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Publication/Creation

[New-Haven] : [Printed and sold by Walter and Steele], [1811]

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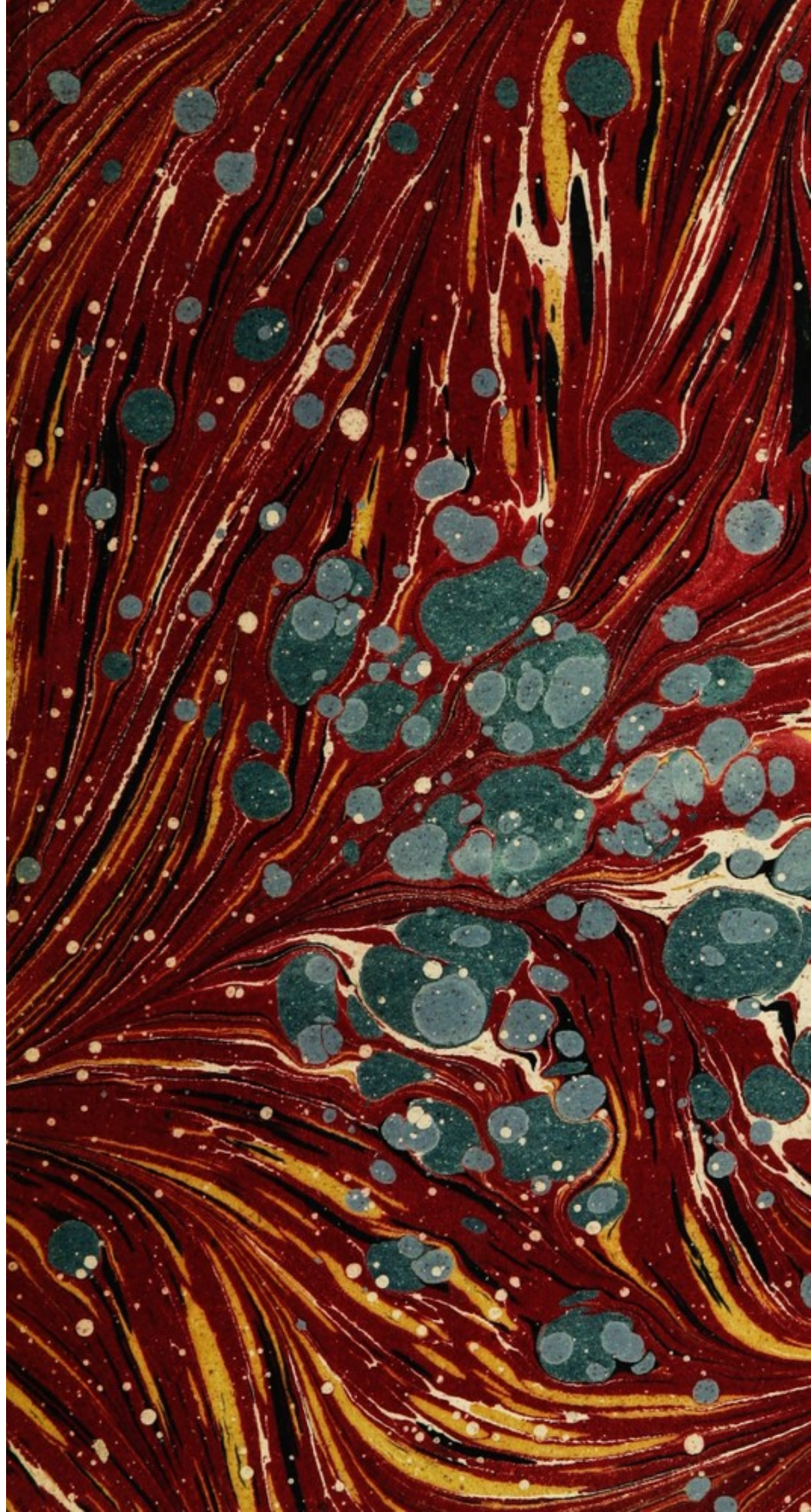


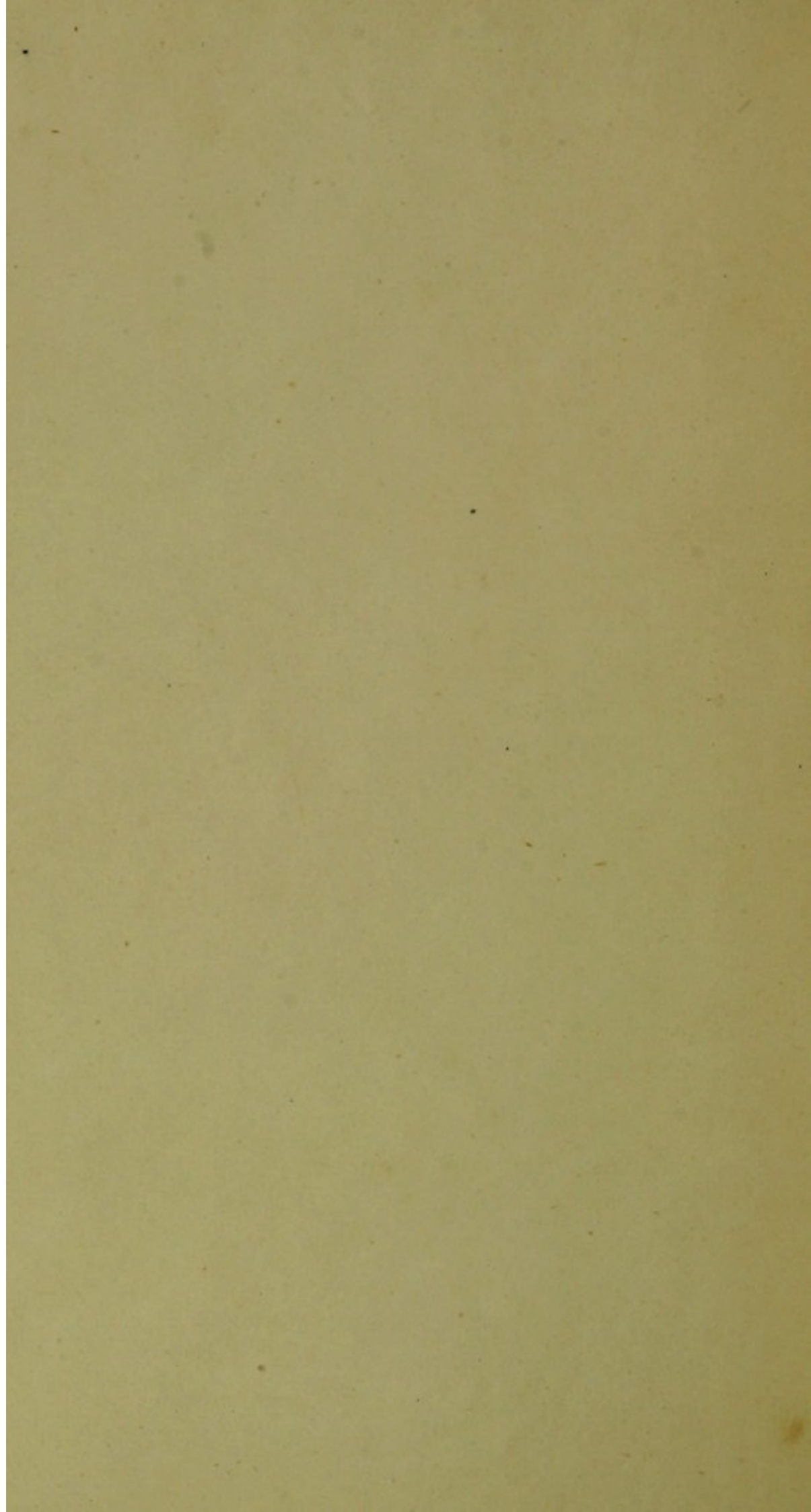
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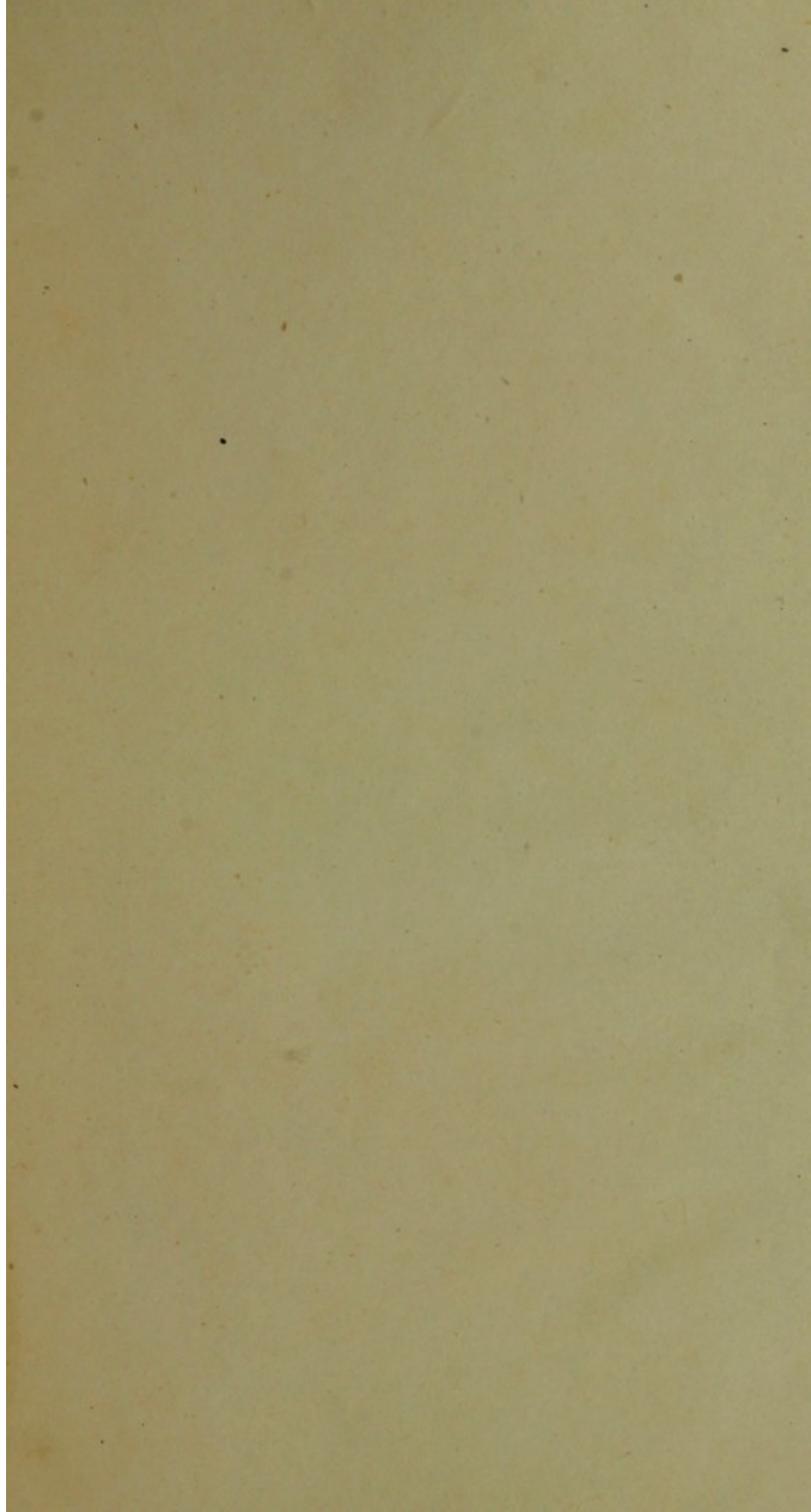


