many flourishing cities and towns immediately on the banks of the St. Lawrence; among which may be named, Longueuil, Trembles, Verchères, L'Assomption, St. Sulpice, Contre Cour, La Valtrie, La Noraye, Wm. Henry and Berthier, in Montreal district, and Port du Lac, in the Three River district. After remaining in the town of the Three Rivers several hours, we again sailed for Quebec, and passed the cities of Rockelau, Champlain and St. Pierre, when we arrived at the line of the Quebec district, in which we passed St. Anne, and Lotbinière, soon after which we arrived at the far-famed city of Quebec.

The city can be seen at a considerable distance, owing to its great height. The St. Lawrence at this place is wedged into a narrow channel between a quar-

ter and a half mile wide, by a high point of land on the south bank called Point Levi, and Cape Diamond, on the north bank, extending a considerable distance into the St. Lawrence. This towering Cape is 356 feet high, and is crowned with the celebrated Citadel, which is pronounced the Gibraltar of America. The St. Lawrence after passing this cape, turns immediately to the left, expands its waters and embosoms the island of Orleans just below the cape. The river after passing the cape, forms an excellent harbour on the northeast of the city, which is under the immediate range of the guns of the forts. On the east and south no landing can be effected, owing to the steepness and height of the rock.

The city contains a population of 30,357 ; it is divided into two parts called upper and lower city. The lower city is regularly laid out and neatly built since the great fire of 1843, when it was entirely destroyed. It is now handsomely built, being covered with tin and slate, as wood is prohibited. This portion of the city contains such manufactories as are here carried on.

After landing, I proceeded through the lower into the upper city, to the Albion hotel, near the centre of the city. This part of Quebec is fenced by a high and powerful stone wall. The buildings are nearly all stone, but large and well built ; the stone are of a rough, grey species ; the roofs are of tiles or slate ; the streets are crooked, narrow and very roughly paved, and generally very dirty ; the side-walks only from two to three feet wide ; and at almost every corner sits a beggar, *with his arms extended*, imploring alms, and many of

them blind, sitting at the corners of these narrow sidewalks, who on hearing the footsteps of a person, would extend their arms and in the most pitiful tones implore alms. For a moment I was struck with surprise; I could scarcely believe that I was walking the streets of far-famed Quebec, under the control of proud and haughty England; but yes, they were the streets of Quebec, and those troops of beggars which annoyed me on every hand, are the beggars of the same proud and haughty nation.

I here hired horse, calaish and driver, whom I was compelled to pay the sum of two dollars and fifty cents per day, and pay the tolls on all the ferries, bridges and gates. It is true this was a high fee, but the best I could do, and which I did not regret, as my little Frenchman was quite intelligent and entertaining.— At 8 o'clock in the morning, at the appointed hour, I applied to the commander-in-chief of the forces of Lower Canada, at his residence in the city, for a permit to enter the citadel and fortifications of Quebec, which I readily received; and found this great military character, a man to all appearance a perfect gentleman. I then proceeded with my guide to the first barrier on the side towards the Heights of Abraham, where we were hailed by the sentinel, who demanded to know if we had a permit, to which I answered in the affirmative, and was permitted to pass. This demand was repeated at the second and third barriers, and the same answer given. When we arrived at the fourth or chief wall, immediately within the gate a platoon of soldiers were drawn up, who kept us at bay till the comman-

der of the garrison stepped up and received our pass, and ordered a commissioned officer to attend us through the fortifications, at which order the platoon wheeled and cleared the gateway.

I was delighted to find this officer a perfect gentleman, who appeared to take great delight in showing me the great strength of their fortifications. The wall next the east precipice is only about 9 feet thick, constructed of very large grey stone, on which I was shown small impressions made by cannon shot, which the officer informed me were made with the heaviest guns they possessed, which were placed on one occasion on ships, and floated to a convenient distance in the St. Lawrence and discharged upon the wall; for the purpose of ascertaining what impression they would have upon the same. On another occasion they were placed on the ice when the river was frozen, and discharged for the purpose of ascertaining the same fact. This experiment was performed no doubt for the purpose of getting the impression abroad that the walls could not be effectually reached, even with the heaviest guns; and if the object was to circulate that impression, it is perhaps a correct one, judging from the thickness of the wall, and its foundation being the enormous height of 356 feet above the surface of the St. Lawrence.

The main walls on the west, next the plains of Abraham, are between 70 and 80 feet thick, though not wholly constructed of stone, as it has the appearance of being two thick walls and the middle filled up with earth; on the top of this great wall there is a very beautiful sward, which is also the case on the tops of all the

barriers. In rear of the guns placed in the main wall, there is a third wall, which is arched over and joins the front wall, thereby forming a sheltered passage to protect the guns and soldiers from the tempests of these cold and terrible regions; thus the main wall of the citadel in that direction, may be properly said to consist of three walls at the bottom, uniting at the top and forming one wall of the thickness abovenamed, and about 20 feet in height.

The battery in the wall consists of heavy guns which with the redoubts in front, rake every inch of ground on the celebrated plains of Abraham, which slope gently from the first redoubt downward for several miles; and owing to the height of the rock on which the fortifications stand, which rises abruptly from the redoubt, so that the whole of the batteries can play on the plains at the same time without interfering with each other, the shot of the upper ones passing over the lower ones, and thus so completely raking every inch of this far-famed height, that it would be impossible for a storming party to advance from that direction.

On the north of the citadel, on a portion of the same rock, is situated the upper city; though lower than the citadel, so that the batteries in that direction can range above the top of the city, so that they can aid the batteries in the lower city in defending the grounds towards the town of Beaufort and the river Montmorency. In this direction in the lower city, can be seen the redoubts assaulted by the noble and heroic Montgomery, during the revolutionary war. In this direction a storming army would have to take possession of

all the forfications of the lower city, pass up through it, and scale the walls of the upper city in the very face of a mighty battery, before they could assault the citadel. On the south and east is the St. Lawrence, and the banks of the cape, which as before named are 356 feet high. The east wall was first given as being 2 feet thick : the south wall is a little thicker, owing to its fronting a high point of land on the south bank of the St. Lawrence called Point Levi, about 100 feet high, and being only between a quarter and a half mile distant. The guns of the citadel are so arranged as to rake every inch of this point, so that it would be impossible for an army to get possession and fortify that point.

In the centre of the citadel, is situated a very strong and powerful building, containing the magazines. This cannot be reached from any point without the walls of the citadel, owing to the size of the fortification, the height of the walls and its great elevation above all the surrounding country ; so that this magazine stands secure from shot, from whatever direction they may come, until a breach is effected in the walls of the fortification, because otherwise after the shot passes over the top of the wall, it must also pass far above the top of the building ; and owing to its great strength, and being entirely fire-proof, it cannot be effected by shell.

The top of this building is the highest point that can be gained on the far-famed rock of Quebec ; on this is placed the British flag, waving in all the pride of the British nation. I ascended to the top of this building, and under the folds of the British flag, I viewed with

astonishment one of the most splendid prospects in the world. The country far and wide decorated with towns and villages, and striped with little streams, pouring their sparkling waters into the great and majestic St. Lawrence, whose broad white waves are rendered tenfold more imposing and sublime by the rays of the meridian sun, while they are rolling onward and onward to the mighty gulf of St. Lawrence.

Imposing indeed were my feelings, while mounted on the highest pinnacle of the magazine, which crowned the mighty rock of Quebec, and viewing under the folds of the British flag, the celebrated Gibraltar of America, which is the great key by which the British hold their power in America. And here, from this towering pinnacle, I convinced myself of the fallacy of an army to attempt taking these great fortifications, other than by a regular siege. Though having no claims to scientific warfare, I satisfied myself that I would be safe in advancing that the citadel of Quebec would never be taken by storm, so long as the garrison remained true to their trust.

Near the building which contains the magazine there is a well of excellent water, which truly is of itself a curiosity, when considering the solidity and amazing height of the rock out of which it is hewn. Immediately under the west wall are the barracks of the soldiers, all of stone; in a word, the whole of this great fortification is fire-proof. Here I had the pleasure of seeing a portion of the Scotch regiment, sent into Canada after the insurrection and troubles a few years ago. *The uniform of this regiment is truly very singular.*

ter the 25th of May, which continues to be worn till the approach of cold weather. This dress consists of a red hunting-shirt, with the waist girdled by a black leather belt; the pantaloons white, extending no farther down than within three inches of the knee; a white stocking extending to the knee, supported by a red garter, the end of which is handsomely fringed and tied in a bow-knot, over which the top of the stocking is turned, the end of the garter hanging within nine inches of the ground; and on the foot a low quartered shoe. The leg between the top of the stocking and the pantaloons, is entirely bare for three inches above and three inches below the knee.

When I first saw this singular corps leave the barracks for the purpose of training, I was perfectly astonished, not only considering the strange and disgusting mode of their uniform, but also the coldness of the weather. I at first could scarcely believe my own sight, as I had on a great box-coat, well buttoned up, and did not feel any thing more than comfortable at that, and these men could walk and stand about in that condition, on this celebrated rock, which is one of the highest and coldest in all Canada, with as much comfort apparently as I did.

The guard-house presented an object of pity. Here were confined a number of soldiers, chiefly for desertion, who are here punished in various ways, owing to the dignity of the crime they committed. Some of these poor wretches are compelled to linger out all the remainder of their days in this miserable prison; some are released after ten years confinement; others after

receiving various corporeal punishments and but one or two years confinement are released ; while still another class are condemned and shot.

Between the upper city and the north wall of the citadel, and immediately on the outside and beneath the battery, I discovered a kind of secret redoubt, where some workmen were making alterations, which was all that I had time to see ; for no sooner than the officer who attended me, discovered that my attention was drawn to that spot, he kindly informed me he was not suffered to allow me to inspect that place ; and of course I immediately withdrew from the spot. We next visited the redoubts towards the plains of Abraham, and such other objects worthy of notice therewith connected, after which we returned to the officers' barracks, where my kind officer entertained me till the arrival of my French guide, when a cordial shake of the hand parted us, and I mounted my calias and started for the plains of Abraham.

These memorable Heights are situated on the west of the fortifications, and with the exception of a small hollow or sink, the plain slopes gradually from the first redoubt westward about one and a half miles, where there is a hollow running into the St. Lawrence, up which hollow Gen. Wolf conducted his army by climbing up the rocks and roots, which was truly a rugged path for an army to pass up. There appears to be something strange connected with this affair ; for we are informed that Gen. Wolf, the commander-in-chief of the British army, had established his head-quarters on the island of Orleans, which is an island in the St.

Lawrence, commencing about two miles below Quebec, from whence all his movements proceeded; and owing to the vigilance and daring of Gen. Montcalm, the French commander-in-chief, all his plans were baffled and defeated, till disappointment, fatigue and watching caused Wolf to fall violently sick, and on his sick-bed he conceived the bold design of transporting his troops up the St. Lawrence, which he accordingly did as soon as he recovered from his sickness. How he transported his troops up the strong current of the St. Lawrence, in a manner under the guns of the great citadel, and passed all the sentinels posted up the river, without the knowledge of either, is a mystery to me. It is true the British had possession of the south bank of the river, and of course the French could not post sentinels there, to watch the movements of the enemy and give the alarm; but so far as I am capable of judging, the narrowness of the river at this place, and the rapidity of the current, would in my opinion render it impossible for such a fleet to pass up without being discovered.

But we are informed that Wolf effected this object, and passed nine miles above the city, where he learned by a deserter, that Gen. Bougainville was stationed above him on the St. Lawrence, the names of the regiments he commanded, and that the garrison at Quebec expected provisions from that General. After having ascertained those particulars, he left his ships one hour after midnight, on the 12th of September, 1759, and *in boats silently* dropped down the river in search of a *landing*, till they were hailed by one of the French

sentinels posted along the shore, who challenged him in the customary military language of the French, "*qui vit ?*" (who goes there?) to which an English captain who was familiar with the French language, promptly replied, "*la France ;*" when the sentinel demanded, "*quel regiment ?*" (to what regiment?) the answer he received was "*de la Reine,*" (the Queen's). The sentinel immediately replied, "*passe ;*" at once concluding that this was the convoy of provisions expected from Gen. Bougainville.

The other sentinels were deceived in a similar manner, which at once shows that they were ignorant of the fact of the British being up the river, because they could not rationally expect a convoy of provisions to pass down the river, when the British were blockading the St. Lawrence with hundreds of their boats and ships. Owing to the height and steepness of the precipice, the first sentinel posted on the plain was considerably above the hollow or ravine, and therefore the last sentinel to hail the British as they floated down the current. The answers he received not being altogether satisfactory, he called out, "*Pourquoi est ce que vous ne parlez plus haut ?*" (why dont you speak louder?)—The answer he received was, "*Tais toi, nous serons entendus.*" (Hush, we shall be overheard and discovered.) As the British had possession of the opposite side of the river this answer also deceived this sentinel, and Wolf passed and landed his troops on a small footing of sand washed there by the water which sometimes run down the ravine, and then crawled up the precipice by clinging to the angles of rocks, roots, &c.

The great battle took place within about three quarters of a mile of the citadel. Here is a small hollow or basin, into which a portion of the British were driven in confusion, and here Wolf, in restoring order, lost his life, and about the same time Montcalm, on the extreme right of the French line, and nearer the upper city also fell, while gallantly hurling his countrymen on the British invader. In the hollow or basin on the spot where Wolf fell, there is a monument; this consists of a round granite shaft, about 15 feet high, supported by a pedestal about 2 feet high and 4 feet square; the iron railing which formerly protected it is now broken down, and the monument very much defaced; the corners being knocked off no doubt by travellers, and the pieces carried away. It was with considerable difficulty that I knocked off a small piece of this monument, so tattered and broken are the corners. It appeared somewhat strange to me, to find so handsome a monument as this must have been, in such a ruinous and disfigured condition; it too erected to commemorate to succeeding generations the great altar on which was offered the heroic Wolf; the costliest sacrifice that Great Britain had to offer.

This memorable height is used as a common by the city. It is however not enclosed, but just left carelessly lying out, on which stock are running at large. At a distance of about a mile from the citadel, it yet remains a forest; between this and the city I saw a troop of boys engaged in drawing firewood with teams of dogs. From three to four large and beautiful dogs were harnessed in a small wagon made for the purpose; the

number of teams and the noise of the French boys as they passed slowly up the gentle sloping height, was a novelty which was to me for a few minutes interesting. It surprised me to see the quantity of wood three or four of these dogs could draw ; there being three or four times as much as a strong man could possibly pile and haul on a common wheel-barrow.

We now returned to the upper city, and visited the Governor's Garden. Here are buried Wolf and Montcalm, in one grave ; though one the commander-in-chief of the British, and the other of the French armies. Over this grave is erected a splendid marble monument, about 25 feet high.* The pedestal on which it stands is about 10 feet square and 2 feet high, and for 12 feet up the monument is square, having a face of about 6 feet. On the top of this is an obelisk terminating in a point. The north face of the monument contains the inscriptions of Montcalm and the south face those of Wolf ; the heroes lying with their feet to the west instead of the east. This garden contains a choice selection of shrubbery, all well arranged, which were in the state of budding ; and no doubt when in flower they make quite a beautiful appearance. A lofty, strong and handsome iron fence encloses the garden.

CHAPTER XVIII.

Cathedral—Wealth of the Catholic Church—Seminary Chapel—Romanism—Catholic Processions—Remark—Indian Lorette and Nunnery—Grand Battery—Death of Montgomery—Santau Matelot—Historical Sketch—Surrender of the Americans—Anecdotes of the French—Theatres.

The Cathedral is a large, strong stone building, the walls of which present no beauty. The first object that presents itself on entering the cathedral is the altar; it is made of highly wrought and highly polished silver, and covered with a profusion of ornaments of great value. On each side of this altar runs a balustrade, enclosing a space of about six feet wide, of considerable length and about four feet high; the handrail from six to eight inches wide; on the top of this handrail at a distance of about six feet apart, are images of saints, beautifully wrought and about eighteen inches high. As you walk through the building, on either side there are different apartments, all filled from the floor to the ceiling with paintings, statues, vases, huge candlesticks, waiters, and a thousand other articles of great value. I learned from my guide, who was himself a Catholic, that this was the every day display of articles of least value; the more costly being stored away in chests and closets. It would be the wildest and most random conjecture to attempt an estimate of the amount of precious metals thus withdrawn by the Catholic Church from the useful purposes of the currency of the world, and wasted in what may be called *barbaric ornaments*, as incompatible with good taste as they

are with the humility which was the most striking feature in the character of the founder of our religion ; whose chosen instruments were the low and humble, and who himself regarded as the highest evidence of his divine mission, the fact that to the poor the gospel was preached.

The Seminary Chapel, under the direction of the Catholics, is a large stone structure. On entering, I found it as well as the Cathedral, to be filled with paintings, statues, vases, candlesticks, &c. This institution has a number of pupils. We entered during the intermission, about 1 o'clock ; in about an hour the pupils commenced entering the Chapel at intervals of about half a minute between the entering of each ; and the moment they arrived within the door they bowed to the cross and kneeled, and for a moment seemed to be engaged in prayer. The cross was situated at the west end of the Chapel ; on it was nailed a large gilt statue representing Christ upon the cross.

The native population of Lower Canada being Roman Catholic, therefore in Quebec the frequent ringing of bells every day is peculiar. The number of priests and monks in the city is astonishing. They are known by their dress, and you will meet one or two of them in every street in Quebec, go what course you will. Such a numerous priesthood of the kind, must hold a strong, and in some respects an unfavorable influence over the people. Where Romanism holds the ascendancy, I believe general education is never promoted. This misfortune is very generally seen in Canada, for the common class have very little or no education

whatever. Like all Catholic regions, religious holidays and processions are numerous in Quebec; some of which are attended by the greater part of the clergy of the province, with the distinctive banners of their order, and their own peculiar dress. The train may be seen leaving the Cathedral a little before sunset; the priests and friars walking in file on each side of the street, with huge lighted wax tapers in their hands, and chanting as they follow the statues which are carried before them at equal distances in the procession. The statues or images are generally of a large size, and represent the various sufferings of the Saviour, until he is laid in the sepulchre; which is a splendid canopy, tasselled with gold, having a figure large as life stretched beneath them; the rear is generally brought up by persons covered in white or black garments, with eye-holes to see through, dragging at their feet chains of different lengths and dimensions. This is a penance which these poor victims of credulity inflict upon themselves for the commission of some offence, or the fulfilment of a vow they had made in the time of affliction. It is not unfrequent to see the ankles of some of these persons very much lacerated and bleeding by the weight of the chains they drag behind them. After traversing several streets, the procession returns to the church from whence it came out.

Some persons may call all this perfect mummery; but I trust that I am neither so bigoted nor prejudiced as to believe that there is any Christian Church, whatever may be its forms of faith or worship, which does not number amongst its members men as good and vir-

tuous, as those whose religious opinions conform to my own. I quarrel with no man for his religious opinions, but I have a right to discuss them, and to describe the rites and ceremonies as they are displayed to the gaze of all. No one I presume can doubt the sincerity of the professors of a religion, so many heroic martyrs of which have perished at the stake, and which for so long a time was the only Christian church, and even now can boast of a larger number than all other Christian sects united. I believe that they are at least as sincere in the great cardinal principles of their faith as the protestants are, that is, the great body of the church. This much however cannot be said of the priests.

The next objects worthy of the stranger's notice are the Indian Lorette and Nunnery. The latter contains a number of nuns. It appears truly astonishing that intelligent persons should thus seclude themselves from their friends, society and the world, to linger out their days in such a manner. Many of these women have the appearance of being once handsomé, gay and intelligent. The building they occupy is about 150 feet long and 30 feet wide, constructed of a species of grey stone, two stories high, with very small windows.

I now made my way to the Grand Battery, in the lower city; which fortification forms a portion of the defence of the lower city; which battery, with many of its auxiliaries, can be if necessary, aided by the north batteries of the citadel, by ranging over the upper and lower cities. Near this place are the redoubts assaulted by Gens. Montgomery and Arnold during the revolution. *The one assaulted by Montgomery was near*

the St. Lawrence, where on the 31st of December, 1775, after rounding the promontory or Cape Diamond, they stumbled upon huge masses of ice thrown up by the river, which his soldiers had to remove amidst a terrible storm of snow, before he could advance upon the redoubt ; when with his sword waving over his head he rushed forward, shouting his heroes to the charge, and rushing up to the very mouths of the cannon, when they opened in their very faces ; and when the smoke lifted, there lay the lifeless form of the noble Montgomery almost under the wheels of the artillery. The column no longer having a gallant leader at its head, broke and fled. The distinguished aid Capt. M'Pherson, with Capt. Cheeseman, in attempting to bear off their lifeless General, lost their lives, after which young Burr, afterwards Vice President of the United States, lifted the body on his shoulders and endeavored to bear it off ; but was compelled to abandon it to the enemy. The storm still raged in all its fury, and all along the way where the column had passed, were strewn corpses ; many of them now became mere hillocks of snow ; the rapidly falling flakes had blotted out the stain of blood, and already wrapped a shroud around the brave dead.

Farther west was situated the place called Santau Matelot, which Gen. Arnold attempted to storm. Up to this he moved with an intrepid step, cheering on his men, when a musket-ball struck his leg, shattering the bone ; he fell forward in the snow ; then by a strong effort rose again, and endeavored still to press on ; and it is said it was with the utmost difficulty he could be

persuaded to be carried to the rear. The command then devolved on Morgan, who fell with such terrible fury on the battery, that the British fled, leaving it in his possession. Daylight had not yet dawned, nothing had been heard from Montgomery; and the snow kept falling in an overwhelming shower and blowing furiously in the soldiers faces; close by was a second barrier, protected by a battery, which opened upon him the moment they turned the angle of the street. This galling fire cut them down like grass; they fled into the houses for shelter, leaving the intrepid Morgan in the street shouting to them to return; but all his words and personal daring could not revive their courage; and his brave heart sunk within him, when compelled to order a retreat to be sounded. But his troops, now thoroughly disheartened, would not venture out again into the deadly fire, even to retreat; and Morgan soon found himself surrounded by the enemy and compelled to surrender.

After viewing from Santau Matelot the surrounding scenery, including the citadel and fortifications crowning the precipitous heights which overhang the St. Lawrence, we repaired to the harbour, where the broad and deep river was enlivened by a variety of shipping. While engaged in examining some of the splendid steamers, we were told some very amusing anecdotes by the British, of the superstitious horror of the old Canadians at the new inventions and innovations of the anglo-Americans; that they beheld the first steamers with such extreme jealousy as to have exclaimed, when they saw them ascend the St. Lawrence, "*Mais croyez vous que*

le bon Dieu perm'ittra tout cela." The traveller during his tour through Lower Canada, may frequently hear anecdotes told on the French Canadians by the British settlers, which are sometimes accompanied with such bitter sarcasm, as to draw the mind of the stranger to the old story of the American, who said that if the United States ever got possession of Canada, they would soon improve the French off the face of the earth. The late Lord Sydenham has been viewed by the French party with great jealousy, in this respect; they speak as if they really believed him capable of conceiving and executing such a project. This is a delusion which is no doubt strengthened by the British settlers, who praise his zeal, habits of business, and devotedness to the interests of Canada; and so ultra are some of his admirers, that one of them, who being so deeply imbued with the spirit of his policy, as to declare in the presence of the French party, "we shall never make anything of Canada until we anglocize and protestantize it:" at which declaration, the lips of the French Catholics could be seen quivering with rage, and an old grey-headed France seigneur immediately rejoined with bitterness, "had you not better finish Ireland first?"

The Theatres of Quebec, though on rather a small scale, attract attention. The buildings are in no wise distinguished for the beauty of their agriculture; they are however filled nightly to overflowing. Plays and performances are generally in the French language, though much inferior to those of Montreal. The French theatre is considerably patronized by the English authorities of the city, and is of course the favorite of all

those of any pretensions to elegance or fashion. The French theatre offers considerable inducements to its patrons, although its performers are by no means the most finished members of the *corps dramatique* of France. After visiting the principal objects of interest on the far-famed rock of Quebec, we made arrangements for an excursion to the country, whose sparkling waters and blue forests had somewhat an inviting appearance from the heights, though not presenting the grandeur they would in winter, when the evergreen and ever-silent woodland is clothed with white drapery, and the fine boughs tipped with icicles which image forth the realms of the great frost-king, presenting in the sunlight, fairy shadows dancing across the chrystal surface, which is not diminished, even by night in grandeur, as it is equally imposing to view the innumerable stars trembling in the cold clear firmament, and the moonlight sparkling upon the crusted snow and white drapery of the forest.

CHAPTER XIX.

Excursion to the country—French Peasants—Lakes—Products of the country—Falls of Montmorency—Factories—Sublime scenery—Beauport—St. Michael—Return to Quebec—Indications of Winter—Departure of the fleet—Canadian winter—Streets of Quebec—Dress in winter—Figh chisgas in Quebec—Departure—Chaudier Falls—Historical Sketch—Wild and sublime character of the Falls—Arrival at Three Rivers—Falls of Maskinonge—Jacques Cartier River—Return to Montreal—Politeness of the French—Theatre—Departure—Distant view of Montreal—Beauties of the St. Lawrence—La Prairie—Barracks—Aspect of the country—St. John—Historical sketch—Swallows—Steamer Burlington.

I now left the city of Quebec for the country, which I found cold, but fertile and well watered. The mass of the population are however^a settled in the valley of the St. Lawrence. The principal public roads through the country are generally M'Adamised, which in many places were heaving up, caused by the action of the frost. The population are chiefly of French origin; speak the French language; are a contented, gay, harmless people, easy and courteous in their manners, but very ignorant, few of them being able to read and write, as education is much neglected. The native French Canadians are called *habitans*; they are strongly attached to their religion, which is Catholic; they are also strongly attached to the land of their birth; though cold, rugged and desperate as are the regions of Canada, they contend there is no such a place on earth; a part of this delusion is of course to be attributed to their ignorance. Yet dreary, gloomy and disheartening as sounds the name of Lower Canada to the^b people of Vir-

ginia, it possesses at least some beauties, after the great mantle of snow and ice, which envelopes her for six months in the year have passed away. These beauties consist chiefly in her waters, such as lake Calvaire, lake St. Charles and lake Beauport, with many beautiful small streams and rivers with handsome cascades and water-falls. These lakes are celebrated for fine trout, and some of the rivers for excellent salmon.

The country is very highly cultivated, chiefly in small farms, which produce some wheat, but the principal products are corn and such other grains common to the northern parts of the United States. Grain however, is not produced in sufficient quantities for exportation. The chief exports are timber, furs, pot and pearl ashes. Below the river Montmorency there are very few settlements, except small fishing villages along the St. Lawrence; as the province becomes still more rugged, cold and sterile, which is said rapidly to increase in a north and northeastern direction, and of course becomes unfit for the abode of man.

On my way back to Quebec, I visited the Falls of Montmorency. This is situated near the mouth of the river of the same name, and 9 miles below Quebec.—The water is of a blackish color, being about the color of common ley. It rises in a swampy section of country; its source being a great pond, at a very considerable distance north of the St. Lawrence, and in its course to the falls it is joined by numerous streams, which increase it to a considerable river, which at the falls shoots in a sheet over a vast precipice 244 feet high. At about 30 yards above the verge of the pre-

cipice, the water is forced into a narrow channel of not more than 100 feet wide, immediately below which it falls about 5 feet perpendicular, and is parted by a large rock, below which it again unites, and immediately falls over an awful precipice of 240 feet perpendicular. The right bank of the river is exposed to the north, and owing to its great height, the sun never reaches the base of the precipice; therefore the base was covered with ice for 6 or 8 feet in height, caused by the freezing of the mist which fell against the bank as it arose from the falls, although in the month of June. The banks on each side are smooth and precipitous, their summits are crowned with trees. From the little fall of 5 feet, there is hewn out of the side of the awful precipice on the left bank of the river, a channel to convey water for the purpose of propelling some mills and other factories, belonging to a Mr. Patterson, which are situated at about 300 yards distance, which are perched high up on an awful verge on the bank of the St. Lawrence.

The falls of Niagara, are celebrated throughout the civilized world as one of the grandest and most sublime spectacles to be found in the universe. Among falls of a secondary character, the falls of Montmorency deserve notice; and although the scenery around them is by no means as impressive as Niagara, yet the true lover of nature—he who looks with the eye of an enthusiast upon the sublime and beautiful, as it came from the hand of the creator, can spend many an hour of pleasure and delight, in watching the Montmorency as it comes rushing and thundering down the high pre-

cipice, sending forth its rainbows of light spray, in token of joy that the rough way is passed over, and that its waters may now mingle with the mighty billows of the majestic St. Lawrence, and roll on in more peace and quiet, in awful grandeur, to mingle with the foaming surges of the ocean.

The village of Beauport is about a quarter of a mile distant from the St. Lawrence, and about 3 miles below Quebec. Near it a small streamlet flows in a narrow ravine about 110 feet deep, partly excavated in the drift, which had filled up a more ancient hollow in the silurian strata. By examining the cliff immediately below the house of a Mr. Ryland, and again a few hundred yards to the west, where lower beds were laid open by the river, and then ascending to the higher grounds northwards and towards a place called St. Michael, I obtained several pebbles and shells which my curiosity induced me to save.

After my return to Quebec, I received from my kind host Mr. Russell, of the Albion Hotel, much information concerning Canada, among other things the following: The indications of the approaching winter, is observed by the delicate and vaporious hues of the long twilights of July; are followed in October by dark nights and gloomy days; the leaves have all withered, the air is sharp, the sky looks grey and dull; the north-west winds begin their wailing accents; the St. Lawrence joins in with mournful murmurs, and all nature sighs with seeming sadness, over the early grave of summer; clouds of dust sweep through the streets, and penetrate the crevices of every door and window; cold

and asthmas prevail ; strangers prepare to leave ; house-keepers are engaged in putting in double window sashes, and lining the door with felt ; and every one who is able makes every preparation for the approaching winter.

To a southern stranger, it is impossible to conceive of a more disagreeable climate. Frost begins about the 15th of September, and lasts until the 10th or 15th of May. About the first of October, the fierce north wind begins, accompanied with whirling flurries of snow, which rolls on the waves of the St. Lawrence and dashes them with great force against the banks. It is at this dreary season, that the last steamer takes its departure for another land. The last boat ! How many anxious feelings are excited in the bosom of the resident, at this announcement ! How many assemble on the pier that day, to gaze upon the envied few, who are to escape before the great portals of the St. Lawrence are locked with ice, and when the last adieu is waved, and the lingering crowd disperse, how do the thoughts of all revert to other scenes ! To those who live in Canada who have lived elsewhere, there appears something exceedingly sad in the aspect of the Canadian autumn, which however cannot be discovered in native-born citizens.

About the first of November, the cold increases in severity ; the water is congealed to the consistency of jelly, and the snow freezes as it falls. Still the mercury descends, and toward the latter part of the month the St. Lawrence is covered with solid ice. The French Canadian rejoices when the snow is deep and hard

and as soon as the police will permit him to venture upon the ice-bound river, he launches forth upon his sleigh, and drives at full speed along the paths which are marked out; boats rigged with sails, and propelled by the wind, glide swiftly up and down on the ice, and when not too cold, a few skaters appear and practice the sport of the winter. When these melancholy days have come, the Canadian breakfasts at about seven o'clock; then piercing with his eye the double glasses of his windows and the drowsy obscurity of day, he discovers snow enough to last for months. After the sun is fairly up, he wraps about him, the Englishman his cloak, and the Frenchman his pelisse lined with fur; out he goes into the clear, cracking cold of a Canadian winter morning; he finds the pavements nicely swept, and may walk them in safety, as the sidewalks in all the principal streets are cleared of snow and ice, and the snow in the streets kept beat down or in part removed, so as to be passable for sleighs.

As the season advances, some bright days bring out into the streets, crowds of the population. The peasantry of the surrounding country flock to the city with their sleighs and horses, and the animation and variety of the multitude, who ride or walk upon the streets as well as on the ice of the St. Lawrence, surpasses any thing of the kind to be seen on the continent. All this multitude are wrapped in fur from the most common to the most costly kind; some of whom occupy the sidewalks; while the carriage-way is completely filled with sleighs, from the dashing turn-out of the English authorities, to the humble sleigh of the French peasant. They

all drive with great rapidity, and yet an accident seldom occurs.

I now prepared to leave Quebec, and my kind host Mr. Russell, whom I found to be a man of wealth, and among his possessions are two of the largest and most popular hotels in the city. He is a host who uses every exertion to accommodate a guest, in a neat but plain manner; and I found him in every way an accommodating man, and on leaving him, he accommodated me with a charge of one dollar per meal, during my stay with him. I repaired to the wharf and took passage on board the steamer Lord Sydenham, the same boat which first landed me, and left the memorable city of Quebec, which I long had a curiosity of seeing, and sailed up the St. Lawrence to the mouth of the Chaudiere river, from which I travelled a short distance up that river to the Chaudiere Falls, which are a delightful curiosity. The fall is of considerable height, and above which are long rapids. It was this fall that came very near destroying Gen. Arnold and his army, in his expedition against Quebec. In his great eagerness to reach Quebec, he sailed down this river with his little boats and canoes without a guide, or even any knowledge of the river; but hurried on till one day about noon he suddenly found himself amid rapids; the boats were caught by the waves, and whirled onward until three were dashed against the rocks and sunk with all they contained. This calamity was their salvation; for while they were drying their clothes on shore, a man who had gone ahead, suddenly cried out "a fall." A cataract was foaming just below them, sending its

oar through the forest. But for the upsetting of the boats, the entire party would have gone on till they came within the suction of the descending waters, when nothing could have saved them from utter destruction.

The falls of Chaudiere possess some attraction, though not to be compared to the falls of Montmorency. Yet a stranger may spend several hours in examining this place, very satisfactorily, especially if he be fond of rugged and rocky scenery. While at this place I learned that this famous river contained no less than seventeen falls between this and lake Megantic, which is the source of the river, situated near the boundary line between Lower Canada and the State of Maine. All of these falls are said to be considerably smaller than the one above named. I now returned to the St. Lawrence, and on my way up the river stopped at Three Rivers.

While at the city of Three Rivers, I made an excursion to the Falls of Maskinonge, located a few miles northward of the St. Lawrence. There is here a considerable cascade and fall; it is situated in a fine region and upon the whole a very beautiful waterfall. The river here forces its way through a narrow cliff of rocks. The day was warm and pleasant, the only warm and pleasant day I experienced during my stay in Canada. In the woods near the falls, in approaching it, we were attracted, and became enveloped in the most terrible cloud of musquitos, I ever had the misfortune of getting into in my life. We of course at first made a defence, and fought desperately for a few moments, but seeing that we would be overwhelmed by numbers, we were

compelled to hew our way through their ranks, and escape by flight. While engaged in this desperate encounter, I almost came to the conclusion the place was more celebrated for mosquitos than any thing else.— This was the only occasion on which I was annoyed by these enemies, owing to the coolness of the season. This river and the Jacques Cartier river are celebrated for excellent salmon fishing.

We were again soon found at the St. Lawrence, and sailing on board the steamer Canada, for Montreal, where I was delighted to again meet my kind host Mr. Hall, of the Ottawa Hotel. During my stay, among other things I was much delighted with the politeness of many of the French gentlemen and ladies; with their gay and lively chat with each other; little of whose conversation however I understood, as it was always in the French language. Those of the parties on leaving the group, never failed to add the words, "*Quand viendrez vous me voir ?*" (when are you coming to see me) to which some of the group would make suitable answers; on which the parties made a graceful bow to each other; and if the group consisted of gentlemen, the word *Messieurs* is added, if ladies, the word *Madam*, if married; if single, "*Mesdemoiselle, je vous souhaite, le bon jour, adieu.*"

The meeting of French gentlemen is no less to be admired than their parting. After a cordial shake of the hand, among the first words spoken are, "*Tumez-vous, voulez-vous un cigar ?*" "*Avec plaisir ; merci.*" (smoke you; will you have a segar? with pleasure, thanks.) Smoking appears to be a characteristic of the French

Canadian. They are here much more intelligent than they are in the lower part of the province; though their education is here neglected as well as it is there. A part of their intelligence may be attributed to their being of the higher classes, and Montreal being the great metropolis of British America, where of course they have more opportunities of receiving information. In the theatre of Montreal I had opportunities of seeing, in the actors of the theatre, how susceptible the French are of high attainments.

I now left the city of Montreal, and crossed the St. Lawrence obliquely on my way southward to the city of La Prairie, a distance of 9 miles. On looking back over the river to Montreal, the whole city seemed in a blaze of light, owing to the fashion here of covering the houses with tin, which reflected the rays of the setting sun, so that every roof seemed a mirror. Behind the city rose its steep and shapely mountain; in front were wooded islands, and the clear waters of the majestic St. Lawrence, sweeping along with a broad and rapid current; while beyond the glittering waves could be seen the dazzling roof of the mighty Cathedral, with her towers piercing as it were the clouds.

La Prairie is beautifully situated on the south side of the St. Lawrence, 9 miles from Montreal; is the great thoroughfare of the trade between Montreal and the United States, and is connected with St. John, on the Sorelle river by railroad. At the barracks in La Prairie, a regiment of hussars were exercising; a scene which we had but a few minutes time to witness, before the cars started for St. John, a distance of 17 miles.

in which distance we passed many splendid farms highly cultivated, all of which were still within the Montreal district. The land I did not consider as good as some on the north shore of the St. Lawrence, it being low and of a cold nature, yet its high state of cultivation remedied this evil no doubt to a considerable extent.

St. John, with a population of upwards of 11,000, is advantageously situated on the river Sorelle; the city is well built and carries on considerable trade. St. John is celebrated as being the place to which Arnold made a masterly retreat, after the disaster of the Americans before Quebec, in which a portion of the army were captured. Here he hastily embarked his men, while the British army were close at his heels; he stood and saw the last boat but his own leave the shore, then springing to his saddle, he galloped back towards the British army, till he came in sight of the pursuing column pressing rapidly forward being close upon him; for a moment he coolly surveyed his foes, then put spurs to his horse and came back in a headlong gallop. Reining up his steed by the shore, he sprang to the ground, and stripped off the saddle and bridle, shot the noble animal dead in his tracks, to prevent his falling into the hands of the enemy, heaved his own boat from the beach, and leaping into it, shot out into the river out of the reach of his enemies. All this when scarcely recovered from the wound received before Quebec.

While at St. John, my attention among other things was drawn to a great troop of swallows, where I counted under the eaves of the stable of our hotel, more than forty nests, of the red-breasted swallow: the nests be-

ing crowded with young birds peeping out of each, while the air was filled with the old ones flying about and feeding them. The landlord told me that they had built there for twenty years, but missed the two years when the cholera raged; for at that time there was a scarcity of insects. Our host also mentioned that in making an excavation near Plattsburg, about 1,000 of these birds were found hybernating in the sand; a tale of the truth of which I do not vouch; together with several other swallow stories which he related.

On board the steamer Burlington, I sailed up the Sorelle, on both shores of which could be seen excellent land, and on the right the town of Dorchester; soon after passing which we arrived at the boundary line between Canada and the United States, and entered lake Champlain.

CHAPTER XX.

STATE OF NEW YORK.

Lake Champlain—Fortifications—Boundary line—Customhouse Officer—Mount Marcy—Mount Mansfield—Majestic scenery—Canadian soldier—M'Donough's capture of the British fleet—Plattsburg—Port Kent—Boulder Formation—Chasm—Water Falls—White Hall—Railroads.

The first object which attracts the attention of the stranger after entering the northern extremity of Lake Champlain, on the western or New York side, are the American fortifications, situated on Houson's Point, near the boundary line. On the Vermont side of the

lake, the boundary line is marked out by an open way cut through the forest. The next object which arrested our attention, was a Custom-house officer on board the steamer Burlington, who kindly invited us to deliver up our trunks for his inspection, which of course we done without any hesitancy, as 'uncle Sam' demanded it. I was delighted to find that this agent was a perfect gentleman; this however I found also to be the case with Queen Victoria's Custom-house agent, after I passed the boundary line of the United States, and was found in her dominions.

The scenery of lake Champlain is deservedly much admired. On the western shore I could see the principal range of mountains in the State of New York, among which are Mount Marcy the highest, attaining an elevation of upwards of 5,400 feet. It was still capped with snow, although the 6th of June. To the eastward were the Green Mountains, Camel's Hump, and the still loftier Mount Mansfield, being very conspicuous, the whole presenting a scene of the grandest and sublimest character.

While sailing up this beautiful lake, which is 120 miles long, enclosed by the grandest mountain scenery on every hand, which appeared to be the chief theme of conversation with the passengers, while a group of some half dozen of us, among which was an intelligent and genteel Canadian, were busily engaged in conversation on the lake and its beauties, the steamer turned a point of land on the right, and rapidly approached the city of Plattsburg; and when on that part of the lake where Commodore M'Donough defeated and cap-

ured the British fleet, during the late war, the Canadian changed the conversation by saying, "right here 14 years ago, we all got the terriblest thrashing, that ever a set of men got in this world;" to which some of the group remarked, "we made the lint fly did we?" He answered, "now if you did not, I would not say so; be assured gentlemen, those of us who escaped were compelled to hussel back, around that point of land, a good deal faster than we came, and be assured you never catch this child in such a scrape again in a hurry; I will know better how to do next time." The captain of the boat remarked to him, "I suppose you will come on our side next time, will you?" to which he answered with a smile, "you are a little too hard for me now; but I will acknowledge that I was once caught in folly."

Clinton county.—While we were thus enjoying ourselves with the Canadian, the steamer placed herself beside the pier of the city of Plattsburg, which contains a population of 6,416, it is beautifully situated at the junction of the Saranac river with lake Champlain; it is well situated and commands a considerable portion of the commerce of the lake. This place is celebrated for the great battle and victory of the Americans under Gen. Macomb, over the British army, under Sir George Prevost; and also for the capture of the British fleet by Commodore M'Donough, a short distance below the town, on the lake, during the late war with Great Britain.

Our steamer next touched at Port Kent, a very beautiful town, situated at the junction of the Ausable river

thick ; and thirdly sand, 20 feet thick. From I went to Keesville, a little town of about 900 inhabitants, to examine a deep cleft in the sandstone which the Ausable river flows for two miles. This chasm is only from 40 to 50 feet in width, perpendicular walls are 100 feet high. A wooden staircase has been constructed here so as to reach the bottom ; and the stranger marvels as he descends, the numerous horizontal strata of micaceous sandstone. In many places this most fossiliferous rock of New York, known as the Onondaga sandstone, is divided into laminae, by thin layers of innumerable shells, which are in such proportion to form black seams like mica, for which they are easily mistaken. Above this chasm were several beautiful waterfalls, where the ripple-like ridges of the sandstone exhibit their usual parallelism, and many

gress from Saratoga Springs to this place, which will open a communication from the city of New York, by the way of Troy and White Hall, through lake Champlain to St. John and Montreal, in Canada, which will shorten the route of travel to the latter place very considerably for the southern traveller.

Thus far lake Champlain forms the boundary between New York and Vermont; the middle of the lake being the line; its waters are beautiful and its scenery delightful; at least all that could be seen by daylight. A portion of the lake I passed over after night, and of course could not see all its scenery. At White Hall commences the Champlain Canal, which connects lake Champlain with the river Hudson at the city of Troy, being 76 miles in length.

C H A P T E R X X I .

Fort Anne—Sandy Hill—Champlain Canal—Uprooting stumps by an engine—Glen's Falls—Bridge—Caverns—Manufactures—Marble quarries—Village of Glen's Falls—Fort Edward—Saratoga Springs—Village of Saratoga—Streets—Shade trees—Groves—Hotels—Mineral Waters—Great popularity of the water—Analysis of the Congress Spring—Appearance of the waters—High Rock Spring—Academy—Churches—Dwellings—Bowling Alleys—Circular Railway—Cemetery—Monument—Saratoga Lake.

Fort Anne, with a population of 3,559, is situated about half way between White Hall and the village of Sandy Hill. The fortifications at this place are celebrated for their importance. The village of Sandy Hill,

is situated near where the Hudson river turns at angles to the south ; it is truly a splendid village located on high and commanding ground, and possesses some objects of attraction. The surrounding country is delightful, being clothed with heavy crops of grain and grass ; the streets of the village are crossing each other at right angles, adorned with beautiful shade trees. There are here several very fine and elegant churches ; the other buildings are of considerable elegance. Just in the rear of the village passes the Champlain canal, which connects the Hudson at White Hall, with the Hudson, as noticed in the preceding chapter, by which the village profits very considerably.

Warren county.—In passing through this county as well as the above named county, I saw many very light farms, many of them new ones ; but not a single tree could be seen standing in the fields, they being drawn out by means of an engine made for the purpose ; which is moved from place to place, being attached to a carriage with two wheels about four feet high, the engine being placed under the carriage. The engine is fastened to the carriage with chains, and the whole constructed with strength and on such a principle, as to be capable of drawing out the most powerful stump in the field. The chains are afterwards used for fencing, being laid side by side which is said to make an excellent fence.

Glen's Falls are situated on the Hudson five miles north of the city of New York. The Falls consist of two falls and a short rapid between the

The upper fall the water descends by a perpendicular fall, of about 18 feet, and falls about 12 feet in the short rapid, in which distance the channel is wedged into a narrow chasm, where the water roars and plunges against the walls which confine it so terribly that it presents a grand spectacle to behold. Immediately below this chasm, is the other fall, about 9 feet high. Over this short and narrow chasm, is constructed a handsome and substantial bridge, being supported by two great pillars, let into a large and powerful rock which forms one side of the narrow chasm, and extends over the remaining breadth of the river; which rock is about 10 feet high, and during a freshet, when the narrow chasm cannot contain the water, it overflows the entire rock chasm and all. Immediately below the rock, and to one side of the lower fall, there is a long rock adjoining it, which runs down the river about 100 yards, which has several small caverns or arches in it, through which a person may walk, by entering it from a ravine running parallel with the west bank and rock; after passing through, you are stopped at the east side, by the rolling waves from the falls, which pass about 18 inches beneath your feet.

The falls afford a vast water power, which is used for manufacturing purposes; there being a large number of factories of different kinds on both sides of the river; among them are some extensive factories for sawing and dressing marble; there being very extensive marble quarries about half a mile below the place, on each bank of the river; which marble can be seen to extend down the precipice from 80 to 90 feet. The

village at this place, is situated on high and commanding ground, its streets beautifully adorned with shade trees; the buildings are chiefly brick, and present considerable elegance, there are also 6 very beautiful churches. There is a short canal constructed from this place to intersect the Champlain canal, which affords an excellent facility for conveying away their vast quantities of lumber and marble.

Fort Edward, with a population of 1726, is situated on the Hudson river. These fortifications have ever been celebrated as of the highest importance, during all the American wars. These great fortifications were noted during the old French war, as being under the command of the cowardly, selfish and miserable Gen. Webb, who turned a deaf ear to the distress of Fort William Henry, about 12 miles distant, which after its commander Col. Munroe had done all that a brave man could do, fell, and its heroic garrison were all massacred. At this important post stood the heroic Schuyler, when the fugitives from Ticonderoga under Gen. St. Clair, emerged from the forest like frightened sheep, from before the victorious Burgoyne, who came thundering from Lake George down the Hudson, crushing everything in his passage, during our revolutionary struggle. In the meantime, and in the immediate vicinity of these fortifications, occurred the murder of the accomplished and beautiful Miss Jane McRea, whose treatment and death will ever stand, as a monument of the most savage cruelty.

Saratoga county.—I now made my way for Saratoga Springs, where I arrived on my route south from

da. These Springs are situated on the west side of the noble Hudson, and within 4 miles of the beautiful lake of Saratoga. They are celebrated as one of the greatest watering places in the world. There is a town with a population of 3384; the buildings in the town are large and well finished, either of brick or stone; the latter being painted white, which makes a very elegant appearance; being situated on a high commanding plain, and is in every sense one of the loveliest villages in the State of New York; the streets are broad crossing each other at right angles; the principal ones extending in a straight line far out into the country. The streets are all beautifully ornamented with shade trees; among which may be found the Beach, Sugarmaple, White pine, Spruce pine, Cypress, Balsam, &c., which together with 4 large Groves within half a mile of the town, perfume the air very agreeably. Two or three of these groves are furnished with seats for the accommodation of vis-

itors. The streets have side-walks about 12 feet wide, which are beautifully curbed and paved with patent bricks. There are hydrants at almost every corner of the streets, which supply the town with fresh water, for the various uses of the inhabitants; these side-walks are adorned on one side with hydrants, white posts and beautiful shade trees; while the other is no less ornamented by numerous marble and granite steps at the doors of the wells, surmounted by a splendid iron banister railing, painted green or black; together with the various flowering boxes, bird cages, &c., renders these

walks more delightful than those of other cities or towns.

The town contains 19 very large and elegant hotels, all of which are well conducted; the four largest which are the United States Hotel, containing 46 rooms; Congress Hall, Union Hall, and Columbia Hotel; which four hotels alone are capable of accommodating 4900 persons in a very comfortable manner. The whole number of hotels combined are capable of accommodating a large number of visitors; in addition to which almost every house is a Boarding-house, the first class; so that those vast crowds which collect together here from far and wide, find little difficulty in procuring good accommodations.

The principal mineral Springs at this place are ten in number, and known by the names of Congress, Washington, Columbia, Hamilton, Putnam, Pavilion, Flat Rock, High Rock, Iodine and Empire. Eight of the springs are fitted up in a very handsome style, with curbs or tubes inserted in the earth to the depth of from 30 to 40 feet, well secured against the admission of fresh water. These Springs are protected by a roof supported by large pillars which are whitened as well as the ceiling over-head. The floors are two feet lower than the top of the curb. Near each of these springs are very large buildings used for bottling water.

The most popular of these mineral waters is the Congress Spring, which is visited by thousands and the sands daily during the months of July and August. This spring alone has been an independent fortune to the late Dr. Clark & Co., as vast quantities of the water is sold in bottles to citizens of our country who li

at too remote a distance to attend the springs ; in addition to which vast quantities are exported to foreign countries. The waters of this noted spring are famed by the known world for their medical qualities. The following is the analysis of the Congress Spring water, at the spring by the celebrated Dr. Allen :

Chloride of Sodium	-	-	-	390,246
Hydriodate of Soda, and B Potassa	-	-	-	6,000
Carbonate of Soda	-	-	-	9,213
Carbonate of Magnesia	-	-	-	100,981
Carbonate of Lime	-	-	-	103,416
Carbonate of Iron	-	-	-	1,000
Sulphate of Soda, a trace,	-	-	-	000
Silex and Alumina	-	-	-	1,036
				<hr/>
Solid contents in a gallon	-	-	-	611 899
Carbonate Acid Gas	-	-	-	383,777
Atmospheric Air	-	-	-	2,361
				<hr/>
Gaseous contents in a gallon	-	-	-	386,138

The other Mineral Springs contain some of the same ingredients which the Congress Spring does, yet not in the same proportion ; some contain more Iron ; some more Lime ; while several have considerable Iodine & other mineral ingredients ; but none as much Magnesia and Soda. These celebrated waters are very cold, have a sparkling appearance similar to very clear water heated just before the act of boiling. The great quantity of gas in the composition of these waters passes off rapidly.

The water as it rises to the surface appears very much agitated, as water in the act of boiling in a common kettle. As it rolls to the surface, it is attended by a buzzing noise ; the surface is almost enveloped in a mist or spray which rises ; this in a clear day is very

beautiful to behold. A chicken or other fowl being put down into the curb in the midst of this mist for a few minutes, when removed it will be found that life is extinct; and a person on thrusting his head into the top of the curb will feel the effects of the gas instantaneously. These singular waters are so cold that it is with considerable difficulty a person can drink off a common glass without stopping to take breath.

The High Rock Spring consists of a rock 22 feet in circumference and 5 feet high, and of a conical form; in the top of which is an aperture of about nine inches in diameter; its depth is unknown. The water rises to within about eighteen inches of the top of the Rock. The water of this, as well as all the other Springs, appears very much agitated by its terrible rolling and rumbling; its sparkling appearance, and the singular buzzing noise attending it. The aperture whereby the water escapes as it rises, has not as yet been discovered. The whole of this rock appears to be a great curiosity, as its waters rise three and a half feet above the level of the surface of the earth, and again escapes in such a manner that no trace of its channel has yet been discovered. The features of this celebrated Rock have every appearance of being once overflowed by the water, and formed by the ingredients in its composition; which with the action of the sun and air on the same is not in the least improbable.

The town contains the Saratoga Academy, a frame structure, situated in a beautiful white pine grove on the main street about 200 yards from the town, which is a very flourishing institution. There are 5 large and

legant churches, each of which contains a very fine Organ; the Catholic church however has the honor of having the finest. There are also many splendid dwellings in the town and its vicinity, among which is that of Judge Marvin, which is situated on commanding ground overlooking the whole town, and is one of the most splendid dwellings in the State of New York.— This gentleman is the owner of the great United States Hotel, and a vast deal of property in the town and its vicinity, together with a very large portion of the stock in the Saratoga Bank. A large portion of the lands around the town are the property of this same wealthy man; many of the lands are laid out in lots from a fourth, to an acre each, and offered for sale at \$1200 per acre; at which enormous price some are sold. The soil is of an inferior quality, as the whole surrounding country is an elevated sandy plain, and was it not for the celebrated Mineral Waters, the whole plain, handsome as it is, would be comparatively a barren plain.

There are here a number of bathing establishments, where baths may be had at all times of mineral or soft waters, at any temperature. There are also for the amusement of persons, Swings, Stooling Galleries, Bowling Alleys, Race Paths; and in one of the Groves there is a circular Railway of about 400 feet in diameter with two tracks, on each of which is a small car with a seat for two persons. This is propelled on the track by means of a crank which the passenger has himself to turn.

The Cemetery, about a mile from town, contains about 30 acres of ground; the whole of which is taste-

fully laid out, and contains many handsome Tombs and Monuments. The largest is situated on a high and commanding eminence, and is a very splendid monument, erected to the memory of Obed M. Colman, the celebrated musician. It contains handsome and appropriate inscriptions and emblems. This beautiful monument was erected at a cost of \$16,000. At the distance of 4 miles is the beautiful little Lake of Saratoga, which is 20 miles long, on which are several handsome little steamers, on board of which a delightful pleasure ride may be had up and down the Lake.

CHAPTER XXII.

Bemis's Heights—Historical Sketch—Last Battle of Arnold in the Cause of American Freedom—Anecdote of Gen. Gates—Conway Cabel—Stillwater—Lake George—Alexandria—Ticonderoga—Crown Point.

The next objects of attraction in the vicinity of Saratoga, are the ever memorable Heights known by the name of Bemis's Heights, celebrated for the two great battles and capture of the British army under Burgoyne, during the Revolution. On this celebrated battle-field, the American camp was pitched on the Hudson, and extended back about half a mile from the shore. Almost directly in front were two creeks running nearly parallel to each other, along which the American pickets were stationed; these presented serious obstacles to the advance of Burgoyne, while towards the sources of these two creeks, or farther up the Heights toward the

left of the American line, the approach was easier. It was on this account Burgoyne resolved to make his attack in that direction. Accordingly on the memorable 7th of October, moving his troops in three columns he advanced to the American left.

While I was viewing leisurely, these far-famed Heights, my mind was drawn back to many of the daring deeds of the impetuous Arnold, more particularly as this was the last bloody field upon which he struggled so nobly for American Liberty. It was here the hero received a shattered leg in the the very sally port of the British camp, where rider and horse sunk together to the earth ; it was here on the 7th of October, 1777, that Arnold, when hearing the heavy explosions of artillery making the earth tremble beneath him, that he mounted that beautiful dark Spanish steed name Warren, (after the hero of Bunker Hill,) and launched like a thunder-bolt away to the scene of strife, and where the shot fell thickest, there that black steed was seen plunging through the smoke, and where death reaped down the brave fastest, there his thrilling shout was heard ringing over the din and tumult. And no sooner than did the British line begin to shake and falter, before Arnold discovered the gallant Frazier, mounted on a gray horse, moving amid the chaos, bringing order out of confusion, and courage out of despondency, wherever he passed. No sooner had he made this discovery, than he applied a remedy, by ordering General Morgan to mark that gallant officer as a host. But few moments elapsed before the gallant Frazier was cut down, and with him fell the right arm of their strength. The impetuous

Arnold had no sooner given Morgan this order, than he put himself at the head of three regiments of Larned's brigade, and with a shout, those who heard it never forgot to their latest day, and with which he stormed the batteries, cleared every obstacle, and forced the British line back into their camp. But scarcely had they entered it, before the heroic Arnold was heard making the most enthusiastic appeals to his troops. "You," said he to one, "was with me at Quebec," "you in the wilderness," "and you on Champlain; Follow me." His sword was seen glancing like a beam of light along their serried ranks, the next moment he and his heroes like a whelming flood were bursting over the enemies' entrenchments, and hand to hand with arguments of bloody steel, were pleading the cause of ages yet unborn. The British we are told, fought with a fury of men struggling for life. Hoarse as a mastiff, of true British breed, Lord Balcarras was heard from rank to rank, loud animating his troops, while on the other hand, fierce as the hungry tiger of Bengal, the impetuous Arnold was hurling his heroes on the stubborn foe, bearing on Columbia's lovely stripes, till horse and rider sunk together to the earth, the good steed dead and the heroic Arnold beneath him with his leg shattered to pieces.

This ended the fight, and the wounded hero was borne pale and bleeding from the field of his fame, only to awaken to chagrin and disappointment. There is little doubt that when he galloped to the field, he had made up his mind to bury his sorrows, persecutions and disappointments in a bloody grave. Would that he had

succeeded, for until then his face had shone like the star of the morning, and he had dazzled the world with the glare of his noble exploits. But alas for Arnold! when wronged and disappointed, he fell like Lucifer from a heaven of glory, into an abyss of never-ending infamy, where his name will ever receive the curses of his countrymen, and the scorn of the world.

We were informed by the people of those regions, to whom it was handed down by their fathers, who were heroes in the conflict, that the heroic Arnold inflicted this last and desperate blow on the British, while Gen. Gates, the commander-in-chief of the American army, was in his tent in the camp, discussing with Sir Francis Clark, the merits of the Revolution. This gentleman had been wounded and taken prisoner, and was laid on Gates' bed; and when one of the American aids came galloping from the field, the aid to his great surprise, found his General very much excited, though not about the battle; but because his antagonist would not allow the force of his argument. Walking out of the room he called his aid after him, and asked him if he "had ever heard so impudent a son of a b——h."

This was the part that General Gates took in the desperate struggle on the plains of Saratoga, and afterwards snatched and wore the laurels upon his own brow, which were won by the blood and wounds of such towering heroes as Arnold, Morgan, Dearborn, Ten Brock, Poor, and a host of others. This being the case, we need not be surprised that his vanity became so inflated, that he was afterwards found so deeply implicated in the Conway Cabel, *perhaps* better known by the name of Con-

way conspiracy, against General Washington ; in which it was found that to gratify a mean ambition, he laid a train to undermine Washington ; which had it matured or exploded, would have shivered the Union into fragments.

The town of Stillwater, with a population of 2733, is situated up the Hudson, from the battle-field. Stillwater is celebrated for the surrender of Burgoyne, on the 17th of October, only 10 days after the great battle of Bemis's Heights. To this town he had retreated after the battle, and intended to cut his way back to Lake George, the way he came ; but by the time he reached Stillwater, he learned that Fort Edward was again in possession of the Americans, which completely cut off his retreat, as that fortification is situated a few miles above on the Hudson.

On leaving these celebrated places & traveling north, brought me to the south end of Lake George, at which place is situated the town of Cadwell. From this place, steamers run regularly to Alexandria, at the north end of the Lake, a distance of 36 miles. This Lake forms the division between the counties of Warren and Washington for that distance, and is one of the most beautiful inland lakes of fresh water in the State. From Alexandria, 3 miles stage travel brought me to Ticonderoga, which has ever been celebrated as a military post of the greatest importance. It is situated on the western shore of Lake Champlain. Many desperate conflicts have taken place in attempting to get possession of this important post, during the wars of America.—*The old fortifications are now famous for their ruins.*

The city of Ticonderoga contains a population of 2169.

Crown Point, with a population of 2212, situated farther down the lake, is a place also celebrated for its military importance, its many gallant defences against the assaults of its enemies, and for the adventures of General Putnam and Mayor Rogers in 1754. This is also the Fort into which the gallant Arnold led in safety, his weary, wounded gallant band, by a bridle path in the dead hour of night, and thus saved them from utter destruction, after his defeat on Valcour Island.

Here I left the State of New York, and crossed lake Champlain for the State of Vermont, whose famous Green Mountains presented to me such a grand appearance, when returning from Canada, by sailing up the lake, that I determined to traverse them from this quarter.

CHAPTER XXIII.

STATE OF VERMONT.

Aspect of the State—Grazing—Vergennes—Burlington—University—Streets—Harbour—Manufactures—Green Mountains—Onion River Valley—Towns—Agriculture—Montpelier—Mountain Scenery—State House—Towns—Barns—Feeding Stock—Sheep Barn—Racks or Mangers—Treatment of Sheep—Dairy—Milk Barn—Treatment of Milch Cows—Butter—Cheese Room—Maple Sugar—Sugar Camp.

In travelling from the city of Vergennes, through the State I found that the Green Mountains from which the State derives its name, on account of the evergreens

with which they are covered, occupy a large portion of the State. I found the face of the country where it is not mountainous, agreeably undulating in places, while in others it is hilly, which as a general thing may be said of the State. The range of mountains pass thro' the whole length of the State, about half way between lake Champlain and the Connecticut river. From these mountains many streams take their rise. The scenery of these celebrated mountains with their green fleeces visible to their towering summits, is truly romantic & beautiful, the air pure and healthful ; and the natives of the State usually known by the name of Green Mountain Boys, famous for their daring exploits in our Revolution, and no less celebrated for their enterprise, intelligence, and hospitality.

The soil is dark, rich and loamy. It is admirably adapted to sustain drought, and affords the finest pasturage in the world. The soil is fertile, and all kinds of grain suited to the climate, are produced in great abundance. But grazing, however, is the chief employment of the inhabitants ; as vast numbers of horses, cattle and sheep are reared in the State. The traveller on every hand, could see great herds of cattle and sheep. Among the cattle were numbers of the finest milch cows, as the dairy receives great attention throughout the State. On our way to Burlington, the Steamer run into the port of Vergennes, a city with a population of 1017, which is beautifully situated at the lower falls of Otter Creek, celebrated as being the port at which Commodore McDonough fitted out the fleet that conquered the British fleet, on lake Champlain, near Platts-

burg, during the late war with Great Britain. The creek is navigable to the falls for the largest vessels.— The falls here afford an excellent water power for manufacturing purposes. The city has some commerce, which passes through lake Champlain. The place is well situated and built in an elegant style.

Chittenden county.—Burlington, with a population of 4271, is the most important city in the State. It is situated on the shore of lake Champlain, built on a gently rising slope, overlooking the lake and harbour.— The city is well built, contains many fine dwellings, and also several splendid public buildings. There is here a handsome Court House and other county buildings; also the University of Vermont, the buildings of which are well built, and the grounds well arranged. The streets of the city are adorned with avenues of the locust tree, which were covered with white blossoms and affording an agreeable shade. The falls of Onion river, afford an excellent water power, where are some large and well conducted factories. The city has an excellent harbour, and is the principal commercial place on lake Champlain, being admirably situated, and therefore commands the commerce of the Lake. From this place I crossed the Green Mountains, which are composed of chiefly of the chlorite of schist and granite so far as rock are concerned. The roads through these Mountains are good, not being very steep; but owing to the great height of the mountains, the ascent and descent are long. The stages running between the city of Burlington and Montpelier the Capital of the State, all have a team of 6 horses, the better to climb the lofty mountains.

Williston and Richmond, one with 1554 inhabitants, and the other with 1054, each of which are up the valley of the Onion River, in a fertile region of country, possessing many attractions for a small valley, being highly and skilfully cultivated, and the whole valley clothed with a heavy crop of grain and grass. Many of those beautiful little fields contained herds of very handsome stock, among which were the largest, fattest and handsomest sheep that I ever saw in my life. In this State great attention is paid to the rearing of sheep.

Balton, with a population of 470, is a very beautiful little village, pleasantly situated on the left bank of the Onion river, about half way between the city of Burlington and Montpelier. This little village is surrounded on every hand by picturesque scenery, which deserves all the praise that can be lavished upon it, yet it is viewed at a considerable distance off.

Washington county.—Waterburg, with a population of 1992, and Middlesex with a population of 1270, each of which are situated still farther up the Onion river. The town of Middlesex is within 6 miles of the Capital of the State. The towns are both in a very flourishing condition, though situated in a more rugged region of country than some of the others, as the country increases in wildness as you advance toward the source of the Onion river.

Montpelier, with a population of 3735, is the Capital of the State. This town is situated in a truly wild and rugged region, at the junction of the north & south branches of the Onion river. In this famous region of country, the stranger may view mountain scenery of

the most sublime and imposing character on every hand, among which may be seen Camel's Hump, and the still loftier Mount Mansfield, whose towering summit stands conspicuous from every point; while immediately around the town, the scenery is wild and rugged indeed, notwithstanding the town of Montpelier possesses some attractions. Here is a State House, a very splendid granite building, recently erected, which is a structure possessing great elegance. There is also here a handsome Court House, and other county buildings.

After leaving the Capital of Vermont, my course was still east toward the Connecticut river; and after travelling through some rugged looking places, brought us to the towns of Plainfield and Marsfield, the one with a population of 880, and the other with 1156, the former 9 and the latter 15 miles from the Capital. Each of these little places contain some fine buildings, and have quite a promising appearance, presenting also a large share of wild and romantic scenery in their respective vicinities.

Caledonia county.—Cabot, with 1440 inhabitants, & Danville, with a population of 2633, are two places well situated; the latter being on the east side of the principal range of mountains. The traveller on arriving at this place, is quite revived at the appearance of the town, especially after emerging from the mountain gorges in the west; which to some may appear gloomy and dismal, yet to the student of nature, they furnish a rich theme for contemplation, as well as other natural scenery. On the same route are the towns of St. Johnsbury and Waterford, each containing about 2000 inhab-

itants; both of which are beautifully situated on the left side of the Connecticut river, in a fertile region of country. By the time I arrived at the town of Waterford, I traversed the State from west to east, through the mountain regions, in doing which, I learned the following with regard to barns, the dairy, &c.:

The Barn in this State, is considered the most important appendage to the farm; they are made large enough to hold all the fodder and animals on the farm. Not a hoof about the premises is required to brave the northern winters unsheltered; but are provided with a tight roof and a dry bed, as it is contended they will thrive faster and consume so much less food when thus protected, that the owner will be ten-fold renumerated.—Disease is thus often prevented, and if it occurs, is more easily cured. The saving of fodder, by placing it at once under cover when cured, is another great item of consideration. The barns are generally placed on the side of a hill, inclining to the south or east; an extensive range of stabling is made below, which is much warmer than when constructed of wood above ground, and the mangers are easily supplied with fodder, which is stored above. An extensive cellar room is made next the bank, in which all the roots, such as turnips, potatoes, &c., required for the cattle, are safely stored in front of their mangers, and where they are easily deposited from carts through windows, arranged on the upper side, or scuttlers in the barn floor above. More room is afforded for hay and fodder by having the stables below, and in this way, a large part of the labor of *pitching* it on to elevated scaffolds is avoided. The stables

are so arranged as to keep perfectly dry, as it is contended and that justly too, that low damp premises are injurious to the health of animals.

Every consideration is given to the saving of manure. The stables have drains, that will carry off the liquid evacuations to a muck-heap or reservoir ; and whatever manure is thrown out is carefully protected by a low roof, projecting several feet over the manure heap which is a good practice ; as it thus prevents waste from sun and rains. The mangers are so constructed as to economize the fodder, which is generally done by box-feeding for cattle, which is preferred ; as in addition to hay, roots, and meal may be fed in them without loss, and with over-ripe hay, a great deal of seed may in this way be saved, as well as the fine leaves and small fragments of hay which are also kept from waste, which by racks, are generally lost by falling on the floor or ground.—When a rack is used, it is provided with a shallow box underneath extending the whole length of the rack, into which the seed, leaves and small fragments of hay fall, and are thereby secured from loss.

The sheep barn is generally built upon a hill side, constructed with three floors over each other, with space enough between each for sheep to pass through ; and above the third floor is room for the storage of fodder. This sheep house has three side walls, and the open side is to the south, with sliding or swinging doors, to guard against storms. The floors are made perfectly tight, and the two on which the sheep stand, are constructed with gutters, to carry off the urine. The troughs are usually made of two boards, 12 inches wide, nailing

the lower side of one upon the edge of the other, fastening both into two or three inch plank, about 18 inches long, with notches in the upper edge for the trough. In addition to the houses for sheltering sheep,^b there may be seen about the premises racks or mangers. The first consists of a common rack, or rather two racks, placed together, forming an angle of about 25 degrees, placed on a broad trough, which is situated near the ground, so the sheep can reach over it to the rack; this trough catches the fine hay and seed which falls in feeding. The second apparatus consists simply of a kind of box, constructed by taking 6 light pieces of scantling, 3 inches square, one for each corner and one for the centre of each side; to which boards 12 or 14 inches wide and 12 or 15 feet long are nailed on the bottom of the posts for the sides, which are separated by similar boards, 3½ feet long, this forms the width of the trough. Boards 12 inches wide are nailed 9 or 12 inches above these plank, thereby leaving a space for the sheep to reach in for their food, and yet prevent them from getting on it with their feet. The edges of the upper and lower boards are made perfectly smooth, to prevent chafing the wool.

The people of this State have their sheep brought in to winter quarters soon after the severe frosts occur, as these diminish the feed and materially impair its nutritious qualities. They are also removed from the grass lands before they become permanently softened by the rains, as they will injuriously effect their comfort and health, and is equally objectionable from their *poaching* the sod. The chief food for their great

herds of sheep in winter, is ripe, sound timothy hay, bean and pea straw, which if properly cured, they prefer to the best hay; to which are added roots of various kinds, with a full supply of salt, grain being seldom fed to store-sheep, and then no other than Oats, with a full supply of good straw, as grain is objected to for sheep, unless attended with common straw. There is placed within their reach, sulphur, ashes, tar and clay, at which they frequently nibble when their stomach required either. Pine boughs are also strongly recommended, not only as a substitute for tar, but as affording a most healthful change in the winter food for sheep. It is also recommended that entire cleanliness and dryness are essential to the health of the flock. Sheep cannot long endure close confinement without injury; therefore the greatest attention is paid by these people to their sheep. In all ordinary weather, they are allowed to run in a well enclosed yard attached to the sheep-barn, which to a considerable extent, shields them from the bleak winds of those northern regions. The sheep when brought to the yards in the fall of the year, are divided into flocks of 50 to 100, according to the size of the yard and sheep barn. The young and feeble ones are separated from the others, and the ailing ones placed to themselves, so that no one may suffer from the others; all are classed as uniformly as possible, as to be supplied with a trough of water.

The Dairy in this State, receives the greatest attention as it has long been celebrated for the excellence of its butter and cheese. The southern stranger views with surprise, the extent and perfection the dairy here

attains. Here almost every dairyman possesses 20, 30 and even 40 of the handsomest and most valuable cows; the whole of which in winter are kept in good stables, fed on roots, and good hay, and when straw is fed, some meal is added, so as to make the keeping equal to good hay. From the 1st of March they feed about 2 quarts of corn or barley meal to each cow per day, until the pasture is good; and during the summer they are put up morning and evening in a milking barn, near & convenient to the cheese room, where they are fed the whey with meal. The milk barn is constructed with an alley through the middle; and the cows therefore stand in two rows; one row on each side of the alley. The whey runs from a box or cistern in the cheese room, into a vat in the alley of the milk barn, at one end of which is a meal bin. The whey and meal are mixed and put in troughs on the right and left. The head of the alley is some 12 or 15 feet from the cheese rooms; over this distance is a floor laid to walk on, and a roof over so that persons can pass from the milk barn to the cheese room and milk house without being exposed to rain or mud. Milking is here considered a very important operation, as on its proper performance depends much of the success of the dairyman. A cow regularly, gently, yet quickly and thoroughly milked, will give much more than if neglected. An indifferent milker is never tolerated in a herd, by these celebrated dairymen, as they declare that good ones are cheaper at double price.

I here learned for the first time that activity and rest of the cow have a great effect on both quantity and

quality of the milk. It is here declared, the less action and the more quiet and rest, the greater the amount of milk and better. But exercise is absolutely essential to the production of cheese. Butter may be made from cows confined in the stable, but cheese can only be profitably made by animals at pasture. It is also contended that excitement or fretfulness, change of locality or to a different herd, with new companions, separation from her calf, periodical heat, annoyance from flies; or worrying from dogs, exposure to storms, severe cold or an oppressive sun, and many similar causes, diminish the quantity of milk.

The mode of churning butter is by a barrel-churn, lately introduced into the State. This is placed in a trough of water of the proper temperature, in which the churn revolves when required, and thus readily receives the degree of heat required by the milk or cream, without the necessity of adding warm water to the cream and churns the whole in ten or fifteen minutes. It is said also to give a larger weight of butter from the same quantity of milk. The churning is performed slow in warm weather, and quick in cold weather, that the proper temperature may be kept up.

The cheese-room, at first presented to me a scene of considerable interest. In making the rennet, different customs prevail. The most common custom, however, is to take the entire stomach and to pour upon them from two to three quarts of pure water, for each stomach, and allow them to infuse for several days, when the infusion is skimmed and strained, and a decoction of leaves added, such as those of the sweet-briar, the

dogrose and the bramble, or of aromatic herbs and flowers, while others again put in lemons, cloves, mace or brandy. These various practices are adopted for the purpose of making the rennet keep better, of lessening its unpleasant smell, of preventing any unpleasant taste it might give to the curd, or finally of directly improving the flavor of the cheese. The acidity of the lemon will no doubt increase also the coagulating power of any rennet to which it may be added. The rennet thus prepared, is poured into the milk previously raised to the temperature of 90 degrees, fahrenheit. The quantity which is necessary to add, varies with the quality of the rennet, from a table-spoonful to half a pint for 30 or 40 gallons of milk. The time necessary for the completion of the curd varies also from 15 minutes to an hour.

The milk is never warmed in an iron kettle upon a naked fire, owing to its great liability of becoming singed or fire-fanged; which always effects the taste of the cheese more or less. The milk is therefore warmed in a large double kettle, consisting of a tin boiler within an iron kettle, after the manner of a glue pot; the space between the two being filled with water, and can never by any ordinary neglect, do injury to the milk. In this manner, many of these celebrated dairymen warm the milk of 40 cows, from which they make from twenty to twenty-five thousand pounds of cheese annually, for which they receive from six to seven cents per pound.

Maple Sugar is manufactured in this State to a very considerable extent. It is estimated that the produ-

over 10,000,000 lbs. annually ; much of which is sold in the city of New York. In some sections of the State, the sugar maple usurps almost the entire soil, standing side by side, like thick ranks of corn, yet large and lofty, and among the noblest specimens of the forest. Their tops are graceful and bushy like the cultivated tree, and but for their numbers, the extent they occupy, and their more picturesque grouping, one would think the hand of taste had directed what nature alone has accomplished. The season for drawing and chrysalizing the sap, is in early Spring, when the bright sunny days and clear frosty nights give it a full and rapid circulation. The largest trees are generally selected and tapped by an inch auger to the depth of an inch and a half, the hole inclining downward to hold the sap. At the base of this, another is made, in which a tube of elder or sumach is closely fitted to conduct it to the cask. A rude contrivance for catching the sap is with troughs, made usually of easily wrought poplar. When the sugar season is over, the holes are closely plugged and the head cut off evenly with the bark, which soon grows over the wound and thus preserves the tree without any apparent injury. The barbarous, slovenly mode of half girdling the trunk with an axe, which soon destroys it, is here never performed. The sugar camps are arranged with large receiving troughs, placed near the fires, capable of holding several hundred gallons of sap, and the boiling kettles suspended on long poles, supported by crotches. The sap is strained before boiling, and well skimmed while boiling, after which it is again strained and put into a tub and let

stand till cold. It is frequently clarified with the whites of five or six eggs, well beaten in about a quart of new milk, and a spoonful of salaratus to each 100 lbs of sugar. After it is well granulated, it is put into boxes made smallest at the bottom, each holding about 50 lbs; each cask box having a false bottom, perforated with small holes, for the purpose of draining out the molasses. The various apparatuses and processes connected with the sugar-camp, present some points of interest to a person unaccustomed to like scenes.

CHAPTER XXIV.

STATE OF NEW HAMPSHIRE.

Aspect of the State—Distant View of the White Mountains—Villages—White Mountains—Mount Washington—Ascent to the Summit—Sublime Scenery—Notch—River Saco—Unequalled Character of the Scenery—Course of the River Saco—Wildness of the Region—Towns—Lake Winnepesaukee

This State has acquired the names of Granite State and the Switzerland of America. I soon found her to be justly entitled to both of the above names; for the traveller from other States, after seeing her lofty mountains, grand lakes of fresh water, and granite quarries will at once acknowledge that both of the titles are justly hers. The country on the coast is level, but in the interior the surface is greatly diversified by hills and valleys.—And at a distance of about 25 miles from the coast, the country becomes more hilly and mountainous. The inhabitants of the State are principally en

gaged in agriculture, which art, I think they are perfectly master of, judging from the heavy crops of all kinds of grain and grass which cover the brows of the high sloping hills which meet the eye on every side.

Grafton county.—I now travelled in an eastern direction for the White Mountains, whose towering summits stood conspicuous to my gaze, long before I entered the State. In approaching these far-famed mountains from the Connecticut river, I passed through the towns of Littleton and Bethlehem, the former with 1778 inhabitants, and the latter with about 1,000, facing the White Mountains, being a very beautiful little village, situated about half way between the Connecticut river and the base of the White Mountains, to which there is a very good stage road:

Coos county.—The scenery in the celebrated White mountains is grand beyond description. This sublime scene consists of six or eight towering peaks, distinguished by the names of Washington, Franklin, Adams, Jefferson, Madison, Monroe and Pleasant. The highest of these peaks is Mount Washington, which is 6428 feet in height. The ascent to the summit of this Mount is attended with considerable fatigue; but the wild and sublime character of the scenery induces a stranger to climb upward and onward, till he gains the summit when all is richly repaid, and his fatigue apparently in a moment vanishes, by the view which is rendered uncommonly grand and picturesque, by the magnitude of the elevation, the extent and variety of the surrounding scenery, which is wild, picturesque and sublime in every hand. To an admirer of the wonders of Na-

ture, this scene truly affords a rich theme for contemplation, not only a view from the summit with its huge and desolate piles of rock, extending to a great distance in every direction far beneath your feet, but also a passage through the notch, which is equally interesting to a student of nature.

The far-famed Notch of the White Mountains, is situated at the western pass. Here the mountain seems to be divided into two parts from the top to the bottom. This deep narrow chasm is about two miles long, and affords a passage, through which the river Saco runs which is joined below the Notch by Lawyers river.— Through the Notch there is a road constructed, which is the only practicable route for carriages across the mountain barrier. Though fatiguing as it is to climb to the summits of these famous mountains, hundreds of travellers visit the State every year to enjoy the magnificent prospect from the top of Mount Washington, while thunder storms are often seen far beneath their feet. But they can stand upon this towering pinnacle, and view with perfect safety, the grand and sublime display of Nature, which for the kind are perhaps with the exception of the Andes in South America, without a parallel on the Western Hemisphere.

The air on the summits of these great mountains is generally cold and chilling to the stranger. This is however not to be wondered at as they are crowned with snow for about ten months in the year. Down the Saco river, at the southern extremity of the principal group of mountains, is situated the town of Bartlet, containing a population of 706. At this place a con-

siderable mountain stream joins the river Saco, whose general course from the notch to the village is nearly due east; below which it is again joined by another considerable stream, when it bends its course nearly due south, till it is joined by Swift river, when it again runs east into the State of Maine.

Carrol county.—The next village on the river Saco, is the beautiful little village of Conway, located on the right bank of the river, 7 miles below the town of Bartlet. Each of these villages is situated in a wild and rugged region of country, possessing no attractions in the agricultural way; yet the wild and sublime character of the mountains is admired by all. To the south of the village of Conway, is the town of Ossipee, with a population of 2170, situated near Winnepiseogee lake on the southern border of the county.

Lake Winnepiseogee is truly one of the most beautiful lakes of water that our country can produce; imbosoming numerous islands and surrounded by a country abounding in romantic scenery. A ride down this lake which is 24 miles long, will repay the expense tenfold. I very much doubt whether this beautiful lake has a parallel on the face of the Globe, so far as I have been able to learn respecting the lakes of Europe and other portions of the world. I think I am safe in advancing that the beauty of lake Winnepiseogee far exceeds that of the famous Loch Lomond, of Scotland itself.

CHAPTER XXV.

STATE OF MAINE.

Aspect of the State—Sebago Pond—Towns—Portland—
 —City Hall—Custom House—Churches—Athenaeum—
 bor—Fortifications—Break Water—Light House—Ob-
 ry—Commerce—Turtle Shell—Railroad Bridge—Hotel-
 er General Warren—Effects of the Sea Breeze—Citi-
 gusta—State House—Arsenal—Towns—Bangor—M-
 tures—Bridge—Lumber—Theological Seminary—Olk-
 —Calais—Dense Fogs—River St. Croix—Forests—
 drew's—Fisheries—St. John—Wharves—Lumber
 Building—Coal-Fields.

Soon after entering the State of Maine, the more northern and eastern of the United States, I found that of the country pretty generally either undulating or hilly, except the coast along the southern part which is tolerable level. The population is chiefly in the southern section, within 60 or 70 miles of the coast, as the central parts of the State contain numerous mountains, and a large portion of it as yet remains a forest, which the inhabitants consider valuable for lumber, which is one of the chief products of the country. The soil is various; much of it is however fertile, but in general it is better adapted for grazing than for agriculture; you will however observe some good farms well cultivated. The coast is remarkably indented with bays and harbors, affording great facilities for commerce and fisheries, which the inhabitants engage in very extensively.

Cumberland county.—The first object worthy notice after entering this county, was Sebago Pond

sted, about 12 miles with its southern extremity, from the city of Portland. This famous Pond, so far as I could judge, is about 7 or 8 miles long from north to south and about 4 miles wide; the waters of which are drawn out at the south-eastern side of the pond by the Presumpscut river, which carries its waters with others into the Bay of Casco; which are admired for their transparency. Between Sebago Pond and the city of Portland, is the town of Gorham, with a population of 3011, situated in the vicinity of the Pond, and is a very flourishing town, containing some fine dwellings and several handsome churches. Within 6 miles of the city of Portland is the village of Sacarappa, which is really a pleasant little place.

Portland, with a population of 15218, is very beautifully situated on Casco Bay, 144 miles north east of the city of Boston. The city of Portland occupies high and commanding ground. The city was entirely destroyed by the British in 1775, and the present city did not receive a charter until the year 1832; and is now a very beautiful place, being regularly laid out; the streets are broad and handsomely ornamented with shade trees of the choicest species. The public buildings are a City Hall, a large and splendid granite structure, surmounted by a dome, which can be ascended with ease and safety; and an excellent view of the city is thereby obtained. A large and elegant Custom House constructed of granite, is situated conveniently to the harbor, which is a structure celebrated for its strength and the beauty of its architecture. A Court House, a handsome granite edifice, is situated on very beautiful ground,

which is tastefully laid out and adorned with shade trees of a rare species. There are here 6 Banks and 16 large and splendid churches, some of which are constructed of granite, some of brick, and others are frame, highly finished and whitened. The Atheneum, at this place contains upwards of 5000 volumes.