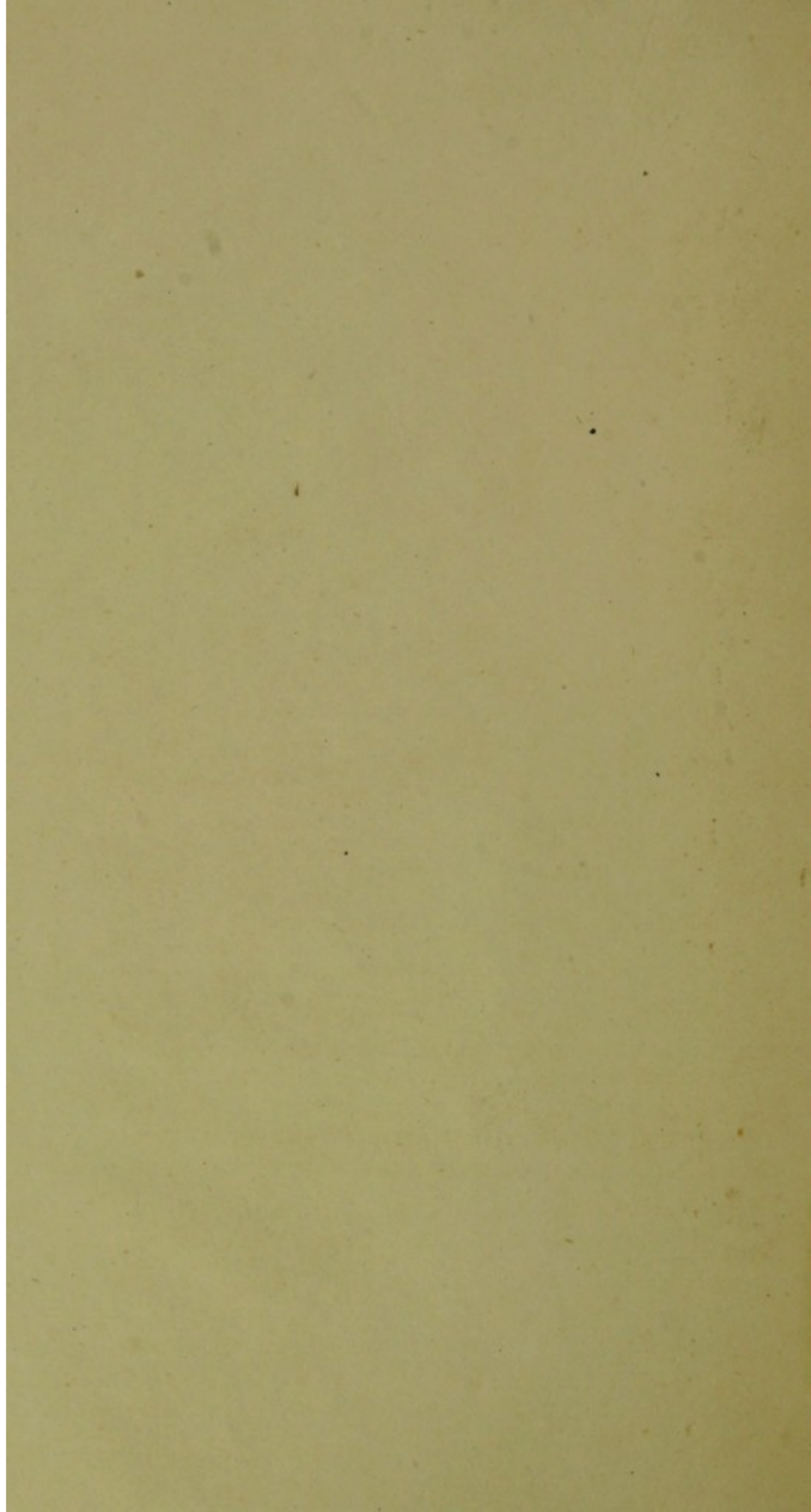
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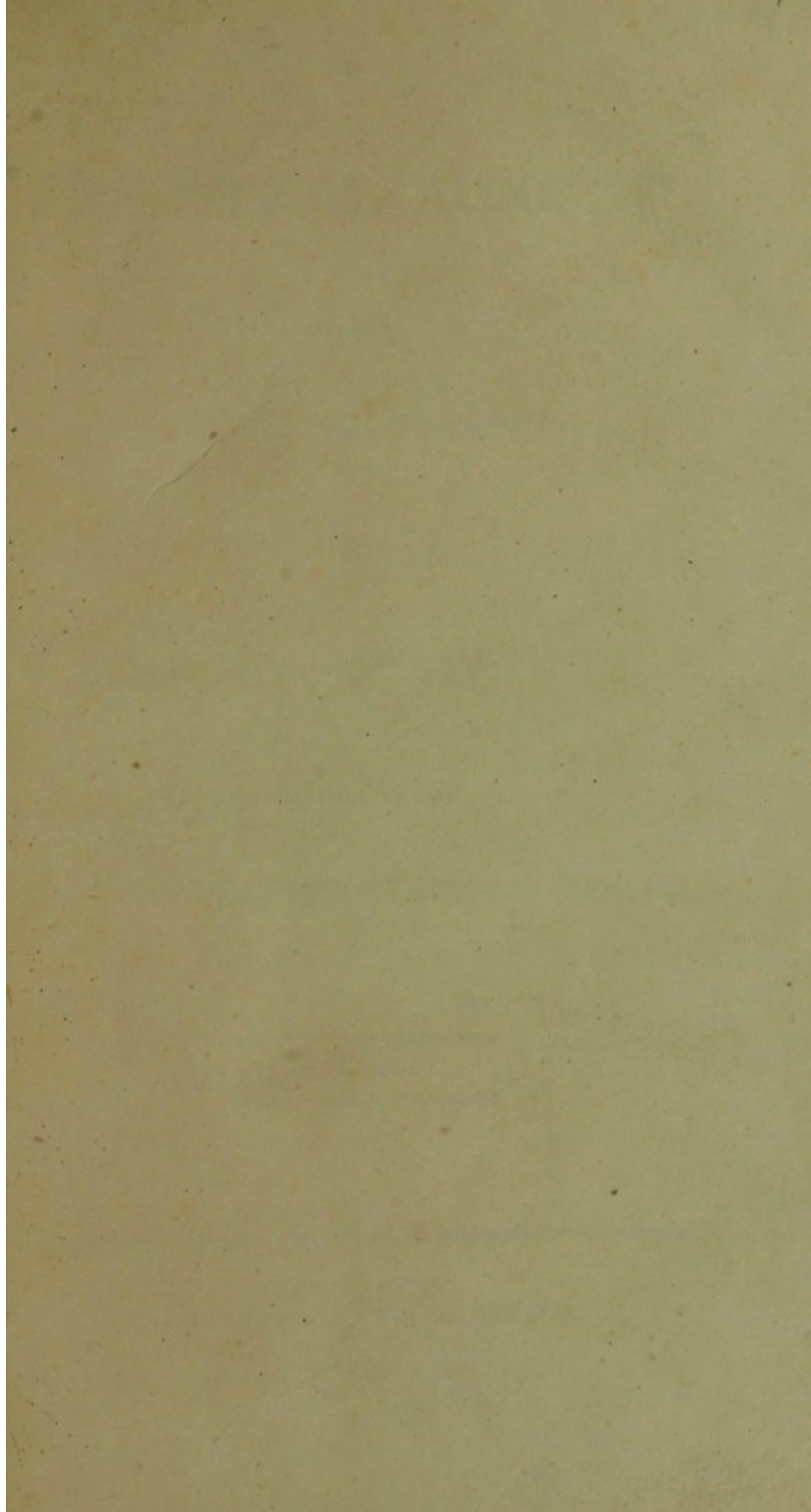
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A