The city has a most splendid harbor, defended by two forts, situated on high and commanding ground, so that every foot of space at the entrance of the harbor, could be raked by the cross-firing from these fortifications. The entrance of the harbor is also protected by two long and powerful stone piers, constructed as a Break-water to defend the vessels while in the harbor from floating ice, and the high waves from the Ocean. There is also at the entrance of the harbor, a stone light-house, built to the height of 72 feet, from the top of which there is a delightful view of the Bay and the Ocean beyond, when the fogs will permit a view, which however were so dense, a large portion of the time I remained in the city, that a distant view of no object could be had with distinctness. There is also an Observatory erected on high and commanding ground, a short distance above the city; it is constructed of timber, 70 feet in height, and shingled from the ground to the top; the summit is gained by ascending a circular stair-case within, and when the summit is gained, it affords a lovely prospect on a clear day, of the whole city and the surrounding waters and lands.

The city has an extensive foreign and coasting trade; the inhabitants are also very extensively engaged in the fisheries. On her numerous long wharves the stranger

may see fish of almost every kind, without number from five pounds weight up to sixty and seventy pounds, together with ship loads of oysters and lobsters with numerous turtles, many weighing over 100 pounds each. On the main street of the city, a few doors south of the United States Hotel, I saw a turtle shell suspended over the door of an oyster saloon, which contained the figures 221, in large and conspicuous characters to point out to the passing stranger the weight of the turtle.

To the north-east of the city, there is a railroad bridge one mile and a quarter in length, constructed over an estuary of the Bay, over which there are two railway tracks, which is the property of the Company constructing a railroad from the city of Portland to the St. Lawrence in Lower Canada, for the purpose of forming a connection with the city of Montreal. This bridge has a causeway of about 300 yards at each end; and between the causeways it is built of timber being supported by thousands of pillars; on which the tide rises about 8 feet, twice a day. The bridge is so constructed in the centre as to permit of being opened for ships to pass through to the north part of the city. The part of the bridge which opens is on the principles of a door upon its hinges, and the apparatus by which the opening is effected is on the order of a common jack-screw. A man on the bridge, by means of an iron lever opens the tracks to the right and left, similar to two barn doors opening from each other. The man by simply turning his lever in a reverse direction wheels the tracks inwards to their proper places, then raises his lever out of its locket and drops it on the floor, when all

is again ready for the cars to pass on either t

While in this city, I had the misfortune of getting the worst fare of any place during the whole of my tour. The first Hotel at which I put up after my arrival in the city was kept by a foreigner; the appearance of the House might be called tolerable; I however was not a little surprised when called to the table to dine. I seated myself with more reluctance than to any other I ever seated myself in all my life; the bread and butter which they bought and therefore had no hand in making or preparing, was good, which I could make myself to swallow by not looking at the other dishes on the table; which consisted in part of one very large dish in the centre of the table, which to all appearance contained Irish potatoes, clams, oysters, lobsters, bread, beef, fish, mutton, fowl, cabbage, carrots, squashes, and tomatoes, onions, garlic and the Lord knows what all boiled together, and heaped on this mammoth dish which emitted a vapor or steam almost equal to a coal-pit. By the smell of this multifarious hotch-pot I presume it would have made very little difference which was selected, as the probability is they all tasted alike; beef tasted like mutton and mutton like oysters were onions and the onions were oysters cabbages were carrots and the carrots cabbages. This dish was surrounded by several other dishes which contained cold beans, which were that stiff and tough that one might as well have attempted to digest a quart of oil. After rising from the table, I like Bruce, of course paid the bill and quit the inn.

The steamer General Warren now carried us t

city of Augusta, the Capital of the State. This was the only route where the sea breeze effected me ; and so violent were the effects that I was compelled to keep my berth, and remain within the State room during the sailing of the Steamer. Much of my sickness I attributed to the rocking of the steamer, which exceeded every other boat in rocking, rolling and plunging through the agitated billows, that I witnessed during the whole of my voyages ; though in every way a very splendid boat manned by an excellent crew. The narrowness of its construction, I considered one great cause of its being more easily rocked to and fro by the waves.

Our Steamer stopped at the port of the city of Bath, which contains a population of 5141 inhabitants. The city is beautifully situated on the left bank of the Kennebeck river, about 15 miles from the Ocean and below the juncture of the Androscoggin river with the Kennebeck, at the head of navigation for the largest class of ships. This place is celebrated for its ship building, which is here carried on very extensively. A few hours spent at this place cannot fail to be interesting & instructive.

Kennebeck county.—The next place at which we touched was at the city of Gardiner, containing a population of 5042. This is a very beautiful city, built on the left bank of the river, containing some very handsome buildings ; among which are several of the most splendid churches to be found in New England. The town is situated in a fertile and delightful region of country, possessing many inviting points. Soon after leaving Gardiner, we touched at the pier of Hallo-

well, situated 2 miles below the Capitol. This place is famous for its splendid granite and marble, among the vast heaps of which the stranger if not cautious, would almost lose his way.

Augusta, the Capital of the State, contains a population of 5316. The town is beautifully situated on both sides of the river, about 50 miles from its mouth at the head of Sloop navigation, in the midst of a fertile and handsome region of country. The city contains a very splendid State House, constructed of granite in a neat, elegant and tasteful manner; the site being adorned with beautiful shade trees. The United States Arsenal at this place, presents objects which may be viewed for an hour or two with considerable interest. At this place there is constructed a strong and powerful dam across the Kennebeck river, which has created numerous excellent mill sites, a portion of which are occupied by mills of various sorts; with more than a due portion of Saw Mills where vast quantities of lumber may be seen all of an excellent quality. Vast forests are said to exist to the north of the Capital.

Waldo county.—Between the Capital and the Penobscot Bay, in a due easterly direction, were the towns of Windsor, and Liberty, Belmont and Belfast; the three first having a population of about 2000 inhabitants each, and the latter upwards of 4000, being a chartered city, located on the Penobscot Bay near its head, possessing a delightful harbor. The city has considerable trade which is chiefly in fish and lumber. It possesses many attractions for an eastern port, having a fertile section of country, stretching back to the westward which pre

sented an attractive appearance from the city and river. From the pier at Belfast, a Steamer took us up the Penobscot river for the city of Bangor. When about to enter the mouth of the river we could see Castine on the opposite side of the head of the Bay, beautifully situated on a fine peninsula, noted for its military position. Up the river are the beautiful cities of Backport and Frankford, each having about 5000 inhabitants. In sailing up the river we could see vast quantities of lumber at certain points, besides great quantities which were regularly passing us; we being scarcely ever out of sight of lumber ships.

The city of Bangor, with a population of 8627, is situated on the left bank of the Penobscot river. The city is divided into two parts by the Kenduskeag river, which forms a junction with the former river at this place. The Kenduskeag having here a very considerable fall, affords a vast water power which is applied to manufacturing purposes. This city is the chief seat of the lumber trade; immense quantities of the very best of lumber are rafted down the river from this place. The lumber trade is said to be a source of great wealth to those engaged in it. It is an enterprise which seems almost inexhaustible, as vast forests of excellent timber abound in the northern part of the State, and particularly toward the source of the Penobscot river. The city contains some fine buildings private & public; among the public buildings may be named the Bangor Theological Seminary, opened in 1816, originally called the Maine Charity School; it being under the direction of Congregationalists.

Bangor is well situated for trade, the Penobscot being navigable to this place for the largest vessels. There is here a bridge across the river which is 1320 ft. long, erected at a cost of \$50,000.

A Railroad of 11 miles in length, connects Old Town with Bangor, passing through Orono a town of 1521 inhabitants, which little place is famous for its numerous Saw-Mills. Fertile and delightful belts of land border on the Penobscot river, which have the appearance of being highly and advantageously cultivated.—Old Town is situated on an Island in the Penobscot river, about 40 miles from its mouth; more usually known by the name of Indian Old Town, noted as being the spot upon which the Penobscot Indians took up their abode after their defeats and almost utter destruction by the white people of the Colony; who left only the remnant of about three hundred persons of that powerful tribe of Indians, owing to their brutal obstinacy, and the savage massacres they inflicted on the people of the Colony. The country between Old Town and Calais, possesses few attractions. Calais is a town of 2924 inhabitants, at the lower falls of the St. Croix, and is noted for its numerous saw-mills, and its immense traffic in lumber which is here sawed and shipped to the various ports of the New England States. In continuing our course east from this place, we arrived in the Province of New Brunswick. The nearer we approached St. John's the denser became the fog which rendered travelling somewhat unpleasant as well as dangerous; because the fog at times was so dense that *the pilots of boats could not see the lights or lamps on*

the boats till they come almost in contact with each other, much less could they see the light-house with its lamp, which is placed to guide them round dangerous points, which is rendered still more dangerous, owing to the coast of the State of Maine and the Province of New Brunswick being so remarkably indented with Bays and Harbors.

The colony is situated to the east of the State of Maine, separated from it by the St. Croix river for a considerable distance on the west. The colony is but partially cleared, and contains extensive forests which furnish large quantities of excellent timber. The soil along the banks of the river St. John is of an excellent quality, and is said to be of a good quality throughout the province. Owing to the dense fogs I did not examine the country off from the river St. John.

The city of St. Andrews containing a population of about 20,000, situated at the head of Passamaquoddy Bay, is a place of great trade in lumber, and is the second city in trade and population in New Brunswick.— There are many of its inhabitants employed in the fisheries; and perhaps an equal number in the lumber trade, which is carried on to a great extent; which is the chief article of export, from which the population of the city derive their principal support; which together with the fisheries constitutes almost the sole support of the inhabitants of the place as well as many other cities and towns in the Province, which is said to render ample reward to all engaged in it. The city of St. Johns, with a population of 25000, is the most important city in New Brunswick; it is beautifully situa-

ted on a fine Bay, at the mouth of the river St. John. The city has a very extensive commerce, and is very largely engaged in the fisheries and the lumber trade. The fisheries are a source of considerable wealth, and employ many of the inhabitants. The stranger cannot see scores and hundreds of fishing smacks and boats approach the wharves when they come sufficiently near to be seen for the fog which obscures them till within a few rods of the landing, all of which are always loaded with the finest of fishes. The lumber trade is also a source of great wealth; vast quantities of timber are cut down in winter and dragged on the snow to the river, where it is formed into rafts on the ice, and floated down when the ice melts in the Spring. Ship-building is also carried on to a great extent which is of itself a considerable curiosity, in seeing the subjects of the already Queen of the Ocean, rearing their masts of ships amid a great dock yard, rendered rugged with lumber of the best quality.

Before my arrival at the city of St. Johns, my idea was to ascend the river St. John to Fredericstown, the Capital of the Province; but owing to the unpleasant fogs which would obscure more or less the scenery for 85 miles up each bank of the river I declined this idea; and contented myself with going no farther into the Province than to some of the coal fields near at hand, which are wrought to a considerable extent; but owing to the inclemency of the weather, the scenery did not repay very richly the fatigue and exposures attending the visit; we therefore returned to the city and again viewed the great theatre of lumber and fish raising which

uld be seen some points of attraction, which were
 t only entertaining but to some extent instructive.
 it we soon got tired of lumber and fish, and prepared
 cross the celebrated Bay of Fundy for the Province
 Nova Scotia.

CHAPTER XXVI.

NOVA SCOTIA.

of Fundy—Peninsula of Nova Scotia—Annapolis—Cliffs—
 led Mud—Foot Prints of Birds—Muddy waters of the Bay of
 Fundy—Cape Blomidon—High Tides of the Bay of Fundy—
 the Bore—Awful grandeur of the Bore—Embankments—
 Cliffs of Sandstone—Parallel Furrows in Sandstone—Latitude
 -Masses of Ice—Basin of Mines—Minuendie—Cliffs of South
 oggins—Height of the Cliff—Grindstone Ledges—Erect Fos-
 il Trees—Coal Seams—Various Ledges of the Cliff—Number
 of Fossil Trees—Destructive Action of the Tides of the Bay of
 Fundy—Hasty Conclusion as to the formation of the Cliff.

The great Bay of Fundy is situated between New
 Brunswick and Nova Scotia, and almost cuts off the
 er from the main land; and therefore forming Nova
 Scotia into a large peninsula 280 miles long and from
 to a 100 miles wide. The Bay of Fundy is cele-
 brated for its tides, which rise 60 and 70 feet in per-
 pendicular height; and so rapid is its rise that even
 the feeding on the shore are overtaken very often &
 dwned. The tide often comes up at first with a lof-
 wave called the Bore. The waters are of a red mud-
 color throughout the whole Bay; but rather more
 ddy *along the shores*, perhaps owing to the impetu-

osity of its waves which become charged with red sediment by undermining cliffs of red sandstone and soft red marl of which the banks are composed.

Nova Scotia is situated south-east of New Brunswick and usually known to strangers by its least favorable side owing to its being enveloped in a dense fog a large portion of the year; it has nevertheless the merit of affording some of the best harbors in the world. Its northern coast also contains some very fertile sections of lands well adapted to the cultivation of wheat and other grains; potatoes of the finest quality are raised in vast quantities. The face of the country is generally undulating, and more than half the southern portion of the peninsula consists of granite rocks.

Annapolis, a flourishing city situated on a fine harbor nearly opposite the city of St. Johns, has considerable trade, which is however chiefly in the fisheries. At this place commence a range of cliffs of soft sandstone, capped by a mass of basalt, and greenstone.— This mass presents fine ranges of rude columns in the bold precipices, facing northwards and running many miles east and west.

Wolfville, a town situated off the Bay of Fundy, northeast from the city of Annapolis, is well built and located on a fine site. The principal object of attraction at this place, is the red mud along the shore of the bay, the upper surface of which is usually smooth, except in some places it is pitted over with small cavities, which I was informed was due to showers of rain which fell regularly every day; at least during my stay. In addition to the smaller cavities due to rain, these

were larger ones, more perfectly circular, about the size of a rifle-ball, which have been formed by air bubbles in the mud, which presented a singular appearance.

A little farther up the Bay could be seen worm-like tracks, made by Annelides, which burrow in the mud, and what was still more interesting to me, the distinct footmarks of birds in regular sequence, faithfully representing in their general appearance, the smaller class of Ornithicnites. I learned from my guide, an intelligent peasant of the neighborhood, that these recent footprints were those of the Sandpiper, a species common to North America; flights of which could be seen daily running along the water's edge, and often leaving his and forty similar impressions in a straight line, and in many places parallel with the waters of the Bay.— My guide also informed me, that after the foggy season is over, the heat of the sun will cause the red mud to crack in hardening during the intervals of the rising tide, and divides the mud into compartments similar to the clay we see at the bottom of a dried pond.

Continuing my course along the southern shore of the Bay of Fundy (on which route the principal objects of attraction are the muddy surges of the Bay, and the broad belt of red mud along its shore,) I at length reached Cape Blomidon, a point of land extending far into the Bay, and being nearly met by a point of land on the opposite shore of the Bay, thereby nearly cutting it in two, and forming the waters to the eastward into a kind of basin or estuary, known by the name of Basin of Mines. Into this famous basin or inner estuary, the tides of the Bay of Fundy pour twice every day a

vast body of water which passes through this narrow strait, converting every small streamlet into the appearance of a large tidal river. The tides here rise 70 feet in perpendicular height, and are said to be the highest in the world. They often come up at first with a lofty wave, called the Bore, the waters seem to come rushing with as much impetuosity as the St. Lawrence, at the celebrated Cascade Rapids. The muddy billows of this Bay roar almost as loudly while rolling on in their mad career, as the St. Lawrence does while rolling its majestic waves over its rocky bed, whose transparent green waters and white foam, far exceed in beauty, the waters of the Bay of Fundy, which resemble a powerful current of red mud in violent motion.

The waters of this famous Bay become charged with this red sediment, by undermining cliffs of red sandstone and soft red marl, while rolling and tumbling in awful grandeur, in performing the office assigned them by Him who holds the waters of the Ocean in the hollow of his hand; and has said to the raging billows, "Hitherto shalt thou come and no farther, and here shall thy proud wave be stayed." A large portion of the red mud which is seen along the shores of the Bay is thrown on the land, wherever the velocity of the current is suspended at the turn of the tide. Many extensive level flats have been thus enriched, and rendered valuable, by afterwards protecting them from the tides by strong and powerful embankments, which exclude the tides from their former bounds.

At Cape Blomidon, can be seen the same range of *cliffs* alluded to at Annapolis; they are a considerable

wonder, consisting chiefly of cliffs of soft red sandstone in nearly horizontal beds, and capped by a mass of basalt and greenstone. This mass of igneous rock, after presenting fine ranges of rude columns on the bold precipice, facing northwards, is continuous in a narrow strip of high land for miles in extent, till it reaches Annapolis.

As I was strolling with my guide, through a dense fog along the beach, at the base of these basaltic cliffs, collecting pebbles and occasionally recent shells at low tide, I stopped short at the sight of an unexpected phenomenon, and remarked to my guide that the solitary inhabitant of a desert island could scarcely have been more startled by the foot-print of a man in the sand, than I was on beholding some recent furrows in a ledge of sandstone under my feet, almost in the very bed of the Bay of Fundy. These furrows were straight, and several only about half an inch broad and about as deep; and some of them running very nearly parallel with each other, their direction being North 35 degrees East, or corresponding to that of the shore at the place. About a quarter of a mile nearer the Basin of Mines are another set of furrows similar in every respect, save a variation of 5 degrees in their general direction, the latter being North 30 degrees East. These singular grooves excited some curiosity in my mind, owing to the newness of their appearance. I finally came to the conclusion, judging from the softness of the sandstone, that ice must have been the cause; I therefore asked my guide whether he had ever seen much ice on the spot where we were standing. At this question he

showed symptoms of surprise ; I having my pocket map in my hand, at a glance discovered that we were in the 45th degree of North latitude, or about half way between the Equator and the North Pole, which at once accounted for the surprlse of my guide, as he of course considered the question of ice being put in so north a latitude a strange one. He replied, that generally during the winter, the ice in spite of the tide which runs at the rate of 10 miles an hour extended in one uninterrupted mass from the shore where we stood, to the opposite coast, of the Basin of Mines, and that the ice blocks heaped on each other, and froze together or packed at the foot of Cape Blomidon, were often 15 feet thick ; and were pushed along when the tide rose over the sand ledges. He also stated that fragments of rocks, a species of black stone, which fell from the cliff, a pile of which lay at the base near our feet, were often frozen into the ice and moved along with it.— These great masses of ice hurried along with such impetuosity, no doubt furnish sufficient pressure and mechanical power to groove the ledges of soft sandstone.

The next object of attraction are the celebrated cliffs of South Joggins, near the town of Minudie situated on the southern shores of a branch of the Bay of Fundy, called Chignecto Channel, which divides part of New Brunswick from Nova Scotia. We now crossed the Basin of Mines, and went to Minudie, near which commence the cliffs of South Joggins. These perpendicular cliffs extend in a south-westerly direction, along the southern shore of the Channel. The commencement of these cliffs consists of blue grit, which affords excel-

lent grindstones, out of which vast numbers are taken. This ledge is forty-five feet in thickness and extends for one mile south of Minudie.

It being low tide, we had not only the advantage of beholding a fine exposure of the edges of these beds in the vertical precipice, but also the horizontal section, which below the grindstone ledges, consisted of red sandstone, with some limestone and gypsum. The vertical height of the cliffs is from 150 to 200 feet. Our schooner now moved down the Chignects Channel, and for three miles south of the grindstone ledges, the cliffs are not interesting, being somewhat obscure, the rocks consisting chiefly of red sandstone and red marl. After passing these three miles, the precipice increases in beauty, for they consist of freestone, bituminous shale, micaceous sandstone, sandy clays, blue shale, and clays, with ironstone, together with no less than nineteen seams of coal, from one inch to four feet in thickness.

About 6 miles from the town of Minudie, commence the celebrated fossil trees in the cliffs of South Joggins, all of which stand as erect as any trees in the forest. In the first of these trees, seen in moving down the Chignecto Channel, there is no part of the original plant preserved, except the bark, which forms a tube of pure bituminous coal, filled with sand, clay and other deposits, now forming a solid internal cylinder, without traces of organic structure. The bark is about a quarter of an inch thick, marked externally with irregular longitudinal ridges and furrows, without leaf-scars, and therefore not resembling regular flutings.—
The diameter of this tree is 14 inches at the top and 16

at the bottom, being 5 feet 8 inches high. The strata in the interior of the tree, is said to consist of a series entirely different from those on the outside. The lowest of the three outer beds which it traverses, consists of purplish and blue shale, two feet thick, above which is sandstone one foot thick, and above this clay two feet nine inches thick.

The second of these fossil trees is separated from the first by a considerable mass of shale and sandstone, which of itself is calculated to attract the attention of the stranger, although in the immediate vicinity of more interesting scenery. This second trunk is about 9 feet in length, traversing various strata, and cut off at the top by a layer of clay, 2 feet thick, on which rests a seam of coal 1 foot thick. This seam of coal forms a foundation on which stands two large trees, about 15 feet apart; each one is about two and a half feet in diameter, and fourteen feet long, both enlarging downwards, and the one situated the farthest south, is bulging very considerably at the base. The beds thro' which these two famous trees pass, consist of shale and sandstone. The cliff was here too precipitous to allow a person to discover any commencement of roots; but when viewed from the schooner, the bottom of the trunks seemed to touch the subjacent coal.

Above these trees are beds of bituminous shale and clay, about ten feet thick, on which rests another bed of coal one foot thick; and this coal supports two trees each, about eleven feet high, and sixty yards apart, and so far as they can be seen, they appear to have grown *on the coal*. One of these trees is about two feet in

diameter, preserving nearly the same size from top to bottom; while the other is only about fourteen inches in diameter at the top, enlarged visibly at the base.— The irregular furrows of the bark of these two trees is about an inch and a half one from the other. The tops of these trees are also cut off by a bed of clay; on this bed of clay rests the main seam of the South Joggins coal, which is at this place only four feet thick.

Above this main seam of coal, there is another succession of strata, consisting of purplish and blue shale, two feet thick, above which is sandstone one foot thick, and above this again, clay which is between two and three feet thick, with occasional thin seams of coal.— This series of strata also contains fossil trees, standing vertical to the seams of coal, at five or six different levels, which appear like fluted columns placed in the face of the cliff, and thereby adorns a towering precipice, whose beauties are perhaps without a parallel on the face of the globe. There were here visible no less than sixteen of these fossil trees, being situated at ten or eleven distinct levels, one above the other; they extend over a space of two or three miles from north to south. In the whole seventeen of these upright trunks not one could be seen intersecting a layer of coal, however thin, nor could any be seen standing on sandstone or their roots terminating on the same; but always on coal or shale. Their height is from five feet eight inches to twenty-five feet. One only could be seen that was twenty-five feet high; this was more than one hundred feet above the beach, which of course could not be approached to measure; but so far as I could judge;

it was that height, and about four feet in diameter, with a considerable bulge at the base.

All these trees appear to be of one species, the rugosities on the surface producing the effect of a rudely-fluted column, the whole of which were placed very accurately at right angles to the planes of stratification. I also learned that other and different fossil trees were exposed a few years ago, that could not now be seen, owing to the action of the tides of the Bay of Fundy, being so destructive as continually to undermine and sweep away, the whole face of the cliff, so that a new crop of fossils is laid open to view every two or three years.

At several places in this singular cliff, we observed not far above the uppermost coal-seams, containing vertical trees, two strata, which perhaps is of fresh water or estuary origin. This strata is composed of black bituminous shale, chiefly made up of compressed shells. Above these beds are innumerable strata of red sandstone or shale, which are without coal-seams, and with few or no fossils that can be seen. In various places in this cliff can be seen ledges of gypsum, which however, is chiefly at or near the beach, in which position it can only be seen at low tide. The cliffs of South Joggins afford a rich theme for contemplation by a student of nature, and more particularly the Geologist, as many curious conclusions may be deduced from an inspection of these celebrated cliffs. But for the existence of the upright trees, it might have been conjectured that the beds of sand and mud have been thrown down at first on a sloping bank, as some times happen

in the case of gravel and coarse sand ; but the evidence of the growth of ten or eleven forests of fossil trees, superimposed one upon the other, together with the erect position of the trees and their perpendicularity to the planes of stratification, will at once compell every sane mind to admit that such a conjecture is not only badly founded, but really absurd.

While viewing these fossils, I was for some time at a loss for a conclusion ; but owing to the waters of the Bay of Fundy being heavily charged with sediment, I came to the following conclusion : The main portion of the peninsula of Nova Scotia being situated South and East of South Joggins, thereby breaking the force of the waves of the Atlantic, and allowing many of the trees near the mouth of the estuary, formerly at a much lower level than at present, to continue erect, by the absence of waves and currents of sufficient strength to loosen and overturn the trees, and the waters being so heavily charged with sediment, readily enveloped the trees before they had time to decay, and after being thus enveloped they were of course preserved. But by the time I had noted the last line of my conclusion I saw that my theory was subject to objection, owing in part to the successive submergence of so many forests which grew one above the other. I therefore no longer taxed my mind concerning the cause of this majestic cliff, hoping at some future day to learn from the pen of some Geologist the cause of this singular yet beautiful precipice, which has the power of furnishing him with a rich repast.

CHAPTER XXVII.

Second Arrival at Minudie—Departure—Windsor—Borealis—Potatoes—Culture—Harvesting and Storages—Holton Bluff—Gypsum—Big Rock—Rose's Gypsiferous Series—Blue Noses—Ardoise Hills—Fossils—Kalmia—Sterility of the Southern Portion of Scotia—Progress of the Country—Inhabitants—Highlanders—Political Dissatisfaction—Halifax—Surroundings—Museum—Commerce—Departure for Massach. Dense Fogs—The Ocean—The Tempest—Sublimity of the Ocean.

After our return to the town of Minudie, we were very hospitably received by the chief proprietor and owner of the land containing the cliffs of South. This wealthy land-lord is also the owner of those fertile flats of red mud before described, which he has redeemed from the sea. Minudie is a happy and flourishing town. From the town of Parrsboro we again crossed the Basin of Mines, but by our penetrating a dense fog, which did not only obscure the scenery of the shores from the view of the sea but was otherwise very unpleasant.

Windsor, is a city situated on a splendid bay on the southern shore of the Basin of Mines, in a rich and highly cultivated region of country, which produces wheat and other grain in very considerable quantities. In the woods near this place, I saw several kinds of Pycnoloba and other flowers, among them the Linnaea borealis appeared here and there, matting the ground with its green leaves under the shade of the fir-trees, and still displaying some of its delicate flowers.

Potatoes are here raised in vast quantities, as the rich, moist, cool and admirable soil of the northern section of Nova Scotia is well adapted to the growth of the potatoe. It is contended a calcareous soil yields a good potatoe and generally a sure crop, and when the land contains but little lime it is added with salt, ashes and gypsum. The land when not already sufficiently rich, manure is spread on the surface before plowing, and if the soil requires the above manures are also added, or such of them as the soil may require. If a tough sod, it is plowed the preceeding fall, but if it is friable it is plowed just before planting; but in all cases the land is put in such a condition as to be perfectly loose and mellow. Hills are chiefly chosen, as they are most convenient for tillage, as they admit of a more thorough stirring of the ground with the cultivator or plow.

The medium sized potatoe is chiefly selected for seed, as it is contended to be vastly the best for planting.— Two potatoes are placed in each hill, or if they are drilled, they are planted singly, nine or ten inches apart. The distance both in hills and drills generally depends on the strength of the soil and size of the tops, as some varieties grow much larger than others. The potatoe is covered to the depth of five or six inches, and if the soil is light the ground is left perfectly level, if cold, heavy, or wet, the hill is raised when finished.

In some cases they receive a top dressing with compost earth well rotted, chip manure, &c.; soon after the plants make their appearance, this is carried to the field and spread from a light cart, the wheels passing

between the rows, after which the plow is run through them, which throws the earth over them two or three inches and no injury results, if the tops are partially or even entirely covered. The hoe is seldom required, except to destroy such weeds as may have escaped the plow. The ground is thus several times stirred before the tops interfere with the operation, but never after they come into blossom.

The harvesting is never commenced until the tops are mostly dead. They are then thrown out of the hills by a plow made for the purpose, called the harrow plow, and after they are raised they are never exposed to the sun for any length of time, but are gathered into small heaps and some of the tops spread over them until they are freed from the surface moisture.— Those for seed are then selected and placed in small piles in the field, till they are placed in thin layers in a cool, dry place in the cellar, where the air is excluded and no heating or injury can occur. Such as are intended for consumption are stored in an excavation made in the side of a hill, and sometimes on level ground, where they are protected from rain and frost until the partial sweating or heating, which soon takes place, is over, when they are covered with earth to a sufficient depth to protect them from being injured by freezing. A ditch lower than the base, is made encircling the heap, from which an outlet conducts away all the water, as any left upon them will inevitably produce decay. In a majority of cases, however, houses are constructed for the purpose of storing away potatoes, which here appear to be a vast product.

Potatoes are here used in large quantities by the manufacturers of starch. The refuse of the pulp, after extracting the starch as well as the liquor drained from it, is used in cleansing woollens and silks, which it effects without injury to the color. They are also used to some extent for distilling, and in a less degree for making sugar. But by far the greatest use of potatoes in this region of country is for stock feeding. They are eaten with avidity by all the brute creation, either cooked or raw. They are here fed to horses, cattle, sheep, hogs and even poultry.

Horton Bluff, near Windsor, is celebrated for its gypsum. The highly inclined and curved strata of this cliff affords a fine section containing coal plants and scales of fish. This is a scene truly interesting, as they contain marine fossils identical with many of those which can be found at Windsor, and at other places on the shore of the Basin of Mines. There is also seen in one of the ripple marked slabs, a something which appears to be the impression of the footsteps of an animal, perhaps a Reptilian, having five claws. There are two of these tracks, neither of which is very plain.

The gypsum taken out of this cliff is immense, and such as is used in Nova Scotia is burnt before using it as a manure. Great quantities of the gypsum of Nova Scotia is shipped for the United States. These vast beds of gypsum are most always found to be intimately associated with limestone, which have no appearance of their having undergone alteration, but appear as natural as when found by themselves.

The gypsiferous strata are best disclosed in the cliffs,

which are washed by the estuary, which penetrates far into the peninsula. The rapid tides of the Bay of Fundy continually undermine and sweep away the fallen debitus at the base of the cliffs, otherwise the section would soon be obscured, owing to the muddy waters of the Bay; but so rapid is the disintegration of the soft red marls with which the gypsum and limestone are interstratified, as to keep it in a manner fresh. The general strike of the beds are nearly east and west, the strata appearing to have been first folded into numerous parallel wrinkles, running east and west, and part of these folds tilted at considerable angles, sometimes towards the east and sometimes to the west, while the rocks are fissured in the direction of their strike and shifted vertically. By such complicated movements the strata have been thrown into the greatest confusion.

In the same range of cliffs, at a place called Big Rock, is seen a great mass of gypsum or alabaster, of a pure white color, which is no less than 300 yards thick and forms a conspicuous object in the vertical cliff, and is said to extend continuously east and west for 12 miles through the country, and is perhaps one of the most magnificent scenes that Nova Scotia can produce. Below it are alternations of gypsum with yellow shale and bituminous limestone. Among the dislocated strata which alternate with gypsiferous series, are three masses consisting of coal-grit, shale and sandstone.— These are visible only at low tide.

A few miles up the Shubenacadie river, at a place called Rose's Point, are seen limestones containing *marien shells*, and at a point called Anthony's Nose, the

same curiosities may be seen. Near both of these places are vast beds of gypsum. I learned that 4 miles higher up the river at Admiral's Rock, there was another vast quarry.

In going southwards from Windsor, there may also be seen on a tributary of the River Avon, a gypsiferous series situated near a Mr. Snide's Mill. This gypsum was inclosed in coarse sandstone, with a seam of impure coal, about two inches thick, near which could be seen clay, iron, stone and shale. Great beds of gypsum could also be seen on the Halifax road.

We now prepared to travel south for the city of Halifax, which we done by crossing the Ardoise hills in a stage coach. I learned while in the great plaster region, that there was a class of persons in Nova Scotia, called the Blue Noses, (so called from a kind of potato which thrives well here.) Whether this nick-name is an appropriate one or not, I did not become sufficiently acquainted with their habits to determine. This much however is true, that they are in the habit of setting a very high value either on their own time or that of others. To this class I presume belonged the driver of our stage coach, for on arriving in the famous Ardoise Hills, which range divides the sloping and fertile northern regions of the peninsula, from the rocky and baren regions of the south, drawing the reins of his horses, he informed us that there were a great many wild straw berries by the road side, and that he intended to get off and eat some of them, as there was time to spare, for he should still arrive in Halifax by the appointed hour. It is needless to say that all turn-

ed out, as there was no alternative but to wait in the inside of the coach or to pick fruit by the road side.— After our driver had made a desperate inroad upon the wild straw berries by the road side, we travelled on for some distance among the hills, when to my great delight I caught a glimpse of the sun, for the first time for some days, on which I raised the question of fog, by asking the driver if we would not soon get out of the foggy regions; when to my surprise I was told that we were just going into the very regions of fog. Accordingly, when we crossed the lower chain of the Ardoise Hills, I found that the driver's answer was very true. Great indeed was the contrast between the climate and the aspect of the fertile country which we had just left, and the cold barren tracts of granite, quartzite, and clay-slate, which we were about to enter on our way to Halifax. The sterility of this quartziferous district is not in the least relieved by any beautiful features of the scenery; the plants alone afforded us some points of interest and novelty, especially the *Kalmia*, now in full flower, which monopolised the ground in some wide open spaces where there was earth enough to support vegetation.

More than half of the southern portion of the peninsula of Nova Scotia consists of granite rocks, clay-slate, quartzite and other crystalline formations, without fossils that are visible, the strata having an east and west strike. Granite also intrudes itself in veins into every part of this series and was it not for the merit the southern half of Nova Scotia, of affording some of the best harbors in the world, it would certainly be one of the

most miserable, poor, rocky and foggy regions in the world. And I do not think it would be slandering the southern portion of the peninsula much, to term it the great theatre of thickets, granite rocks and fogs.

But in spite of the large extent of barren and rocky land in the south, and what is a more serious evil, those seven or eight months of frost and snow, which crowd the labours of the agriculturalist into so brief a season, the resources of the province are very great. They have the most magnificent harbours in the world, and fine navigable estuaries, large areas of the richest soil in the northern part of the province, which have been gained from the sea by embankments, together with a vast supply of coal and gypsum, with large and dense forests of timber, all of which are great resources of the province, rendering it great aid in overcoming all other obstacles; and it can be seen that the progress of the colony is onward.

A fellow-passenger in the coach from Windsor to Halifax, a native of the country, and who from small beginnings had acquired a large fortune, bore testimony to the rapid strides which the province had made within his recollection, by deploring the universal increase of luxury. He spoke of the superior simplicity of manners in his young days, when the wives and daughters of farmers were accustomed to ride to church, each on horseback, behind their husbands or fathers; whereas now they were not content unless they could ride there in their own carriage.

In Nova Scotia, not a few of the most intelligent and thriving inhabitants are descended from loyalists, who

fled from the United States at the time of the declaration of Independence. The picture they drew of the stationary condition, want of cleanly habits and ignorance of some of the Highland settlers in parts of Nova Scotia, was discouraging, and often so highly coloured as to be very amusing. They were described to me as cropping the newly cleared ground year after year without manuring it, till the dung of their horses and cattle accumulated round their doors, and became even to them an intolerable nuisance. In this predicament they accordingly pulled down their log cabins and removed them to a distance, till at length several of their more knowing neighbors offered to cart away the manure for a small remuneration. After a time the Highlanders perceived the use to which the manure was put, and required those who removed it to execute the task gratuitously, which request of course was performed without a murmur.

In this province the stranger may see that there is a political dissatisfaction among the inhabitants; however not to so great an extent as in the Canadas. In this province may be heard complaints against the British government, for their habitual disregard of the claims of native merit, as citizens native born, mentoo of the greatest talent and moral worth are excluded from the most important places of trust and honor; all posts of rank and profit being awarded to foreigners, or which is the same thing, to natives of the mother country, who they contend, have not their hearts in the country where they are but temporary sojourners, which by the by, is not so absurd an argument as is

sometimes held forth in matters of less importance. A second complaint is against the lumber traffic and timber duties, as the laborers engaged during the severe winters at high pay, to fell and transport the timber to the coast, become invariably a drunken and improvident set. Another serious mischief is contended as accruing from this traffic, as often as the new settlers reach the tracts from which the wood has been removed, instead of a cleared region, ready for cultivation, they find a dense and vigorous undergrowth of young trees, far more expensive to deal with than the original forest; and what is worse, all the best kinds of timber fit for farm buildings and other uses have been taken away, having been carefully selected for exportation to Great Britain.

The city of Halifax, with a population of 18,000, is beautifully situated on a harbour, said to be the most magnificent in the world, surrounded by low hills of granite and slate, covered with birch and spruce fir. The city contains many fine buildings, among which is a very large museum containing a vast number of fossil shells and a large fossil tree filled with sand. The city has a vast commerce, and is the point where British steamers always land from Europe.

On leaving Halifax, on board a steamship, for the city of Boston, in the State of Massachusetts, the splendid harbour and the Atlantic were enveloped in a dense fog, which is said to be caused by the meeting over the great banks of the warm waters of the gulf stream flowing from the south, and the cold currents often charged with floating ice from the north, by which very op-

posite states in the relative temperature of the sea and atmosphere are produced, in spaces closely contiguous. In places where the sea is warmer than the air, fogs generate. The ocean was found to assume different colors. The materials which compose its bottom cause it to reflect different hues in different places, and its appearance is also affected by the winds and by the sun, while the clouds that pass over it communicate all their varied and fleeting colors. When the sun shone it was green; when he gleamed through a fog it was yellow. After sailing about 20 hours, there came up a very heavy rain, attended by a considerable tempest; and while the rain was falling in torrents, the storm bringing up wave after wave, and loud peals of thunder following in quick succession, added sublimity to the scene. After it ceased raining, the tempest increased with such fury as to compel the steamer to sail into the Bay of Casco for safety, where we remained nearly all night.

Such is the Ocean—a most stupendous scene of Omnipotence, which forms the most magnificent feature of the globe we inhabit. When we are sailing over its bosom and cast our eyes over the expanse of its waters, till the sky and waves seem to mingle, all that the eye can take in at one survey is but an inconsiderable speck. In fine, whether we consider it as rearing its tremendous billows in the midst of the tempest, or stretched out into a smooth expanse, we cannot but be struck with astonishment at the grandeur of that omnipotent being who holds its waters in the hollow of his hand, and who has said to its foaming surges, “Hitherto shalt thou come and no farther, and here shall thy proud waves be stayed.”

CHAPTER XXVIII.

STATE OF MASSACHUSETTS.

Green Mountain range—Agriculture—Shipping—Aspect of the State—Railroads—Remarks on the past history of the State—Gloucester—Cape Anne—Salem—Trade—East India Marine Society—Witchcraft—Historical sketch—Remark on the Delusion of the Colony—Linn.

In travelling from the city of Boston, through various sections of this State, I found the Green Mountain range to traverse the central parts of the State from north to south. These mountains in their whole extent abound in noble elevations, dark green forests, pleasant and well sheltered valleys, all presenting an infinite variety of very impressive scenery. The State, west of the Connecticut river is mountainous, and east of that river it is undulating or hilly, except the southeastern portion of the State, or the counties south-east of Charles river, which are level and sandy. The soil of a large portion of the State is of an inferior quality, but cultivated with such a degree of skill and intelligence that it is rendered delightful to behold, and remunerates the owners with a handsome reward.

This great State is usually known by the name of the Old Bay State, so called from the celebrated Massachusetts Bay, on which it is situated, which great bay extends from the city of Boston north to Cape Anne, and south to Cape Cod, which two Capes extend far into the Atlantic, in the form of a crescent or half-moon; the bay is therefore so completely land-

locked as to render it one of the most secure and magnificent bays in North America. The coast of the State is long and very irregular, and has with the exception of the State of Maine, more good harbors than any other State in the Union.

Agriculture receives in this State great attention, and is conducted with a superior degree of skill and intelligence. It is no doubt one of the most highly cultivated States in the Union. In this State the Legislature as well as Agricultural Societies have made great efforts to encourage a skilful and thrifty husbandry, and to introduce the best foreign breeds of sheep and cattle. The great object, however, of the people of Massachusetts is commerce, manufactures and the fisheries, which three chief pursuits are carried on to a very extensive scale. The State employs in her commerce and fisheries, nearly one third of the whole shipping owned in the United States. It is the most thickly settled section of the Union, and is distinguished for the enterprise and public spirit of its citizens. The people are famous for the liberality with which they support literary and humane, as well as religious institutions, which are all in the most flourishing condition. The State is also noted for its magnificent public works.—Notwithstanding the State is mountainous and hilly, it has some very important canals and no less than seventeen or eighteen rail-roads, wholly within the State, five of which centre in the city of Boston. The larger portion of the rail-roads of the State are constructed with two tracks the entire length; and cars may be seen passing each other every few minutes.

Massachusetts is famous for the patience and forbearance which she practiced amidst the oppressions heaped upon her by old England ; an oppression experienced through exaction and calumnies, loss of charter, and one abridgement of liberty after another ; still she maintained her loyalty, still indulging the feelings and adopting the language of affection, until justice, patriotism, religion and the cry of liberty, raised by the renowned old Dominion, by the voice of her immortal Henry, bid them rise and assert those rights, which the God of nature designed for all his rational offspring, at which she took animation, hurled the Tea of Great Britain into Massachusetts bay, and boldly resisted by force of arms the oppressions of England, and furnished more men and money than any other colony, for the purpose of bringing to a prosperous conclusion, a revolution which a selfish and jealous mother country, by her pride and imprudence, had occasioned.

Through this long and trying war, in which inexperience had to contend with the best discipline of Europe, and poverty with great wealth, we see the inhabitants of Massachusetts the first to pledge their fortunes, liberties and lives, to one another, which being followed by twelve of her sister colonies, they together accomplished their emancipation, to the great astonishment of the world. And it no less astonished the world to learn, that no sooner were these confederated colonies emancipated and transformed into an independent nation, than they were found calmly betaking themselves to the organization of a government, under a Constitution as wise as it was singular, and whose ex-

cellency and competency, the experience of more than half a century has confirmed; a government which has since become the joy and admiration of the world; a government which has divested the wilderness of all its savage wildness and caused it to put on beauty and fruitfulness; a government whose jurisdiction and progress has been onward and onward, till it has become arrested in its progress by the mighty billows of the Pacific ocean.

Soon after my arrival in Massachusetts, I made an excursion to Gloucester, a great fishing town, with 6,350 inhabitants, situated on the southern bank of Cape Anne, which has an excellent harbour. The town is connected with Boston by railroad, and is famous for its fisheries, particularly for its mackerel and cod. At this town may be seen vast numbers of the finest mackerel and cod, together with immense quantities of other fish, as fishing is the only employment of the inhabitants. Gloucester is a place admirably situated for carrying on the fishing business. The town however has few attractions, being rendered filthy and disgusting by the immense numbers of its fish. The stranger after viewing the great number of fishing boats, and some very large whale ships, has few other objects of interest to detain him, as an hour or two will generally incline him to leave this great theatre of fish.

Salem, with a population of 16,762, is situated on a fine harbor, which is to the north of the city. On the opposite side of the harbor is the town of Beverly, containing 4,684 inhabitants, connected with Salem by a very beautiful bridge, 1500 feet in length. The inhab-

itants of the place are chiefly employed in commerce and the fisheries. Salem is noted for the commercial enterprise and industrious spirit of its inhabitants. It has long been largely engaged in the East India and China trade, and its coasting and foreign trade is very considerable. The inhabitants are also engaged in the whale fishery, in which they employ thirteen ships. They also carry on the common fisheries to a great extent. The city was incorporated in 1629, and received a charter in 1836. Salem is neatly built and contains the East India Marine Society, which is composed wholly of nautical men. It was founded in the year 1799, incorporated in 1801, and is said to contain the finest collection of East India curiosities in the United States. The introduction of a member is required to procure admittance. The collections consist of very valuable natural and artificial curiosities. There is here a Lyceum, a very flourishing institution, which was incorporated in 1830. Eighteen large and elegant churches also adorn the city.

Salem is noted for the great delusion of 1692, when nineteen persons were hanged on the charge of witchcraft, among which was Mr. George Burroughs, a very respectable minister of the gospel. This singular infatuation of the people, on the supposed prevalence of witchcraft, caused Salem to become a place of revolting and distressing scenes. From this town the awful mania rapidly spread into the neighboring counties, and caused terror, disorder and tumult throughout the colony; and for a time the counsels of age were unheard, wisdom was confounded and religion silenced,

all giving ear to the savages, who with their long story of Hobbamocko, heightened their imagination, confirmed their delusive opinions, and furnished materials for approaching terrors. While under the influence of this awful delusion, at length the enquiry was anxiously suggested, where will this accumulating evil and misery end. This singular infatuation began now to give way, and a conviction began to spread that the proceedings had been rash and indefensible; and happily for the colony, the cloud which had so long hung over it slowly and sullenly retired, and like the darkness of Egypt, was to the great joy of the distressed inhabitants, succeeded by serenity and sunshine. It would perhaps be unjust for us rashly to condemn our ancestors, as the human mind is prone to superstition, and more or less it prevails in every country, even in those which are civilized and refined and upon which divine revelation sheds its light. Even in this case, we are compelled to contemplate with wonder, the seeming madness and infatuation, not of the weak, illiterate and unprincipled; but of men of sense, education and fervent piety. We are also bound to consider, that though groundless, as is the existence of witchcraft at the present day, at that period its actual existence was taken for granted, and that doubts respecting it were deemed little less than heresy, because the delusion or humbug had seized upon all, not even escaping the most learned and accomplished of England. Even the celebrated Dr. Baxter pronounced the disbeliever in witchcraft an obdurate Sadducee; and Sir *Mathew Hale*, one of the brightest ornaments of the

English Bench, repeatedly tried and condemned those as criminals who were accused of witchcraft. It is however cheering to know, that no people on earth are now more enlightened on this subject than are the people of United States. Nothing of a similar kind has since existed, and probably never will exist. It is true stories of wonder, founded on ancient tradition or upon a midnight adventure, sometimes awe the village circle on a winter's night, but the succeeding day chases away every ghost and lulls every fear. There is perhaps no nation on earth who are now more free from those delusions, than are the people of the U. States.

The town of Lynn, with a population of 9,369, is beautifully situated as a seaport town, on a fine harbor. The place contains many large and handsome buildings and is celebrated for the great amount of shoes, (over 2,590,000 pair annually,) manufactured here. The inhabitants also carry on the cod and whale fisheries.—Nahant, a part of this town, is situated on a rocky peninsula, and is a very celebrated watering place and resort of the Bostonians during the summer months.

CHAPTER XXIX.

Boston—Site of Boston—Harbour—Bridges—State House—Slabs from the Beacon-hill Monument, with inscriptions—Representatives Hall—Devices and Inscriptions—Dome—Senate Chamber—Arms of the State—Cap of Liberty—Number of rooms—Height of Cupola—Regulations—View from the north window of the Cupola—East window—South window—West window.

The city of Boston, with a population of 114,306 inhabitants, the capitol of Massachusetts and the principal city of New England, is pleasantly situated on a small hilly peninsula, on Massachusetts bay, with a safe and commodious harbor, deep enough to admit the largest vessels, and so completely land-locked as to be perfectly secure, and large enough to contain six hundred ships at once. Several forts erected on the islands to the eastward, command the approaches to the city. Besides this main high and commanding peninsula, the city comprises another peninsula called South Boston, connected with the main city by two free bridges. The city also comprises the island of East Boston, with which communication is kept up by a number of steam ferry-boats. On the north, four bridges connect the city with Charleston, on the northwest with Cambridge, and a solid causeway of earth unites it with Brooklin, on the west. Before the erection of this great causeway, all the lowlands to the south of it were overflowed by the tide, with perhaps ten or twelve feet of water. A narrow neck of land which has been raised and widened by artificial construction, joins it to Roxbury, the main portion of the city being entire-

ly surrounded with water. The peninsula is bounded on the north, east and south by the bay and Charles river, and on the west by a large, open marsh, containing water to the depth of several feet.

The city is very irregularly built, having no streets of any considerable length, being entirely destitute of a handsome street of one hundred yards in length, they being generally crooked, narrow and roughly paved. The buildings are lofty and beautiful, from three to five stories in height. It is very rare that you see a building under the height of three stories, all of which are constructed either of granite or brick, and with the exception of the older part of the city, possess considerable excellence.

The peninsula was first settled in 1630; the first church built in 1632; the first market erected in 1634 and the first newspaper published in America, was issued here in 1704.

OBJECTS OF ATTRACTION. *The State House.*—The corner-stone of this splendid edifice was laid July 4th, 1795, on land formerly owned by Governor Hancock, near the top of Beacon Hill. This hill is 150 feet above high water mark, which is truly a splendid eminence in the centre of the city. (On the top of this beautiful eminence stood the old Beacon Hill Monument, which was taken down in 1804, and the four slabs which formed the base, now remain to be seen at the foot of the stairs leading to the cupola.) This elegant building is constructed of patent brick, and is of an oblong form, 173 feet front, and 61 feet deep. It consists of a basement story 28 feet high, and a princi-

pal story 30 feet high. The centre of the front is covered with an attic 60 feet wide and 20 feet high, which is covered with a pediment. Immediately above this rises a dome 52 feet in diameter and 85 feet high; the whole terminates with an elegant circular lantern, 25 feet high, supporting a gilded pine cone. The lower story is finished plain on the wings, with square windows. The centre is 94 feet in length, and formed of arches which project 14 feet; they form a covered walk below, and support a colonnade of Corinthian columns of the same extent above: The outside walls are of large patent brick.

The lower story is divided into a large hall, or public walk in the centre, 50 feet square and 20 feet high, supported by Doric columns in the centre, and on the north side of this story, is placed Chantrey's highly finished statue of Washington. As the visitor enters the State House at the south front, he beholds the statue through the arched passage-way that leads from the Doric hall to the apartment where it is placed. This statue, together with the pedestal on which it stands and the little temple in which it is placed, cost the sum of \$16,000.

Near the back door and at the foot of the stairs, are the four large slabs above named, which formed the pedestal of the monument on Beacon Hill; on one of which there is the following inscription:

"To commemorate that train of events which led to the American Revolution and finally secured Liberty and Independence to the United States, this column is erected by the voluntary contribution of the citizens of Boston, A D C C X C.

Stamp Act passed 1765, Repealed 1766, Board of Customs established 1767, British troops fired upon the inhabitants of Boston, March 5, 1770, Tea Act passed 1773, Tea destroyed in Boston Dec. 16, Port of Boston shut and guarded June 1, 1774, General Congress at Philadelphia Sept. 4, Provincial Congress at Concord Oct. 11, Battle of Lexington April 19, 1775, Battle of Bunker's Hill June 17, Washington took command of the army July 2, Boston evacuated March 17, 1776, Independence declared by Congress, July 4, 1776, Hancock President, Capture of Hessians at Trenton, Dec. 26, Capture of Hessians at Bennington, August 16, 1777, Capture of British army at Saratoga, Oct. 17, 1777, Alliance with France Feb. 6, 1778, Confederation of United States formed July 9, Constitution of Massachusetts formed 1780, Bowdoin President of the Convention, Capture of the British army at York Oct. 19, 1781, Preliminaries of Peace Nov. 30, 1782, Definitive Treaty of Peace Sept. 10, 1783, Federal Constitution formed Sept. 17, 1787, and ratified by the United States 1787, to 1790, New Congress, assembled at New York April 16, 1789, Washington inaugurated President April 30, Public Debts funded August 4, 1790.

Americans: while from this eminence, scenes of luxuriant fertility and flourishing commerce and the abodes of social happiness meet your view, forget not those who by their exertions have secured to you these blessings.

From the slabs above noticed, our attention is again drawn to the capitol. Two entries open at each end 16 feet wide, with two flights of stairs in each, on both sides of which are offices. On the west wing the Secretary's department in front and the Adjutant General's in the rear; on the east wing, the Treasurer's department in front and the Land Agent's and Library in the rear. In 1846, for the further accommodation of the Library, the legislature made an appropriation for the finishing of a room in the basement story, under the west wing. The library is accessible to the members of the General Court at all times.

The rooms above, are the Representatives Hall in the centre, 55 feet square. This hall is finished with Doric columns on two sides, 12 feet from the floor, forming galleries; the Doric estabatures surround the whole; from this spring four flat arches on the side, which being united by a circular cornice above, form in the angles, four large pendants to a bold and well proportioned dome. The pendants are ornamented with emblems of commerce, agriculture, peace and war. Directly over the speaker's chair, on the north side of the hall, is placed the State arms, and a little above may be seen the gilded eagle, just ready to fly, having in his beak a large scroll with the following inscription in large gilt letters: "GOD SAVE THE COMMONWEALTH OF MASSACHUSETTS." On the south side, opposite to the eagle, is a mammoth codfish, an emblem of the fisheries of Massachusetts.

The centre of the dome is 50 feet from the floor; the speaker's chair is placed on the north side; the clerk on the right of the speaker; the permanent seats in a semicircular form, so arranged as to accommodate 300 members on the floor; the front west gallery is for the use of members of the legislature; the rear gallery for the use of the public; east front gallery for the ladies; the rear gallery for the public.

In the east wing is the Senate Chamber, 55 feet long by 33 feet wide and 30 feet high; highly finished in the Ionic order of architecture. Two screens support with estabatures, a rich and elegant arched ceiling.— This room is also ornamented with Ionic pilasters, with the arms of the State and of the United States, placed

in opposite panels. Directly opposite the door, is placed the president's chair; on the right and left are seated the members, beginning with the oldest member in office on the right of the president. There are forty members in this branch of the legislature.

In the west wing is the Council Chamber, 27 feet square and 20 feet high, with a flat ceiling; the walls are finished with Corinthian pilasters and panels of stucco. These panels are enriched with State arms, the emblems of executive power, the scale and sword of justice, the insignia of arts and freedom, the caduceus and cap of liberty; the whole decorated with wreaths of oak and laurel. In the rear of this room on the same floor, is a small room called the Governor's room, and the antechamber for the use of the committees of the council.

Besides these principal rooms, there are no less than twenty-five smaller ones for the use of the several committees. The cost of this famous capitol amounted to \$133,333,33. It was first occupied by the Legislature on the 11th of January, 1798, upwards of three years after its commencement. The foundation of this edifice as before stated, is about 150 feet above the level of the sea. Its elevation and size make it a very conspicuous object. Two flights of stairs lead to the top of the outer dome or circular lantern, 170 steps from the lower floor. This lantern contains four large windows, situated north, south, east and west, which windows are 230 feet above the level of the sea. The view from these windows affords the spectator one of *the most interesting and beautiful spectacles.* It is free

to the public at all times, by the stranger registering his name in a book kept for the purpose, with the exception of Sundays, Thanksgivings and Fast days, when entrance is prohibited by order of the General Court. The views from this cupola are various in the extreme and the objects are here noted as they are seen from each window in succession, which embrace a greater variety, and present more grandeur and beauty, than can be found on the same area of ground on the western hemisphere.

North Window of the Cupola.—On the left is Cambridgeport, with Old Cambridge in the distance. Harvard University is in this town, but cannot be distinctly pointed out. To the right of Cambridgeport is East Cambridge, with its extensive glass works, which can be distinguished by their tall chimneys. Beyond and a little to the left of East Cambridge, is seen the town of West Cambridge. Directly in the range of the glass works, is the McLean Hospital for the Insane, (located in Somerville,) which is a department of Massachusetts General Hospital.

Somerville is a village seen to the left and partly on a hill, which is Winter Hill. This eminence served as a protection to the Americans in their retreat from Bunker Hill; and cannon-shot are frequently dug out of its sides. To the right of the Hospital, in the distance, stand the ruins of the Ursuline Convent, on Mt. Benedict. This Convent was burnt in the month of August, 1834. Directly beyond the ruins is seen the town of Medford, famous for its ship building. Malden is a town seen beyond and to the left the Bunker

Hill Monument. Let the eye cross the water, (which is a part of Charles river,) directly east of the glass works, to where stands the Massachusetts State Prison, which is a cluster of granite buildings, situated in the city of Charleston. The principal objects in that town to interest the stranger, are Bunker Hill Monument and the Navy Yard. A description of each, with other objects in both cities, will be given in their proper place. The Navy Yard is to the right of the Monument, and can be easily distinguished by its ship houses, under which stand some of the largest ships of the American navy. In the back ground of the navy yard is the town of Chelsea. In this town are located the Marine and Naval Hospitals belonging to the United States, which are two large granite buildings, to the right and left of the farther end of the Bridge. To the right of the town of Chelsea, in the distance, is the famous town of Lynn, already noticed.

From Lynn the attention is drawn back to Boston. On the left the most prominent object which strikes the eye, is a large granite building, which is the Massachusetts General Hospital, the left wing of which has been erected within the past year. The funds for that purpose (about \$60,000,) were subscribed by a few benevolent individuals of the city; the object being to afford more opportunity for free beds for poor people. There is seen to the left of the Hospital, the Medical College, for the use of students during the season for the lectures on Medicine and Surgery. To the right of the Hospital is seen the Wells Schoolhouse. A large church to the right of one fronting the spectator,

is the West Church, (better known as Dr. Lowell's) on Lynde street. Two very large buildings, seen directly over Dr. Lowell's Church, are the warehouses and depot connected with the Boston and Lowell railroad. Between the church and the depot can be seen the County Jail. To the right of the jail is seen the school house recently erected, called the Otis school, named in honor of that venerable patriot, Harrison Gray Otis. At the opening of the school in March, 1845, Mr. Otis was present, and among other things stated that forty years ago, the place where the schoolhouse now stands, was then a mill-pond, and the tide flowed into it to the depth of ten or twelve feet. Nearer the spectator, to the right of Dr. Lowell's church, are seen the spires of Grace church, one of the most beautiful churches in Boston. A vacant lot could be seen, on which some workmen were employed, which is intended for one of the reservoirs for the aqueduct. Directly in front of Grace church, in Bowdoin street, is seen Bowdoin street church, to the right of that is Bowdoin square Baptist church. In rear of the latter church is seen the National Theatre.

On the extreme right is seen a church with the high steeple, which is Christ church, in Salem street. This church contains a set of chime-bells, the music of which is truly delightful. It is situated near to Copp's Hill, celebrated in the history of Boston. On this hill can be found the tomb of the famous Increase and Cotton Mather. The eye cast over the top of the city to the water, where six bridges will attract the attention from *this window*. The first on the extreme left is Cragie's

bridge to East Cambridge; the next is Charles river bridge, leading to Cambridgeport; still farther to the right are Boston and Lowell railroad bridge; Boston and Maine railroad bridge; (the depot of this road is seen to the right of the Bowdoin square church,) and the Warren and Charleston bridges; the two latter are owned by the State and are free bridges. Directly in range of Cragie's bridge is seen a curious round building, which is used as an engine house for the Boston and Lowell railroad.

To the right of the Boston end of the Warren bridge is the depot of the Fitchburg railroad. A large round building is seen in front of the State Prison in Charleston, which is the engine house belonging to the Boston and Maine extension railroad. From this window, on a clear day with a good telescope, two mountains can be seen in a range of East Cambridge, one called Mount Watutick on the borders of the State, and a little to the right of that can be seen the top of Mount Monadnock, said to be situated in Jeffrey, in the State of New Hampshire.

From this same window, on a clear day the same mountains can be seen without the aid of a telescope, by simply fixing the eye upon a very large brick building, situated in East Cambridge on the left, and raising the eye to the back ground, when can be seen tolerably distinct Mount Watutick, near the town of Ashburnham, on the borders of the State, as above named. In the same manner can be seen Mount Monadnock, a little to the right of it in the State of New Hampshire.

East Window.—From this window we have the harbor, with its forts, islands, wharves and shipping, which is truly a grand scene of itself, and more particularly on the 4th of July, when the mighty bay of Massachusetts was spotted over with ships, and the wharves crowded; the whole of this powerful array of shipping with their hundreds of towering masts, all crowned with national colors, proudly floating in the breeze, had really an imposing effect on the stranger while gazing on the scene from this window.

An island in front of the window, at a distance of about two miles, is known by the name of East Boston, and contains about 800 acres. It was called Noddle's island by the first settlers, but of late years it has been known by the name of William's Island. It is said there were but two or three houses upon it as late as 1830. The population at present is about 7000. The rapid increase of this place is probably owing to the Eastern railroad depot being there. A very large brick building seen is the sugar refinery, which is a very extensive concern, employing about 100 men.— To the right of the sugar-house is the depot of the Eastern railroad, and still farther to the right of that is the Cunard wharf, used for the British line of mail steamers. The first island on the right is Governor's island, on which is situated fort Warren. To the right of fort Warren in the distance, is the Boston Lighthouse, distant about 13 miles. To the left of Governor's island is seen a beautiful little island, known as Apple island. To the right is fort Independence, situated on Castle island. It was at this fort that the notorious Stephen

Barroughs was once confined, the fort at that time being used for the reception of convicts. Fort George is seen in the distance, between Governor's Island and Castle Island. The eye is again drawn to Boston, in which we have a little to the left of a front view, Faneuil Hall, and directly between that and the water is seen Faneuil Hall Market.

To the left of Faneuil Hall is seen the long block of granite stores on Commercial wharf; and back of that is Lewis's wharf. To the right of the market is seen the Custom House, easily distinguished by its granite dome, which is found on examination to be a splendid structure. Directly between the Custom House and the spectator, is seen a large stone building, occupied by the Boston Museum, which is found to be an immense granite edifice. In rear of the Museum is seen the Court House, which is a beautiful granite building.

A little to the left of Faneuil Hall Market, and near the spectator, is seen the top of a church in Brattle street. In the front of this church can be seen a cannon ball embedded in the brick. The ball was fired by the American army stationed in Cambridge, on the night previous to the evacuation of Boston by the British, March 17th, 1776. The ball was picked up and firmly fixed in the cavity it had formed.

A beautiful Gothic church is seen beneath the spectator's eye, which is the Swedenborgian church. To the right of it and near the spectator, is Old South, a church so called, and is at the corner of Washington and Milk streets. During the revolution, the pews of this church were taken out and used for fuel by the

British soldiers, and the building itself converted into a riding school for the dragoons belonging to Burgoyne's army. To the right of the City Hall, nearer the spectator, is the Massachusetts Horticultural Society's Hall, and to the right of that is seen the Tremont Temple, (formerly the Tremont Theatre,) but laterly it has been occupied by the far-famed Millerites. Immediately in front of the Tremont Temple is the Tremont House, a large and splendid granite edifice, occupied as a hotel. Directly beneath the spectator's eye, on Beacon street, is seen a very large granite building in process of erection, which is intended for the Boston Athenæum.—The farthest point of land to be seen from this window on the left, is Nahant, which has already been noticed. The hotel is seen distinctly and is distant about 9 miles.

South Window.—Castle island and fort Independence can be seen from this window, directly over the spire of Federal Street Church. To the right of the church is seen, on a long island called Thompson's island, a farm school, belonging to the city, where persons can place their boys at school and have them labor upon a farm during a certain number of hours each day. Directly in front of this island, stands the City Prison, being the Houses of Correction, Reformation and Industry, together with the Insane Hospital. The House of Correction is devoted to the punishment of those convicted of crimes in the Police Court of the city; the House of Industry is for the support and relief of the virtuous poor, who seek this refuge from misfortune or age; the House of Reformation is for the punishment of juvenile offenders, who have not arrived

at years of discretion. To the right of the prison, on a hill, is seen the Perkins Institute and Massachusetts Asylum for the Blind, situated on one of the hills fortified by order of Washington during the occupation of Boston by the British, the breastworks of which are yet remaining.

In the back ground is the town of Quincy. A town to the right of Quincy is Dorchester, and to the right of Dorchester is Roxbury. The Boston and Providence railroad and the Boston and Worcester railroad cross each other in an open marsh on the right. The Providence railroad runs directly from the spectator. In Boston the object on the extreme left as seen from this window, is Federal Street Church. A church close to the spectator is Park Street Church. From this window can be seen the Granary burial-ground, where is a monument erected to the memory of the Franklin family. To the right of Park Street Church, on Tremont street, is the Masonic Temple, which is a rough granite building. To the left of the Temple is seen St. Paul's Church; in a range is seen the spire of the Baptist Church in Rowe street,

To the left of Park street church is seen Trinity Church, which is a rough granite edifice, built in the massive Gothic style. A little to the right of Trinity Church is seen Young's Church. Over the top of Green Church can be seen the Chauncey Place Church, which belongs to the oldest religious society in Boston. Directly over a red brick turret, which is Essex street Church, is seen the depot of the Boston and Worcester and Western railroad. This is easily seen by its ex-

tensive roof; and beyond this is seen the new Catholic Church, a splendid edifice situated in South Boston.— The depot of the Old Colony railroad is seen near the depot of the Worcester road. From this window can be seen three different railroad routes to the city of New York. The one on the right running directly from you, will take you by the way of Providence, in Rhode Island, to Stonington in Connecticut, near the head of Long Island Sound; the second by the way of Worcester, to Norwich in Connecticut; the one on the left, (which is the Old Colony railroad,) leads to Fall river; each of which roads are connected with steamboat lines, which run regular to the city of New York.

To the left of the Essex street Church, and near the spectator, is seen the Latin schoolhouse, a splendid edifice, in which there are two apartments: one for the High School, where boys can prepare in the most thorough manner for almost any business in life, and the other where boys are fitted for College. A large brick building seen to the north of the Boston and Worcester depot, is the United States Hotel, which is the largest in the city. The Common, directly beneath the spectator's eye, contains fifty-five acres, and its form somewhat resembles a cone; the whole handsomely and tastefully laid out. Beautiful and well gravelled walks are seen from this window in almost every direction through the grounds, together with its many graceful shade trees and handsome iron fence, causes it to present a very beautiful appearance. Between the Common and the marsh, is seen the public Garden, with its numerous shrubbery, flowers, swings, &c.

West Window.—Directly beneath the eye, on the left, is seen the house that was once owned and occupied by the Hon. John Hancock; it is easily noticed by its antique appearance, being built of very rough stone. A bridge in front is the western avenue. Previous to the building of this bridge or causeway, which is constructed of earth and stone, and is thereby made solid, all the lowlands to the south of it, (part of which is yet a marsh,) were overflowed by the tide with as much water as there is now on the north side of the causeway, which is 10 or 12 feet deep. A great many houses are now built on land so reclaimed. Some buildings seen on the farther end of the avenue, are known by the name of the City Mills. Directly over them is seen the town of Brooklin. A body of water seen in front is Charles river. Cambridgeport is on the right, which is also seen upon the left from the north window. Between Cambridgeport and the window is seen just in front, the Charles street Baptist Church, a truly splendid structure. Directly in range with the church is seen the town of Brighton. By carefully observing the horizon a little to the right of the church, on a clear day, the Wachusett Mountain can be seen, which mountain I saw very distinctly with the aid of a telescope, without which it cannot be distinctly seen. It is situated near the town of Princeton, and near the source of the Chickopee river.

The view from these windows is truly very extensive and variegated; perhaps nothing in the United States is equal to it. From this window is a fine view of Charles river and the bay, the town of Cam-

bridge, rendered venerable for the University two centuries old, and the numerous towns in the distance.—From the north window the eye is met by the memorable heights of Charleston, crowned with a towering monument, which stands there boldly to commemorate not only our liberty, but the dawn of the liberty of the world.

CHAPTER XXX.

Faneuil Hall—View from the Cupola—Old buildings—Paintings—Quincy Market—Custom-House—Order of Architects—Museum—Massachusetts General Hospital—Court-House—Old State House—Houses of Industry, Correction and Reformation—Athenæum—Institution for the Blind—Eye and Ear Infirmary—Trinity Church—St. Paul's Church—Park Street Church—Bridges—Wharves—Boston Common—Valuation of the Common—Remark—Cemetery—Pond—Great Elm Tree.

After enjoying the magnificent prospect from the windows of the cupola of the State House, the next move of the stranger will be to visit Faneuil Hall, situated at the intersection of State and Tremont streets. This venerable old building is so thronged with immortal reminiscences as to be called the "cradle of liberty." This structure was commenced in the year 1740, by Peter Faneuil, Esq., and in 1742, or 2 years afterwards, at his own expense, and generously given to the town. It is built of brick which have since been stained to the color of grey granite. The lower story of the building was intended by Mr. Faneuil for a market-house, and used as such till the year 1827, the se-

cond story being used as a Town Hall. The building was then 100 feet in length and 40 feet in width.— This valuable gift was consumed by fire, (except the brick walls,) several years after the death of Mr. Faneuil, or some time in the year 1761. Boston, however, resolved immediately to rebuild it in the same style it was before, it being the building in which meetings were held, and Columbia's illustrious sons counselled together, for the purpose of giving proud old England that staggering blow, from which she never will recover to the end of time. In 1805 it was enlarged, by adding 40 feet to its width, and 25 to its elevation, thus making it one hundred feet by eighty feet. There is a cupola on the building, affording a fine view of the harbor and a large portion of the old part of the city. In the immediate vicinity of this noble old building can be seen many of those old, antiquated, gable-ended, top-heavy houses, crowded together, as if the little hilly peninsula of Boston was the only spot of ground on earth. This constituted the compact centre of Boston in the days of the old English Governors; and so far as the word compact is concerned, I think it was very appropriately applied, and the word might be applied to the whole of the city without doing it the least injustice, as the whole is too densely built for the comfort and health of its thousands of inhabitants. From this cupola is presented a fine view of many of the crooked narrow streets of Boston, whose winding course present a gloomy appearance, especially when contrasted with the streets of many other cities.

The hall in this memorable old building is now a-

about 80 feet square and 28 feet in height, with handsome galleries on three sides, supported by a number of very beautiful Doric columns. At the west end of the hall, the wall is ornamented with a number of splendid paintings, among which may be seen the handsome full-length likenesses of Mr. Faneuil, the donor of the edifice, also Gen. Washington, Knox, Green, Putnam, and a host of military heroes; to which may be added Governor Hancock, Samuel Adams, and a splendid bust of John Adams, all Columbia's noble sons, who lifted up their voices and patriotic arms for freedom. Here are presented to view the beautiful forms of many of that brother-band of virtuous patriots, who on the side of Columbia toiled and bled for liberty, who bathed their noble forms in sweat and blood, till they fell at the feet of their mourning and weeping country, after having once dazzled the world with the glare of their exploits. The lower story of the building contains the armories of the different military companies of the city, it being no longer used as a market.

Faneuil Hall Market, (sometimes known as Galley Market,) erected in 1827, is an immense building, six hundred feet in length and fifty feet in width, two stories high, constructed of granite, at a cost of \$150,000. It is built of land once overflowed by the tides, but sufficiently reclaimed from the waters to answer for the foundation of the building. The lower story is divided into 130 stalls, and the second story similarly furnished. The building on market days, presents a scene of considerable interest. Here the stranger may perceive the eddying throngs, gathering and whirling,

scattering and hurrying hither and thither in the activity of a market-place. He may become confused by the never-ending turbulence and commotion, with the hundreds of mingled notes and noises which are arising from the multifarious throng here collected; all comingling in the same hour, in the same street and in the same scene, with their waiters, pans, buckets, baskets and all manner of things, for bearing off a portion of the great variety of eatables with which the market abounds.

The Custom House, situated on a low level site, on India street, at the foot of State street, is built of Quincy granite, and is truly a splendid structure. It is advantageously situated between Long and Central wharves, and is perhaps one of the most beautiful and substantial buildings in our country. It would be difficult to find terms of description, which would convey an adequate idea of the effect produced by the architectural arrangements of this structure. The most that I can say of this elegant edifice is, that the new Custom House of Boston is imposing in its dimensions, harmonious in its proportions, impressive in its solidity, and beautiful in its strength. The following, however, are the most striking features of this great edifice: The order of its architecture is the Grecian Doric, which style is preserved throughout as far as is consistent with the site and the business to which the building is devoted. The extreme length of the building is 140 feet, and its depth omitting the porticoes, is 75 feet. The height from the basement floor to the top of the dome, is 95 feet. Externally, 32 fluted columns are presented, each 5

feet 4 inches in diameter and 32 feet in height. Of these, 16 are three-quarter columns, and form part of the walls; the space between them being devoted to windows. There are four of these columns at each end of the building, and two on each side of the porticos. Then at each corner is a nearly full column, so that each end of the building presents the appearance of six of these fine columns; and the sides, including the porticos, severally exhibit twelve columns. Four antea or square pillars, stand at the intersection of the porticos with the body of the building.

The porticos are ten feet deep by sixty-six in width, with six columns, each of the same dimensions stated above. The entablatures are ornamented with triglyph, friezes and mutule cornices on a line with the cornices of the building. The porticos are reached by 11 beautiful stone steps on the fronts and sides.

The roof of the structure throughout, and the inglazed part of the dome are covered with granite tiles, which are visible from many places in the city; the best points of view however at a distance, except the State House, are some points of view in State Street.

Passing from the principal external visible features of the building, we proceed to the foundation on which it rests. This consists of 3000 piles, covering an area of nearly 14000 feet. On these piles has been laid a platform of granite, a foot and a half thick, well cemented together, so as to be impervious to water. On the east, south and west margins of this platform, is built a ten foot shield wall, and within the enclosure *thus formed*, stand the wall proper of the Custom House.

The cellar is much cut up by arches and walls of vast thickness, required to support the immense weight of the internal stone work above. A number of rooms however, 12 feet high, are secured for storage, and an apartment for the furnaces for heating the whole of this large and beautiful establishment.

The first story open to the light of day is the basement. In addition to the thick wall partitions separating the rooms, are four granite columns, four feet in diameter, and eight others two feet in diameter. These twelve columns are distributed through the rooms as supporters. In the northwest corner are two rooms for the night inspectors: one 12 feet by 22, and the other 15 feet by 24. In the southwest corner is a room 10 feet by 13, for the engine for carrying the fans by which the heated air is to be forced up. The remainder of the rooms in this story are for storage.— They are about 11 feet high.

In the second story of this grand structure, the main feature is the splendid entrance vestibule or rotundo, 50 feet square, which is formed by 12 granite columns, 4 feet in diameter. From the north and south sides rise two grand stair-cases, 15 feet wide at the bottom and 7 feet at the top, terminating in smaller vestibules above which connect with the various offices in the third story. On the northwest side of the grand vestibule, are the Assistant Treasurers' apartments which are three in number. The two largest are 20 feet by 32, and 16 by 25. The smaller is 12 feet square.— This is the vault, or Uncle Sam's strong box. In the northwest corner is the Measurers apartments, one 19

feet by 29, and the other 9 feet by 12.. Next to this is the Superintendent's room, 12 by 16, and adjoining that west, the room for the markers and approvers of spirits, 12 feet by 15. In the southwest corner are the rooms of the Weighers and Gaugers, one 22 feet by 33, and the other 15 feet by 12. In the southeast corner are two rooms for the Inspectors, one 40 feet by 33, and the other 8 feet by 12. In one of these rooms are 4 granite columns, 14 feet high. In most of the rooms in this story, the ceiling is arched.

The third story is gained by either of two grand staircases, already noticed, in which we find the great business room, under the direction of the Deputy Collector. It is 62 feet by 58, and lighted from the dome and by six windows opening on the east and west, and two end windows, opening on lighted passages. The dome is supported by 12 fluted Corinthian columns of marble, 30 feet in height. Above them rises the dome 32 feet more. The lower circumference of the dome is 195 feet, or about 65 feet in diameter. The circumference of the eye of the dome is 57 feet, or about 19 feet in diameter, and is furnished with beautifully variegated stained glass, which send down a flood of mellowed light, which has a grand and imposing effect.— This is said to be the most perfect and superb hall in the Corinthian style, to be found in the United States.

Throughout this splendid edifice the flooring is stone, of a fine quality. On the third floor, in the northwest corner, are the Collectors apartments; one 28 feet by 20, and the other 10 by 12. In the northeast corner are the naval officers apartments, one 19 by 24 and the

other 11 by 25. The southeast corner contains the surveyer's apartments, 27 by 19 and 11 by 10. In the southwest corner are the public storekeepers, 25 feet by 20. In the attic of this building, there is an extra room for the markers, which is 11 feet by 18, a room for storing papers belonging to the Collector's office, which is 64 feet by 20, and another room of the same dimensions, for the papers of the Surveyer's office.

The Boston Museum is situated about halfway between the State House and Custom House, and occupies a fine site on Tremont street. It is an immense granite edifice, covering about 20,000 feet of land.— This structure was erected in 1846, for the express purpose, at a cost of upwards of \$200,000. The collection is exceedingly curious & valuable, comprising nearly half a million objects of interest, embracing every variety of birds, quadrupeds, reptiles, insects, shells, minerals and fossils; and extensive gallery of costly paintings, engravings and statuary; together with an innumerable variety of rare and curious specimens of nature and art, from all parts of the world. The collection is admirably arranged for inspection, and with the extreme order and neatness everywhere observed, has risen to be one of the most prominent places of interest to strangers visiting the city. Connected with this famous institution, in an adjoining large building, is a spacious hall, where splendid performances are given every evening and Wednesday and Saturday afternoons, free of charge to visitors of the Museum.

The Massachusetts General Hospital is a splendid granite structure, situated at the west end of Boston, on

land formerly called Prince's Pasture. The cornerstone of this elegant edifice was laid on the 4th of July, 1818, in the presence of many persons of dignity in public life, and a numerous assemblage of citizens. It is said the civil, religious and masonic services were performed with such impressive pomp, as rendered the whole scene truly solemn and interesting. This famous building was so far completed on the first of September, 1821, as to be in a fit condition to receive patients. The main building with its right wing was finished in 1821; the left wing was only erected within the past year. This edifice has been pronounced the finest building in the old Bay State. It stands on a small eminence, open to the south, east and west. The length of the building is 168 feet and its greatest breadth is 54 feet, having a portico of eight Ionic columns in front. The building is constructed of Chelmsford granite, the columns and their capitals being of the same material. In the centre of the two principal stories are the rooms of the officers of the institution. Above these rooms is the operating theatre, which is very handsome place, lighted from the dome. The wings of this edifice are divided into wards and sick rooms. The staircase and floorings of the entries are of stone, well polished. The whole of this splendid structure is supplied with heat by air-flues from furnaces, and with water by pipes and a forcing-pump. From every part of this building can be seen the beautiful hills which surround Boston. The grounds belonging to this building have been greatly improved, by the planting of ornamental trees & shrubs, and the extension of the gravel walks, for those patients

whose health will admit of exercise in the open air.— These beautiful grounds though small, (being only about 4 acres,) make truly a handsome appearance. The grounds on the southwest are washed by the waters of the bay.

The Court-House, situated in rear of the Boston Museum, is a large and splendid edifice, constructed of granite. It is 176 feet in length, 54 in width and 57 in height. This is the most beautiful building of the kind I ever saw, and so capacious, that at times eight Courts are all in session without interfering with each other.

The Old State House, situated at the head of State street, built in the year 1748, is replete with revolutionary reminiscences. This old building was long the place where the General Court of the province of Massachusetts was holden, until the erection and dedication of the State House on Beacon Hill, already described. The Houses of Industry, Correction and Reformation, situated in South Boston, are admirably conducted institutions, a short sketch of which was given in the notes taken from the Cupola, at the South window. The Boston Athenæum, established in 1806, has a library of over 40,000 volumes, a collection of valuable paintings, busts, &c. There is a large and splendid grate structure in process of erection on Beacon street, which is intended for this Athenæum.

The Institution for the Blind, at South Boston, established in 1832, is a celebrated charity. The Medical branch of Harvard University, founded in 1782, is a large and splendid brick building at the foot of Bridge

street, which are respectively institutions richly worth a visit. The city contains an Eye and Ear Infirmary; also 25 banking institutions, with large and splendid buildings for the purpose. There are here 25 insurance companies, 36 printing establishments, 57 primary schools, one African school for blacks, and numerous private schools for children of both sexes, and no less than 106 literary and charitable societies, all in a flourishing condition.

Boston contains 76 large and handsome churches, among which may be named Trinity church, an elegant edifice, built of granite in the Gothic style, situated at the corner of Summer and Hawley streets. It contains a very large and splendid fine toned organ.

St. Paul's church, consecrated in 1820, built of granite in the Ionic style, 112 feet in length and 72 feet in width, situated on Tremont street, near the Masonic Temple, is a very beautiful edifice.

Park Street church, situated on Park street, at the northeast end of the Boston Common, was consecrated in 1810. It is a very large granite structure, and is one of the most lofty and elegant churches in New England; the steeple is 218 feet high.

Boston is connected with Charleston by means of Charles river bridge, opened in 1786. It is 1503 feet long, 42 feet wide and cost originally \$50,000; also by Warren bridge, opened in 1828. It is 1390 feet long and 44 feet wide. The city is connected with Cambridge by West Boston bridge, opened in 1793, and is 2758 feet long. The famous causeway constructed of stone and earth, is 3444 feet long and cost \$76,667.

South Boston bridge, leading from Bostonweck to South Boston, was opened in 1805, and is 1550 feet long, 40 feet wide and cost \$50,000. Canal Bridge, leading to Bechmere's Point, opened in 1809, is 2796 feet long and 40 feet wide.—An arm extends to Prison Point in Charleston, which is 1820 feet long and 35 feet wide. The Western Avenue from Beacon street to Sewell's Point, in Brookline, was opened in 1821, is one mile and a half long and 100 feet wide. This avenue forms a dam across Charles river Bay, and cost \$700,000.—Boston Free Bridge from Sea street to South Boston, opened in 1828, is 500 feet long and 38 feet wide.—There are also five handsome railroad bridges on which the cars pass over the waters into the city.

The Wharves of Boston exceed those of any other city in the Union perhaps, in convenience and magnitude. There are wharves around about half the main city, from the bridge of the old Colony railroad at the south, to the bridge of the Boston and Maine railroad at the north: The whole of the wharves are built as close to each other, as they could conveniently be made; they somewhat resemble the cogs of a wheel, when viewed from some eminence in the city.

Long wharf, at the foot of State street, is 1800 feet long and 200 feet wide, and has on it a row of warehouses 76 in number. Central wharf, built in 1816, is 1380 feet in length and 150 feet in width; over the centre is a large observatory, from which high tower the stranger can look down on a forest of ship masts, crowded together in the wharves and bay, which have truly a very imposing effect. On this wharf are 54

warehouses, four stories high. Commercial wharf, 1, 100 feet long and 160 feet wide, contains 34 large granite warehouses.

The Boston Common, a piece of ground in the form of a cone, contains 55 acres, which is enclosed with a substantial iron fence, erected on stone cappings. The height of the fence is about eight feet, beautifully painted, and cost the sum of \$100,000. The ground is laid out with gravelled walks, bordered with ornamental trees of the choicest species. A more delightful spot in summer, is not to be found in any city of its size in the United States.