STATISTICAL ACCOUNT

OF THE

TOWNS AND PARISHES

IN THE

STATE OF CONNECTICUT.

PUBLISHED BY THE

Connecticut Academy of Arts and Sciences.

VOL. I.—NO. I.

NEW-HAVEN,
PRINTED AND SOLD BY WALTER AND STEELE.

1811.

STATISTICAL ACCOUNT

OF THE

TOWNS AND PARISHES

STATISTICAL ACCOUNT

OF THE

STATE OF CONNECTICUT

CITY OF NEW HAVEN

Compiled by the Board of Statistics

BY THE BOARD OF STATISTICS



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A
STATISTICAL ACCOUNT
OF THE
CITY OF NEW-HAVEN.

BY TIMOTHY DWIGHT,

President of Yale College.

PREFACE.

THE design of forming a Society, which might combine the efforts of literary men in Connecticut, for the promotion of useful knowledge, was suggested early in the year 1799. A few gentlemen in New-Haven attended a meeting at an invitation given; and a sketch of the principal objects of such an Association was communicated, together with the outline of the proposed Society, which was named "The Connecticut Academy of Arts and Sciences."

At a meeting on the fourth of March, the gentlemen, who had associated, adopted a number of regulations, as bye-laws for their government; and elected a number of gentlemen in various parts of the state to be members. At a subsequent meeting, certain fundamental articles were adopted as the Constitution of the Academy, by which were prescribed the terms of admission to membership. In October following, the Academy, on petition, obtained from the legislature an act of incorporation.

One considerable object proposed by this Association, was to collect for publication a Statistical Account of the State of Connecticut; and to the accomplishment of this object they have directed their attention and exertions. On the first of January, 1800, they addressed a circular letter to every town in the state, containing the subjects of inquiry arranged under thirty-two distinct heads, and requesting answers to their inquiries. This letter was printed and distributed. In a subsequent address, the Academy urged an attention to the subject of those inquiries, and suggested a plan, by which they supposed the labor of furnishing correct answers might be greatly facilitated. This business is still in progress; and nearly thirty papers containing answers to the above-mentioned letter, have been received.

Some of the accounts received have been collected with great apparent industry, are well arranged, and very complete. Others are very brief and less perfect. Notwithstanding this latter circum-

stance, and the tardiness with which these accounts are furnished, the Academy have determined to prosecute their design; and to publish statistical accounts of the several towns, in numbers, as the materials shall be supplied. The following Account of New-Haven is published first; as a pledge of the determination of the Academy to exert their best endeavors to accomplish the object; and as a specimen of the manner of execution; and the Academy cannot but hope that this example will have its effect, in stimulating the exertions of gentlemen in other towns, to furnish the means of a complete statistical account of the state. The Academy are not willing to believe, that there are not gentlemen in every town who are competent to give at least a tolerable history of the township—and they would regret that the history of a single town or society should fail to be inserted, for want of materials.

The following is the circular letter above-mentioned, containing the inquiries, to which answers are solicited.

NEW-HAVEN, Jan. 1, 1800.

SIR,

THE CONNECTICUT ACADEMY OF ARTS AND SCIENCES, desirous of contributing to the collection and propagation of useful knowledge, and of procuring the materials for a Statistical History of Connecticut, request you to furnish them with every species of information which it may be in your power to obtain; relative to the Geography, Natural, Civil and Political History, Agriculture, Manufactures and Commerce of the State of Connecticut. Among the articles to which the Academy request your attention are the following:

1st. The history of the settlement of the town or society in which you reside—the situation and extent of each—the number of societies, school districts and school houses in the town—by what means the lands were obtained from the Indians, whether by purchase or conquest—the number of foreigners, and of what country.

2d. The Indian names of places, mountains, rivers, lakes and ponds within the town; also any remarkable occurrences in the history of the Indians—their customs, mythology, battles, burying places, monuments, forts, and any other traces of their settlement—the tribe to which they belong—their present number and situation, as to subsistence, vices, &c.

3d. The face of the country, in regard to mountains, hills, vallies and plains, rocks, stones, clay, sand, nature of the soil—curiosities

natural and artificial, antiquities, monumental inscriptions elucidating points of history.

4th. Rivers, streams, springs, (if remarkable,) especially mineral and medicinal springs ; lakes and ponds, their sources and uses as to mills, navigation, and the production of fish, or the watering of lands.—Cataracts or falls.—Wells, their depth on different grounds.—Aqueducts or pipes for conveying water to families—the expense by the rod—plenty or scarcity of water for domestic uses—change of quality within the present age—failure of streams in consequence of clearing the land—increase or decrease of water in springs and wells.—Accidents by damps or mephitic air in wells or other places, the time and other circumstances attending them.

5th. Mines and minerals, especially those most useful, as iron, copper, lead, silver, sulphur ; also, quarries of stone, with the kind and quality of the stone, and its distance from navigable water.

6th. What was the natural or original growth of timber and wood, and what the variations in the species on successive cuttings—whether the timber is plenty or scarce, increasing or decreasing, and the causes ;—the best method of increasing the quantity—the best time in the year for falling timber for durability, and wood for fuel.—The sugar maple tree, and the quantity and quality of sugar made—improvements in making and refining it—the best mode of procuring the sap without injuring the tree.—Quantity, quality and price of lumber of all kinds—distance from navigable water.

7th. Fuel of all kinds, as wood, coal, peat, or turf—the quantity and quality—distance from navigable water—increase or decrease of fuel, and price of the several kinds.

8th. Furnaces, forges and mills ;—their situation, conveniences and quantity of work performed. In particular a description of any curious machinery, by which the labor of man is abridged, and the operation of the mechanical powers simplified and applied to useful purposes.

9th. Agriculture ; increase or decrease of the price of land, within the memory of the present generation—price of provisions and labor in the several occupations—the kinds of grain cultivated, quantity of each produced on an acre, and total quantity in a year—quantity of flour and kiln dried meal exported annually—quantity of hemp and flax raised, and the best mode of raising, rotting and dressing them—the quantity of flax and flax-seed exported—quantity of land planted with potatoes, and sown with turnips, rotation of crops best suited to various soils—improvements by means of artificial

grasses, improvements by draining and diking marshes, meadows and ponds.

10th. Manures ; the best for particular soils, and the best time and mode of applying them—as stable manure, lime, lime-stone, shells, ashes, salt, compost, marl, swamp, creek and sea mud, plaster of paris, and sea weed—the preparation best suited for particular crops—the best means of increasing manures—the effects of irrigation or watering lands.

11th. The best seed time and harvest time—best time and modes of preparing lands for seeding—best modes of extirpating weeds and of preserving grains from insects—the effects of a change of seed.

12th. Mode of cultivation, whether by oxen or horses—the expence, advantages and disadvantages of each.—Number of teams—the number and kinds of waggons, carts, ploughs, harrows, drills, winnowing and threshing machines now in use—improvements in them, both as to utility and cheapness.—Fences ; the materials and mode of erecting them—kinds most used—increase or decrease of timber for fencing—the best kinds of trees or shrubs for hedges, and the means of propagating them.