This famous Common has been valued by the proper authority of the city, at four dollars for every square foot of land enclosed by the iron fence, which would be the sum of \$9,583,200 for 55 acres of land, which in many other places perhaps would be considered an extravagant valuation. But this spot of ground is not only prized by the authorities of the city, but it is valued by every class of citizens as being the only place in the city to which they can resort for fresh air and enjoyment. To the many thousands of inhabitants of this densely built city, how pleasant and significant is that name, the Common; not the Park nor the Mall, but simply the Boston Common; a place owned in common by all the citizens of Boston, and in which every citizen has a common right and interest; a place where the rich and poor may meet together and enjoy the common bounties of heaven,—fresh air, green grass and waving trees; a place set apart for the common *good and happiness* of the citizens of Boston.

How rich a boon is even this one breathing place, to this renowned and densely built old city. And even the traveller from the country, after being housed up and confined for only three or four days between brick walls, in passing the narrow streets of the city, when he arrives at the Common, and strolls along its walks and witnesses the amount of happiness, which this one piece of common ground can afford, he cannot but bless the memory of those to whom he, as well as those persons on the Common with him are indebted, for the gift of this breathing ground, the Boston Common.

It is not boys and girls alone that are made happier and healthier by this sweet Common. There are hundreds and thousands of men and women too, who having been pent up all day between brick walls, refresh their weary bodies, invigorate their jaded minds, and it is hoped improve their hearts, by an evening's stroll along the walks of this famous Common.

The greatest extent of this Common is east and west ; adjoining its eastern extremity, and near the State House, there is a very beautiful Cemetery ; and adjoining the southern fence there is a very splendid Cemetery, both of which contain beautiful tombs and monuments. Near the centre of the Common there is a Pond, which in form resembles an ellipsis. It is beautifully walled up around the edge with stone. In this pond the boys have a number of little ships well rigged, so that the breeze blows them from bank to bank, while the boys stand in crowds on the bank with uplifted hands, shouting on the departure and approach of their *respective little ships*.

A little to the south of the Pond stands the great Elm Tree, planted by an ancestor of Governor Hancock's family by the name of Henchman. Its age can never be ascertained, as the trunk is hollow, so that boys actually went in and out at pleasure according to tradition, within fifty or sixty years; the concentric circles marking its growth are therefore obliterated. It is about 65 feet high, the extent of its branches is about 90 feet, and its girth a little above the ground nearly 22 feet. All its large branches are well braced with rods of iron, so as to prevent the wind from splitting them off. The tree is enclosed by a very handsome fence, constructed in a circular form and about seven feet in height, so that persons cannot even have the pleasure of touching this famous old tree. In a western direction from this Common, there are no buildings to obstruct the view for some distance, as in that direction there is a large open marsh.

CHAPTER XXXI.

Celebration of the 4th of July—Order of the Procession—The afternoon—Colours—National salute—Sky-rockets—Position and appearance of the apparatuses connected with the Fire-works—Commencement of the chief part of the Fire-works—Spouting fire—Circle of Stars—Statues, Dome, American Eagle and Banners—Sugar Refinery—A portion of the various apparatuses and processes connected with the refining establishment.

On the Boston Common, I witnessed the celebration of the 4th of July, where there were collected togeth-

er an immense crowd of persons, during the day and evening. The celebration was opened by a National salute of thirty guns, on the morning of the 4th at sunrise. At 8 o'clock, a procession of hundreds and thousands of persons began to move from Faneuil Hall, at the head of which was a very splendid regiment of soldiers, all uniformed in a very costly and handsome style; they were followed by the Mayor and principal authorities of the city; in rear of them the different benevolent societies of the city; in rear of which followed the citizens. At 9 o'clock, a large portion of the procession entered the Common, where the military companies made a very handsome display for about two hours, after which there were a number of very eloquent Orations delivered.

At 1 o'clock, the procession again moved toward Faneuil Hall and dispersed. During the afternoon the military companies marched through the principal streets of the city, accompanied by a number of very splendid bands of music, while scores of colors were suspended over the streets by cords, from window to window, proudly waving their lovely stripes over the heads of the soldiers, as they marched through the streets of the Granite city, to commemorate the great deed of Columbia's first and greatest sons. At precisely 30 minutes before sunset, commenced a national salute of 30 guns, at an entraval of one minute between the report of each. At the discharge of the Massachusetts and Virginia guns, there was given such a tremendous shout for each, that it appeared to almost rock the peninsula on which *Boston* is situated; truly the most deafening

about I ever heard for the old Dominion, in all my life. At sunset, after the discharge of the last gun of the national salute, while the hollow thunder of its report could still be heard in the distance, commenced the firing of sky-rockets, at intervals of one minute between each discharge, which continued till 9 o'clock. The rockets would burst in the air, and balls of fire would diverge as from a common centre, and tending their course downwards, followed by a stream of fire resembling a comet, each ball burning with a brilliancy that dazzled the eye; every ball being tinged with a different color from another, and so directed as to descend within the Common.

At 9 o'clock commenced the showing of the principal part of the fire-works, which is said to be the greatest ever exhibited in America; even a tolerable description of which it is not in my power to give. A part of the apparatus connected therewith was situated on the most prominent eminence in the Common, and before they were set on fire, the largest had the appearance of consisting of timbers or other materials framed together; the lower frame of an oblong form, about 80 feet long and 40 feet high; on the top of this frame was a semicircle, the profile of which resembled the dome of a building; this dome or semicircle was crowned by the American Eagle with expanded wings, which were about 15 feet from wing to wing.

The dome contained thirteen large stars within its circumference, each being about four feet in diameter. The other spaces in the semicircle were filled up with banners and other appropriate devices. Just below

semicircle were the words in very large letters, at three feet in length, "1776, *The dawn of the Liberties of the world.*" These words extended along the whole length of the work ; immediately under the centre of those words was placed a statue of Justice, with her right hand extended upward, holding the scale toward the letters ; immediately under the figures 1776, was placed a statue of Washington, and immediately under the word "world" was placed a statue of Lafayette ; the spaces between were filled up with stars and emblems and other appropriate emblems. This apparatus rose from the ground to the beak of the eagle, was about 100 feet in height. In front of this on the brow of the eminence, were 13 very large stars, each supported by a post about 20 feet high, placed in a circular form, with a star about 8 feet in diameter. In the centre of this circle of stars was placed a large bee-hive on a stand ; the hive revolved, and resembled in form and appearance, a small haystack, around which were placed the apparatus for the spouting, spinning and reeling of fire. At the top of the little hill or eminence, and immediately in rear of the whole of those apparatuses, was the chimney, from which proceeded the sky-rockets already described and sketched. The whole of those emblems were constructed and of such material, that they would burn in succession and burn for about four minutes each, with such brilliancy as to dazzle the eye of the beholder. At 9 o'clock, this part of the exhibition commenced, by the firing of comets or balls of fire, at an elevation of about 15 feet above the heads of the spectators, which comets would cross each other in every

direction, and so soon as they arrived at the edge of the Common, they would turn at angles of about 45 degrees, at which time a report could be heard as loud as the report of a musket when discharged, in which way they would pass and repass over the heads of the crowd, from two to three times, in doing which, no other noise could be heard than that caused by the resistance of the air.

Next came the spouting, spinning and reeling of fire, the whole of which was grand in the extreme, and had more the appearance of being under the direction of a supreme artificer, than being conducted by man. When this with many other things of a similar kind had passed off, the hive was fired by a match ; it revolved, burning with all the primary colors, which presented the most gaudy appearance, for being composed of fire, that was ever witnessed in Boston ; while the hive was surrounded by swarms of bees composed of fire.

Next the circle of stars took fire in succession, each one burning four or five minutes, with all the primary colors, in the most grand and brilliant style, while out of every star would proceed rockets or fire balls, from almost every point of the star, which were propelled to a considerable distance in the air, where they would explode, and streams of fire descend in awful grandeur toward the earth.—And last of all, came the large part viz : the statues, dome and American eagle, which crowned the whole in beauty and grandeur ; which, with its splendid statues, letters, stars and stripes, with the American eagle with expanded wings, crowning the whole. This apparatus, with all its beautiful or-

naments, statues and emblems, burned for eight or ten minutes, with the various primary colors, with such a brilliancy as to dazzle the eye of the beholder; the same as it would if gazing upon the effulgent face of the meridian sun; while rockets would ascend from almost every point of the apparatus, and after being propelled far in the air, would explode, and streams of fire diverge from their respective centres, and bend their way downward to the gazing thousands, who with their thrilling shouts and uplifted hands, aided in commemorating the great deed of Columbia's sterling sons. The whole was perhaps the grandest artificial display ever witnessed in America. The exhibitions of the day and night were entertaining and instructive throughout, rendered more thrilling as they were exhibited in the very "Cradle of Liberty."

Thus ended the celebration of the 4th of July. The features of a few of the most prominent emblems, and the position they occupied, have been sketched, leaving many others unnoticed, which were used on the occasion, and the causes and effects therewith connected. What was the cause of this or the cause of that, I leave for some scientific individual to give, as science had complete command of the whole. It yet remains for me and thousands of others who witnessed the same, to learn the causes and effects therewith connected in every particular; to know how those emblems could spout fire far into the air, and reel it as yarn; throw rockets toward the heavens, and the whole burn with such bright effulgence as to dazzle the eye, and yet its *chief features not be consumed or destroyed.*

The Sugar Refinery, situated in East Boston, is a very large brick building, and is a very extensive concern, employing about one hundred men. It is very lofty, consists of an unusual number of floors or stories, and lighted by over one hundred windows, most of them small, and at such a height as to have seven floors between them and the ground. A visit to this refinery, and a day spent in the establishment, would be interesting to any traveller who had never visited a like concern. The hogsheads of sugar are brought on drays, from the docks to the front of the building, and are hauled up by a crane and drawn in at an open door, to a large square room. This is the first part of the refinery which I visited, and a busy scene it presented.—

Here was a hogshead of sugar suspended from the crane, there was another hogshead deposited on a low iron carriage just in from the door, and near it was a third lying weighed; a little farther on was a man knocking out the head of a hogshead, and near him a party emptying the contents of another already opened, while others were removing empty hogsheads.

The sugar when about to be operated on, is shovelled into large circular vessels, called by the refiners, blow-up cisterns; so called from the mode in which the steam is admitted to the contents of the vessels.— The cisterns are six or seven feet in diameter and about five feet in height; and the purpose for which they are employed is to dissolve the sugar, preparatory to the removal of earthy and other impurities, with which *sugar is well known to be contaminated; in addition to which, there are two other substances which require*

to be removed from this sugar, before the white crystalline state can be obtained, and they are coloring matter and molasses.

Three distinct processes are resorted to in order to remove these substances. To remove the impurities is the first object. The sugar as before stated is thrown into the blow-up cistern, and water is admitted to it from a cistern at the top of the edifice, which supplies every part of this vast establishment. Into the cistern containing the sugar and water, there is added a small quantity of lime-water, which is brought from large vessels in the building, where the lime is dissolved in water, and stirred till a milky fluid is produced, from which it is conveyed in small quantities to the cistern containing the sugar. From an engine, steam is forced into the solution, by which the latter becomes heated in a short space of time, aided by constant stirring.

The temperature of the solution is not greater than that of boiling water. The saccharine solution, which is called in the language of refinery, liquor, is not skimmed at all; but at a certain stage in the operation, it is allowed to flow from the blow-up cistern into a range of filtering vessels in a room beneath, into which filters it enters as a thick, opaque, blackish liquid. The arrangement of these filters is exceedingly ingenious.— They consist of several cast-iron vessels, each containing a large number of cloth tubes attached to short metallic tubes, which are screwed in circular holes in the upper part of the vessels, and hanging vertically downward. Each of these tubes contain a large bag, made of a close kind of cotton cloth, and coiled up so as to

make a compact mass of cloth. The liquor flows from the blow-up cisterns into a shallow vessel to which the tubes are attached, and thence through the bags contained in the tubes. There is no outlet for the liquid except through the meshes of the cloth, and as the cloth forming the bags is doubled and redoubled in its tube, the liquid finds its way through between the plies and folds of the cloth, and finally exudes in a transparent state. The whole of the impurities, except a little coloring matter, are retained by the bags and tubes, while the saccharine liquor passes through. After the bags become clogged, the tubes to which they are attached are unscrewed and removed to a washing-yard, where the impurities are removed, and the bags and tubes thoroughly cleansed by washing. The saccharine matter contained in the impurities, is afterwards extracted for other purposes by various processes.

The next point in our visit was the rooms in which the process of decoloration is carried on. All the liquor as it leaves the filters flows through pipes into other parts of the building, occupied by charcoal cisterns, each of which is a square vessel about four feet high, and provided with a double bottom, the upper one being perforated with small holes. On this perforated bottom a piece of cloth is laid, on the cloth a layer of powdered animal charcoal or boneblack, between two and three feet thick.

The saccharine liquor flows on the surface of this charcoal bed, through which it slowly finds its way percolating to the bottom, then through the meshes of the cloth and perforated bottom, into the vacant space be-

neath. The effect of this filtration is truly very striking, for the liquor, which though transparent, is of a reddish color when it flows into these cisterns of charcoal, leaves them in a state of colorless transparency, almost equal to that of water. This is the way the coloring matter is removed from brown sugar, and is the second process in refining sugar in such establishments.

Near the room which contains these cisterns of charcoal, is an apartment called retort-house, supplied with furnaces, retorts and various subsidiary arrangements; the whole of which curious apparatus, whose use might to a stranger appear rather inexplicable, in a sugar refinery exemplify one of the most curious and valuable properties in the charcoal employed. When the process of decoloring the sugar has rendered the charcoal impure, water is poured through the mass in the cisterns, until all the soluble saccharine part of the impurities are removed, after which the charcoal is removed from the square cisterns, carried to the retort apartment and put into iron retorts. The process is so conducted that the charcoal leaves the retorts in a state as fit for use as when first made; all the impurities having been burnt away without any deterioration in the coloring qualities of the charcoal. Thus the same portions of charcoal may be used over and over again.

The next place of interest to the stranger, is the apartment where the boiling is carried on, which is the most important of all; and a description of all the inventions and contrivances which have been brought to bear on this process, would not only be tedious in the extreme, but would involve scientific details which I

perhaps are not capable of giving. A very large number of pipes and tubes of various sizes, traverse a sugar refinery in every direction. Some convey water to the reservoir on the top of the building; others reconvey it to cisterns and pans in different parts of the refinery; some conduct steam from boilers to the blow-up cisterns, to the pans, to the heaters, to the ovens or stoving-rooms, and to other parts; while another series convey the sugar and syrup from vessel to vessel, in different stages of their progress.

The process of boiling the liquid sugar is briefly this: The liquid is collected in a cistern several feet below the pans, which are of a circular form, the top and bottom being oval, somewhat resembling the form of two bowls or basins of equal size when placed together.— These pans are supported by a frame or carriage similar to the carriage of an artificial globe. In the bottom of each pan there is a pipe which communicates with the cistern below, which contains the syrup or liquid sugar. The air is withdrawn from within each pan by means of an air-pump, the liquid sugar ascends the pipe into the vacuum by atmospheric pressure from without, on the same principle as the water ascends in a common pump. Steam is then admitted to a vacant space below the sugar in the pan, and through pipes traversing the interior; and by these means the sugar is brought to a boiling state, while comparatively at a low temperature, on account of the almost perfect vacuum existing above the surface of the liquor in the pan. As the evaporation proceeds, the vapor flows through a large iron pipe into an open court, where a cistern

of cold water condenses it as fast as formed. The sugar by this evaporation, thickens and becomes partially granulated; and to ascertain how far this process has extended, a most ingenious instrument called a proof-rod, is used, by which a small quantity of sugar may be taken without disturbing the vacuum in the pan. A hollow tube is fixed in the pan, with the outer end exposed to the atmosphere, but the inner end immersed in the liquid sugar; this inner end is constructed with a socket and plug, like the key of an ordinary liquor-cock, with two apertures through which, when open, liquor may flow. The proof-rod being introduced into the tube and turned round, unlocks the socket and plug in the tube, and allows the liquid sugar to flow through the apertures of the socket and plug, into a recess at the bottom of the key. The proof-rod being then again turned, locks up the apertures in the tube, and on being withdrawn brings with it a small sample of liquid sugar.

The attendant boiler then tests the state of the sugar, to ascertain what degree of tenacity and granulation it has acquired. If the result is not satisfactory, the boiling is continued for some time longer; but if satisfactory, a valve at the bottom of the pan is opened, and the sugar flows through a pipe into a room beneath, where vessels are placed for its reception. The sugar as it flows through, appears to be much altered, for it looks now like a mass of crystals enveloped in a dark colored syrup. The purpose to which the pans are applied is to drive off in the form of vapor, so much of the water which has been mixed with the sugar, as to

enable the latter to crystalize. The stranger after witnessing the operations and curious apparatus connected with boiling, can follow the progress of the sugar to the lower floor of the building, where he will find a room containing vessels called heaters, into which the sugar flows from the pans. In these heaters the sugar is raised to a temperature of about 180 degrees, being constantly stirred.

The next part of the refinery worthy of notice is the fill-house. This part of the concern, as well as the other apartments, presented a very singular appearance. A considerable portion of the floor was covered with iron conical moulds, between eighteen and two feet high and six inches in diameter in the largest part; each one placed on the apex, or in other words the pointed end downward, and upheld by the one with which it was surrounded. Hundreds of thousands of these moulds were thus ranged in long ranks and file, some were filled with sugar so hot and hot from the heaters, while others were in the act of being filled, and scores and hundreds empty waiting to be filled. These moulds give the well known sugar-loaf shape to the masses of white sugar bought in our stores and groceries.

The fill-house presented a busy scene. A number of men were engaged filling the moulds with liquid sugar from the heaters, each man carrying before him a large copper basin, shaped somewhat like a coalscoop, and large enough to hold about one hundred weight of melted sugar. The men pass and repass with their *scoops* filled with hot viscid sugar, running with a quick

elastic motion to the moulds. In witnessing this, it appeared strange that the men were not scalded by the liability of the sugar being spilled from their shallow scoops.

These moulds contain sugar and syrup mixed up together, in a heated and viciid state; the moulds stand till the next day to cool, after which they are placed in earthen jars, where they remain for some time.— During this period the syrup drops out slowly from the perforation at the small end of the mould. After the syrup has drained out and the whole become sufficiently cooled, the mould is thrust against a post with the end, which loosens the sugar within, after which the sugar-loaf is placed in an ingenious machine, where the surface is shaved or sheared off, leaving the body of the loaf clean and smooth. Thus I leave the sugar refinery, noticing only a very small portion of what can be seen in this or any other refining establishment.

CHAPTER XXXII.

Charleston—Bunker-Hill—Bunker-Hill Monument—Commencement of the Monument—Cost of the ground—Enclosure—West Front—Windows—Charming prospect—Remark—Lightning rods—Cost of the Monument—Navy Yard—Ship Houses—Frigate Constitution—Dry Dock—Park of Artillery—Park of Anchors—Singular Gun—Ropewalk—Marine and Naval Hospital—Winter-Hill.

Middlesex county. Charleston, with a population of 11,484, is connected with Boston by several bridges already noticed. The city is handsomely situated on

a very beautiful and commanding peninsula, formed by the rivers Charles and Mystic. The city, though somewhat irregularly built, commands many fine views of the harbor and the surrounding country. The most lofty point of this peninsula is Bunker-Hill, where was fought the bloody battle of the 17th of June, 1775; and here just fifty years afterwards, on the 17th of June, 1829, the illustrious Lafayette, in the presence of an immense concourse of spectators, laid the corner-stone of the Bunker-Hill Monument, which now adorns this beautiful and memorable height.

This celebrated obelisk is 50 feet square at the base and rears its towering head to the height of 220 feet; it is 15 feet square at the top, with spiral stairs within, by which a person can ascend the whole height with perfect safety. It is built of Quincy granite, 80 courses high, each course two feet eight inches wide; and the whole so handsomely fitted together and cemented, that it is with difficulty that it can be seen where the blocks are joined, if the eye be thirty or forty paces distant. This is the highest monument of the kind in the world; and is said to be not much lower than some of the Egyptian pyramids.

Lasting as pyramids, it here proudly records,
The Colonies taken from the British King and Lords;
And also the fall of Warren, Liberty's friend,
Who Britain will remember till time shall end.

This towering monument was seventeen years in building, being commenced in 1825, under the administration of President J. Q. Adams, and completed in 1842, under the administration of President Tyler. The lot of ground upon which it stands comprises fifteen acres,

which sacred ground cost \$24,000. It is beautifully enclosed by an iron fence; the grounds laid out with gravelled walks, ornamented with the choicest species of shrubbery. The monument is enclosed with a very beautiful and substantial iron fence, erected on stone cappings. This enclosure is about 80 feet square; the posts are Quincy granite. On the west front of the monument is a small but handsome office, where the clerk or agent is found, from whom admittance is procured to the door of the monument, with the use of a telescope, for which the stranger is required to pay a small fee. This little office is the only building of the kind within the enclosed fifteen acres of this beautiful and memorable height.

The west front of the monument contains the door by which it is entered, and three long narrow windows to admit light to the stranger as he ascends the spiral stairs; and when he has gained the top, he finds four square windows, one in each face of the obelisk, at a convenient height for him to look out with perfect safety. The windows are situated north, east, south and west. The ascent to these windows is attended with considerable fatigue, which soon vanishes, apparently, as the view from the windows is rendered imposing, grand and picturesque by the magnitude of the elevation, and the extent and variety of the surrounding scenery. We may take in at a single glance a hundred, perhaps a thousand villas and cottages, with their stately parks, blooming gardens and pleasure grounds; their white walls seen through the embowering foliage, and *glittering in the sunbeams, from every hill-top and*

slope bordering on that renowned and magnificent bay, whose surface presents the appearance of a great sheet of bright tin, emboosing a number of distant islands, beautified with the most luxuriant fleece of vegetation, presenting to the eye a delightful appearance; while the vast expanse of waters surrounding them, by degrees become illuminated, reflecting the bright beams of the god of day with dazzling effulgence. In addition to the beauties of the bay, there is presented to view a perfection of rural scenery, sufficient to gratify the desires of the most enthusiastic votary of agriculture and a pastoral life.

Here you may look down far beneath your feet on the brow of Charleston's sacred height, now bespangled with beautiful buildings, which was on the terrible 17th of June, 1775, all enwrapt in flames, with a dark and awful atmosphere of smoke which enveloped the memorable height, on which were the struggling patriots, with their beloved and lamented Warren lying dead at their feet. Look to the east, at the foot of the hill, and you behold the spot where the British soldiers landed, now adorned by a mighty Navy Yard of the United States, animated by freemen at their daily avocations. Look to the south, and you behold on a high eminence, the "cradle of liberty," whose inhabitants first resisted by force of arms, the tyranny of Great Britain over the liberties of the colonies. And while looking to the east, and viewing with your telescope the wide expanded ocean, bring to your mind, when seeing the ships far distant, tossed to and fro by the foaming surges of the briny element, that from there

came the noble Lafayette, with all his fortune, and raised his strong arm for freedom, and became the chief prop and right-hand man of immortal Washington, in rearing this mighty empire of liberty, without a parallel in the annals of man.

No wonder the French people gave and claimed for LaFayette, the proud title of ("Le Heros Des Deux Mondes,") for no sooner than the enemies of liberty lay prostrate at the feet of freemen in America, than he returned and struggled heroically for the liberties of his native land. Where the towering hero moved, amid the chaos of convulsive France, bringing order out of confusion, and courage of despondency, till the allied tyrants of Europe crushed brave France, and hurled her beloved Napoleon on the rock of St. Helena, & tyranny again reigned triumphantly in his unfortunate and persecuted country:

No sooner than was the noble Hero compelled to bid adieu to liberty in France, before he is on his way across the same wide expanded Ocean, for the shores of America, and rendered this memorable Hill hallowed by his footsteps, when laying the corner stone of this noble monument of Liberty, now the admiration of the world, from whose towering pinnacle we may gaze down on its footstool, once the scene of that martial strife, whose thunders rocked as it were every monarchical throne in Christendom, and was the herald which proclaimed the dawn of the liberties of the world.

At each corner of this obelisk there is a lightning rod, constructed of small wire platted together, so as to form a rod about an inch in diameter. It is construct-

ed of wire, so as to give the rod more surface, which renders the structure more secure, as it is well known that electricity passes only on the surface of its conductor. These rods are very ingeniously constructed at the top of the monument, being so united as to divide the heaviest bolt, and conduct it to the ground to a sufficient distance from the foundation of the monument, so as to leave the structure entirely secure from harm. There are four metallic needles or shafts, pointing toward the four cardinal points, north, south, east and west; one from the centre of each window at the top of the monument, each of which shafts extend a considerable distance beyond the walls, which long shafts, with the rods already noticed, forms one of the most complete lightning apparatuses to be found in our country, which will not fail to attract and conduct to the ground, with perfect safety, the heaviest bolt of lightning which may threaten the destruction of this towering obelisk, erected at a cost of \$100,000, proudly to commemorate the spot on which took place the first important conflict, which afterwards laid the British lion prostrate at the feet of freemen.

The United States Navy-Yard contains about 60 acres of ground, enclosed on two sides by a stone wall, about 8 feet high, with only one gateway by which it can be entered, on the Charleston or land side. This Navy-Yard occupies the ground on which the British landed, when ordered from Boston by General Gage to drive the Americans from Bunker-Hill. This celebrated Navy-Yard cannot fail to please the stranger and richly repay a visit.

The large and lofty ship houses, under which stand some of the largest ships of the American navy, some of which are the most stupendous specimens of naval architecture to be found, perhaps in any Navy-Yard on the face of the globe. There are here hundreds of workmen employed in building and repairing ships, who cause the grounds to resound with the noise of their axes, hammers and saws, which is intermingled with the whistle and song of the jolly workman.

Among the many ships of the United States, which were undergoing repair in this yard, was the famous frigate *Constitution*, commanded by Capt. Isaac Hull, who after a desperate conflict captured the British frigate *Guerriere*, commanded by Capt. Dacres, which commenced that series of naval achievements for which the late war with Great Britain was so distinguished.

The Dry Dock, constructed of hewn granite, is 341 feet long, 80 feet wide and 30 feet deep, with its steam pumps attached, by means of which the water is pumped out of the dock, after a ship has been floated in, and the gates closed in its rear, where a ship of the largest class can be repaired. This large and handsome dock is truly a very splendid, smooth and strong piece of masonry; and according to the inscription on one of the blocks of granite of which it is constructed, it was commenced under the administration of President J. Q. Adams, and completed under the administration of President Jackson, at a cost of \$670,089.

The Park of Artillery is situated near the centre of the grounds, about half way between the barracks and shiphouses. It is enclosed by a handsome fence, about

three feet high, and adorned with beautiful trees. This park contains the artillery, all arranged in rows as near each other as they can be placed; and between the rows there are beautiful gravelled walks. There were near seven hundred guns, varying in size from a six-pound-up to the heaviest guns in the American navy. At one end of the park were a number of large heaps of balls of various sizes. At the northeastern end of this park, and between it and the water, there is a park enclosed in the same way and nearly as large, which contains the ship anchors. Here were a number of men engaged in removing the anchors, and mowing the grass and removing it, which had sprang up in the Park; after which the anchor was again replaced, and a fresh coat of paint given to preserve it from rust.

The next object to attract the attention of the stranger, was a very large, singular and well polished brass gun, mounted on a strange constructed carriage, which was placed about half way between the Dry Dock and the Park of Artillery. This singular cannon contained a number of emblems and devices, as well as inscriptions, which, together with its high polish, caused it to be an object well worthy of inspection. Whether this singular gun was a present bestowed by some foreign nation, or a trophy taken by the Americans in 1804, at Tripoli, or taken during the war with Mexico, I was unable to learn.

There is here a Rope Walk, said to be the longest in the United States, which is of itself interesting.— There are also here a number of naval store-houses, arsenals, magazines, barracks, and slips, together with

many other objects entertaining and instructive ; added to which there is a beautiful band of music, who enliven the whole ground by their thrilling strains of national airs.

The Marine and Naval Hospitals, belonging to the United States, are large granite buildings, situated in the back ground of the Navy-Yard, in that part of the town called Chelsea. The marine department is for the reception of seamen of the mercantile navy ; and the naval hospital is for the reception of seamen and others belonging to the United States Navy.

Winter-Hill.—This celebrated eminence is now occupied by the village of Somerville. This is the hill which received the retreating patriots from Bunker-Hill, from which they were driven by the British, after that desperate conflict of the 17th of June, 1775, which left Bunker-Hill in possession of the British, who however, could not exult over their prize, as it was purchased at so dear a rate, while Winter-Hill proudly protected the sad patriots, who were compelled to weep over the fall of Warren, for a strong and mighty ally, and a noble man had been lost to the great and glorious cause of freedom. A costlier sacrifice a cotillion altar never received.

CHAPTER XXXIII.

Camb. & Co.—Harvard University—Professors—Examination of the Students—Education in Massachusetts—Bequests and Donations—Popular Libraries—Heavy sale of books—Education Law—Popularity of Professors and Tutors—Bible—Lexington—Monument—Towns—Lowell—Manufactures—Number of Mills—Capital invested—Number of Operatives—Number of Schools—Banking institutions—Mr. John Lowell—Merrimack Valley—Towns.

Cambridge, with a population of 8,409 is connected with Boston by a wooden bridge and the famous causeway, already noticed. The town is well laid out and contains a number of fine buildings, both public and private; the whole town is in a very flourishing condition, and possesses many attractions not to be found in any other perhaps.

Harvard University is located in this town. This celebrated College is the oldest and best endowed in the country, having been founded as early as 1638, or only about 18 years after the landing of the Pilgrims on the rock of Plymouth. The buildings for this famous institution are large, well built, and beautifully situated on grounds handsomely laid out for the purpose.

The College contains about 400 students and 32 professors, each assisted by one or more tutors. Many of them are well known in the literary world as authors. Five only of the thirty-two were educated for the pulpit, three of whom are professors of divinity, one of ethics, and one of history. All the students are required to attend divine service in the churches to which they severally belong; but the divinity-school for pro-

professional education is Unitarian. The pupils are examined in the New Testament, in Paley's Evidences, and Butler's Analogy. The tutors selected by the professors of this College, may in some degree, be compared to our private tutors, except that they are more under the direction of the professors, being selected by them from among the graduates, as the best scholars, and each is specially devoted to some one department of learning. These tutors, from whose number the professors are commonly chosen, usually teach the first year students, or prepare pupils for the professors lectures. Care is also bestowed on the classification of the young men according to their acquirements, talents and tastes. To accomplish this object, the student on entering the College may offer to undergo an examination, and if he succeeds, he may pass at once into the second, third or fourth year's class; the intermediate steps being dispensed with. He may also choose certain subjects of study, which are regarded as equivalents, or are exchangeable with others. Thus in the four years of the regular academical course, a competent knowledge of Latin, Greek and of various branches of mathematics is exacted from all; but in regard to other subjects, such as moral philosophy, modern languages, chemistry, mineralogy and geology, some of them may be substituted for others, at the option of the pupil. There are public examinations at the end of every term, for awarding honors, or ascertaining the proficiency of students; who, if they have been negligent, or put back into a previous year's class, the period of taking their degree in that case, is deferred.—

Honors at this College are obtainable for almost every subject taught by any professor; but emulation is not relied upon as the chief inducement for study. After passing an examination for the fourth year's class, the student can obtain the degree of Bachelor of Arts, and may enter the divinity, medical, or law schools.

The stranger in travelling through the famous old State of Massachusetts, and visiting her celebrated Colleges, and seeing the State spotted with school-houses, is compelled to come to the conclusion that there is no other region inhabited by the Anglo-Saxon race, containing 750,000 souls, where national education has been carried so far. What are the chief causes of its success, I am unable to say. It doubtless is to be attributed to a combination of causes. The following has aided to a considerable extent no doubt, in raising and carrying forward this important cause: First, there is no class in want or extreme poverty here, partly because the facility of migration to the western States, for those who are without employment is so great, and in part from the check to improvident marriages, created by the high standard of living, to which the lowest work people aspire; a standard which education is raising higher and higher from day to day. Secondly, it is generally declared by politicians of opposite parties, that there is no safety for the Republic, now that the electoral suffrage has been so much extended, unless every exertion is made to raise the moral and intellectual condition of the masses, as universal suffrage has a tendency to point out the dangers of ignorance. Thirdly, the political and social equality of all religious sects.

This equality tends to remove the greatest stumbling-block still standing in the way of national instruction, in some parts of Europe, and unhappily in some of the States, where we allow one generation after another of the lower classes, to grow up without being taught as they should be, good morals, good behavior, and the knowledge of things useful and ornamental, partly because we cannot all agree as to the precise theological doctrines in which they are to be brought up. In the fourth place we observe, that there is no subject in which the people of Massachusetts display more earnestness, than in their desire to improve their system of education, both elementary and academical. They have sent missionaries to Europe, who examined the celebrated systems of Germany, Holland, Britain and France, and published elaborate reports on the methods of teaching employed by those learned nations; and seem ready to adopt whatever appears worthy of imitation in these different models.

Again, the munificent bequests and donations for public purposes, whether charitable or educational, form a striking feature in the modern history of the New England States, and especial the State of Massachusetts.—Not only is it common for rich capitalists to leave by will, a portion of their fortune towards the endowment of national institutions; but individuals during their lifetime, make magnificent grants of money for the same objects. There is here no compulsory law for the equal partition of property among children, as in France; and on the other hand, no custom of entail or primogeniture, as in England; so that the affluent feel them-

selves at liberty to share their wealth between their kindred and the public. Here, with all their donations, parents have the pleasure and happiness of seeing all their children well provided for and independent long before their death. I here seen a list of bequests and donations made during the last twenty years, for the benefit of religious, charitable and literary institutions, in the State of Massachusetts alone ; and they amounted to no less a sum than \$6,000,000. These donations consisted of from \$100 up to \$20,000 for a single individual, and in several instances it exceeded that sum.

The traveller will find popular libraries in almost every village of Massachusetts ; and observe a growing taste for the reading of good books, which is attested by the heavy sale of large editions of such works as Herschel's Natural Philosophy, Washington Irving's Columbus, Plutarch's Lives, Johnes' Translation of Froissart's Chronicles, Leibig's Animal Chemistry, Constock's Philosophy, Sear's Works, Prescott's Mexico, and hundreds of other works, read by all classes. The traveller can also distinctly perceive, that not only those works that have a practical tendency, awake attention and command respect ; but the purely scientific, which possess far greater merit, are also prized very highly by the same book-loving people.

The law of this State ordains, that every district containing fifty families shall maintain one school ; for the support of which the inhabitants are required to tax themselves, and to appoint committees annually for managing the funds and choosing their own schoolmasters. The Bostonians submit to pay annually for pub-

lic instruction, in their city alone, the sum of \$120,000, which is all cheerfully paid; and to keep their glorious system of education in a flourishing condition, they would submit to pay double that sum without a murmur. In the schools the Bible is allowed to be read in all, and is actually read in nearly all the schools; but the law prohibits the use of books calculated to favor the tenents of any particular sect of Christians. In this case, parents and guardians are expected to teach their own children, or procure them to be taught, what they believe to be religious truth; and for this purpose, besides family worship and the pulpit, there are Sunday Schools. This is a system which works well among this church-building and church-going population.

The law prohibiting the use of books calculated to favor the tenents of a particular sect of Christians, in Colleges and schools, in my judgment has an excellent tendency, because at College, the pupils are brought together on neutral and usually on friendly ground, where kindly feelings and sympathies will generally spring up spontaneously, and will be cherished in after life by congenial souls, however distant the station, distinct the religious opinions or professional employments. While on the other hand, where sectarianism reigns triumphantly, it is generally found to disunite these and other sections of the same community, and throws them into antagonist masses; each keeping aloof from the other, in cold and jealous seclusion; each cherishing sectarian or party animosities, or professional and social prejudices. How often is it that complaints are

heard, and not without reason, of the harsh outlines that often separate the different denominations and grades of society in our country? Much of this originates and is fostered in the season of youth; and when men are engaged in the common pursuits of knowledge, especially if allowed as far as possible to follow the bent of their own tastes and genius. There is no doubt by this excellent system, friendships might be and are formed, tending to soften these hard outlines. I fancied the religious toleration of the different sects towards each other in the State of Massachusetts, is accompanied with more Christian charity than is generally found in many other sections of the Union, much of which I attributed to their excellent systems of Colleges and Schools. In this famous Commonwealth, families are not found divided, and the best relations of private life disturbed by the bitterness of sectarian dogmatism and jealousy, which unhappily is too much the case in many of the other States; and even the renowned old Dominion is not exempt from the evil. But with these church-building and church-going population, a great degree of religious freedom is enjoyed, as there is no sect to which it is ungentle to belong, no consciences sorely tempted by ambition, to conform to a more fashionable creed.

It is worthy of remark, that every professor and tutor of these colleges and schools commands the utmost respect of his pupils, which, among other things goes to show that he is not ill qualified for his post. No one who is master of his favorite science, will fail to inspire the minds of his more intellectual scholars with a

love of what he teaches, and a regard and admiration for their instructor. Among the many objects of attraction in Harvard College, may be seen a copy of the Bible, translated by the missionary Father Elliott, into the Indian tongue. It is now a dead language, although preached for several generations, to crowded congregations of the aboriginal tribes, which language, to the unaccustomed ear, sounds singular enough to divert its possessor.

Middlesex county. Lexington, with a population of 1642, is celebrated as being the spot on which took place the first action that opened the war of the Revolution. It was here on the morning of the 19th of April, 1775, that seventy militia on parade, were attacked by Major Pitcairn, and eight of their number killed and several wounded, without provocation. The notorious Pitcairn, on seeing them on parade, rode up to them and with a loud voice cried out, "disperse, disperse, you rebels." The sturdy yeomanry not immediately obeying his orders, he discharged his pistol, and ordered a part of eight hundred of his grenadiers to fire and disperse them. On the battle-ground is a monument erected to the memory of the eight men killed. The monument contains suitable inscriptions, honoring the names of the patriots, whose blood sealed the downfall of the British tyranny over the colonies; as their brethren vowed upon the crimsoned field to avenge their innocent blood.

On our way to Lowell, we passed through Woburn Centre, containing a population of 2993, situated on the Boston and Lowell railroad, 10 miles from Boston. The

town of Woburn is a well built, handsome and flourishing little place. Between it and Lowell are Willmington, Tewksbury and Bellerica Mills, each with a population of from twelve to fifteen hundred, situated in the Merrimack valley, all villages of considerable attraction.

Lowell, with a population of 29,127, is situated at the junction of the Concord and Merrimack Rivers. The rapidity of its growth is almost without a parallel. In 1813 a cotton factory was established here ; in the year 1815 it contained a few scattered dwellings ; in 1820 it contained about 200 inhabitants ; and now it is the most extensive manufacturing town, not only in Massachusetts, but in North America.

Water-power is supplied by a large and powerful canal, which is fed by the Merrimack river. The capital invested in manufactures in this place, is no less than the sum of \$11,400,000. The Merrimack company alone has a capital of \$2,000,000. There are here 45 mills, containing no less than 253,456 spindles and 7,756 looms, which consume annually the enormous sum of 62,400 bales of cotton. There are employed no less than 7,915 females in these factories, who are chiefly young women from the age of 18 to 25, who attend to the spinning-jennies and looms. They are generally handsome, neatly dressed, chiefly the daughters of New England farmers, sometimes of the poorer clergy. These poor girls have stated hours of work, (12 hours a day ;) each girl attending two spinning-jennies, or four looms, which by the by, is a heavy task. *Their moral character stands very high ; and a girl is*

paid off if the least doubt exists on that point. Many of the boarding-houses are kept by widows, some of which are convenient to the factories, while others are at a considerable distance off. In these boarding-houses the operatives are required to board, the men and women being separate.

There are also in the same employ, 3340 men, who are generally employed in bearing burdens, warping, and performing sundry offices too burdensome for the females. There are few children employed in these factories, and those under fifteen years of age, are compelled by law, to go to school three months in the year, under penalty of a heavy fine. If this regulation is infringed, informers are not wanting; for there is a strong sympathy in the public mind, with all acts of the legislature enforcing education.

The factories at this place are not only on a large scale, but are so managed as to yield heavy profits, as they are situated, arranged and conducted in every point of view, with the highest regard to profit, being situated within 26 miles of the city of Boston, with which it is connected by an excellent railroad. There is here a high school, the building of which cost the sum of \$28,000. There are also in the town 8 grammar schools, and 29 public schools; all of which are in the most flourishing condition. The Lowell Bank, at this place, chartered in 1828, has a capital of \$250,000. The Railroad Bank, chartered in 1831, has a capital of \$800,000.

These celebrated mills are remarkably clean and well warmed for establishments so extensive. Most all are

employed in making cotton and woollen goods, vast quantities of which are exported to the west. The Literary Institute, or public school above noticed, is said to be the donation of Mr. John Lowell, who made some heavy donations for literary establishments in his native State, and who on a visit to Europe, drew up his last will and testament amid the ruins of Thebes, in the year 1835, leaving half his remaining fortune for this institution, and then pursued his travels in the hope of exploring India and China. On his way, he passed through Egypt, where being attacked while engaged in making a collection of antiquities, by an intermittent fever, of which he soon died.

In passing up the Merrimack valley, we had on our route the towns of Middlesex, Chelmsford, celebrated for its excellent granite, and Tynsboro, each containing between fifteen and eighteen hundred inhabitants, and all of which are situated on the Lowell and Manchester railroad. A considerable portion of the land up this valley, is of an inferior quality, especially near the river; it is however, so highly and skilfully cultivated that the crops presented quite a promising appearance. In continuing our course up the valley, we again entered the State of New Hampshire.



CHAPTER XXXIV.

STATE OF NEW HAMPSHIRE.

Nashua—Manufactures—Towns—Manchester—Streets—Buildings—Falls of Amoskeag—Manufactures—Sad Accident—Labor of the Operatives compared with slave labor of the South—Abolitionists of New England—Emancipation of Slavery—Villages—Concord—Bridges—State House—State Prison—Merrimack Falls—Railroads—Return to Boston.

Hillsborough county. The first object of attraction on entering the State from the South, is the town of Nashua, containing a population of 6050. This town is very beautifully situated near the southern line of the State. There are here several very large cotton mills, which are propelled by the waters of the Merrimack river. These mills are conducted on the plan of those at Lowell, and manufacture a great deal of domestic goods. Still farther up the Merrimack river are situated a number of flourishing little villages, among which are Thornton's Ferry, Reed's Ferry and Goff's Ferry. The latter is a considerable village, containing 2376 inhabitants. There are also here some factories of various kinds. The lands in the vicinity of these villages, has no appearance of being of a high quality.

Manchester is another celebrated manufacturing town with a population of 3235. This place is beautifully situated, about half a mile below Amoskeag falls, on the Merrimack river, 58 miles north of Boston and 32 miles up the river from Lowell. The town of Manchester is located in a somewhat rugged region of country, the town however is situated on a handsome, high and com-

manding site. It is regularly laid out, contains some handsome streets, ornamented with shade trees of a rare and choice species; the buildings are large and beautiful, among which are several fine public buildings.— In the centre of the town there is a public square, enclosed by a fine railing, and beautifully laid out with walks, adorned with a number of flourishing shade trees and flowering shrubbery. To the north of the town, toward the foot of a gentle slope, are situated the factories for which Manchester is so much celebrated.

The falls of Amoskeag affords an immense water power, which is employed in propelling a number of very large manufacturing establishments, some of the buildings of which are from six to six hundred and fifty feet long and two stories high, while others therewith connected, are about two hundred feet square and from five to six stories high, the whole of which are constructed of brick.

Manchester is classed the second manufacturing town in the United States. The males and females employed as operatives, more than double exceed the whole regular population of the town. The two most extensive companies at this place are the Stark and Amoskeag. The water is conveyed from the falls by an enormous canal, which supplies the propelling power to the different factories. Between the cotton mills and the river there are a number of saw mills and other factories, among which are some for sawing, dressing and polishing marble and granite.

On the morning before my arrival, a sad accident occurred at the depot. A little girl eleven years old, the

only child of an operative in one of the factories, in attempting to cross the railroad track for the purpose of telling her father to come to his meal, as was her custom, was run over by the engine and instantly killed. This accident was not attributed to any neglect of the engineer or firemen, for the unfortunate little girl was just turning the corner of the depot-house as the cars entered, and of course could not be seen by them; and on stopping were horror-struck on finding her lying beside the track, with her head entirely mashed by two of the engine wheels. No sooner was this sad accident related, than I heard another, of a young man, his widowed mother's only dependance for support, with his two small children, of his losing an arm and leg from the same cause, by his own neglect.

By the time I arrived at this great manufacturing town, through some of the northern and eastern States, I had heard a great deal of complaint from the abolition party, against slave labor and the slave treatment of the South; and what made it appear more remarkable to me, was, that many of those complaints were heavily urged by men who have sons or daughters employed as operatives in those factories. In many of the factories, and more especially at the celebrated manufacturing town of Lowell, as well as this place, I had opportunities of seeing the condition of the poor factory girl; which two places alone employ nearly 15,000 women and 6,000 men, which I considered a sufficient number to give a fair sample of the condition of the operatives in manufacturing establishments. Therefore, I was not a little surprised to find those intelli-

gent men the more eager to throw stones, though living themselves in glass houses.—For so far as I am capable of judging, there is no slave labor of the South, or of Virginia at least, except it be like labor, that I consider so hard a task, by a very considerable per cent, as the task of the poor factory girl; for all the factories which I visited in the spinning and weaving departments, one girl would be attending two spinning-jennies, or four looms, which would keep them very busy indeed. The various other employments in the factories I consider very little if any better; the whole being certainly very injurious to health; the confinement in the building for twelve long hours a day, where there is no free circulation of fresh air, the whole building being fogged over with particles of cotton and dust, and the air perfumed with oil, in which the operatives are required to work for twelve long hours a day, and allowed but half an hour at dinner. At half past twelve o'clock, the bells ring, at which they cease their operations and in a few minutes after, they are seen walking and running by hundreds and even thousands to their respective boarding-houses, some of which are from three to four hundred yards distant. At one o'clock the bells again ring to summon them to their posts; and almost instantly the streets will be seen crowded by them, some of whom, owing to the distance they have to go, have not time to finish their meals at the table, and return to their work with a piece in their hand, eating as they go.

What portion of the year the operatives are required to labor twelve hours a day I am unable to say; but

should the many thousands employed in the manufacturing establishments of the New England States, be ground down for any considerable portion of the year, by the same rules and regulations which prevail at the two principal manufacturing towns, which is to labor hard for twelve hours a day, and breathe the impure air of the factory, with only half an hour intermission for dinner, with the confinement, will certainly be the cause of withering down many a lovely woman to an early grave. I did not note these particulars as a disparaging remark to the manufacturing establishments, for such establishments are necessary and should receive due encouragement; but I simply noted their severe rules and regulations, because I considered them capable of more than covering the rules and regulations concerning slave labor and slave treatment of the South.

I often asked myself, when in the midst of these abolition States, how it could be possible for an intelligent and an honest mass of people, to be so deluded by a few unprincipled fanatics, who by an array of notorious exaggerations and falsehoods, succeed in enlisting the sympathies of the masses to a considerable extent in their cause, so that the Southern stranger hears many a heart-rending story, concerning slave treatment and slave labour of the South; and not unfrequently meets with a pamphlet containing the basest exaggerations relating to the same, which with their speeches, goes to show that at least some persons are perfectly mad upon the subject of slavery, and are ready to lay trains which have not only a tendency to disorganise and disunite, but if fully matured would shake the very Union

to its centre. I was delighted, however, to find the mass of the people honest in their abolition opinions, acknowledging they have no right to meddle with the institutions of other States, disclaiming all power therewith connected, save that of expressing their opinions, which they always done in a very respectful manner; therefore a conversation with this portion of the population on the question of abolition of slavery, is by no means so disagreeable a subject as it is when assaulted by some one of their more ultra brethren.

The abolitionists of the New England States may with some propriety be divided into three classes: the moderate, the ultra, and the fanatic. To the first of these classes I am happy to find belong a majority of the population. It is not unusual to hear the ultra abolitionist heavily denouncing the slave institution of the South, and among his complaints, he raises a great cry against the Federal basis, which he contends gives to the South more representation in the Federal Government than she is entitled to, according to the white population; this however, is only a part of his objections, we therefore find him more ready to intermeddle with southern institutions, by his eagerness to inflict upon the South, such measures as he thinks will have a tendency to favor his ends, than we find in his more moderate brethren. The Wilmot Proviso is one of his favorite measures, as an auxiliary in stifling the South.

It is not a little singular, yet bordering on disgust, to hear this class of men eulogising the capacities of the negro for advancement in society. The schools for the colored population at Boston are frequently alluded to

in showing that black children show as much quickness in learning as the whites. To what extent the faculties of the negro might be developed as adults, we have as yet no means of judging ; but so far as my reading extends, I never have learned a single instance, where an educated black has ever yet, with all his opportunities of ripening or displaying superior talents, in this or any other civilized country ; that he ever reached in literature, the learned professions, or any political eminence. Therefore it is quite a strange philosophy to me, that the blacks of Massachusetts and other New England States should rival the whites in learning. The emancipation of slavery in the West Indies, appears to furnish a rich repast for the minds of those philanthropists, as they point frequently to that event, and the moral and intellectual condition of the blacks of those Islands, when making their assaults upon the institutions of the South. This however is a very lame argument, because the great experiment now making in the West Indies, affords no parallel case, as the climate there is far more sultry, relaxing and trying to Europeans, than the Southern States of the Union, and it is well known to all, that the West Indian proprietors have no choice, the whites being so few in number, that the services of the colored race are indispensable. And again, England had a right to interfere and legislate for her own colonies, whereas the northern States of the Union and foreigners have no right to intermeddle with the domestic concerns of the slave States. Such intervention must have a tendency to excite the fears and indignation of the Southern planter.

and thereby retard, and must be expected to retard the progress of the cause. A deep sense of injustice and a feeling of indignation will of course disincline him to persevere in advocating the cause of emancipation.— It is also known to every intelligent man, how long and obstinate a struggle the West Indian proprietors had made against the emancipationists in the British House of Commons. It is farther evident, that had the different islands been directly represented in the Lower House of Parliament, and there been Dukes of Jamaica, Marquises of Antigua, and Earls of Barbadoes in the Upper House, as the slave States are represented in Congress, the measure would never have been carried to this day.

During my stay among those visionary philanthropists, I felt astonished at the confidence displayed by so many of these anti-slavery speakers and writers, not only in New Hampshire but some of the other New England States, and New York not excepted. The course pursued by these agitators show that next to the positively wicked, *alias* the fanatic, their impracticable schemes produce the most mischievous effects in society, as it is known to every man of common recollection, that before the year 1830, a considerable number of the planters of the slave States were in the habit of regarding slavery as a moral and political evil, and many of them openly proclaimed it to be so in the Virginia debates of 1831-2. At that period the emancipation party was gradually gaining ground, and not unreasonable hopes were entertained that the States of Kentucky, Virginia and Maryland would soon fix on

some future day for the manumission of their slaves.— From the moment the abolition movement began, and that missionaries were sent to the Southern States, a re-action was perceived, because the planters took the alarm, laws were passed against education, the condition of the slave made worse, all caused by the inter-meddling of these visionary characters.

In some of the New England States, the free blacks have votes and exert their privileges at elections; yet there is not an instance of a single man of color, although eligible by law, having been chosen a member of the State Legislature, or any other office of rank or profit. It is here contended, that wherever property confers the right of voting, the man of color can at once be admitted without danger, to an absolute equality of political rights; the more industrious alone becoming invested with privileges, which are withheld from the indigent and most worthless of the race. It is further held, that such a recognition of rights, not only raises the negroes in their opinion of themselves, but what is of far more consequence, accustoms a portion of the white population to respect them.

After being frequently lectured by these persons on the subject of emancipation, which was not a little annoying to me, in their attempts to convince me of the high capacities and claims of the negro, to an equal standing in the scale of society, several opportunities presented themselves, whereby I could test the consistency of these visionary philanthropists, who would have us take the negro by the hand, and lead him through this vale of adversity, love him as we would ourselves;

and do unto him as we would wish other men to do unto us. One of these opportunities was presented in a Christian church, where the members were commemorating the death and sufferings of Christ, by surrounding the Lord's table. The officiating minister, by accident omitted four or five of the white members, which caused the order and sanctity of the service for a few moments to be in imminent danger of being disturbed. After some confusion however, the officiating minister proceeded, by showing his resolution not to allow any interruption from this accident, and thus stayed the confusion which was arising.

This furnished me with a new proof that consistency is a jewel, find it where you will ; and that these dreaming philanthropists, who speak in such glowing terms of the negro, are at the same time separated from him by a chasm as wide as that which now separates the Southern planter from the slave, and that he is here as everywhere else, looked upon as belonging to a class a little lower than the lowest. It takes no extraordinary stretch of the mind to discover that these philanthropists are conscious of the lazy, filthy, vicious and dishonest creatures they inevitably become, where they are not held in bondage.

The intelligence the people of New England are known to possess, makes the doctrine of emancipation the more remarkable, because Canada and Ireland teach us how much time, and how many generations are required for the blending together, on terms of perfect equality, both social and political, of two nations, the conquerors and the conquered ; even where both are of

the same race and decidedly equal in their natural capacities, though differing only in religion, manners and language. But when we have in the same community, two races so distinct in their physical peculiarities, as to cause many naturalists who have not the least desire whatever to disparage the negro, to doubt whether both are of the same species and started originally from the same stock. In part, because bondage and barbarism seems to be their destiny, the only element ever known in which they progressed ; a destiny from which the Ethiopian race has furnished no exception in any country, for a period long enough to constitute an epoch, as it is almost evident that the only idea the negro has of liberty, is exemption from labor, and the privilege to be idle, vicious and dishonest ; as to the mere sentiments of liberty and the elevated consciousness of equality, they are certainly incapable of the former and for the latter, no such equality ever did exist, and in my opinion never will exist ; because there is a line which cannot be passed by any degree of talent, virtue, or accomplishment, by them. In Africa, they have been found in an unprogressing state, have been degraded by those who first colonized North America, to the lowest place in the social scale. To expect under such a combination of depressing circumstances, in a country where nearly seven-eighths of the race are still held in bondage, the newly emancipated citizen should under any form of government, attain at once a position of real equality is a dream of these visionary philanthropists, whose impracticable schemes are ten-fold more likely to injure than to forward the cause.

The most deluded of these persons are the fanatic, who happily for our country, are few in number when compared to their more moderate brethren; though what they lack in numbers, they make up in part by their untiring energy in speaking, writing and laying deep and dangerous schemes; and so perfectly mad is he on the subject of slavery, that it is found his whole soul is so filled with burning gaul, that he is ever seeking an opportunity to spit his venom on the South, for the purpose of withering down her institutions, even at the very hazard of shivering into fragments, our glorious Union, whose lovely banner is the admiration of the world. But enough on this subject; as it is not my province to attempt a defence of the institutions of the South, when there are so many others who are amply qualified to do justice to the cause. The remarks advanced on the subject may be called prejudice and should it be prejudice, I have the consolation of knowing that I am not alone, as it is a well known fact, that this prejudice exists wherever the negro may be found.

Merrimack County. On my way to the Capital of the State, I passed through the village of Martins Ferry, a handsome little village, 5 miles above Manchester, and the village of Hooksett, containing a population of 1175, beautifully situated on the right bank of the Merrimack river, 8 miles from the capital, a well built village, with the Nashville and Concord Railroad passing through it,—Robinson's Ferry 4 miles further north, is also a place of some promise.

Concord, with a population of 4,897, is the Capital of the State; it is very beautifully situated on both sides

the Merrimack river, 65 miles from its mouth. This splendid little town is principally built on two streets, running nearly due east and west, and connected by two handsome and substantial bridges across the Merrimack river. The State House is constructed of hewn granite, and is an elegant edifice of 126 feet in length, and 49 feet deep, and was erected at a cost of \$80,000. The State Prison is a strong and superb granite structure, 70 feet long and 36 feet wide.

The town also contains several handsome and substantial banking houses, some elegant churches and hotels. The Falls of the Merrimack at this place, create a great water-power, which is advantageously employed in propelling machinery of various kinds.

The Concord railroad connects with the Boston and Lowell and Nashville and Lowell railroads, making with the Concord railroad, a distance of 73 miles between Boston and Concord. This railroad also connects on the north with the Northern railroad, which is now in operation to Lebanon, a distance of 65 miles above Concord, on the direct route to Montpelier and Burlington, in the State of Vermont. I now returned to Massachusetts and again visited Boston.

CHAPTER XXXV.

STATE OF MASSACHUSETTS,

Second arrival in Boston—Greek Slave—Sunday & quality of persons—Horses—Dorchester Heights—Quincy—Old mansion of John Adams—Unitarian Tomb of John Adams—Quincy Church-Yard—Tomb of Q. Adams.

On my return to this State, after a visit to manufacturing towns of New Hampshire, I returned to the city of Boston, from which I had set out. At the exhibition I had an opportunity of seeing the Greek Slave, as she is represented by the figure of a beautiful woman, divested of all drapery and exposed for sale. Here is a woman, the perfection of whose form is designed to express the ideal beauty and purity of womanhood; but not only a woman the ideal of her race, a Greek woman, a Christian woman, nurtured in the love of Him, who extended a hand to woman and to her "daughter."

As I entered the exhibition-room, and marked the exquisite, the adorable beauty of the figure, I was struck involuntarily, for she seemed unapproachable in the divinity of her perfect loveliness; then my eye turned to her manacles and chain; then on the lock cross hanging from the column at her side; then to the embroidered cap and robe at her side; then again at the manacles on her soft fair hands. I was struck with the proud sadness of her attitude, and drew near to her, which bordered on awe; then I looked upon her grand in its heroic endurance, divinely beautiful in its purity and inexpressibly mournful in its sorrow.

at first caused my heart to beat audibly, and the tears to spring to my eyes ; and for a moment I gazed through a mist of sad but most exquisite emotion.

With what irrepressible tenderness, with what pitying human love, we look upon this glorious creation of a true artist's soul, the measure of whose fame is full, as he wrought the figure as perfect no doubt as mortal hand could make it. That it is wrought with a mechanical skill almost miraculous ; that the artist here shows himself possessed of rare power, no one will dare to deny, or for a moment question. To add one word of praise to the exalted skill of Mr. Powers, is not within the reach of my pen ; the most that I can say is that I discover in the figure of the Greek Slave, divine harmony breathing through the lines of beauty ; a lofty poem, which writes itself on the gazer's spirit ; a sublime tragedy in stone ; an immortal embodiment of womanhood triumphant in sorrow and degradation ; torn forever from her country, its faith and its loves ; chained in the market-place of her enemies, all disrobed and awaiting her brutal purchaser ; yet pure as a seraph and proud as a crowned queen ;—yet unconquerably constant to her love, her country and her God. Oh what a divinity of purity, what a glory of womanhood is round about her, holier than the halo of saints, and far more mighty than the panoply of warriors !

It is a little remarkable to observe the reverential silence in the presence of the Greek Slave. No one speaks above a whisper ; and many gaze with hushed breath and tearful eyes, in a dreamy trance of admiration, in a full, deep enjoyment of a new and delicious

sensation. The face is very beautiful, very to very womanly, though bearing faintly the impress of misfortune; the mournful tracery of frowns, tears and wrongs; as deeply felt as branded. By the embroidered cap and robe as well as by the exquisite delicacy of her features may know the maiden is noble, and that luxuries and honours have waited upon her steps from infancy. Then how fearful this bondage, and this exposure to the gaze of vulgar eyes on those fair hands and the gaze of vulgar eyes upon that unrobed patrician form, more torturing than barbed arrows dipped in poison. But this worthy daughter of Greece, whose features disclose lineage, the doomed slave of the Turk, the dreader of her religion and her race. Yet the noble spirit of Greece is represented by this celebrated statue conquer all her agony, and hide it in the recesses of her bosom, and to exhibit an angelic resignation with the sublime bearing of a great soul, forgets her sorrow in that of those she loves. But she is far away from her brave and struggling country; chance she sees her sire vainly pouring out his blood for its lost liberties,—Or perhaps she recalls her spirit her desolate home, where her mother weeps ceaselessly for the child she can no longer fondle in her breast, whose return she looks not for, and whose name little children speak mournfully.

The Greek Slave is perhaps the most sublime work of art on the face of the globe. It faithfully expresses the idea it professes to represent. It also adds to itself with great power to the sense of the bear-

it appeals still more powerfully to our purest sentiments, breaking up all the hidden fountains of our most sacred sympathies. It awakens in us a new and god-like pity, and we come away from it with a new sense of the sacredness of womanhood and of woman's unutterable wrongs, when she is thus made a victim and a slave, and that flower of heaven is flung down to be trampled upon by the miry hoof of sensuality. In fine, it acts upon us with a sanctifying and regenerating power; we feel as if we had been listening not merely to a sermon, but to a sermon of unequal pathos expressed in the enduring marble. As a work where purity and beauty of form are manifested in a high degree, all are compelled to admire this statue, which is sufficient to kindle the soul of every beholder into a very high degree of enthusiasm.

The next object I deemed worthy of notice on my return to this great city, was the Sunday Schools, which however, is not confined to the city; but the system prevails throughout the State. Almost every church, not only in the city of Boston, but in the country, is constructed with a basement story, finished off for the expressed purpose of Sabbath Schools. This department of the church is furnished with maps, charts, diagrams, paintings, and the necessary furniture thereto belonging. It is truly cheering to visit these Sunday Schools, and observe the prospering condition and excellent system of juvenile instruction, not only of one or two sects, but all the different denominations, who are numerous enough to afford a church. It is no less cheering, to observe the progress the different classes are ma-

king in their respective departments of learning. Every class delights the stranger with the correct and astonishing answers they make to the interrogation their respective teachers, not only in the various sciences, but high and weighty questions in the Scriptures.

Every Sunday School has a Chairman and Secretary; the latter keeping a record of the whole proceeding of the school, and rewards the scholar with tickets, pamphlets, a fancy newspaper, or a magazine plates, in proportion to the task. In addition to the above rewards for industry, on certain occasions the scholar receives a premium, and on still more important occasions, there is a medal awarded to the victor.

The school usually closes by a short address by the Chairman, in which he generally tells an amusing anecdote and in some instances reads a report of some other Sunday School, by him received during the preceding week, which has a tendency to stimulate an energy in the school. This little congregation of urchins not only delight the stranger with their vocal music, which is performed with such precision, as to throw many of the worshipping congregation into the shade.

While visiting these flourishing institutions, and observing the good effects they produced on the juvenile population, my mind was drawn back to those denunciations I had frequently heard against Sunday Schools. I would have been gratified to have had some of the objectors with me, especially those who say, (to their own language,) "that Sunday Schools are the cause of grinding the Methodist doctrine into children, and it will never be got out of them in the world."

evident these same persons would have become thoroughly convinced, that it is ~~far~~ better to give the Methodists, or any other Christian denomination, an opportunity of grinding their doctrine into children, than to run about the highways and streets, where they have ample opportunities of having not only the various shades of mischief, but also a draught of brandy ground into them.

It is somewhat strange, to find that the sympathies of the whole people can be other than with the Sunday Schools. For my own part, I think I am safe in advancing, that the noble Sunday School systems of Massachusetts, are the cause of impressing more religious truths on the youthful minds of the juvenile population, and ten per cent more indelible, than the religious truths impressed on the minds of the adult population, by all the sermons and admonitions from the pulpit, in the same length of time, though attended with the most profound reasoning and thrilling eloquence. Therefore, I for one, would say to the Presidents of these noble institutions, go on in the great cause proclaimed by a wise and mighty King, "train up a child in the way he should go, and when he is old he will not depart from it."

During my tour through various sections of the State, I observed that equality was a conspicuous characteristic of the population. In the city of Boston, an instance occurred which I deemed worthy of noting.— In one of the Courts of Boston, a witness, and by no means an ignorant one, stated on evidence, that while he and another gentleman were shovelling up mud, he

saw the prisoner throw the brick-bat at the policeman; &c., from which it appears that the spirit of social equality has left no other signification to the terms gentlemen and lady, but that of male and female individual.

Boston is famous for its excellent horses, and especially its draught horses, which are large, active, and possess great muscular power; the finest I seen during my tour, even exceeding the famous draught horse of Canada, in beauty and strength, but perhaps inferior on the score of activity to that noble animal. The Boston drayman has his horse harnessed in the most excellent manner, being also ornamented with six or eight bells, two of which are attached to the bridle, and the remainder are fastened to a belt girded round the horse. From four to six of these fine animals may be seen placed one before the other, stepping off in great pride under the sound of their jingling bells. The driver guides the shaft horse only, by means of lines in the usual way, the others being under the control of his voice.

Norfolk county. Dorchester Heights.—The fort which crowns this memorable height, is the scene of an important chapter in the history of our Revolution.—This height was fortified by order of Washington, after the bloody battle of Bunker-Hill, as the summit of Dorchester commanded the harbor and city; a step which he knew must bring on a general action with the besieged British, who soon found that the city could not be held unless the Americans were dislodged, which the British commander undertook with great spirit; but a tremendous storm made such havoc among his transports as to compel him to suspend operations; and af-

ter a council of war the city was evacuated by the British embarking for Halifax in Nova Scotia.

The view of Boston from these heights is very commanding. The bay, with its fortified islands stretching away to the right, is very grand and beautiful from its shape and from the brightness of its water; the city clustering upon its heights, rising in graceful lines to the summit, which is crowned with the State House, whose pinnacled cupola is the admiration of the New England States. The country to the left is all that is lovely in cultivation; sprinkled here and there with the most gay and flourishing villages. Look almost where you may from this commanding height, you behold the suburbs of the 'granite city,' sparkling with villas on every hillside within the horizon.

Quincy, with a population of 3486, situated 8 miles from Boston, is celebrated for the birth and residence of the Adams family. The residence of the late John Q. Adams is a large, venerable looking mansion, in the back ground of which yet stands the old homestead, which has the power of exciting very imposing feelings, although but an old building; but its inmates are so thoroughly interwoven with our past history, that this reverence is easily accounted for. In the immediate vicinity of this are the elegant buildings belonging to Charles F. Adams.

The next object of interest is the Unitarian Church, under the walls of which is buried the illustrious John Adams. On the right of the pulpit, as you enter the Church, is a tablet of beautiful white marble, with a handsome inscription to his memory; the tablet is sur-

mounted by a bust of the sterling patriot, whose ashes are slumbering beneath. By his side lie the remains of his remarkable wife, to the memory of whom the old Romans would undoubtedly have raised a statue, without the least fear of countenancing woman's rights to any dangerous extent.

The Quincy churchyard contains the grave of the venerable John Q. Adams, which is distinguished only by a plain granite structure, with no monument and no tablet; bearing only the letters raised on the stone, the name J. Q. Adams, his birth, age and death; all severely simple and purely republican as the character and life of the brave patriot, the conscientious statesman and humble-hearted Christian, whose ashes repose beneath its shelter.

As I stood by this plain and simple tomb, many of the events connected with the life of its illustrious but now slumbering inmate, passed in rapid review before me. I of course first thought of the death of the statesman, who in that hour when full of honors and years, was stricken down in the national halls, like a star struck suddenly from the blue vault of heaven. When upon his dying lips lingered the words, "this is the last of earth, I am content;" and a sublime faith bearing up his soul, he waited in God's love, the swift, silent coming of the angel of death, in the same halls which years before had oftentimes echoed with the voice of his fervid and impassioned eloquence.

Next came rushing over my mind, his patient industry and lofty ambition, in gathering together and hoarding up all varieties of knowledge; of the high and

ainless morality of a life, beset by many and peculiar temptations; of all that grand and beautiful display in the councils of our nation, where he stood a conspicuous star in the history of the Republic, at times attended by sunshine playing around him, at other times storms beat heavily upon his way, as he made himself dearer and dearer to his country. When I again gazed upon the simple resting place of the illustrious ex-resident, whose greatness belongs to our country forever, a legacy grand, beautiful, priceless and imperishable.

CHAPTER XXXVI.

Low Lands—Towns—Plymouth—When founded—Rock of Plymouth—Remark—Pilgrim Hall—Contrast between North and South America—Cape Cod—Barnstable—Yarmouth—Martha's Vineyard—Edgarton—Wine Grapes—Gayhead—Green Land—Shell—Shark Teeth—Indians—Sea Breeze—Ponds—Spotted Tortoise—Vineyard Sound—King Crab.

Plymouth county. On my way from Quincy to this county, I passed through a considerable body of low lands, which however, are rendered valuable by draining and the excellent mode of cultivation. On the Old Colony railroad are the towns of Wymouth, Nauset, Baintree, North Abington, Abington Centre, South Baintree, South Abington, North Hanson, South Hanson, Halifax, Plympton and Kingston, containing each from 1000 to 4000 inhabitants, all being situated with the highest regard to location, some of them near

the old town of Plymouth, a place memorable as the region first colonized by our Pilgrim Fathers.

Plymouth, with a population of 5,281, is very beautifully situated on Plymouth bay, 37 miles southeast of Boston, celebrated as the oldest town in New England. This venerable old town was founded as early as 1620, and possesses many objects of great interest for so small a town; at the head of which may be named the ever memorable Rock of Plymouth, on which landed our Pilgrim Fathers, on the 22d of December, 1620. The Rock was removed to the centre of the town, in the year 1774, and is now protected by a handsome railing. The day on which I visited this venerable old town was warm and pleasant, and the many touching and glorious associations of the place came thronging upon my mind. It was with no small delight that I gazed upon the ever memorable Rock of Plymouth, rendered hallowed by the footsteps of our Pilgrim Fathers, while I felt my gratitude warming for what our ancestors have done for our happiness, which is also reaching forward to our posterity, and meets them with cordial salutation, ere they have arrived on the shore of being.

It was with no small pride that I viewed here on the shore of the Atlantic, the Rock on which commenced our greatness, which has been carried with a great voice of acclamation and gratitude over the whole breadth of the land, till it has lost itself in the murmurs of the Pacific seas. Thus large has grown the mighty tree of Liberty, under whose balmy boughs the persecuted of every clime are protected. A voice commen-

cing on the Rock of Plymouth, and yet resounding over the earth, which is to bid them welcome to this pleasant land of the Pilgrim Fathers ; which bids them welcome to the healthful skies and the verdant fields of the American Union ; which bids them welcome to the blessings of good government and religious liberty ; which bids them welcome to the treasures of science and the delights of learning ; which bids them welcome to the transcendent sweets of domestic life, to the happiness of kindred, and parents and children ; which bids them welcome to the immeasurable blessings of rational existence, the immortal hope of Christianity and the light of eternal Truth.

The next object of attraction is the Pilgrim Hall, erected for the Pilgrim Society, in the year 1820, or just two hundred years after the landing of the Pilgrim Fathers. The Hall is a neat and beautiful edifice, containing an admirable painting of the landing of the Pilgrims, as well as a cabinet of rare and valuable curiosities. While viewing this painting, my mind was again drawn to the great progress of our country. Had Spain colonized this region, how different would have been her career of civilization, and how deplorable her condition, for we find that nation declining under the most favorable circumstances, as South America affords a rich soil, a climate adapted to the production of every thing which grows out of the earth, and possessing in great abundance, every metal used by man.—While Massachusetts was settled by a few poor Pilgrims, who were brought hither by their high veneration for the Christian religion, and who carried no

thing with them but their own hardy virtues and indomitable energy, and found the region with a sterile soil, an ungenial climate, and no single article for exportation but ice and granite rock. How have the blessings profusely given by Providence been improved on the one hand, and the obstacles overcome on the other? What a wholesale contrast is here presented! Look at the anarchy, poverty, misery and degradation on the one hand, and the productive industry, wide-spread diffusion of knowledge, public institutions of every kind, general happiness, and continually increasing prosperity in letters, arts, morals, religion, and in every thing which makes a people great; and so far as my information extends, I am warranted in asserting there is not in the world, and there never did exist, such a commonwealth as Massachusetts.

I now sailed on board a steamboat for Barnstable, on Cape Cod, a distance of 30 miles. The Cape forms the county of Barnstable. Cape Cod extends far into the Atlantic in the form of a crescent or half circle, thereby bounding on the south the deep and celebrated bay of Massachusetts. The city of Barnstable contains a population of 4311, situated on the same great bay.— That portion of it however, on which the town is situated, is called Cape Cod bay. On the southern shore of the Cape is the town of Yarmouth, with a population of 2554, situated 4 miles from Barnstable, which distance is the only width of the Cape at this place. These two towns are largely engaged in the fisheries, in proportion to their population. A steamboat now carried us to Martha's Vineyard, a distance of 24 or 25

miles. The island of Martha's Vineyard is situated 80 miles south of Boston, and about 25 miles south of the southern coast of the State. This island, like the peninsula of Nova Scotia, is famous for its fossils. The principal town is Edgarton, with a population of 1736, situated near the eastern extremity of the island, which is about 20 miles long from east to west. The town possesses few objects of attraction, unless you would call fish and oysters, together with scores of dirty, greasy and filthy looking fishermen, objects of attraction.

I did not find this island so famous for wine-grapes as I expected, judging from the glowing descriptions given of the place. In this respect, it has no stronger claims than the southern coast of the State, where not only the grape but the various vines grow as luxuriantly as they do on the island itself, which is by no means to so great an extent as is usually supposed.

Gayhead, a famous cliff of 200 feet high, situated at the western end of the island, is the chief object of interest, where the highly-inclined strata are gaily colored; some consisting of bright red clays, others of white, yellow and green sand, and some of black lignite.— This section of strata is about four-fifths of a mile in length; the beds dipping to the north and east, at an angle of from 35 to 45 degrees. The bed of green sand contains shells, teeth of large shark, and the remains of the dolphin and of a whale of great size, and teeth of the seal. In the same cliff, in some of the other strata may be found numerous nodules of the shape of kidney potatoes, from one to two inches in diameter, and smoother externally than an egg; and I was informed

when analysed they have been found to contain no less than 50 per cent of phosphate of lime.

On the island is a small settlement of Indians, a remnant of the aborigines who have been protected by the government of Massachusetts, yet all sales of land by them to the whites is null and void by law. These Indians are said to make excellent sailors in the whale-fishery of the South Seas, a source of great wealth to the inhabitants of Martha's Vineyard. These resident Indians are very intelligent and well clothed; and I could not discover that the vice of drunkenness prevailed among them, which evil I observed among the remnants of some other tribes during my tour. The occupation of the sailor in the whale-fishery, with all its privations and dangers, seems admirably suited to the bodily constitution and hereditary instinct of a hunting tribe, to whom steady and continuous labor is irksome and injurious.

The Island contains fine timber and good water, both spring and well; and is also famous for its sea breeze, which is quite salubrious and bracing to the constitutions of persons who may remain for a few weeks or a month. The Island also contains numerous ponds of fresh water, which are filled with frogs and turtles, and among them some spotted tortoises, with red heads, which at times may be seen travelling from one pond of water to another. The Vineyard Sound contains as many novelties as the fresh-water ponds; for here may be seen large specimens of the King Crab, crawling about in the salt-water pools, left by the sea on the *retiring of the tide*, which is a novelty calculated to at-

tract the notice of the stranger, especially when these pools are surrounded by a troop of boys, who make a great deal of sport in tormenting the King Crab and turtle, which sport is generally brought to a close by killing the turtles.

CHAPTER XXXVII.

STATE OF RHODE ISLAND.

Aspect of the Southern part of the State—Newport—Harbour—Fortifications—Fisheries—Narragansett bay—Mount Hope—King Philip—Warwick—Providence—Harbour—State-house—Dexter Asylum—Friends Academy—Arcade—Brown University—Athenaeum—Churches—Roger Williams—Manufactures—Railroads—Blackstone Canal—Towns.

On arriving within the southern boundary of this State, from Martha's Vineyard, I found it to consist of almost as much water as dry land. Those of the islands of the State which we sailed in sight of, are rich and highly cultivated, and especially the beautiful island of Rhode Island, more properly called Newport Island, is celebrated for its beautiful cultivated appearance, abounding in smooth swells and being divided with great uniformity into well tilled fields.

Newport county. The city of Newport, with a population of 8,333, is very beautifully situated on the southwest extremity of this delightful and highly cultivated Island, and is particularly famous for the summer resort of the wealthy from all parts of the United States, on account of its pleasant situation, the refresh-

ing coolness of the sea breezes, and its great advantages for sea-bathing ; it being situated 14 miles from the Atlantic.

The harbour is one of the finest in the world ; being safe, capacious and easy of access, and is defended by two great forts, Wolcott and Adams, erected by the United States government. The city is extensively engaged in commerce, and many of its inhabitants employed in the fisheries, which is a source of great wealth. This place is by far the most beautiful to be engaged in the fisheries, of any I saw during my tour, as many of the other great fishing towns were frequently not only soiled by them, but rendered disagreeable by their smell, which was by no means the case with this place. Newport is also celebrated for the birth of Gilbert Stuart, the far-famed portrait painter, and of Melbone, so celebrated for his miniatures.

In sailing up the Narragansett bay about 9 miles, I landed us at the city of Bristol, containing a population of 3490, in a county of the same name. The city is situated on the eastern shore of the bay, and is quite a flourishing place, actively engaged in the foreign and coasting trade, and whale fisheries. The town is a very pleasant one, containing many handsome dwellings and several beautiful churches.

Mount Hope, near the city, is celebrated as having been the residence of the famous King Philip, Sachem of the Wampanoag tribe of Indians, the grandson and successor of the celebrated Massasoit, who fifty years before the depredations of Philip, had made a treaty with the Plymouth colony. The place consists only

of a hill of no great height, and is no less celebrated for the death of this terrible chief, whose transcendent abilities are handed down to the people of Rhode Island, who assert that the advantage of civilized education and a wider theatre of action, would have made the name of Philip as memorable as that of Alexander or Cæsar.

In two hours our boat again sailed up the bay, and touched at Warwick, which contains a population of 6,726, situated on the western shore of the bay, at the mouth of the Pawtuxet river, which is a city extensively engaged in manufacturing. The river above this place has a sufficient fall to create a vast water-power, which is economically applied to manufacturing purposes. The town is also famous for its fish.

Soon after leaving this place, we arrived at the city of Providence, with a population of 23,181, being the second city in New England in point of wealth and population, it being the Capital of the State. The city is divided into two nearly equal parts by the Providence river, so called, more properly the head of Narragansett bay, where it receives the Mooshasuck river. The city is connected by two bridges which are thrown over the river, near the head of tide water. The town is situated 35 miles from the Atlantic, and can be approached with the largest ships. The harbour is excellent, animated by sailors of all sorts and sizes. Steamboats of the largest and finest class, keep up a daily communication with New York during the greater part of the year.

The State House, constructed of brick, is a splendid

edifice for its size. The Dexter Asylum for the poor of the city, is a massive structure of brick, three stories high, 170 feet long and 45 feet wide. The Friends Academy or boarding school, is another spacious structure of brick.

The Arcade, finished in 1828, at the expense of \$130,000, is the most spacious and splendid building in the city. It occupies the whole space between two streets, being 226 feet in length and 72 feet in width. The body of the edifice is built of split stone, covered with cement. It contains two fronts of hammered granite, 72 feet wide, presenting colonnades of the pure Doric style of six columns each. These columns are 25 feet in height, the shafts being 22 feet in length, and each of a single block.

Brown University, which takes its name from Nicholas Brown, of the city, who was its most munificent benefactor, is the second building in size and elegance in the city. It consists of two splendid halls, built of brick, four stories high, 150 feet long and 46 feet wide. This University was founded in Warren, in 1764, and removed to Providence in 1770, and has now an extensive philosophical apparatus, and a library of more than 14,000 volumes; in a word, the University is in a very flourishing condition under its present learned head.

The Athenæum, a massive granite structure, occupies an excellent site and was founded in 1836. It has an excellent library. There are here 18 churches; the most spacious and elegant are two Unitarian, the first Baptist and the St. John's Episcopalian, which *four* may be ranked among the most elegant in the U-

United States. Providence was first settled in 1636, and is memorable for the retreat of Roger Williams, when persecuted in Massachusetts, in 1635. It was to this eccentric and opinionated, but sincere and pious man, that Providence is indebted for her settlement, which at this day stands the second city in New England, with a capital of more than \$3,000,000 invested in manufactures, and \$5,000,000 employed as capital in banking institutions.

The Constitution adopted in 1842, by a majority of the legal voters, after a great display of party rancour, appears now to take very well, after they have become weaned from the celebrated charter granted by Charles II, in 1663, which some of them appeared to cling to, with a tenacity which was not to be shaken.

The city is famous for its manufactories, among which may be named cotton-mills, woollen mills, bleacheries, dye-houses, machine-shops, iron-foundries, nail-factories, &c. It also has an active coasting and foreign trade. It is connected with Boston by railroad, and with Stonington in Connecticut. The Blackstone canal connects it with Worcester in Massachusetts.

On our way to Worcester, by the Providence and Worcester railroad, we passed through the following towns: Pawtucket, Centre Falls, Valley Falls, Lonsdale, Ashton, Albion, Manville Woonsocket, Waterford and Blackstone, all of which are in the most prosperous condition. The first of which is famous for its cotton mills, calico printing works, &c., in such a high condition that Lowell itself has no reason to be ashamed of it.

CHAPTER XXXVIII.

STATE OF MASSACHUSETTS.

Third arrival in the State—Towns—Worcester—Railroads—State Lunatic Asylum—Antiquarian Hall—Villages—Brookfield—Towns—Springfield—State of Agriculture—United States Armory—Gardens—Cranberry—Peas and Beans—Culture—Hedges—Fences—Posts. ●

Worcester county. Soon after leaving the village of Blackstone, I again found myself in Massachusetts, being the third time I entered it in less than ten days time. I found the Blackstone Valley to be adorned with numerous towns and villages, which, with their gardens and public grounds attached, displayed much taste and beauty. In addition to the order and taste displayed, they appear to be situated with the highest regard to beauty of location. They are Uxbridge, Whittins, Dunplace, Northfield, Farnumville, Grafton, Suttten, Millbury and Quinsigawand, which are respectively well built, pleasant places, especially Uxbridge, which is situated on the left bank of the Blackstone river, and carries on some manufactures.

Worcester, containing a population of 7,497, is situated on the Blackstone river, near the head of the Blackstone Valley, is a fine inland town, connected with Providence by the Blackstone canal, opened in 1828, at a cost of \$600,000. It also has a railroad communication with Boston, Providence, Springfield and Albany. The town contains some fine buildings, among which are the State Lunatic Asylum, established in 1832, a very celebrated institution; the American

Antiquarian Hall, erected in 1820; the society was founded in 1812, and is now in a flourishing state.— The hall contains a very valuable library of 16,000 volumes, and a cabinet of valuable antiquities. The town is situated 44 miles west of Boston, and is actively engaged in manufacturing, having over \$500,000 invested for that purpose.

On our way to Springfield, we passed through three flourishing towns, each of which are situated on the Worcester and Albany railroad, viz: Clapville, Carlton, and Spencer, halting about an hour at Brookfield, memorable as the place where the English took refuge after being routed by the Indians, and their commander, Capt. Hutchinson, killed. Here was shown me the spot where the house stood, in which the inhabitants and routed soldiers took shelter, which the Indians surrounded after having burned all the other houses, and poured a storm of musket balls upon it for two days; after which, the arrows of fire and the cart loaded with flax and tow was applied, by pushing it against the house with long poles. At this critical moment, a torrent of rain descended and suddenly extinguished the kindling flames, soon after which the approach of Major Willard dispersed the Indians, and saved the besieged.