13th. Uncommon fruits and garden vegetables, native or imported—the soils on which particular fruits and vegetables best flourish, and the best modes of cultivating them—quantity of cider made annually—quantity exported—best mode of making, improving and preserving it—best mode of preserving apples and other fruits during the winter—improvements by ingrafting and inoculation—best time and mode of pruning—state of gardening.

14th. Number of tenants on leased lands—quantity of lands leased and the rent—the state of cultivation of leased lands compared with that in the hands of proprietors. Emigrations from the town or society. The number of persons convicted of capital crimes, and instances of suicide, within twenty years, or since the town was settled, and whether committed by natives or foreigners. The time when pleasure carriages were first used.

15th. Number of sheep and swine ; quantity of pork, beef, butter, and cheese annually sent to market ; the best mode of multiplying, improving, feeding and fattening sheep, swine, neat cattle and horses ; their diseases, description of them, and the best mode of preventing and curing them.

16th. Manufactures ; distinguishing the kinds and quantity made in families and in manufactories ; the market for them. The his-

tory of any useful manufacture, including its increase and decline, and the causes.

17th. Breweries; time of their introduction—the kinds and quantity of beer made.

18th. Fisheries; the kinds, quantity and value of fish taken; best mode of curing them; the market. The years when shell and other fish have been unusually lean or sickly, and when they have declined, disappeared, or perished, from causes known or unknown. The best modes of multiplying and preserving shell fish.

19th. Ship building; its increase or decline—harbors, depth of water, direction of the channels, obstructions, land-marks and directions for entrance; the year when the first vessel was built, and the progress of trade. The means of facilitating transportation by land or water.

20th. Roads and bridges; the present state of them, annual expense and mode of defraying it; description of bridges remarkable for elegance or utility; the best mode of securing bridges from the effects of frost, floods and sea worms; the kinds of timber not subject to be eaten by sea worms.

21st. Ferries; their situation, and whether public or private property; the places near them, where bridges may be erected, and probably made permanent.

22d. Wild animals, now or heretofore known; their increase or decrease, and from what causes; new species, migration, and natural history of birds.

23d. Natural history of plants; their kinds, whether noxious or useful; new species, time of their introduction, their progress; effects of the barberry and other noxious plants, and the best modes of extirpating them.

24th. Places of public worship; their number, and the denomination to which they belong; the rise of congregations and various sects, the names of the successive clergymen, the time of their settlement and exit; notices of any eminent clergymen; the salaries of clergymen, and the funds by which religious worship is maintained.

25th. Academies and schools; in what manner supported; number of winter and summer schools; the time they are kept in each year, whether by male or female instructors; number of scholars; salaries or wages of teachers; kinds of knowledge taught; improvements in the mode of instruction; prices of board, and expenses of schooling.

26th. Poor; their number, whether natives or foreigners; their former occupations, the expense of maintaining them, the mode best calculated to unite humanity with economy in their support; the means by which they were reduced to want, or inability to labor.

27th. Free blacks; their number, vices and modes of life; their industry and success in acquiring property; whether those born free are more ingenious, industrious, and virtuous, than those who were emancipated after arriving to adult years.

28th. Inns or taverns—their number.

29th. Climate and diseases; variations in seasons and in diseases from clearing lands, draining swamps, and the like causes; the diseases most prevalent in high and low situations, near streams of running water, or marsh and stagnant water, on the north and south sides of hills and mountains, and on different soils; remarkable instances of diseases and mortality among animals of various kinds. Meteorological observations. Register of marriages, births and deaths, noting the sex, occupations, ages, and diseases of those who die. Remarkable instances of longevity; the local situation, the occupation, and the habits of life of those who arrive to a great age, as also their temper, whether cheerful or melancholic, quiet or discontented.

30th. Remarkable seasons or occurrences in the natural world; as tempest, rain, hail, snow, and inundations, by which injury has been sustained, the time when they happened; unusual insects, or usual insects in unusual numbers; time of their appearance and disappearance, their generation and transformations; injury sustained by them; unusual death of insects; best modes of destroying noxious insects, or preventing their ravages.

31st. Unusual failure of crops from causes known or unknown; the years when it occurred, and the temperature of the seasons. An explication of the causes and phenomena of blast, mildew, rust, honey dew, bursting of vegetables, diseases and death of plants, trees or shrubs; the times when they occurred.

32d. Distinguished characters, who have been natives or residents in the town; improvements in arts and sciences, and the authors of them; inventors of curious machines; vices, amusements, attention to civil and religious institutions; remarkable instances of liberality, heroism, or other virtue. Libraries; when established, and the number of volumes. Charitable institutions and endowments. Associations for the purpose of improvement or humanity. Benefactions to pious and charitable uses.

It is not expected, that in all the above mentioned articles information can be given by each or perhaps any gentleman to whom this letter is addressed; but it is hoped and believed that the magnitude of the object in view, will induce every one, to spare no pains in obtaining and communicating such information as shall be in his power. Should the exertion for this purpose be general and active, all the necessary information will probably be collected.

In Scotland, the first, and it is supposed, the only successful attempt of this nature, has been carried into complete execution, by a similar application to the clergymen, and a few other enlightened persons in that country.

It is rationally believed, that efforts equally spirited and efficacious will be made in Connecticut: should this be the case, our state will have the honor of leading in this important field of knowledge.

Every piece of information on the subject specified, will contribute to the great object in view, and will be gratefully received by this Academy.

By order of the Academy,

SIMEON BALDWIN,

Recording Secretary.

A

STATISTICAL ACCOUNT

OF THE

CITY OF NEW-HAVEN.

New-Haven, July 6, 1811.

SIR,

PERMIT me to return the following answer to the request of the Connecticut Academy of Arts and Sciences, concerning a statistical history of the city of New-Haven: The public will naturally ask why the answer has been so long delayed. The true reason is, that every man, here, is closely engaged in his own business; and that no man of business is, ordinarily, willing to write on subjects, unconnected with his personal concerns. My own situation, to those who know it, would fairly excuse me from the undertaking. I have made the attempt, because I was convinced, that it would be made by no other person. As this account is drawn up in circumstances of extreme inconvenience, the Academy will, I doubt not, readily excuse its imperfections.

New-Haven, together with Woodbridge, Hamden, East-Haven, North-Haven, the principal part of the townships of Wallingford and Cheshire, and of the parish of Northford, forming a tract about 18 miles in length and 13 in breadth, was purchased, partly of Momauguin, sachem of Quinnipiack, November 24, 1638, and partly of Montowese, sachem of Mattabeseck, now Middletown, December 11th, the same year, by the Rev. John

Davenport and Theophilus Eaton, Esq. in behalf of the first planters of New-Haven. The Indians reserved lands, on the eastern side of the Quinnipiack, for planting and the right of hunting, fowling, and fishing, throughout the tract. The price paid to Momauguin was twelve coats of English cloth, twelve alchymy spoons, twelve hatchets, twelve hoes, two dozen knives, twelve porringers, and four cases of French knives and scissors.

The first principal settlers were Theophilus Eaton, Esq. Mr. Davenport, Mr. Samuel Eaton, Mr. Thomas Gregson, Mr. Robert Newman, Mr. Matthew Gilbert, Mr. Nathaniel Turner, Mr. Thomas Fugill, Mr. Francis Newman, Mr. Stephen Goodyear, and Mr. Joshua Atwater. These adventurers and their associates formed one of the most opulent settlements in New-England.

On the 4th of June, 1639, the planters formed their constitution. On the 5th of October following they organized their government, when Mr. Eaton was chosen governor. By the general court, which sat Sept. 5th, 1640, Quinnipiack was named *New-Haven*. On the 19th of May, 1643, the colony of New-Haven entered into a confederation with Connecticut, Plymouth, and Massachusetts. The confederates styled themselves the United Colonies of New-England. In 1655, a system of laws for New-Haven was finished by Gov. Eaton, and was printed in England. In 1657 Gov. Eaton died; and Francis Newman, Esq. at the following election, was chosen in his stead. He died in 1661; and was succeeded by William Leet, Esq. March 27th. In 1661, Whalley and Goffe came to New-Haven, and, the following October, removed to Hadley. May 11, 1665, the colonies of Connecticut and New-Haven were united. From that time the legislature has met, alternately, at Hartford and New-Haven.

New-Haven is the name of a township, and a city included in that township. The township is bounded on the east by East-Haven, on the north by Hamden and Woodbridge, on the west by Milford, and on the south by Long-Island Sound. Its area I am unable to ascertain. Nature has divided it into two great parts. The eastern division is a plain, commencing on the western bank of Wallingford river, at the foot of a ridge of hills

in East-Haven, belonging to the range of Middletown mountains, and partially bounded, on the northern side, by the East Rock, the southern end of the range of Mount Tom; by Mill Rock, a spur from it; by Pine Rock, a spur from West Rock; and by West Rock, the southern end of the eastern ridge of the Green Mountains; and on the west by a chain of hills, a continuation also of the Green Mountains, and here frequently called the Milford Hills. The western division is formed by the last mentioned heights. The plain extends about three miles from east to west; and on the eastern side about two miles from north to south, and on the western, measuring from West Rock to the southern shore of West-Haven, about five. The western division is about five miles from north to south; and somewhat more than two, from east to west. A handsome hill, named Mount Pleasant, intrudes into the plain in a southern direction from Mill Rock; and occupies an area of about 400 acres. There is also a small eminence in the north-eastern quarter of the township, called the Beaver Hills.