Hamden county. Warren, Brimfield, Palmer, North Wilbraham and South Wilbraham are towns varying in population from one to three thousand inhabitants each, being situated on the Worcester and Albany railroad, and present the most delightful and flourishing appearance, several being situated in a fine region of

country, within a few miles of Springfield, all of which little towns are neatly built, occupying pleasant sites and have a portion of the famous Connecticut valley to support their prosperity.

Springfield, with a population of 10,985. This beautiful town was called by the Indians, Agawam. It is situated on the right bank of the Connecticut river, and is one of the most splendid towns in New England, being situated in a very fertile and charming region of country, which is all that is lovely in cultivation, where the science of agriculture is managed in a masterly degree.

Springfield and its vicinity is memorable for the incursions and depredations of the Indians. We however, are not to be surprised that the Indians held on to Springfield and its vicinity, with a tenacity which nothing but death could affect, as it is part of the Connecticut valley, the garden spot of the New England States.

The town of Springfield is well laid out, the buildings being large and elegant, the streets are broad and well paved, with fine avenues of the American elm on each side of them, the churches, (twelve or thirteen in number,) generally highly finished and possessing much elegance. The United States Armory, about half a mile from the town, is a great object of interest. This establishment comprises several large buildings, where about 250 men are constantly employed in the manufacturing of arms. They complete about 15,000 muskets annually. Springfield has a communication with Boston, Albany, Hartford and New Haven by railroad.

and also with the two last named places by steamboat on the Connecticut river, which is navigable to this place.

The gardens in the vicinity of the town receive the greatest attention. I here observed that Yankee enterprise was displayed no less in gardens than in other pursuits of life, at least so far as order, neatness, arrangement, taste, beauty and variety of plants are concerned; among which may be found grapes, currants, gooseberries, raspberries, strawberries, flowering shrubbery, the various roots and plants, in a word, as much vegetation as can be found on the same area of ground, in any other region of country, in the same latitude.

The cranberry may be seen growing spontaneously here as well as in other sections of the State. They are generally planted on low, moist meadow-lands, which are prepared by subsoil plowing and thorough harrowing. They are then set in drills, about 3 inches apart, the rows being about 20 inches from each other. They are cultivated on the order of corn, by keeping the weeds down and stirring the ground with a light cultivator for a time, as they soon occupy the whole ground. The berries are gathered with a rake made for the purpose. Three hundred bushels per acre have been produced, which are worth in market, from one to two dollars per bushel.

Peas and beans are here a flourishing crop. The peas are most usually sown broadcast, at the rate of from two to three bushels per acre, and plowed in to the depth of three inches and the ground afterwards rolled smooth to facilitate gathering. The beans are

planted in drills in the usual way, about one and a half bushels of seed to the acre, when sown broadcast about as much more seed is used. They are usually gathered by [mowing or by means of an iron hook-rake.— The vines are gathered into small heaps, where they remain for a while till dry, when they are thrashed, cleaned and spread till entirely free from dampness.— The straw or haulm is then stacked for the use of sheep, as it is considered excellent fodder for them. Large quantities are raised not only here but in the New England States generally, for the purpose of feeding sheep, as beans are considered one of the best kinds of winter food for them, they being the only animal which eats the bean raw. The crop produces usually from fifty to sixty bushels per acre when sown, and from twenty-five to thirty when drilled.

On my way from Worcester to this place, as well as in some other sections of the State, my attention was drawn to the various modes of fencing. Hedges are comparatively few, and when met with are generally short. They are objected to as occupying too much ground and harboring vermin. Such however, as are met with are made up of different kinds of shrubbery, sometimes several kinds in the same fence, among which may be seen English hawthorn, the holly, with an evergreen leaf handsomely variegated with yellow spots, and armed with short still thorns; the gorse, a prickly shrub bearing a yellow blossom. These are fences more for taste and fancy than real profit. In the more substantial hedges are the buckthorn; the orange grows here, but is better adapted to a south-

ern climate ; the native thorn, the Michigan rose and the sweet-briar, both hardy and of luxuriant growth ; the crab-apple and wild plumb, with their thick tough branches and formidable thorns, constitute the best of these fences. The wild laurel, an evergreen of great beauty at all times and especially when clothed with its magnificent blossoms, at which time it forms a beautiful hedge.

Many of the fences are constructed by a substantial foundation of stone, reaching about two feet above the ground, in which posts are placed at proper distances, with three bar holes above the wall, in which an equal number of rails are inserted. A fence constructed of posts and rails, and posts and boards, are common where there is a deficiency of timber. The posts are placed in the centre of a large hole, about two and a half feet deep and surrounded by fine stone, which is well pounded down by a heavy iron shad rammer, as they are filled in. The lower end of the post is pointed, to prevent its heaving with the frost.

In preparing the posts for fencing, its position while in the tree is reversed, or the upper end of the split section of the trunk, which is used for a post, is prepared to be placed in the earth, as it is contended by persons to be more durable. This end is frequently charred or partially burned, which will also add to its duration. Some posts are prepared by boring a hole near the surface, or that portion of it which comes near the surface of the earth when planted ; this hole is bored with a large augur, diagonally downwards and nearly through, which is afterwards filled with salt and close-

ly plugged, which is said to add greatly to its ty. This process and that of charring or but tends only to oak and chestnut, and such other less durable than cedar and locust.

CHAPTER XXXIX.

STATE OF CONNECTICUT.

Connecticut Valley—Ponds—Connecticut river—High agriculture—Equality of persons—Birds—Delightry—Shade Trees—The Grape—Gardens—Screen—Unfenced portion of the valley—Sunken Fence—Connecticut Bridge—Dwelling-houses—Hartford House—City Hall—Trinity College—Athenaeum—Asylum—Retreat for the Insane—Manufactures—Historical sketch—Towns—Barren Land—New Harbour—State House—State Hospital—Yale Geological Cabinet—Trumbull Gallery—Gardens—Avenues of Shade Trees—Public Square—Roman Cemetery—East Rock—Prospect—Humming-Bird Wharf—Commerce.

Hartford county.—In travelling from Springfield down the famous Connecticut Valley, I found luxuriant meadow, chequered by patches of corn and other grains. There are no tunnels few embankments on the railroad. The traveller, fore, has an excellent view of the country, which contains a number of small lakes and ponds, affording a pleasing variety to the scenery; and they are as they are ornamental. The water is beautiful, clear, and I was told when they are frozen to

of many feet in winter, they furnish large cubical masses of ice, which are sawed in square blocks of convenient size, and transported to the principal cities thro'out the Union, and even shipped to South America.

The banks of the Connecticut River, for miles, were covered with an elegant species of golden rod, with its showy bright yellow flowers forming two golden belts, with the silvery waves of the Connecticut rolling in majestic grandeur between them, presenting a scene delightful and sublime. This delightful Valley, as well as many other portions of the New-England States, is entirely destitute of large timber, owing to its being cut down originally without mercy, because it served as an ambush for the Indians, since which time it has never recovered.

The Valley of the Connecticut presents a pleasing picture of a rural population, where there is neither poverty nor great wealth. Here the elements of agricultural knowledge are scattered broadcast over the country, and brought within the reach of the poorest citizens and the humblest capacities. The great science of Agriculture is raised to its proper standard, and the farmer, who is the "bone and sinew" of our country, is here met at his daily avocations by doctor, lawyer, merchant and dandy, and receives from each and all, as cordial a shake of the hand as he would from his brother farmer. There is a remarkable contrast, in this respect, between the New-England States and the Old Dominion, a portion of which I attribute to the high standard of agriculture, which of course to some degree, disarms those persons of their whims, and they

meet the plain farmer upon more equal footing. In this respect, my attention was particularly directed to the dandy tribe, in which the contrast was so great between the South and East, that I also came to the conclusion that the Eastern dandy could not be orthodox, as I observed he did not take the same pride in making inroads upon the cigar-box and his father's or guardian's purse; neither is bowing and scraping practiced to such a wholesale extent as it is by the genuine booted and strapped dandy of the South.

Among the many beauties of the Connecticut Valley which attract the attention of the stranger, may be named its numerous Birds, that keep up a ceaseless song, while chirping and skipping among the branches of the numerous and beautiful shade trees of the Valley. These birds are many of them adorned with a brilliant plumage, and whose songs, intermingled with the din of the grasshoppers and crickets, add animation to the scene spread out before the view of the traveller, while the flowering shrubbery conspicuous on every hand, is also animated with scores of humming-birds and hawk-birds, or humming-sphinx, all poised in the air, while sucking the flowers, the body seeming motionless and the wings being invisible from the swiftness of their vibrations, whose buz is delightful to the ear and animating to the mind.

The shade trees of the Valley possess all that is lovely, graceful and imposing, being of the choicest species, among the largest of which may be named the elm, one of the most graceful and imposing trees, with its beautiful projecting limbs and long pendant branch-

es. Would that all could see the patriarchal elms which grace the beautiful villages and country dwellings of the Connecticut Valley! I would almost guarantee their universal dissemination. The sugar maple, a beautiful tree having a straight trunk, and regular, upward branching limbs, forming a top of great symmetry and elegance. This tree, besides the ornamental and thick shade it affords, gives an annual return in its sap, which is used for making into sugar and syrup, and its timber is esteemed valuable for furniture. The black walnut, a stately, graceful tree of great value for its durability; the white ash, with its slender and stiff top, has a light and graceful appearance; the weeping willow, with its variegated foliage and long flexible twigs, sometimes trailing the ground for yards in length, whose silvery leaves are among the earliest of Spring and the last to maintain their verdure in Autumn; the locust, with its profusion of flowers and massive flakes of innumerable leaflets of the deepest verdure, are among the largest shade trees which grace the Connecticut Valley.

The grape appears to grow as spontaneous in this Valley as any thing else. The vine is frequently seen taking possession of the scattered trees in the fields and borders of woodlands, without receiving any attention or labor, except the planting in some instances, and a few stakes to protect them while young from injury by cattle or other animals. They are planted on the south side of the tree when planted at all, where they will receive the warmth of the sun, where they need only a little protection. They are also planted near the

dwelling on the south side of a post, which is firmly planted in the earth, being of considerable height.—The shoots or scions are two or three in number, and are trained up the post by means of loops of leather, till the first of March in the second year after planting, at which time the number is reduced to one, which is to make the trunk of the vine. This is cultivated by pruning, training and manuring, together with such other attention as it may require. With this small attention the native wild grape is said to produce an abundance of fruit.

In the gardens and pleasure grounds may sometimes be seen a screen or wire fence of taste or fancy, around beds of flowering shrubbery, which is very beautiful. This screen or fence is frequently called by these people hurdle. It is variously formed of cordage, wire or wicker work, in short pannels, and firmly set in the ground by sharpened stakes or posts, which are sometimes made of iron, at the end of each pannel. When this hurdle is constructed of wire, it is prepared by boiling the wire in linseed oil, heated as hot as it will bear for half an hour. The wire is then taken off and hung in the sun until it is dried. This process is repeated three times. The object is to make the wire tough, and render it impervious to rust. When constructed of cordage, a coat or two of a proper composition is applied, which renders it water-proof, and greatly adds to its duration.

In one portion of the Valley the prospect is not even obstructed by a fence. This portion of it is called *the unfenced part of the Valley*, which is caused by

the scarcity of timber. To remedy this evil to some degree, extensive legislative powers reside in the separate towns, which enables each to adopt such regulations as best comport with their own interests. Therefore, no animals are permitted to go on the fields till autumn, and the crops are required to be removed at a designated time, when each occupant is at liberty to turn on the common premises, a number of cattle proportionate to his standing forage, which is accurately ascertained by a supervisory board. This arrangement prevails chiefly on the broad bottom lands which skirt the banks of the Connecticut river, where in many places, the periodical inundations would sweep away a fence if they had the materials wherewith to make one.

In other sections of the valley, the sunken fence is used, which is said to be perfectly efficient, and is certainly agreeable to good taste. It consists of a vertical excavation on one side about five feet in depth, against which a wall is built to the surface of the ground.— The opposite side is inclined at such an angle as will preserve the sod from sliding from the effects of the frosts and rain. This fence therefore, does not obstruct the view any more than where there is none whatever. To the addition of serving as a fence, they afford good ditches for the drainage of water, and always remain in good repair.

On my way down the valley to Hartford, I passed the following villages, at each of which we stopped: Tompsonville; Warehouse Point. At the latter place there is a very strong and splendid bridge over the

Connecticut river, on which the cars pass. The bridge is 1260 feet long and cost \$120,000, built at such a height that steamboats and packet ships pass through under it. Being built on six arches, with a roof, it affords a charming prospect of the river. Windsor Lock, near the bridge on the west bank of the river, is a handsome little village. The town of Windsor, with a population of 2283, situated within 7 miles of Hartford, is a handsome, flourishing little town.

The dwelling-houses in the country, are many of them only one story high, with a neat little brick chimney at each end; and the houses are generally weather-boarded and painted either white or yellow, the latter most frequently. The arrangements connected with the dwelling, as well as the farm buildings are neat and convenient. Some of the houses have both chimnies at the side of the house instead of the end, being from ten to twelve feet apart, owing to the size of the building. This mode of building chimnies, however, is not so common in the Connecticut valley as in some other old settled sections of New England.

Hartford, with a population of 9468, is very beautifully situated on a commanding site, on the west bank of the Connecticut river. It stands in a fertile district bespangled with neat villages, which enjoy the advantages of numerous millseats, and easy communication with Long Island Sound and the Atlantic. The site occupied by the city of Hartford, contained only one house and a fort in the year 1633, and three years afterwards it was permanently settled by the Rev. Mr. Hooker and some emigrants from Massachusetts. The

city has a daily communication with New York by steamboats.

Hartford is a semi-capital of the State, and contains a very splendid State-House, where the legislature meets each alternate year; the other capitol being at New Haven. The city Hall is an elegant structure, occupying a delightful site. The Trinity Collge, founded in 1824, and then called Washington College, is a very flourishing institution, with large and excellent halls. The Athenæum, an elegant gothic edifice, is richly worth inspection. The American Asylum, for the instruction of the deaf and dumb, established in 1816, the first of the kind in America, has now 145 pupils, who receive instruction in various branches of learning, and acquire a knowledge of the useful arts. The retreat for the Insane, a very celebrated institution which has been in operation since the year 1824. There are here numerous branches of industry, among which are the manufacturing of wearing apparel, saddlery, wire, cards, shoes, &c. Rocky Hill, a place in the immediate vicinity of the city, where can be seen a large mass of columnar trap, with red sandstone. In this famous quarry, the distinct joints which divide the sandstone, contrast finely with the divisional planes which separate the basalt into pillars.

Hartford is celebrated for the Convention of the Federalists on the 15th of December, 1814, which is said to have been a treasonable combination of ambitious individuals, who taking advantage of the embarrassments of the national administration, arising out of the war, sought to sever the Union, and so far as can be

learned, they were only deterred from an open attempt to accomplish their purpose, by the unexpected conclusion of a treaty of peace with Great Britain, which disembarrassed the immortal Madison and his administration, and swept away all grounds upon which to prosecute their unholy designs.

After a session of near three weeks, they published a report, in which they threw a mantle over their designs, by dwelling upon the public grievances felt by the New England States particularly, after which, in no small degree, they proceeded to suggest no less than seven different alterations of the Federal Constitution, and concluded their report with a resolution providing for the calling of another Convention, should the United States refuse to favor their designs. On which these black cockade delegates dispersed, whose acts have since been bitterly denounced and charged as being of a treasonable nature. A charge from which it is said, neither their report nor secret journal has the power of exonerating them. Therefore they will ever receive the scorn of the world and the curses of the American people, so long as a spark of republican feeling remains in their breasts.

Down the valley from Hartford, are the towns of New Britain and Berlin Station; the latter with a population of 3411, situated at the distance of 11 miles below the city. At this place, stages leave for Bristol, Terryville and Plymouth, on the arrival of the steamboat train from New Haven. The town is well laid out, located on a beautiful site, handsomely ornamented with shade trees of a hardy and beautiful species.

The town contains some fine looking dwellings, and several large and elegant churches.

New Haven county. The village of Meridian Station, with a population of 1880, situated 7 miles below Berlin, is a pleasant little place. At this place stages are in readiness on the arrival of the same train above noticed, to take passengers to Middletown and Waterbury. Between Meridian Station and the city of New Haven, are the villages of Willingford and North Haven; the latter with a population of 1351, which is quite an attractive little town. Near this place, is a considerable area of barren land, which is surrounded by the most fertile region of country. On seeing this barren spot at a considerable distance off, I fancied it was a great field of ripe wheat. This spot presents the more remarkable appearance, owing to its being situated in the midst of a region clothed in the most luxuriant verdure.

New Haven, with a population of 12,960, is very beautifully situated at the head of a bay of the same name, on a large plain, 4 miles from Long Island Sound. The harbour is safe and spacious, but it is shallow and gradually filling up. New Haven was founded in 1638, by Theophilus Eaton and John Davenport. In the year 1665, it was united to Connecticut by royal charter, and plundered by the British in 1779. It is now also a semi-capital of the State, and contains a State House, an elegant structure built of brick. The State Hospital, founded in 1824, is a large and splendid building, well arranged. Yale College, one of the most celebrated literary institutions in the United

States, was founded at Killingworth, in 1701, removed to Saybrook in 1707, and to New Haven in 1717.— The halls belonging to this memorable institution are large and superb. This college contains a splendid mineralogical cabinet, and a very valuable library of over 33,000 volumes. The late Col. Trumbull bequeathed to the College, many of the best productions of his pencil, which are arranged in an appropriate building known as the Trumbull Gallery. This gallery is opened daily to visitors, and the proceeds arising from the exhibition, (25 cents being the admittance fee,) are appropriated to aid indigent students in obtaining their education.

The city is regularly laid out and neatly built; many of the houses have the most splendid gardens attached. The streets are broad and bordered with the most beautiful avenues of shade trees, of the choicest species, which mingle agreeably with the buildings of Yale College and the numerous churches. In the centre of the city is a most beautiful square, ornamented with the same fine graceful trees, and surrounded with the most splendid edifices.

The graceful and beautiful trees of the public square with those of the far-famed College, have a most imposing appearance. They have too a social and moral influence, far beyond the mere gratification of the eye or the consideration of dollars and cents. In their freshness and simplicity, they impress the young mind with sentiments of purity and loveliness as enduring as life. *From the cradle of infancy, consciousness first dawns upon the beauty of nature; beneath their grateful shade*

the more boisterous sports of childhood seek their keenest enjoyment amid their expanded foliage; and they become the favorite resort, when the feelings assume a graver hue, and the sentiments of approaching manhood usurp the place of unthinking frolic. Their memory in after life, greets the lonely wanderer amid his trials and vicissitudes, exciting him to breast the storm of adversity till again welcomed to their smiling presence. Their thousand associations repress the unhalloved aspirations of ambition and vice, and when the last sun of decrepid age is sinking to its rest, these venerable monitors solace the expiring soul, with the assurance that a returning Spring shall renew its existence beyond the winter of the tomb.

The public Cemetery, containing about 18 acres, is very tastefully laid out in avenues running at right angles with each other, bordered on each side with neat white railings, on which appear the names of the owners of the lots enclosed. The East Rock, situated on the opposite side of the head of the bay, is a very high bluff of rock, rising so abruptly as to be very fatiguing to gain the summit, which however affords a charming prospect of the plain and Long Island Sound, as far as the eye can reach. In the beautiful gardens of the city may be seen flowering shrubbery, and plants of almost every kind. Here I saw for the first time in a garden, the scarlet lobelia and a large sweet-scented water lily. The humming birds fluttering around the flowers of a gladiolus was a delightful scene. The wharves are good, Long Wharf, being 3945 feet in length. The foreign and coasting trade of the city is considerable.

and its manufactories of fire-arms, carriages, &c., are very extensive.

CHAPTER XL.

STATE OF NEW YORK.

Long Island Sound—Scenery—Beauties of Long Island Sound—Approach of the City of New York—The Country—Shipping of the City of New York—Horses—Battery—Prospect,

A few minutes after entering the Steamer *Commodore*, I found myself within the boundary of the Empire State, by sailing in the very bosom of the Long Island Sound, which is from ninety to ninety-five miles long, and from five to fifteen miles wide. The day was very beautiful; the sun shining on the water with her bright rays, added sublimity to the scene. We had Long Island on the one side and the mainland on the other; the scenery at first tame, from the width of the channel, but very lively and striking when this became more contracted; and at length we seemed to be sailing into the very suburbs of the great city of New York itself, passing between green islands, some of them covered with buildings and villas.

The longer we sailed and the nearer the sun got to the horizon, the more brilliant and sublime did the rays appear. I was not a little diverted on hearing some of the passengers comparing the changing hues of the clouds and sky to the blue and red colours in the pigeon's neck. The brilliancy of the rays of the sun falling obliquely on the bosom of the water, presented a

scene truly imposing and grand. The watery element appeared to change its hues every moment ; the shades of purple and green fleeting over it, now dark, now lustrous, now pale and then a streak of silver light divided the shades of green.

The nearer we approached the great metropolis, the more imposing the scene, as the chimnies of countless steam-boats, factories and houses of a population of nearly four hundred thousand souls, rolled up a magnificent cloud of smoke, which ascended heavenward, while the rays of a dazzling sun shed refulgent glories on every part of the scene, till we landed at the wharf, surrounded by hundreds of steamers, ships, schooners, sloops, &c., amid the din and noise of the wharves of a great and populous city.

By the time I landed at this place a second time, I had become almost disgusted with large cities, as I had reason to believe that all populous places are unhealthy, because the atmosphere is perpetually being poisoned and corrupted. Putrid, animal and vegetable substances necessarily abound in them ; high walls and crowded houses obstruct the free passage of the air, & while miasmata thus created and confined are poisoning the atmosphere, thousands of human beings are breathing it, and of course adding to its impurity. It is impossible that such a state of things should be otherwise than unfavorable to human health, and destructive to human life.

. But the pure air of the country, and its exceedingly beautiful scenery had such an excellent effect upon my health, that I became very partial in this respect, and

shall hereafter seize every opportunity of inhaling the one and beholding the other. The busiest and most important avocations afford some few snatches of leisure, and these can never be better or more wisely employed, than in seeking out the beauties of nature in their native haunts. It is the more easily accomplished, as a large portion of the year presents a perfect succession of beauties to the eye of taste, and of enjoyments to a well attuned soul ; and there are few indeed, who cannot contrive to quit their avocations for a brief space of time. It was however, with no small delight that I viewed a second time this great theatre of commerce, where no less than two thousand foreign ships arrive annually, together with five thousand coasting ships in the same length of time. There are also here a line of steam-packets to Liverpool, besides which there are line-ships, that sail for Liverpool every five days, to London every ten days, and to Havre every eight days. Regular lines of packets are also established to all the chief cities in the United States, the West Indies, and South America. The steamboat lines to all the adjacent maritime towns are very numerous.

In viewing the giant power of the steam-vessels and the recent achievements they have accomplished, we cannot but feel a certain awe mixed with admiration, in looking to the future changes which this great maritime agent may affect in the state of the world. The main object in the busy age in which we live, is to shorten distance and save time ; for this purpose hills have been levelled and valleys filled up, canals dug, & rivers spanned, and the steam engine made in a thous-

and ways to supply the offices of human hands.

Here we behold conspicuously the new era which has come upon us ; skill, science and enterprise have been called into activity by the inexhaustible wealth of our country, whose merchants are princes. The distant conceptions of Watt, and the predictions of Fulton have been realized. The broad Atlantic wave has been advantageously navigated by Steam. America and her mother England have been brought within twelve days sail of each other, time and space had alike been measurably annihilated, by curtailing distance and giving speed and certainty, which before both time and safety were at the mercy of the winds.

Here we behold with pride the steam ships plowing the briny surge, in spite of wind or wave, like giants rejoicing at their course, engendering generous deeds and friendly feelings between the denizens of the old and new world, to the mutual happiness and prosperity of both, and it is evident that it heightens the affections of all, and causes them to become more closely entwined.

My attention was now drawn to the horses of the city, which are generally poor and look badly, which might be said of them all, except perhaps some of the carriage horses of the more opulent of the city. There appears to be a great contrast in this respect, between the large and noble animal of Boston and the lean, rough, broken-down horse of this city. This however, is not confined to the city alone, but the northern and eastern portion of the State also, has many very indifferent horses. *This fault does not extend to other beasts,*

which all appear to be in a thriving condition. It appears a little remarkable, to behold in this great theatre of prosperity, so many small, lean, rough, nicked and bobbed horses, presenting strong indications of being refused their due portion of the prosperity of the country.

On the morning of my departure, I spent an hour at the Battery, situated at the southern extremity of the city, containing eleven acres of ground, well shaded with beautiful trees, where the weeping willows with their variegated foliage and long flexile twigs, whose silvery leaves had increased in size and beauty in the time that intervened on my tour north and east from the city. The air was warm, and the rising sun cast its brilliant rays in sublime grandeur on the harbour, which could be delightfully viewed from the Battery, with all its islands, ships, steamers, forts &c. It is with no small pride that the stranger views the harbour of this Great Commercial Emporium of the Western Hemisphere, where the chimnies of numerous steam-boats and the great forest of towering ship-masts, with hundreds of flags fluttering in the breeze, which presents a scene at once imposing and delightful.

CHAPTER XLI.

STATE OF NEW JERSEY.

Jersey City—*Newark*—*Manufactures*—*Elizabethtown*—*Marshy Lands*—*Villages*—*New Brunswick*—*Rutger's College*—*Theological Seminary*—*Bridge*—*Dean's Pond*—*Princeton Collage*—*Shade Trees*—*Theological Seminary*—*Remark*—*Trenton*—*State House*—*State Prison*—*Delaware and Raritan Canal*—*Falls of the Delaware*—*Manufactures*—*Sampink Bridge*

Hudson County. The ferry-boat landed us at Jersey city, containing a population of 3072, situated on the left bank of the Hudson River, just opposite the city of New York, at the distance of one mile; that being the width of the noble Hudson at this place. The city has quite an active trade for the number of its inhabitants, it being well situated for commerce. It is also connected with Newark by railroad.

Essex County. Newark, with a population of 17,290 inhabitants, being very delightfully located on the west bank of the Passaic river, 3 miles from Newark Bay, is the largest and most important city in the State, being well built with spacious streets and handsome houses, many of which are animated with fine, graceful shade trees. The city has an easy communication with New York, by means of steamboats, it being only ten miles distant; and the New Jersey and Morris canal also pass through the city. This place is in a very flourishing condition, and has considerable commerce, though principally noted for its manufactures, which are extensive, the capital employed being about two millions of dollars. Among the articles produced, may be named carriages, shoes and boots, cutlery, and

dlery, jewelry, hats, furniture &c. There are here seventeen large fine churches, three banks and several valuable libraries. The city was founded in 1666, by a company from Connecticut, who purchased the site and some of the surrounding country from the Indians, for £130, twelve blankets, and twelve old muskets.

Elizabethtown, with a population of 2500, is a very beautiful town, 4 miles from Newark. It contains several manufactures, mills, &c. It is connected with Newark, Trenton and Summerville by Railroad, by which the inhabitants are not slow in profiting.

Middlesex County. This county and that of Essex contain large bodies of marshy lands. In the latter county, between the city of Newark and Elizabethtown, are large bodies of swampy flats, chiefly between the Railroad and the Hudson river. In such places where they will admit of draining, they are rendered valuable for grass, and in some places are rendered sufficiently dry for the cultivation of grain and roots; some of these swamps are redeemed from the water, and so highly cultivated as to produce the very heaviest crops of oats and corn. On the railroad to New Brunswick, are four flourishing villages, Rayway, Metuchin, Freemans and Campbells.

New Brunswick, with a population of 8,693, is a very beautiful city of 800 houses, pleasantly situated at the head of sloop navigation on the Raritan river, and at the termination of the Delaware and Raritan canal. This city is the depot of the product of the fertile district of the Raritan river. The city is located on the left bank of the river, on a very beautiful site, being

regularly laid out and well situated for trade, in which it is engaged very actively. Rutger's College is located here, and was founded in 1770, has now a President and ten Professors. The Theological Seminary is a very flourishing institution, under the direction of the German Reform Church. The city also contains eight large handsome churches, two banking houses &c. The bridge which crosses the Raritan river at this place was erected at a cost of \$86,687, which is a handsome, substantial structure of considerable length, at no great height from the water.

Dean's Pond situated 7 miles from the city, on the Railroad, is an object calculated to arrest the attention of the stranger, owing in part to its not being situated in so low a region of country as those numerous marshes he passed to the north of New Brunswick. On the same route is Kingston a pretty little town 4 miles distant.

Mercer County. Princeton, with a population of 3055, is pleasantly and beautifully situated on the western branch of the Millstone river. It is the seat of the College of New Jersey, one of the oldest and most celebrated institutions of the kind in our country, being founded at Elizabethtown, in 1746, or more than a century ago, and removed to Princeton in 1757. It has thirteen professors and a valuable library of about 12,000 volumes. The halls of the College are large, handsome, and well built, on a very splendid site, ornamented with very beautiful shade trees, whose graceful boughs have a very imposing appearance. The Princeton Theological Seminary, under the direction of the

Presbyterians, also possessing fine buildings, located on a commanding site, and is said to be a very popular and flourishing institution. The town contains some fine houses, situated on broad, handsome streets, bordered with beautiful avenues of trees.

Princeton is also noted for the great battle of the 3d of Jan. 1777, when Washington was stealing by night, from the victorious Cornwallis. It appears on that morning at sunrise, his retreat being cut off at this place, by three regiments of British soldiers, who fell with such fury on his little army as to cause them to waver and break & when all seemed lost, when Liberty & her Star Spangled Banner were drooping and almost within the grasp of the victorious Cornwallis, the already dazzling Star of Washington burst forth in brighter effulgence than ever, by his snatching Columbia's lovely stripes, & spurring furiously midway between the contending parties, and with his manly breast turned full on the foe, said to his countrymen in language more elegant than words, "Follow Me," and moved on amid the chaos, while the thrilling shout of the gallant Mercer brought up the Americans and who sealed the memory of his noble daring with his life, while hurling the Americans on the British foe.

Trenton, with a population of 4035, very delightfully situated on the east bank of the Delaware at the lower falls, 30 miles above Philadelphia, is the Capital of the State, and contains a State House, one hundred feet long, and sixty feet wide, constructed of very beautiful stone, located on a splendid site. The town is regularly laid out and occupies high and commanding ground,

At an advantageous point, the Delaware being navigable to the fall for sloops. The State Prison at this place, is a strong and elegant structure; together with some other public buildings in the town, present quite a handsome appearance. There is here a library, established as early as 1750, and seven large elegant churches. The Delaware and Raritan Canal passes through the town. The falls of the Delaware afford extensive water-power, which is largely employed in propelling manufacturing establishments, there being ten mills and manufactories just below the falls. The Delaware is here crossed by a very splendid bridge, 1100 feet in length, resting on five very handsome arches.

Trenton is celebrated for the complete surprise and capture of the British and Hessians, by Gen. Washington, on the morning of the 26th of December, 1776. While engaged in a Christmas frolic, they were thunder-struck on hearing the voice of Columbia's noble and greatest son, exclaiming to his heroes, while raising on his stirrups and waving his sword: "There, my brave friends, there are the enemies of your country; and now all I ask of you is just to remember what you are about to fight for. Charge!" This charge wound up the Christmas ball, and forty-one of the guests were to bury, and near a thousand had the pleasure of taking a New Year's frolic in the city of Philadelphia, prisoners of war.

Trenton is also famous for the reception of Washington, on the 21st of April 1789, at the bridge over the Sanpink, a creek running through the eastern side of

the city, across which Washington retreated on the 1st of January, 1777, or six days after his capture of the British and Hessians. On the east side of this little creek it is said, he planted his cannon to defend its passage. In this position Cornwallis attacked him, at 4 o'clock in the evening, and undoubtedly would have captured him and the whole American army, had he taken the advice of Sir William Erskine, who advised the continuance of the battle, while Cornwallis saw fit to withdraw his troops when night closed in. It was from the banks of this same little creek, that Washington stole in the darkness of the night, and next morning hewed his way through the British regiments at Princeton, and effected his escape.

Twelve years afterwards, the bridge over this creek was chosen by the ladies of Trenton for the reception of Washington, while on his way to New York to act as President of his country. Under their direction, this bridge was decorated with a triumphal arch with this inscription in large letters:

DECEMBER 26, 1776.

THE HERO WHO DEFENDED THE MOTHERS,
WILL ALSO PROTECT THE DAUGHTERS.

The hero entered the arch at the south end of the bridge, amidst the thrilling shouts of thousands. At the north end of the bridge we are told, were drawn up several hundred little girls, dressed in snow-white robes, with their temples adorned with garlands, and baskets of flowers in their arms, while behind them stood long rows of young virgins, and still behind them their venerable mothers, all of whom, while singing

the following verse of their ballad, strewed the way with flowers before him :

“Virgins fair and matrons grave,
(These, thy conquering arm did save ;)
Build for thee triumphal bowers,
Strew ye fair, his way with flowers,
Strew your hero's way with flowers.

CHAPTER XLII.

STATE OF PENNSYLVANIA.

Aspect of the State—Country Buildings—Fences—German population—Internal Improvements—Aliens—Towns—Philadelphia—Streets—Shade Trees—Old State House—Prospect—Custom House—Exchange—Order of Architecture—Navy Yard—Naval Asylum—Alms House—Hospital—Institution for the Deaf and Dumb—Eastern State Penitentiary—University—St. Stephen's Church—Christ's Church—Tomb of Franklin—Girard College—Tickets of Admission—Omnibusses—Laurel Hill Cemetery—Fairmount Water-Works—Omnibusses—Bridges—Learned Institutions—Markets—Monument of the Treaty of Penn.—Fire Engines—Vulgar Familiarity—Intellectual condition of the People.

After crossing the Delaware at Trenton, I found myself within the boundary of this State ; and in travelling through the State by the way of Harrisburg, I found the central part of the Old Keystone State to be intersected by the various ridges of the Allegany range of mountains, whose general direction is from southwest to northeast. The valleys between many of these ridges are generally of a rich black soil, suited well to the various kinds of grass and grain. Some of the

mountains admit of cultivation almost to their summits. No State in the Union perhaps, shows to the traveller a richer agriculture than the old Keystone.

Mountainous and rolling as these regions are, it is emphatically a grain country, raising wheat and other grains of a superior quality. In a word, it produces all the productions of the northern and middle States, and is particularly famous for the size and excellence of its breeds of draught horses. The State is also noted for its immense coal beds, which are of two kinds, the anthracite, (perhaps better known as Lehigh coal,) and the bituminous coal, which are distinct in their qualities.

The inhabitants of this famous old commonwealth, are distinguished for their habits of order, industry and frugality. The passing stranger, as he traverses the State, is struck with the noble roads and public works, with the well cultivated fields, all beautifully laid out and enclosed with a handsome straight fence, and also their commodious and durable stone houses and still larger stone barns, with the farm buildings ornamented with very lofty and beautiful shade trees. An agricultural country, alike charming and rich spreads under his eye.

The State of Pennsylvania, perhaps labors under the disadvantage of being jointly occupied by two races, those of British and those of German extraction. The latter I observed during my short sojourn in the State, to be to all appearances, industrious and saving, very averse to speculation, but certainly wanting in that habit of identifying themselves with the acts of their gov-

ernment, which can alone give to the electors under a representative system, a due sense of responsibility.—Some of them denounce in the strongest terms, the great system of internal improvement carried on by their State, by talking of it as of a commercial project which has failed, and they were reaping few or no advantages from the enormous expenditure of their government.—Because, it is contended, that such cheap and rapid means of locomotion are injurious, by facilitating migrations to the west, and preventing a country with a sparse population, from filling up. For this reason, their lands had not risen in value as they ought to have done. They protested that they had always been opposed to railways and canals, and that for every useful line adopted, there was sure to be another unnecessary canal or railway made, in consequence of log-rolling in the legislature.

The representatives they say, of each section of the country, would only consent to vote money if they could obtain a promise that an equal sum be laid out in their own district, and to this end, some new and un-called for scheme had to be invented. This kind of jobbing these Germans compare to log-rolling in the back settlements, where the thinly scattered inhabitants assemble and run up a log-cabin in a single day for the new comer, receiving in their turn, some corresponding service whenever the union of numbers is required. There may also be noticed some complaint against that multitude of aliens, who have recently been admitted to take part in the elections, by showing the term of years required for naturalization. It is said

that owing to the neglect of registration, many aliens vote fraudulently, and others several times over at the same poll in various disguises.

This is a matter sometimes dwelt upon with bitterness by some, while the picture drawn by others is often so highly coloured as to be very amusing, and upon the whole there appears to be no great affection for that large number of aliens, who have of late years been invested with electoral rights, and candidates for places in the magistracy or the legislature. To the sympathies of this ignorant mass, the flattery of the demagogue is very frequently directed. This temptation is too strong to be resisted, for small as may be their numbers when compared with the native voters, they often turn the scale in an election where the great constitutional parties are nearly balanced. Therefore, it is here a very easy matter to draw a discouraging picture of the dangers of universal suffrage.

Bucks county. This famous old county is situated in the angle of the Delaware, where that noble river bends its course from southeast to southwest, forming an angle of about ninety degrees, a few miles below Trenton. The southeast end of this county is all that is lovely in agriculture; the soil, to all appearances, is of the most admirable quality. On the Trenton and Philadelphia railroad are Morrisville, Tullytown, Bristol and Taconey, each of which are very flourishing towns. From Taconey a steamboat carried us down the Delaware 8 miles to Philadelphia.

Philadelphia, with a population of 228,690, is very beautifully situated in a county of the same name, and

flat peninsula between the Delaware and Schuylkill rivers, about five miles above their junction, is the principal city in the State, and has the merit of being the most regularly laid out and the most beautifully built city in the world. It yields to none in the Union in wealth, industry and the intelligence of its citizens.—The streets of the city are broad and straight, crossing each other at right angles, thereby dividing the city into numerous blocks or squares, some of which have been reserved for public walks, being ornamented with fine shade trees and flowering shrubbery. The dwelling-houses are neat and commodious, and the public buildings are generally constructed of white marble.—The city is noted for several events in our history, such as Penn's treaty with the Indians, the assembling of the first Congress, in 1774, and being occupied by the British in the year 1777, &c.

OBJECTS OF ATTRACTION. The Old State House, erected as early as 1735, contains that renowned old hall, where the Congress sat which declared our national independence, and also the Convention which formed the Constitution of the United States. Tickets of admission to the steeple may be procured at the Mayor's office, between the hours of 9 A. M. and 2 P. M. The superintendent of the building is always on duty. A ramble through this venerable old building is truly interesting, and the view from the steeple is delightful.

The Custom House, formerly the United States Bank built after the model of the Parthenon, at Athens, was finished in 1824. It is 87 feet on the front and 160 feet deep; erected at a cost of \$500,000.

The United States Mint, established in 1791, and removed to the present beautiful white marble edifice in 1830. Visitors are admitted every day before 12 M. except Saturday and Sunday.

The Merchant's Exchange, is situated at the corner of South Third and Walnut streets, and on the angle formed by the intersection of Dock with Walnut and Third streets. This splendid structure was built in 1834, after the model of the Choragic Monument, at Athens, called by modern Athenians the Lantern of Demosthenes; a monument erected 330 years before Christ.

This Exchange is constructed entirely of marble, in the form of a rectangular parallelogram, ninety-five feet front on Third street, by one hundred and fifty on Walnut street. On Dock street however, is a semi-circular projection, ornamented from the top of the basement story, with six beautiful Corinthian columns, with handsome capitals. This splendid portico is of the height of two stories, and communicates with the Exchange room by means of nine separate windows, which may be used as doorways. This semi-rotundo is seventy-two feet in diameter in the basement, on either side of which, a flight of stone steps leads likewise to the main room of the edifice from Dock street. On the side of the same street, commences a hall which passes through the centre of the building to Third street, and another likewise communicates with this from the north side.

On the right or north side of this hall, is the Post Office, seventy-four feet by thirty-six, and on the left

are several insurance offices and banks, and also the session-room of the Chamber of Commerce. On each side of this great hall are a flight of stairs, which ascend to the second floor. On this floor is the Exchange room, situated at the east front of the building, extending across the whole length of the building, and is said to occupy an area of 3300 superficial feet. A very beautiful entrance leads from the head of the stairs into this apartment. The ceiling extends to the roof, is of the form of a dome and supported by several marble columns. Its panels are ornamented with splendid fresco paintings, representing commerce, wealth, liberty, &c., all beautifully executed, appearing to have as striking a relief as sculptured work. There are rooms on the right side of this hall, which are appropriated for the meetings of stockholders, brokers, &c. The attic story is fifteen feet high, contains six rooms, occupied by library associations, artists, &c.

The front on Third street, contains a sort of piazza, let into the main wall, with several pillars constructed of marble, rising from the top of the basement to the roof. The roof of the structure is oval, and surmounted by a circular lantern that rises forty feet. This edifice is one of the most imposing for architectural display, of which the city can boast.

The United States Navy Yard, located on Front street, contains about fourteen acres of ground; but ships of war of the largest class cannot ascend to the city with the whole of their armament. The Naval Asylum is a handsome structure of marble, with a front of 385 feet, being capable of accommodating four hun-

dred men, erected at a cost of three hundred thousand dollars.

The Alms House, situated on the west bank of the Schuylkill, consists of four distinct buildings, with four hundred rooms. The Pennsylvania Hospital, founded in 1750, and commenced five years afterwards and only finished in 1804, is beautifully situated on Pine street. In front of it there is a bronzed lead statue of William Penn: The Institution for the Deaf & Dumb established in 1820, and the Orphan Asylum, established in 1814, are worthy charities.

The Eastern State Penitentiary is situated on one of the most elevated, airy and delightful sites in the vicinity of Philadelphia, and is said to be one of the largest buildings in the United States, occupying ten acres of ground. Tickets of admission may be obtained from any of the inspectors, viz: M. L. Bevan, 349, Arch street; John Bacon, 74, South Third or 117, Race street; Thomas Bradford, 7, Sansom street; Robert Patterson, 182, Market street; or Recorder Vaux, South Sixth street.

The principal front of this great structure is six hundred and seventy feet in length, and reposes on a terrace, which from the inequalities of the ground, varies from three to nine feet in height. The basement or belting course, which is ten feet high, is scarped, and extends uniformly the whole length. This front is composed of large blocks of hewn and squared granite. Near the gate of entrance are situated three towers; there are also four others situated on the angles of a wall thirty feet high, enclosing an area of six hundred

and forty feet square. From these towers the whole establishment can be overlooked. The great gateway, in the centre of this enormous wall, forms a conspicuous feature. It is twenty-seven feet high and fifteen feet wide, and is filled by a massive wrought iron portcullis, and double oaken gates, studded with projecting iron rivets the whole length, and is said to weigh several tons.

On each side of this entrance are enormous solid buttresses, diminishing in offsets, and terminating in pinnacles. A lofty octangular tower, 80 feet high, containing an alarm-bell and clock, surmounts this entrance and also forms a picturesque feature. On each side of this, are the apartments of the warden, keepers and domestics, whose walls are pierced with small, blank pointed windows, and are surmounted by a parapet.

The centre building is two hundred feet in length, and consists of two projecting massive square towers, fifty feet high, crowned by projecting embattled parapets; supported by pointed arches, resting on corbels or brackets. The pointed windows in these towers are very lofty and narrow, and contribute in a high degree to the picturesque appearance presented by them.

The walls of the building are plaistered and neatly white-washed, the cells are eleven feet long and eight feet wide. At the extremity of the cell, is a doorway containing two doors, one of lattice work or grating, to admit the air and secure the prisoner, the other composed of planks, to exclude the air if required. This door leads to a yard, eighteen feet long and eight feet wide. In these cells the prisoners are confined ~~sepa-~~

rately. They see the keepers, chaplain, and occasional visitors, by which the rigour of their solitude is mitigated. They are taught to read, and have numerous occupations. The whole establishment has the appearance of being admirably managed.

The University of Pennsylvania, situated on Ninth street, was founded in 1791; the Medical department of which is said to be one of the most distinguished in the United States.

Among the churches, the most noted is St. Stephen's, in Tenth street, which is 102 feet long, 50 feet wide and of the Gothic order of architecture. Christ's church erected in 1691, is one of the oldest churches in the city. It has a spire 196 feet high. In the burial ground of this church, lie the remains of Dr. Franklin and wife, whose tomb is found in the west corner, near Arch street, by a plain marble slab, with no other inscriptions than his name and that of his wife, and the time of their deaths.

St. John's church, is another very splendid Gothic edifice, situated on Thirteenth street. In addition to these, there are one hundred and thirty-eight other large and elegant churches, with three large and splendid synagogues. Among the worshippers in these numerous churches, may be found all the different persuasions existing in our land, even to the Deist. It was here I first learned that the Deists were numerous enough to have churches.

The Girard College, founded by Stephen Girard, for the education of orphans, is situated on a high and commanding site, formerly known as Rel Hall, one mile

from the city. It consists of a main building, one hundred and sixty feet by two hundred and eighteen feet, and two others, each fifty-two by one hundred and twenty-five feet. They are very much celebrated for their architectural beauty, being constructed of white marble, with a colonnade of Grecian Corinthian columns entirely surrounding them, standing on a marble platform, which is gained by eleven steps. The floors are very beautifully tessellated, and the building has a grand and imposing appearance, being covered with marble tiles, every superior tile overlapping the one below it six inches. Among the many devices which adorn the interior of this superb structure, may be named the statue of Mr. Girard, by Gevelot, which is wrought in a masterly style, of an excellent quality of marble. This great college was erected at a cost of over one million two hundred thousand dollars. By the will of Mr. Girard, the clergy are excluded from visiting this great college. Tickets of admission to the college, now in full operation, may be obtained of J. R. Chandler, Esq., President, 105, North Tenth street, and Isaac Elliott, 81, Chestnut street, or W. G. Duan, 138, Walnut street. Omnibusses pass through Chestnut, Tenth, Poplar and Ridge Road streets, and leave the Exchange every eight minutes for the college, and continue about 2 miles to Laurel Hill Cemetery, to which place tickets of admission may be had of any of the managers, among whom may be named, Frederick Brown, Esq., corner of Chestnut and Fifth streets.— This Cemetery is considered the most beautiful in the State of Pennsylvania. There are here many of the

most splendid monuments, and an elegant piece of sculpture, by Thom, of Old Mortality.

The Fairmount Water-Works, constructed at a cost of about \$450,000, presents an eminent combination of elegance and utility. They occupy thirty acres of ground, most of which is a hill, one hundred feet high. There are four reservoirs, having a capacity of over twenty millions of gallons. The grounds are adorned with beautiful walks and shade-trees. The annual expense of this great work is about forty thousand dollars. The grounds at the foot of the hill, near the machinery which forces up the water, are very beautifully ornamented with shade trees of the choicest species.— There are here several very beautiful cisterns or basins, constructed of white marble, one of which contains a female statue, standing on a pedestal placed in the centre of the basin, holding in her arms a marble swan, the water ascending from the mouth of the swan to the height of fifteen or eighteen feet. The other basin or cistern contains a pedestal, on which is placed the statue of a child sitting on a fish, looking up at the water as it ascends from the mouth of the fish. Omnibusses for this place connect with steamboats to Laurel Hill, Schuylkill Falls and Manyunk, leave the Exchange every eight minutes. One line passes through Third, Chestnut and Broad streets, another through Third, Arch, Schuylkill, Fifth and Vine streets, all of which arrive at the Water-Works every eight minutes. Fare for each passenger 6½ cents.

The permanent bridge over the Schuylkill, built in 1798, is one thousand three hundred feet in length.

constructed at a cost of three hundred thousand dollars. The wire suspension bridge, at Fairmount, built in 1842, at a cost of fifty-five thousand dollars, is remarkable for its light, elevated and beautiful appearance.

The learned institutions of Philadelphia are very distinguished, among which may be named the American Philosophical Society, the Academy of Natural Sciences, the Pennsylvania Historical Society, and the Franklin Institute; all of which have published some valuable volumes. The City Library is of itself a curiosity, consisting of no less than 53,000 volumes.—The city also contains an Academy of Fine Arts. The markets of Philadelphia are celebrated for the great variety of products exhibited, as also for their cleanliness and extent. The manufactures of the city are various and extensive; her foreign commerce is considerable; her inland commerce is also very extensive, and said to be rapidly increasing in consequence of the facilities afforded by the numerous canals and railroads which centre here, affording an easy communication with all sections of the State and with the great western valley.

The next object of interest is the Monument of the great treaty of Penn. This consists of a simple block of marble in the form of a cone. This is situated on the spot where stood the great Elm tree, upon the bank of the Delaware, at Shackamaxon, under whose widespread branches William Penn effected a treaty with the Indians; a compact, which for its justice and benevolence, has conferred immortal honor upon the founder of Philadelphia. It is said that during the rev-

olutionary war, in 1775, when the British army had possession of the city and surrounding district, when fire-wood became scarce, the British commander, General Simcoe, from a regard which he entertained for the character of William Penn, and the interest which he took in the history connected with the tree, ordered a guard of soldiers to protect it from the axe.

This stately tree was uprooted by a storm in 1810, when the trunk measured twenty-four feet in circumference. The Penn Society, in order to preserve a knowledge of the spot where the elm tree stood, have caused this simple block of marble to be placed there, containing the following inscriptions :

ON THE NORTH.

*Treaty ground of William Penn
And the Indian natives, 1682.*
UNBROKEN FAITH.

ON THE WEST.

*Placed by the Penn Society,
A. D. 1827, to mark the site of
THE GREAT ELM TREE.*

ON THE SOUTH.

WILLIAM PENN,
BORN 1564,
DIED 1718.

ON THE EAST.

PENNSYLVANIA FOUNDED.
1681,
BY DEEDS OF PEACE.

The last objects I deemed worthy of notice, were the fire engines, during my stay in the city there being no less than three alarms of fire. Whether these were real or false, I did not learn, but the noise of the firemen was tremendous. At the head of the procession came a runner, blowing a horn with a deep unearthly sound ; next came a long team of men, (for no horses are employed,) drawing a strong rope to which the ponderous engine is attached, with a large bell at the top, ringing all the way ; next followed a mob,

some with lanterns, others with torches, while some would be shouting at the top of their lungs; and before they were half out of hearing, another engine followed, attended with a like escort, the whole affair resembling a vision more than real life. It is however, no sham, for these young men are ready to risk their lives in extinguishing a fire; and as an apology for their disturbing the peace of the city when there was no cause, we were told that these young firemen required excitement.

On entering on my tour, I had made up my mind that as a matter of course, I would fall in now and then with free and easy people. I am bound however to say, that in the only glaring instances of vulgar familiarity which I experienced during the whole of my tour, which were but few, I found out that the offenders had crossed the Atlantic only eight or ten years before, and had risen rapidly from an humble station. This and other things confirmed my belief, that whatever good breeding existed here in the middle classes, could certainly not be of foreign importation. Therefore, the Europeans and John Bull in particular, when out of humour with the manners of the Americans, is often unconsciously beholding his own image in the mirror, or comparing one class of society in the United States with another of his own country, which ought from superior affluence and leisure, to exhibit a higher standard of refinement and intelligence.

However, I might say of this city as of some others in the middle and Eastern States, in spite of the constant influx of uneducated and penniless adventurers

from Europe, I believe it would be impossible to find a like number of cities, with as many inhabitants in any other region of the globe, whose average moral, social and intellectual condition stand so high.

CHAPTER XLIII.

Inclined Plane—Norristown—Bridge—Manufactures—Valley Forge—Anecdote of Baron Steuben—Villages—Reading—German Language—Mountain Gorge—Court House—Manufactures—Bridges—Union Canal—Mountain Scenery—Towns—Pottsville—Coal Trade—Manufactures—Lehigh Coal—Mountains—Forests—Sweet Fern—Lehigh Summit Mine—Railroad—Mules—Interesting Scenery—Towns—Harrisburg—Streets—Prospect—State House—Panoramic View—Court House—Susquehanna River—Sublime Scenery—Governor Shunk—Political Excitement—Cumberland Valley—Carlisle—Dickinson College—Streets—Chambersburg—Court House—Manufactures.

Chester County.—On my way from Philadelphia to the coal regions, the first object of interest was the Inclined Plane, about 4 miles from Philadelphia, immediately on the left bank of the Schuylkill. At this place, the railroad track has an elevation of eighty-eight feet in the distance of five-eighths of a mile. The cars are drawn up by means of a large and powerful rope, attached to a stationary engine at the top of the Plane. The track is entirely straight, and the rope is guided by means of large pulleys placed in the ends of *short posts* of about a foot in length; these being planted about forty feet apart, in the centre between the

tracks. The cars start suddenly, although drawn by a rope five-eighths of a mile in length. So soon as they arrive at the top of the Plain, an engine being in readiness, they proceed with a loss of very few minutes time.

On the Philadelphia and Reading Railroad are the towns of Manayunk, Spring Mill and Norristown, which contains a population of 3750, situated on the Schuylkill River, 17 miles from Philadelphia. There is here a bridge over the river, eight hundred feet in length, erected at a cost of thirty-one thousand two hundred dollars. The town contains a Courthouse, several fine Churches and a considerable Library.— There are also here some manufactures; the capital invested is about three hundred and fifty thousand dollars. Port Kennedy, about three miles farther up the river, is a place well situated and in a flourishing condition.

Valley Forge, situated 23 miles from Philadelphia, is a place memorable for the winter quarters and sufferings of the American army, during the dreadful winter of 1777, and for the changes introduced into the army by the celebrated Baron Steuben, Aid-de-camp to the King of Prussia; a noble foreigner, high in honor and rank, who hastened from his home to share our struggles and our sufferings, where he found only a few thousand famished, half-naked men, looking more like beggars than soldiers; cooped up in miserable log huts, dragging out a desolate winter amid straw.— With this poor band of patriots reduced to a ragged horde, with scarcely the energy to struggle for self-

preservation, Steuben entered on his work of instructing both officers and men, which it is said, he did with all the sympathies of his noble nature roused in our behalf. It is said his ignorance of our language crippled him at first very much, while the awkwardness of our militia, who, gathered as they were from every quarter, scarcely knew the manual exercise, irritated him beyond measure. They could not execute the simplest manœuvre correctly, and Steuben, who was a choleric man, though possessed of a soul full of generosity and the kindest feelings of human nature, would swear terribly at their mistakes, and when he had exhausted all the epithets of which he was master, would call on his aid and ask him to curse in his stead! Still the soldiers loved him, for he was mindful of their sufferings, and often his manly form was seen stooping through the doors of their hovels, to minister to their wants and relieve their distresses.

Still farther up the Schuylkill are Phoenixville, Royer's Ford and Pottstown. The latter contains a population of 722, and is situated in a fertile region of country, 40 miles up the Schuylkill from Philadelphia.— All these are flourishing villages, surrounded by the fertile lands of the Schuylkill.

Berks County. Reading, with a population of 8,410, is very beautifully situated on the east bank of the Schuylkill, 50 miles northwest of Philadelphia.— The town was regularly and handsomely laid out in 1784, by Thomas and Richard Penn, governors and proprietors of the province. It was originally settled by Germans, and several newspapers are still printed

in the town in that language, which is also chiefly spoken in the town and the surrounding regions, as well as preached in a large portion of the churches, though English is generally understood. The town is situated at the base of the most eastern of the great parallel ridges which constitute the Alleghany chain of mountains. Here is a great transverse gorge, which gives a passage to the Schuylkill river, through which it flows in sublime grandeur. The town contains a Courthouse, two hundred by two hundred and twenty feet deep, erected at a cost of fifty-nine thousand dollars; three banks, three public libraries, twelve churches and some manufactures. Reading is particularly famous for wool hats, as it is said that more than fifty thousand dozen wool hats have been manufactured here in a year, for the southern and western markets. There are also here a number of nail factories. Two handsome bridges add to the scenery, each of which is six hundred feet in length; and the one over the Schuylkill was erected at a cost of sixty thousand dollars. The Union canal terminates here, by which the town is connected with Harrisburg.

Up the Schuylkill from Reading, are Althouses, Mohrsville and Hamburg. The mountains northwest of Reading, afford picturesque and romantic scenery. No traveller can fail to remark the long and uniform parallel ridges, with intervening valleys, like so many gigantic wrinkles and furrows, which mark the geographical outline of this region. The long and narrow ridges rarely rising more than 2000 feet above the valleys, and usually not more than half that height, are

broken here and there by transverse fissures, which give passage to rivers, much the same as that at Harper's-Ferry, near the lower region of the great Valley.

Schuylkill County.—Port Clinton, situated on the Schuylkill, is quite a lively place. Here stages leave on the arrival of the cars daily, (except Sundays,) for Tamaqua, Mauch Chunk and Wilkesboro. About eight miles from Port Clinton, is Orwigsburg, the county town. There is here a fine Courthouse and other county buildings. Between this and Pottsville are Auburn and Schuylkill Haven.

Pottsville, with a population of 4345, is situated in a wild district on the Schuylkill, in the midst of the coal regions. It contains many handsome dwellings, where in 1824, there were only five houses. This place is chiefly celebrated for its immense coal trade, being the Anthracite, perhaps more commonly known as Lehigh coal, whose burning is not attended with that disagreeable smell and smoke which is always experienced by the use of bituminous coal.

Here I was agreeably surprised to see a flourishing manufacturing town, with tall chimneys of numerous furnaces, burning night and day, yet quite free from smoke. Leaving this clear atmosphere and going down into one of the mines, it was a no less pleasing novelty to find that I could handle the coal without soiling my fingers. Great indeed was the contrast between this and other towns using these coal and those using the bituminous coal of Nova Scotia, to the use of which is coupled the penalty of living constantly in a dark atmosphere of smoke, which destroys the furniture, dress

and gardens, blackens the buildings, and renders cleanliness impossible.

The general effect of the long unbroken summits of the ridges of the Alleghany Mountains is picturesque, and the scenery is beautiful. The slopes as well as the summits of the ridges are densely covered with wood; under the trees the ground is covered with an evergreen, called Sweet Fern, the leaves of which have a very agreeable odor, resembling that of the bog-myrtle, but a little fainter.

Among the most remarkable of these celebrated coal mines, is the Lehigh Summit Mine, to which a railroad is constructed, having a gentle ascent for nine miles. Here are sixty mules employed to draw up the empty cars every day. In the evening, the mules themselves are sent down standing four abreast, and feeding out of mangers all the way, as the cars are impelled by their own weight, at the rate of about fifteen miles an hour, which presents a scene truly interesting when viewed from some eminence.

The scene is no less interesting to see them start in the morning. They form a very long train of wag-gons, among which are the same cars that are to carry them back; and I was told, that so completely do they acquire the notion that it is their business through life to pull weights up hill and ride down at their ease, that if any of them are afterwards taken away from the mine and set to other occupations, they willingly drag heavy loads up steep ascents, but obstinately refuse to pull any vehicle down hill, coming to a dead halt at the commencement of the slightest slope.

The little car for passengers descends the whole nine miles impelled by the weight of the persons in it.— This may go at the rate of twenty miles an hour, without the least danger of an accident ; a man sitting in front checking the speed as occasion may require, and oiling the wheels without stopping. The burden cars are managed in a similar way.

In some of these celebrated coal mines may be seen some beautiful coal seams, which appear very smooth and glittering. In one of these mines may be seen no less than thirteen seams, several of which are very thick ; in some may be found white grit and pebbles of quartz, about the size of a hen's egg. These great coal regions, to all appearances, possess treasures inexhaustible. Vast quantities of coal have been taken from this district, and enough yet remains for ages.— The stranger views the scene here presented with no small delight, not only the mines and the miners, but also the wild and sublime character of the surrounding regions.

At Pottsville we took stage for Harrisburg, the capital of the State, situated at a distance of 69 miles.— This part of our route contained good roads for mountain roads, though being almost one continued ascent and descent, with mountain scenery of the most wild and romantic character, being hills, ravines and mountains, with few settlements till we arrived at the town of East Hanover, having a population of 2461, situated 20 miles from Harrisburg, in Dauphin county, a town containing some fine dwellings and several handsome streets, being located in a fertile district, highly culti-

vated. Within 5 miles of this place is West Hanover, another handsome town, 7 miles from which we found Singletown, situated 8 miles from the Susquehanna, at which we soon afterwards arrived.

Harrisburg, containing a population of 5,980, is very beautifully situated on the east bank of the Susquehanna river, and is the Capital of the State. The town is regularly laid out and well built; the streets are ornamented with very beautiful shade trees. The site occupied by the town is high and commanding, having a delightful prospect of the river and surrounding country, which is fertile and delightful in the extreme. The State-House is located on a pleasant site, and is a very elegant structure, one hundred and eighty feet long and eighty feet deep; the cupola of which, affords one of the most delightful panoramic views that the old Keystone State can produce. The town also contains a Court-House, a very handsome structure, with the necessary county buildings, and a number of fine churches. There is here a bridge over the Susquehanna, two thousand eight hundred and eighty-six feet long, which contains two tracks for wagons, and two for foot passengers, and on the top a track for the cars. This great structure is built of wood, supported by a number of stone piers. The whole cost of constructing this bridge was one hundred and fifty-five thousand dollars.

The noble Susquehanna presents a scene which deserves all the praise that can possibly be lavished upon it, especially when viewed at the close of the day, either from a window in the bridge, or the bold banks

between the town and the river, where the scene enjoyed is exquisitely rich and attractive. The quiet stream, as it goes shining down to the ocean, is full of loveliness, and all upon it or near it, partakes of its character. In looking westward, the sight enjoyed is imposing in the extreme; there is no change comes over the beauties—they are immortal—they are without mutation. In the bosom of the broad river, glowing with the golden beams of the retiring sun, sat the islands that break the unity of the glittering stream, and augment its beauties.

So rich, so full was the sunlight upon the river, that these islands seemed to be floating in the gorgeous light. Some shot out prominent angles into the water, and presented salient points to break the uniformity, white others sat swan-like down, their rounded edges touching the stream, as if they had been dressed by art to present the perfection of symmetry. The dark green of the shrubbery that sprung up in the moisture of the islands, was mingled with the golden rays of the sun, and here and there the gentle current, by passing over some obstructing object, broke into a ripple, that danced like liquid gold in the sunlight.

Thus after a heavy shower of rain, when the sun was setting in all the brightness of its beauties, I sat absorbed in the scene until it began to drop below the hills, and the warmth of the coloring upon the water, was yielding to the neutral and colder tints of evening; but upward along the sides of the hill, the gorgeousness of the sunlight was in its fulness. That glorious sunset on the islands and waters of the noble Susque-

hanna, cannot soon fade from my memory,—as it was the richest and loveliest scene I witnessed during my short sojourn in the old Keystone Commonwealth; a scene to which frequency of enjoyment in my opinion can bring no satiety; and he who sits down to such a sublime scene, finds the impressions of unfriendly association passing away, the resolutions of revenge which unprovoked rudeness excited, melting into the better determinations of the heart, and all the bitterness and animosity which unchastened pride encourages, are neutralized and lost in the deep emotions of love which, such a view of God's works, and such a sense of man's enjoyment necessarily promote.'

The next morning I went in company with my host to the residence of the Governor, who was on the point of death. It was with sad emotions that the many visitors in the room gazed upon the venerable, but declining form of Governor Shunk, who in his strength and health had wielded the helm of their government with a masterly skill, to the satisfaction of a large majority.

In the evening about dusk, I witnessed a political excitement. This parade perambulated the streets, headed by a band of music, and a man carrying transparencies with lights in them, in which the names of the candidates and their principles were conspicuously inscribed. Occasionally a man called out with a stentorian voice, "Principles, the whole principles and nothing but principles," which was followed by a loud English huzzah, while at intervals a single blow was struck on a great drum, as if to imitate the firing of a

gun, after which they repaired to the Court-House, where there was a discussion.

Cumberland County. After crossing the Susquehanna, we entered the celebrated Cumberland Valley, the garden-spot of the State, presenting all that is delightful in agriculture. A few hours travel brought us to Carlisle, containing a population of 4351, situated on a commanding and beautiful eminence, possessing all that is lovely, being the most beautiful site for an inland town of any I seen during my tour. It is the seat of Dickinson College, the halls of which are the most splendid stone structures, adorned with very graceful trees. The town contains many other beautiful buildings situated on broad and handsome streets, bordered with avenues of shade trees. On our route to Chambersburg, we stopped at New Ville and Shippensburg, two very beautiful towns of fifteen hundred inhabitants, situated in the midst of the valley.

Franklin County. Chambersburg, with a population of 4030, is a very beautiful town, situated in the handsome and fertile valley of the northeastern branch of the Conococheague river, being only a continuation of the admirable soil of the Cumberland Valley. The town contains a Court-House, which cost fifty thousand dollars. There are here some other public buildings belonging to the county. In the vicinity of the town is an excellent water-power, where are located several manufactures. The town is regularly built, and contains eight fine churches. After leaving the town, two hours travel through a splendid region, brought us to the Maryland line.

CHAPTER XLIV.

STATE OF MARYLAND.

Deep Cut—Sliding of the banks—Dirt cars—Hagerstown—Stage Coach—Williamsport—Conococheague river—Aqueduct—Potomac river—Arrival at Winchester—General course of the Route—Aspect of the Route—Review of the Middle and Eastern States.

Washington County. On our arrival at the Deep Cut, north of Hagerstown, we found the railroad track entirely clogged up with huge rocks and earth, which had slid down that morning, which was caused by the rain which fell in torrents during the night, which had so thoroughly softened the banks as to cause them to slide in great masses, which could not be removed till the arrival of the cars, although twelve or fifteen men were engaged in doing so. On the south end of this cut several dirt cars were reserved by the workmen, for the purpose of conveying the passengers to Hagerstown, three or four miles distant.

The passengers had to leave the train on its arrival, and wade through mud and water and climb the huge rocks, which had slid down into the track, so that we might gain the opposite end of the cut. As we entered this muddy gap, I overheard some young ladies exclaim, "well, we are in a pretty fix." Words which I often heard used, and have known myself to use similar words. On this occasion however, the word *fix* sounded so bad to my ear, that I had curiosity enough to note it. This at once struck me the application of the word *fix* must be of Hibernian origin, as an Irish

gentleman, King Corney, in Miss Edgeworth's story of Ormand, says, "I'll fix him and his wounds." The substantive "fix" is certainly in some degree vulgar; but the verb is used in New England by well-educated people, in the sense of the French "*arranger*," or the English "do," in such words as to fix the hair, the table, the fire, &c., which I presume means to dress the hair, lay the table, make up the fire, &c.

The dilemma in which we were placed, was soon overcome, and we found ourselves snugly seated on our trunks, placed on the dirt car, drawn by horses, in which way we entered Hagerstown in full trot, of course making as much display as we could with propriety, nevertheless our carriages not being of the highest and most extravagant finish.

Hagerstown, with a population of 7197, is situated west of the Blue Ridge, on Antictam creek, in the centre of a fertile and beautiful valley, in the midst of a very flourishing German settlement. The town is regularly built, the streets being broad, straight and well paved. There is here a very beautiful Court-House, erected at a cost of fifty thousand dollars. There are also here nine large, fine churches.

The morning after my arrival, I entered an old stage for Winchester, in Virginia, which I soon found was not as comfortable as the dirt cars, by fifty per cent, but was the best I could do. After scores of jolts and thumps, we arrived at Williamsport, a very beautiful little town of 500 inhabitants, situated at the junction of the Conococheague river with the Potomac. The Chesapeake and Ohio canal passes through this place

and crosses the Conococheague river by a stone aqueduct, of one hundred and thirty-four paces, or four hundred and two feet in length, supported in the centre by three very beautiful arches.

At Williamsport we crossed the raging Potomac, which had been swelled to a fearful extent by the recent rains. The ferry-boat however, by first going a considerable distance up the river and then crossing, secured the landing on the Virginia shore; and after travelling lengthwise through Berkeley county, I observed the crops not already gathered, were heavy and flourishing. Leaving Martinsburg at 2 o'clock, I arrived in the evening at Winchester, from which I had set out.

It was with no small delight that I again entered Winchester, which I had left nearly three months before, during which time I travelled over the following route, as a general course, without taking into consideration or account the excursions and perambulations, viz: to the city of Washington; thence to Baltimore; thence up the Chesapeake bay to Frenchtown; thence across the State of Delaware to New Castle; thence up the Delaware river to Camden; thence across the State of New Jersey to South Amboy; through the bay and strait of Amboy to the city of New York, thence up the Hudson river to Albany; thence west, up the Mohawk valley, and through western New York to the city of Buffalo on Lake Erie; thence down the banks of the Niagara river to Lewiston; thence down the river Niagara and across Lake Ontario, to the city of Toronto, in the Home District in Upper Canada; thence

down Lake Ontario and the river St. Lawrence, to the city of Quebec in Lower Canada. From Quebec I again sailed up the St. Lawrence, as far as the city of Montreal; thence southeast to St. John's on the river Sorell; thence up that river and Lake Champlain to White Hall; thence South to Saratoga Springs; thence north through Lake George and across Lake Champlain to the city of Burlington, in the State of Vermont; thence up the Onion valley and continuing an east course, to the White Mountains in the State of New Hampshire; thence southeast to the city of Portland in the State of Maine; thence through the bay of Casco and up the Kennebeck river, to Augusta, the capital of the State; thence across the country to Belfast on the Penobscot bay; thence up the Penobscot river to the city of Bangor; thence northeast across the country to Calais, on the St. Croix river; thence down the St. Croix river and through Passamaquoddy bay, to St. John's in New Brunswick; thence across the bay of Fundy to Annapolis in Nova Scotia; thence northeast to Cape Blomidon; thence across the Basin of Minas to South Joggins; thence south to Windsor; thence across the country to the city of Halifax, on the Atlantic shore; thence by steam ship to Boston, in the State of Massachusetts; thence up the Merrimack valley, to Concord, the capital of New Hampshire, and back to Boston on the same route; thence southeast by the way of Plymouth, to Martha's Vineyard; thence northwest across Vineyard Sound and up Narragansett bay, to the city of Providence, in the State of Rhode Island; thence up the Blackstone valley to Worcester, in Mas-

achusetts; thence west to Springfield; thence down the Connecticut valley, to the city of New Haven in the State of Connecticut; thence down Long Island Sound to the city of New York; thence southwest through the State of New Jersey by the way of Trenton, to the city of Philadelphia in Pennsylvania; thence up the Schuylkill valley to Pottsville, in the coal regions; thence west to Harrisburg, on the Susquehanna river; thence through the Cumberland valley, to Hagerstown in the State of Maryland; thence south to Winchester, in Virginia.

That portion of the Northern States and the Canadas through which this route led, presented every variety of mountain, hill, plain and valley. The Appalachian or Alleghany range, extends through the former region, from southwest to northeast, in several parallel ridges, which attains in Pennsylvania its widest limits. None of these however, reach the elevation of the highest summits of the Blue Ridge, or the White Mountains. The Alleghany range is generally covered with forests, and contains many wild solitudes seldom trodden by the foot of man, affording shelter to various species of game. The mineral products of the Middle States are various and valuable. Bituminous and anthracite coal, several kinds of iron ore, salt, &c. and excellent building materials, together with clays useful in the arts, are among the treasures in which it abounds. Mining industry has acquired importance from the activity and success with which it has lately been pushed. The public works in this section are particularly remarkable for their number and magni-

tude. In general, the soil is fertile, and particularly favorable to the production of every species of grain. Wheat is the principal object of culture.—Indian corn, rye and barley are also very extensively raised. The fruits common to the temperate regions, are abundant and of an excellent quality. The commerce of the Middle States is immense, and chiefly carried on thro' the cities of New York and Philadelphia, to which it centres. The trade however, of a considerable part of Pennsylvania and Delaware, flows to Baltimore.

The surface of the New England States is infinitely varied. In the interior it is mountainous, with fertile valleys between. The land along the sea shore presents in general an irregular surface, consisting of hills and ridges, with flats of moderate extent. The inland portion towards the mountains, presents an almost constant succession of short hills and narrow valleys.—There are no extensive plains throughout the whole of New England. Much of the soil is good, yet in general it requires diligent cultivation, and compels the farmer to use great industry to procure good crops; and although it well repays the labor of the husbandman, it is perhaps on the whole, less fruitful than many other parts of the United States.

A very active commerce is carried on from the ports of New England, with all parts of the world. Their ships spread their sails in every sea, and her lumber, manufactures, and the produce of her fisheries are extensively exported. Almost every village carries on some handcraft, and the farmer often employs the long winter evenings in some gainful task. Thus are pro-

duced many little objects, which although in themselves, are of small value, yet in the aggregate, constitute a source of considerable wealth to the community, and are produced to such an extent, as almost to rival in value the products of the large manufacturing establishments.

A large proportion of these vast regions is susceptible of cultivation nevertheless, including a great variety of surface, soil and climate, yet it is of a quality calculated to repay the labor bestowed upon it. A considerable portion of its surface is occupied by mountains, which from their height and ruggedness, forbid all attempts to render them productive in the means of subsistence to man. There are no deserts of any great extent, and few barrens—nothing like the vast sterile plains which exist in other parts of the world. These same regions also embrace a variety of climate, as we find the summits of some mountain peaks capped for six months, others for eight months, while Mount Washington and some others of nearly equal height, are crowned with snow for ten months in the year, while the valleys are clothed in the most luxuriant verdure. The winters are long and severe. Snow often falls to the depth of three or four feet, and the cold is so piercing, as to oblige the inhabitants to make very diligent provision against it. Spring returns late in April, and in summer the heat is great.

No part of the world can be more abundantly watered by streams, which not only give fertility to their borders, but are ready to wait the gifts of the soil to the ocean, and bring back to the inhabitants the products

of all other climes. Neither the States nor individuals have been slow in improving and extending their natural advantages; and the spirit with which they have been undertaken and the perseverance they have shown in executing the most magnificent plans, have shed a lustre on the American name. All the various obstacles in the navigation of the most important rivers, have been overcome, by removing the bars or ledges which obstructed their channels, or by side-cuts, locks and dams. These great improvements have already given fresh life to manufactures, and encouraged the establishment of new ones; invigorated, and in many places created internal trade; promoted agriculture, which requires a cheap and easy transportation for the bulky articles which it consumes and produces; and developed in an astonishing degree, the mining industry of the country.

The inhabitants of the Middle and Eastern States have equally surpassed all other people in the number and extent of their Railroads, having in about fifteen years, constructed nearly four thousand miles of these artificial levels, over which cars are propelled by locomotive steam-engines, at the rate of from 20 to 30 miles an hour. Although this contrivance is less adapted than canals to the conveyance of bulky articles, yet in these regions, it possesses considerable advantages over that mode of transport: such as that of not being interrupted by, and being suited to, certain localities, in which artificial water communication would be impracticable.

The manufactures of these regions are very exten-

sive. The different establishments of various kinds are too numerous to specify, a few of which have already been sketched. The cotton factories in particular, employ a vast number of hands and a great amount of capital. Many of those establishments are of recent origin, yet in their infancy as they are, they have risen to great respectability, though being as yet, overbalanced by agriculture and commerce. No country in the world can compete with those regions, in the article of coarse cotton goods, neither as to quality or price. Cottons, which in 1812, were worth 25 cents a-yard, can now be bought of a better quality for 7 or 8 cents. And even in the finer quality of goods, great advancement has been made. It was the policy of the British government before the revolution, to discourage American manufactures, and thus to keep the country in a state of great dependence. But that has gone by, and should events ever cut off a supply of British manufactures, the country could do without them, unless Great Britain and other countries shall consent in a fair way, to receive American breadstuffs in exchange for their manufactures.

In so great a region, manners and society are also varied. In the New England States, the inhabitants are almost exclusively of unmixed English origin, and though never united as a political whole, they have at different periods been connected for their common interests. From the earliest settlement of their country, they have enjoyed peculiar advantages for literary and religious instruction, and trained to habits of industry, economy and enterprise, by the circumstances of their

peculiar situation, as well as by the dangers of prolonged wars, they present traits of character which are considered as remarkable abroad, as they are common at home.—While on the other hand, the Middle States were originally settled by people of various countries, having different habits, feelings and opinions. Society therefore, does not possess that uniform character which admits of a general description. The people have not that unity of feeling and interest which is observed in the New England and Southern States; and the only reason for their being classed together, is their contiguity. They are slow in uniting for any public purpose, and there seems to be but little sympathy or common feeling, which prompts them to act in concert for public affairs. The great body is of British descent; but in New York and Maryland there are many Germans, and in Pennsylvania they are so numerous as to constitute in some respects, a separate community, retaining their own language, and being often ignorant of English. In New York and New Jersey, there are many descendants of the original Dutch settlers of New Amsterdam, and in some sections the Dutch language is partially spoken. It is impossible, therefore, for an untravelled author, and a farmer at that, to picture with any degree of satisfaction, the heterogeneous customs and fashions developed in such a society.

The stranger may see thousands of forlorn persons, from the London street-walker, to the black-eyed damsels who hailed from every clime, all of whom have wandered hither; and the saloons re-echo with the

minstrelsy of every land. Here he may hear voices and harps of singing men and women, from almost every region of the world; he may be entertained with the music and dances of parties, whose performance reminds him of the exhibitions of the Choctaws or kindred tribes.—Or he may witness the singular antics of a troupe of dark brown Gipsies, whose supple movements, melodious voices and brilliant eyes, with lids and lashes dyed like those of the Egyptian almahs.—The gipsy dance, although very much in step and movement, like what is often called a regular heel and toe, excels it much in quickness and animation. The male performer holds himself erect, looking daggery, by the appearance of his desperate frowns, and the female indulging in wanton movements, while both are exhorted to “put it down,” by the wild and exciting chorus of the gipsy band.

Among the multifarious population of those regions, may be seen many Jews; which singular people are almost invariably clothed in long black tunics, reaching nearly to the ankle. Their beards are mostly long and flowing, and in their thin sallow faces we read the patience and the craft for which they have been remarkable. Being parsimonious, industrious and sober, they profit by the wealth of the land, and become largely engaged in the trade and commerce of our country.

Education is here more universal than in any other part of the world. It is exceedingly hard to find persons of mature age, (except they be aliens,) who have not been instructed in the common branches of school learning; and as a general thing, it may be said their

education does not merely instruct them in the arts of reading and writing, but that whole system of moral, intellectual and religious training and cultivation, which is necessary to develop the nobler faculties of our nature, and give to the character of man, the impress and likeness of Him, in whose image he was created. Institutions of learning and education were established at an early period, by the first settlers of New England; some of which at the present day, are the most respectable and efficient in the Union. A large portion of the distinguished men of the United States have been educated at Harvard and Yale Colleges; and there are many similar institutions in other States; still many students from the South and West are annually taught in the Colleges of New England.

The noble institutions of this kind, of the Middle and Eastern sections of the Union, have made the pathway to honorable distinction, as broad and as straight from the door of the humblest cottage, as from the proudest mansion in the land. Genius, and industry, and energy find no barriers to arrest their career. The abolition of arbitrary distinctions and classes of society, has given all men an equal start in the race of preferment, and brought thousands of eager competitors into the field, whose nobler faculties would otherwise have remained forever undeveloped. The whole talent of the country is thus forced into action; and the results are visible in every vocation in life. The results can be seen in agricultural fairs, in exhibition-rooms, and also in the Patent Office, where the stranger may examine the specimens of New England ingenuity and

skill which are there displayed. There we have visible and significant monuments of the genius and industry of these people. In these same regions, we may see many men giving direction to the policy of their country, who in early youth guided the plow, or wielded the hammer or the axe.—And even in the capitol of the Union, may be seen many of those same men, sitting in high places of the land and shedding lustre on the Republic, who at one time made the anvil or lapstone ring with their vigorous blows, or plied the busy needle, or with their own brawny arms, brought into action that most potent of all human agents—the printing press.

It is the object of the people of those regions, as their institutions as well as ours, rest upon the virtue and intelligence of the people, to diffuse knowledge and sound principles amongst them, and keep them if possible, up to the level of their institutions, and teach them their duties under their institutions. If this is not done, it is evident the government must sink to their level. Let the people become ignorant and debased, and the laws must be adapted to their capacity, and the Constitution of the land brought down to their standard of morality and intelligence.—Public sentiment will become vitiated, and a spirit of licentiousness and disorganization pervade the whole body of society. It requires no spirit of prophecy to foretell the consequences of such a state of things. If the foundation of our political edifice becomes rotten, the superstructure must inevitably fall. It is to be regretted, that some of the other States of the Union do not

take the same measures the better to prevent such a disaster, as they are all perfectly aware that the encroachments of the executive power upon popular privilege, is always in proportion to the decline in the standard of virtue and intelligence. The pages of history abound with admonitions on this subject, which are no less frequent than impressive. An ignorant populace has always been the instrument by which ambition and treason have accomplished their unhallowed designs.—And if, in the progress of events the day shall ever arrive, in which some artful demagogue or bold military chieftain, shall erect a throne upon the ruins of the Constitution of our country, his pathway to power will be strewn with the fragments of the pulpits, the school-houses and the printing-presses of the Middle and Eastern States, which now sow the seeds of virtue and knowledge broadcast through the land.

It may with some propriety be said, that the Middle and Eastern States of the Union govern to a considerable extent, the spirit of the age.—And happily for mankind, there are none who can escape the power of this age; and no one can tell how great may be its influence upon the princes and people of the kingdoms and empires of the world. The exercise of despotic power has always been precarious, in ages which could not boast the superior intelligence of the nineteenth century. The day is past when despotism can contend successfully against the ceaseless encroachments, and *the sure, though almost imperceptible advances of freedom.* The unconquerable spirit of intelligence, ever

on the advance, too vigilant and too crafty for the sentinel, passes the barrier unseen, and whispers things which will one day be proclaimed aloud. We have seen this glorious spirit growing and expanding, until France and nearly all Germany rejoices in its name, and we witness its perfection and most noble results in the incomparable happiness of our blessed country.— This irresistible spirit—the intelligent, thoughtful, religious spirit of the age, is effecting reform throughout Europe. We hear of its clamoring at the portals of the Austrian Empire, and tapping for admittance to every council chamber.—It even addresses the judgment and the virtues of the Russian Czar, and begs to be established beneath the fostering rod of his prodigious power.

THE END.

ERRATA.

Page 27, line 25, should read "in a hall 92 feet long, 34 feet			
wide and 36 feet high."			
Page 45, line 24, should read "70 feet above the river."			
" 47, "	" 4,	" "	" "Amboy strait."
" 67, "	" 17,	" "	" "His wife."
" 69, "	" 1,	" "	" "seated close by."
" 85, "	" 18,	" "	" "Col. Fleury."
" 92, "	" 9,	" "	" "through a canal."
" 94, "	" 3,	" "	" "1686."
" 94, "	" 23,	" "	" "Foxes Kill, Rutten Kill, and
Beaver Kill."			
" 107, "	" 27,	" "	" "he was master of."
" 110, "	" 22,	" "	" "riven rocks."
" 112, "	" 2,	" "	" "leave a name."
" 117, "	" 7,	" "	" "between them."
" 126, "	" 10,	" "	" "dilute it with water."
" 146, "	" 25,	" "	" "clay or tile pipes."
" 174, "	" 7,	" "	" "now runs."
" 247, "	" 22,	" "	" "Shooting Galleries."
" 259, "	" 30,	" "	" "carry off the urine."
" 268, "	" 12,	" "	" "Sawyer's river."
" 326, "	" 8,	" "	" "and finished in 1742, or."
" 335, "	" 25,	" "	" "splendid granite structure."
" 375, "	" 13,	" "	" "with two small children."