I can find no Indian name on record, except *Quinnipiack*. This was given to the river, which is the eastern boundary of the township, and now commonly called Wallingford river; to the adjacent country; and to the tribe, by which it was inhabited.

There is nothing known of the *Indian customs* and *mythology*, peculiar to this tribe. They were a branch of the Mohekaneeus, or Muhheakunnuks; a nation which inhabited the whole country, from the Potowmac to the St. Lawrence, and from the Atlantic to the Mississippi, together with an extensive region, westward of that river. All the tribes, within these limits, comprehending about a million of square miles, except the Iroquois, spoke different dialects of one language. The Iroquois were interlopers, who fought their way from a distant western region into the country, which they ultimately inhabited, and which they conquered from the tribes who occupied it before them.

The Quinnipiacks have long since been extinct.

The Quinnipiacks dwelt, in the summer, on the shore, for the convenience of fishing; and, in the winter, in the forests, for the convenience of fuel.

They had a place for powawing, about a quarter of a mile north-east from the house of Stephen Woodward, in East-Haven, about three fourths of a mile east of the harbor bridge. The spot was formerly a swamp, and is now a meadow.

Charles, the last sachem of this tribe, died about 80 years since. He was frozen to death near a spring, about one mile north of the Presbyterian church in East-Haven.

They are said to have had neither marriages nor divorces.

They caught round clams with their feet; and taught the English to catch them in this manner.

The Indian arrow-heads, frequently found here, are exactly like some which have been brought from Cape Horn.

At Fort Hill there was formerly an Indian fort, and an Indian burying-ground, on the eastern side of the hill. The name of this spot was formerly Indian Hill.

The soil of the eastern division of this township is loam, mixed with sand, except the hill mentioned above, and the principal part of the New Township, which is loam, mixed with gravel; the most common soil of New-England. The latter is moderately good; the former is warm, but dry, and lean. Both are, however, capable, as experience has extensively proved, of being rendered very productive by judicious cultivation. The soil of the western division is the same with that of Mount Pleasant, and rarely rises above mediocrity: while, to a considerable extent, it falls beneath it.

There are no *curiosities*, here, either natural or artificial, no *antiquities*, no *monumental inscriptions*, of any particular importance.

There are three rivers in this township, which empty their waters into the harbor of New-Haven: West river, which has its origin in Woodbridge; Mill river, which rises in Hamden; and the Quinnipiack, whose head waters are in Southington. The two first run a course of about ten or twelve miles; the last runs about thirty; and is navigable for boats eight miles. Sloops have been frequently built at North-Haven, and conveyed down this stream to the Sound.

There is one *pond*, only, in this township, called *Bea-*

ver pond. Formerly, when full, it was not far from a mile in length, and about 60 rods in breadth. In dry seasons, the southern end of it was a marsh. From the north end of this water issues a stream, which turns an overshot mill.

There are no *medicinal springs*, except a small chalybeate spring near the Beaver pond, nor *cataracts*, nor *falls*, in this township.

The *wells* within the city of New-Haven generally yield excellent water. Their depth, on the lowest part of the plain, is not more than ten feet; on the highest, thirty-four. Generally, it appears to vary, as the surface varies. Most of them, indeed all, which are dug to a proper depth, yield water at all seasons of the year.

There is an aqueduct in this town; the commencement of which is unknown, as well as its origin. It empties a sprightly stream into the East creek, on the south side of Fair street, just below State street.

No *accidents by damps*, or *mephitic air*, are remembered here.

For the following account of the *mineralogy* of this township, the Academy are indebted to Professor Silliman.

The mineralogy and geological structure of New-Haven and its vicinity, have been but recently examined with much attention. This examination is not yet completed; but the following facts and the observations connected with them will be found tolerably correct.

The plain on which New-Haven stands, is a secondary country, evidently of recent formation; it is wholly alluvial, and is composed of beds of siliceous sand, and gravel, arranged in strata, nearly parallel, and extending to a depth greater than any wells have yet penetrated. The sand is more or less ferruginous, and presents no interesting minerals, except such as appear to have been accidentally deposited, or brought from other situations, viz. quartz, flint, jasper, and feldspar, which are considerably abundant, and agate, sappare, and garnets, which have been found in a few instances.

There are no rock-formations in this plain, except a very recent and friable sandstone, which occurs in a few places, and appears to be little more than an indurated

mass, composed of similar materials with the loose sand and gravel of the plain.

The fine amphitheatre of hills, which encircles New-Haven, in all parts, except those occupied by the water, presents an interesting variety, both as it respects its geological formation, and the individual minerals which have been discovered. On the eastern side of the harbour, the rocks are chiefly granite, greenstone, and sandstone.

Only a few rocks of granite occur, and they are probably the commencement of those extensive granite ranges which occupy the middle and eastern parts of Connecticut.

The sandstone is extremely coarse, and may more properly be called, at least in many instances, a conglomerate or puddingstone.

Greenstone hills accompany the sandstone all along the eastern side of the harbour, as high as the village of Dragon, and, probably, much farther. The sandstone lies beneath, and the greenstone reposes on it. Steatite or soapstone has been observed in this sandstone in small masses. The greenstone of these hills is broken into small fragments, most of which do not exceed two or three inches in length.

North-east and north-west of New-Haven, at the distance of two miles from the town, and from each other, rise two perpendicular eminences, or bluffs, exhibiting precipices of naked rock, and called the East and West Mountains. Contiguous to these are several smaller eminences of the same description, the largest of which runs off at right angles from West Rock, in an easterly direction, and is called Pine Rock. This assemblage of eminences is the termination of several extensive ranges of the same nature, which run a great distance into the interior of New-England, forming numerous bold precipices, among which are the celebrated ones called Mount Tom, and Mount Holyoke, near Northampton. Our remarks on this occasion, will be confined to the East and West Mountains, and their immediate appendages. They possess so many features in common, that they may be considered together with advantage, while their distinct peculiarities may also be pointed out.

Although it is the province of mineralogical description to consider only the nature of the substances of which it treats, one cannot contemplate these eminences without admiring them, as forming bold and beautiful features in the scenery around New-Haven. Their height is from 350 to 370 or 380 feet.

There can be no hesitation in pronouncing them to be greenstone rocks, called by the popular name of *whin* in Scotland, and *trap* more generally throughout Europe. The term *basalt* has been more loosely and inaccurately applied to rocks of this description. It properly belongs to one variety of this family, of which the Giant's Causeway and the Cave of Fingal are celebrated examples. There is a striking resemblance between the greenstone mountains of New-England among themselves, and the same description of mountains in Scotland, and probably in other parts of the world. They present high mural precipices, perfectly naked and rude. Their fronts are composed of vast assemblages of columns, more or less regular, frequently affecting the prismatic form, with considerable, and sometimes with surprising regularity. A fine example of this latter circumstance, occurs at Mount Holyoke. Rocks of this description are full of cracks and fissures, from which cause it probably arises that they are prone to break off and fall, an effect which is doubtless produced by the freezing of water deposited in their cavities. Hence, vast masses of broken rocks, from the smallest size, to that of the largest columns, are usually found sloping from the bases of these mountains up their fronts, sometimes for more than half their height. They are also distinguished by sloping backs, declining so gradually, that, in the rear, the ascent is often easy, while in front it is impracticable.

These circumstances are no where more conspicuous than in the greenstone mountains of New-Haven. An observer placed at the foot of the West mountain, (particularly,) is forcibly struck with the grandeur, and sublimity, of the numerous and lofty columns which there form an extended front.

These rocks are composed principally of hornblende and feldspar, through which quartz is sometimes interspersed; iron enters considerably into their composition.

Hence, during their decomposition, which takes place slowly in the weather, iron rust gradually covers the exterior of the stone, thus giving it a reddish brown appearance. The greenstone of New-Haven has been found, by experiment, to be fusible in a furnace, and to produce a blackish glass.

It may not be improper to remark, that it forms an excellent building stone, and is extensively employed for that purpose in New-Haven.*

The greenstone mountains which have been described belong to the class of secondary rocks. This is proved, beyond controversy, (whatever system of geology be adopted,) by the fact, that they stand upon strata of sandstone. Sandstone is, by all geologists, acknowledged to be formed by the gradual disintegration of other rocks; and therefore, whatever other rocks repose on it, must necessarily be secondary. The junction of the sandstone and the greenstone in these hills, may be distinctly perceived in a number of places.

There are some particular minerals found in these rocks which deserve notice. Iron pyrites, in minute pieces, and sometimes imperfectly crystalized, is found disseminated. Grey sulphuret of copper is sometimes seen, connected with crystalized quartz. Epidote occurs in veins. Prehnite occurs also in veins and in nodules, having a distinctly radiated structure, and the characteristic green color of that mineral. Very beautiful specimens of it are found at the East Rock, crystalized, in veins, and in distinct globular concretions. This mineral probably abounds in the greenstone ranges of Connecticut; for it has been found at Farmington, near Berlin, and also at the Pine Rock. At the latter place, it forms numerous perpendicular veins, rarely exceeding 1-4 of an inch in thickness. They are considerably decomposed and injured by the weather; nor have any specimens been found at the Pine Rock, which can compare either for soundness or beauty with those of the East Rock.

* It is worthy of notice, that most varieties of the trap or greenstone rocks, if heated red hot, plunged into water, and pulverized, become a good substitute for the puzzolana of Italy, in forming a water-proof mortar for the construction of piers, docks, &c.

Another interesting mineral found in these rocks is zeolite. It *occurs* at the East Rock, but is most abundant at the Pine Rock. It is in veins; in superficial coatings on the stone, and in loose pieces lying among the broken rocks. There appear to be several varieties, viz. mealy zeolite, lamellar or foliated, and radiated. The lamellar variety is frequently crystalized; but unfortunately, the specimens are so much injured, that they possess but little beauty. The veins of zeolite, when found in place, are *horizontal*.

It may not be amiss to remark, that in deciding the character of the two last mentioned minerals, their specific gravity was ascertained to correspond with that mentioned in the systematical books. The zeolite was found to be soft, to intumescere before the blow-pipe, to fuse into a white enamel, and to gelatinize with acids. The prehnite intumescere before the blow-pipe, and melted into a greenish slag. It was so hard as to scratch glass, and give sparks with steel.

It is somewhat gratifying to find these minerals so common in the greenstone of the old world, associated also with that of the new.

Leaving the West mountain, the circuit of the hills is to the south. New features here present themselves; not however without considerable resemblance to the country last described. For about four miles, ranges of greenstone continue, accompanied, however, and frequently interrupted, by extensive strata of a singular rock, to which it is not easy to give a name. It is universally schistose in its structure, and distinctly stratified. The direction of the strata is nearly the same with that of the hills. They incline generally to the west, sometimes at an angle of from 30 to 45 degrees, and sometimes becoming nearly horizontal. The rock is composed of distinct layers of quartz, varying from a mere line to an inch in thickness; between which are interposed layers of a distinctly slaty substance, which sometimes verges towards mica, talc, or chlorite; and, at other times, passes into clay-slate and greenstone slate. It occasionally has a glistening appearance; is very soft; and has a distinctly saponaceous feel; but frequently its feel is dry and meagre.

Within about two miles of the sea shore, the greenstone ceases. The country becomes distinctly and wholly stratified. The strata are similar to those already described; but nearer the shore, and contiguous to the village of West-Haven, the rock changes into a perfect slate, lying in very extensive and beautiful strata, and forming continuous and high ledges, with intervening chasms. This slate appears to be intermediate between argillaceous slate and chlorite slate, verging sometimes towards the one, and sometimes towards the other. The strata continue quite to the sea shore, and jut upon it, in abrupt and broken cliffs. These cliffs, in some instances, run directly into the sea, and are lost beneath the water; rising however occasionally into little islands at some distance from the shore, thus indicating that this formation is probably extensive.

The beach, which forms the margin of the shore, about a mile below the village of West-Haven, presents an interesting phenomenon, the solution of which may be found in the rocky strata, which we have been describing. The beach is covered with magnetic iron sand; uncommonly pure, and very sensible to the magnet. It may be obtained in large quantities; and is used by the inhabitants of New-Haven for sanding paper, and sometimes for an ingredient in a firm and durable mortar. The origin of the iron sand, which we have mentioned, appears to be this. The strata at this place seem to be decidedly formed of chlorite slate; and abound in minute crystals of magnetic, octahedral iron ore. The sea lashes the rocks at every tide, and, in all probability, the same kind of strata continue extensively beneath the surface. The rock being one which is easily disintegrated, the iron is thus washed out, broken by friction, and by the flow of the waves thrown back upon the shore. It is not often, perhaps, that a geological fact admits of more satisfactory explanation.

There can be little doubt that these extensive strata are primitive; and it is very probable that the contiguous greenstone is primitive likewise. Its structure is considerably different from that of the secondary greenstone described above. It is much more porphyritic, and it frequently contains numerous crystals of white

feldspar, of considerable size. In some instances it alternates with the schistose strata; and no observations hitherto made, will justify the conclusion that these rocks, like the East and West mountains, rest on sandstone, or any other secondary rock.

Leaving the hills which immediately bound the plain of New-Haven, and proceeding westward on the great road leading to New-York, some additional facts may be noticed. Greenstone continues to be the prevailing rock of the country; and for several miles, we cross extensive ridges of this rock and of greenstone slate.

At the distance of five or six miles from New-Haven, the strata of greenstone slate become very extensive and regular. Their direction is very nearly north-east and south-west; and their dip is from 30 to 40 degrees.

The country here is filled with ridges consisting chiefly of greenstone slate, which look generally to the south-east, with considerable chasms or small valleys between them, so as to resemble, very much, a series of billows when the sea runs high.

To this general formation, there is one remarkable and striking exception. About five miles west of New-Haven commences a range of serpentine, both common and noble, and mixed more or less with primitive limestone and bitterspath. As this range proceeds westward, the limestone predominates more and more over the serpentine; and soon the rock becomes primitive stratified limestone. This continues in the same direction, in nearly uninterrupted ridges, for three miles at least, and, as is asserted, several miles farther. Thus a circumscribed space, not exceeding 1-4 of a mile in breadth, and running in length as has just been specified, intervenes between ridges of greenstone, and even in some instances alternates with it; this rock forming its boundary on the north, and also on the south, and in some places coming into direct and visible contact with it.

These strata of limestone are remarkably regular.— Their direction and dip is the same with that of the greenstone slate. In a few instances the limestone is interrupted by greenstone and chlorite slate.

A quarry has recently been opened in these calcareous strata, for the purpose of obtaining marble; for the

limestone which has been mentioned appears properly to deserve that name. The structure of the rock is schistose. Its texture is minutely granular. Its prevailing color is that of the Italian dove marble; but very much variegated by innumerable veins of calcareous spar or bitterspath, of a very fine and brilliant white, by an admixture of serpentine forming green spots, and by black spots and clouds which sometimes are magnetic iron ore, and sometimes appear to be serpentine of a dark hue. Marble also occurs here of a deep black, beautifully illuminated by white clouds. As far as the investigation has gone, these calcareous strata are divided into large distinct tables; so that they can be taken out in many instances, without making any other fracture than what exists naturally. Pieces of the marble have been sawn and polished; and although only weathered pieces have hitherto been tried, the stone exhibits so fine a texture, so high a lustre, and such beautiful delineations of color, as to justify the belief that as a marble it will prove a valuable acquisition to the country.*

It lies immediately upon navigable water, which, at the distance of two miles communicates directly with Milford harbour and Long-Island Sound, and is sufficiently copious to work the mills necessary for sawing it.

Serpentine occurs in this range in various places, and it appears to be indeterminately mixed with the marble in various proportions, so as to give the beauties of color belonging to each. The serpentine which is found at the eastern end of this range, is principally yellow and green, marked with numerous shades, clouds and veins, arising from the admixture of magnetic iron ore and other substances. It admits of a handsome polish and is very beautiful. The noble serpentine which is found in it is of a very deep green mixed with yellow, and is susceptible of so high a polish as to become a perfect mirror.

Green talc, resembling French chalk, is sometimes to be met with between the strata of limestone.

Asbestos is abundant in this range, existing chiefly in

* The discoverer of this marble was Mr. Solomon Baldwin, a student of Yale College.

the serpentine, and is very handsome. Its colors are various shades of white, blended with green. It is intermixed with bitterspath, and contains numerous pieces, and sometimes large ones, of magnetic iron ore. Amianthus is also found here, in some instances as fine as that of Corsica.

A considerable number of other minerals are found in this vicinity. Steatite or lamellar talc occurs near the marble, and is used by the inhabitants as a substitute for chalk.

Fine specimens of tremolite, common, asbestous, and glassy, are found in rocks composed of dolomite and quartz.

Epidote is very abundant in this region. It exists chiefly in veins in greenstone slate and other rocks, and is sometimes massive; but handsome specimens of a radiated structure have been obtained in calcareous veins running through greenstone slate.

Chlorite is frequently found; sometimes penetrating calcareous spar and quartz, and sometimes in veins in greenstone slate, and other schistose rocks.

Actynolite occurs in greenstone, which often contains micaceous magnetic iron ore.

Phosphate of lime is sometimes found in detached nodules of granite, in the neighborhood of the marble.

Jasper, flint, red and common quartz, puddingstone, and pitchstone, are considerably abundant in this region.

Iron pyrites is found, both massive and in cubical crystals.

Lead, in the form of galena, has been repeatedly discovered. A few years since, several hundred weight was found within half a mile of the range of serpentine, and repeated attempts were made to mine for it; but it was not sufficiently abundant to prove profitable. Lead has also been found in small quantities, in several places within a few miles of this.

P. S.—Although not within the province of this essay, it may not be amiss to preserve in this place the memory of a curious fact, concerning the discovery of native copper a few miles from this town. Copper is still known to exist in various places, in the Hamden hills, and attempts have been repeatedly made to sink shafts for the

purpose of obtaining the copper, but the business has never been prosecuted to effect.

The fact now to be mentioned, seems to justify the hope, that at some future period, copper mines may be successfully worked in this vicinity.

The following account is taken from Mrs. Doolittle, of this town, the daughter of the person who discovered it. She relates, that her father, Mr. Josiah Todd, of North-Haven, when gathering fruit on the Hamden hills, discovered a mass of native copper, weighing about 90 pounds, which he obtained and preserved. It was lying on the surface of a flat rock, at some places adhering to it, and even running into its crevices. He, with several other persons, afterwards sought for more, but as they, by their own confession, had superstitious fears respecting it, they probably did not make a very minute investigation, and no more was found. This mass passed through several hands, and was finally obtained by the son-in-law of the discoverer, a coppersmith, who considered it as very free from alloy, and used it in the course of his business. It existed and was used within the remembrance of Mrs. Doolittle and her son, of this town, and a part of it even 10 or 15 years since. Unfortunately, no part of this interesting natural production can now be obtained, nor is the precise place of its discovery known.

On that part of the plain, which is between Mount Pleasant and Milford hills, the *original growth* was the shrub oak. Wild turkies abounded on this plain, as late as the year 1695.

In the eastern division of this township, there is no *forested ground*, except upon Mount Pleasant and the Beaver hills, and the southern end of East rock. A considerable part of the western division is still forested. The *trees*, of which our forests are composed, are the

Oak,	Button-wood, or	Pepperidge,
Chesnut,	Plane tree,	Thorn,
Hickory,	Hemlock,	Locust,
Elm,	Willow,	White and yellow
Ash,	Horn-beam,	Pine,
Maple,	Sassafras,	Butternut,

Birch,	Poplar,	Bass or Linden,
Wild Cherry,	Alder,	Crab Apple,
Dog-wood, or Box,	Sumach,	Crab Pear,
Beech,	Swamp-Sumach,	Black Mulberry.
Red Cedar,	White Tulip tree,	

The *price of timber*, squared, is 6 dollars per ton.

The *price of wood* for fuel is, by the cord, hickory from seven to eight dollars; pine, three and a half dollars; other kinds of wood from five to six dollars.

A small quantity of peat has been used for fuel.

The use of coal is almost unknown. Wood is altogether preferred for this purpose; as furnishing, in the opinion of the inhabitants, a pleasanter and cleaner fire.

From pretty extensive inquiries, made under the direction of the Academy, it is believed, that the quantity of wood, within the region whence the city of New-Haven is principally supplied with fuel, the radius of which may be estimated at about ten miles, is not diminishing, but gradually increasing. About one third of the fuel, consumed here, is imported from Long-Island, Guilford, or the borders of the Hooesteanuc, or Stratford river.

From the books of the wharfinger it appears, that in the year ending June, 1806, the tonnage of vessels, bringing wood to the city of New-Haven, amounted in the aggregate to 4305. Vessels are supposed to carry half a cord to a ton; which gives 2152 1-2 cords, imported that year. As they actually carry somewhat more, the quantity may be estimated in round numbers at 2500 cords. If one third of the wood, consumed in the city of New-Haven, is imported, the whole will, according to this estimate, be 7500 cords; or ten cords to a house: including, however, all that is consumed in Yale College, and in the stores, and mechanics' shops, as well as on board the shipping. If we allow 6 dollars for the cord, the expense of the inhabitants for fuel will be annually 45,000 dollars.

The pine timber, used in building, is imported from Connecticut and Hudson rivers, North-Carolina, Georgia, and the District of Maine, chiefly from the last.

There is no *sugar* made from the maple in this township.

The *distance of wood and fuel*, on the grounds in, and

about New-Haven, from navigable water, is from one to five miles.

It is believed, from a number of experiments, which have come to the knowledge of the Academy, that *the best time for cutting timber*, in order to render it durable, is that in which the sap flows most freely. Immediately after it is cut, the bark should be taken off. The wood will then acquire a degree of hardness, not attainable in any other known manner.

The flowering shrubs, which are natives of this township, are the

Laurel,	Swamp rose,
American red honey-suckle,	Sweet briar,
American white honey-suckle,	Snow ball,
Mountain elder,	White bush,
Wild rose,	Vineleaf raspberry.

Fruit-bearing shrubs, are the

Bilberry,	Spice-bush,
Whortleberry,	Hazel,
Blackberry,	Barberry,
Raspberry,	Bayberry.
Partridge-berry,	

Barren shrubs, are the

Juniper,	Moose-bush,
Savin,	Small ivy,
Shrub-oak,	Fern.

There are no *furnaces*, nor *forges*, in New-Haven.

There are three grist-mills, two paper-mills, three fulling-mills, one powder-mill, one bark-mill and one cotton manufactory, containing all the usual machinery for spinning and twisting cotton, and a manufactory of Cut Nails.

Mr. Ebenezer Chittenden, of this town, is the inventor of the first machine, in this country, perhaps in the world, for bending and cutting card teeth with a single movement.

That part of the eastern division of this town, which lies between the West River and the Quinnipiack, and between the northern boundary and the harbour, is included within the limits of the city of New-Haven, by the act of incorporation. The area of this tract may be

about seven square miles. The harbor is also included within the limits of the city, and forms an area of about six miles.

The city of New-Haven lies at the head of the harbour; which sets up four miles from Long-Island Sound, in 41 degrees 18 minutes N. latitude, 72 degrees 56 minutes, W. longitude; 76 miles from New-York, 166 from Philadelphia, 34 from Hartford, 134 from Boston, and 107 from Albany. It is the capital of the County, which bears the same name, and the semi-capital of Connecticut.

The *harbour* of New-Haven is four miles in length, to the point on the eastern side; on which, within a few years, a light-house has been erected; and 240 rods in breadth within the beach, a sand bank projecting from West-Haven shore, almost to the channel.—The harbour is formed by the confluence of the three rivers, which have been mentioned above. The channel of the harbour is the common channel of the Quinipiack and Mill river; and lies near the eastern side. The depth, from the bridge, which crosses these two rivers after their junction, styled the Harbour bridge, is fifteen feet at low water. It is however, in some degree interrupted by a bar of sand, which has been formed in consequence of the erection of an insulated pier, at the distance of a mile from the head of Long-Wharf. On this bar the depth, at low water, is about six or seven feet. A foot and a half has been added to the former depth on this bar, by the contraction of the passage for these two rivers under the bridge. This benefit is still increasing.

On the East-Haven side, nearly opposite to the beach, rises at the edge of the water, an insulated rock of considerable elevation. Here the United States have erected a fortress of brick-work, on which are to be mounted seven guns for the defence of the harbour. At this place is stationed a garrison of 22 men.

A common tide, in this harbour, rises about six feet; and spring tides, from seven to eight.

In moderate winters the navigation is not obstructed by ice. In cold winters it is obstructed for a short time.

In 1804—5, the harbor was covered with solid ice during ten weeks.

The north-western side of the harbor has undergone great changes since the settlement of the town. The spot, which was originally called the Winter Harbour, on the borders of which, seventy or eighty years since, there was a ship yard, is now covered with meadows and gardens. About the same period, foreign vessels loaded, and unloaded on the eastern side of Fleet-street, about twenty rods above the head of Long-Wharf; where now the spot is also covered with gardens. Forty six years since, there was more water, it is believed, at the foot of the wharf, when its length did not exceed thirty rods, than there is now, when it is three fourths of a mile. These changes are partly owing to human labour; partly to the influx of earth, conveyed into it by rains and streams; and partly, and indeed almost entirely, to the continual accumulation of what is called Harbor or Creek mud; believed, not without reason, to be principally a marine vegetable. This mud accumulates annually, on the northern and western sides of the harbour, and seems not unlikely to convert a considerable part of it, finally, into tract of a salt marsh.

The city is built on the north side of the harbour; and occupies an area of about a square mile. It is divided into two parts; called the Old, and the New Townships. The original or old town was laid out in nine squares; each fifty two rods on a side, and separated by streets four rods in breadth, running S. 30° W. and E. 30° S.; and thus forming a quadrangular area, 172 rods on a side. The central square is open; and is believed to be the handsomest ground in the United States. The surrounding squares are, by a by law, divided, each into four. The principal part of the streets, forming this division, are opened and built upon.

The New-Township lies immediately eastward of the Old. This is a beautiful tract, bounded on two sides by Mill river, and the harbour. The houses here have, within a few years, become numerous; as they have, also, in other parts of the exterior.

The whole number of houses in the city of New-Haven is 750: of which 314 are built on the streets forming

the squares. The stores, shops, barns, &c. are scarcely less numerous than the houses. The style of building generally adopted here, is neat, and in but few instances expensive. A few of the houses are of three stories; a moderate number of one; the rest, supposed to be more than 600, are of two. There are forty brick, and eleven stone buildings. Many of the rest are probably destined to be the materials of a future conflagration.

In the year 1800 there were no buildings of Rock Stone in the City, except a small Powder House; and but two buildings of Free Stone. At the same time there were but 2 fire-proof buildings. The neatness of the houses is extended to every thing around them. Little, that is old, or unrepaired, meets the eye. The courts, and gardens, which exist almost every where, are prettily enclosed. Fruit trees, and ornamental trees and shrubs, abound every where. Upon the whole, few places make a more delightful appearance.

The scenery around New-Haven is uncommonly rich. The East and West Rocks, particularly, are, for their height, very fine eminences, remarkably bold and striking.

The public buildings in New-Haven are the collegiate buildings, five churches, four school houses, a state-house, a county-house, a gaol, a bank, an alms-house, and a market; all of them decent, but none of them beautiful.

The *agriculture* carried on within the limits of this city, is directed to most of the objects, pursued in the husbandry of this country. Wheat, rye, maize, barley, oats, flax and grass, are the principal products. Wheat has yielded 40 bushels, rye 28, barley 45, maize 80, Oats 60; flax 620 lbs. and grass 4 tons an acre. Neither buckwheat, nor hemp, is cultivated in our fields. The annual produce cannot be estimated.

The *kiln-dried meal* exported annually amounts to between five and six thousand hogsheads; it has greatly exceeded this quantity.

The *quantity of land, planted with potatoes*, is unknown.

No *rotation of crops* has hitherto obtained a decided preference.

The only *grasses, cultivated with the plough*, are clover and herdsgrass or foxtail. These have been cultivated with success.

The only attempts at *draining and diking marsh ground*, have been made on the south end of Beaver pond, and on the west meadow. The effects of this experiment, in the former instance, have, hitherto, been promising; but, as the work is only in progress, the result cannot be accurately determined.

In the year 1769, a dike was built across the meadow, on the West river, at the bridge; for the purpose of preventing the salt water from overflowing the tract, which lies above the bridge, containing about one hundred and twenty acres. A gate was at the same time suspended from the bridge; which was shut by the tide, and opened by the stream, when the tide fell. At that time, the whole, or nearly the whole of this ground was a salt marsh. The salt grass soon died; and was succeeded first by white grass, as it is here called, and afterwards, on about half of the tract, by spear grass and clover. A part of this ground has at times been ploughed, and yielded good crops of maize. It contains, also, several valuable orchards of apple trees; which were planted by cattle, and produce an abundance of fruit. It is remarkable, that the canker worm has never attacked these orchards.

The best manure for the lands on this plain is wood ashes, either fresh, or after they have been lixiviated. They have many advantages over every other kind. Wheat is very rarely blasted on grounds dressed with ashes. On such grounds produce of all kinds is abundant; and, what is remarkable, they increase the fruit more, and the stem less. Their efficacy continues longer, by three or four times, than that of manure from the stable. Lixiviated ashes, also, meliorate the soil finally, by giving it a greater consistence. Manure, from the horse stable, increases the effects of drought, and seems ill fitted to a dry soil.

The white-fish, a kind of herring, remarkably fat, and too bony to be eaten, have been extensively used, as

manure, on both shores of the Sound, east of New-Haven; and, to some extent, here. The process is, either to place a layer of the fish upon the ground, and then a layer of earth; and thus, alternately, until all the fish are disposed of; or to spread them on the land, and plough them in. In both cases the manure is perfected, when the fish are completely dissolved. This is an excellent dressing; and in many places is esteemed superior to every other. The number of fish, necessary to dress an acre, is from ten to twelve thousand. These fish, in large shoals, frequent our shores in the month of June. As a manure, they appear to suit most soils, and almost every kind of vegetation, in the garden as well as in the field.

The *best means of increasing manure*, within my knowledge, are, the regular accumulation of every thing capable of becoming manure, either in a pile, or a pit, so conveniently posited with respect to the house, as to encourage the process. A hog-pen will answer this purpose extremely well, if sufficiently large; and may, perhaps, be ordinarily the best resort. Earth, occasionally mingled with this mass, will increase the quantity of manure.

A large quantity of manure might be gathered, without much trouble, by mowing the weeds, which unfortunately spring up, in such quantities, in so many of our fields, and stacking them in heaps, of a convenient size, on the spot. A layer of earth should be placed above every layer of weeds. The weeds should be mowed, before they have gone to seed. In this manner the farmer would gain the double advantage of extirpating weeds, and of increasing his manure.

Manure may be also increased by any effectual measures for preserving the urine of horses and cattle, while they are confined in the stall.

Beside the obvious and customary *modes of exterminating weeds* by the plough and the hoe, much may be done by collecting the manure, with which the land is to be dressed, into a heap, or a pit, and suffering it to continue, until it has gone through a putrefactive process. In this case the seeds swell, and perish. A large part

of the weeds, found in our fields, are planted in the manure, with which they are dressed.

It is difficult to say what is *the best seed time*. Anciently, the best time for sowing wheat was supposed to be the third week in August. Since the Hessian fly began its ravages, the last week in September, and the first and second in October, are generally preferred. In the former case, the white bald wheat was almost exclusively cultivated. This was much the best wheat, ever known in New-England. It was less exposed to injuries from the frost, or the blast, than any other. It yielded more by the acre; the grain was heavier; the flour was whiter, and better tasted; and the bread fresh and moist much longer. This wheat was, more than any other, the favorite food of the fly; and has, therefore, been for many years disused. The yellow-bearded wheat has been substituted for it extensively. Several other kinds have been also sown, with different success.

The only *modes of preventing, or lessening, the ravages of the fly*, of which I have heard, are, to sow the wheat so late in the autumn, as to escape this enemy during that season; and to sow it only on rich ground.

No important *effects* are known to have been derived from *changing seeds*.

The lands in this township are almost exclusively *cultivated by oxen, or a joint team of oxen and horses*. The advantages of employing oxen are, that they will endure more fatigue; draw more steadily, and surely; are purchased for a smaller price; are kept at much less expense; are freer from disease; suffer less from labouring on rough grounds; and perform the labour better: and, when by age or accident they become unfit for labour, they are converted into beef. The only advantage of employing horses instead of oxen, is derived from their speed.

There is but one ox-waggon in this town. Such waggons are found to be very useful for transporting loads over considerable distances. The ox-cart will turn much more easily, and discharge its load in most cases with much less difficulty, and in much less time. Such carts are, therefore, more convenient for the ordinary business of a farm; and will probably be long retained.

The *ploughs* and *harrows* are such as are common to this part of the country.

Drills are not used, except to drop onion seed: and, for this purpose, those which are employed here are very serviceable. A single man, with such a drill, will plant more than an acre in a day.

We have no *threshing machines*: but a few vans, of the common construction, are employed to winnow wheat, rye, and barley.

The *fences*, with which our fields are generally inclosed, are of posts and rails, made in the manner which is common throughout this country. A few are formed with three rails: the space between the lower rail and the ground being filled up with a wall of stone. This is a good kind of fence, and will last many years. The posts and rails are of chesnut. Their price has been doubled in thirty years, although the sources whence they are supplied, have probably not decreased. The expence, by rod, of this species of fence, is 75 cents.

Hedges have never succeeded here. Attempts have been made with the prim, the apple, the mulberry, and the thorn. The seeds of the last were imported by the late Judge Ingersoll from England. The prim hedges, throughout this country, universally died about forty years since. The cause of this disaster is unknown.

It has been supposed, that hedges might be advantageously formed of red cedar.

The city of New-Haven contains, probably, as many good kitchen gardens as any town in the state: and all, or nearly all the objects of horticulture, within the state, may be found here. The vegetables cultivated in our gardens, are the following:

* Asparagus,		* Endive,	
Beans,		* Garden Cresses,	
Beets,	4	* Garlic,	
Cabbages,		Maize,	
Carrots,	3	Mustard,	
Cauliflowers,	2	Lettuce,	
Celery,	2	Onions,	3
* Chives,		Parsnips,	2
Chalots,	2	Parsley,	2
* Coleworts,		Peas,	

Peppergrass,	2	* Scarcity Root,	
Peppers,		Spinach,	3
Radishes,	5	Turnips,	5
Sal Souffee,			

The fruits cultivated in our gardens, are, on vines,

Cantelopes,		Squashes,	
Cucumbers,	3	Somatos, or Love Apples,	
* Gherkins,		Watermelons,	
Mandrakes,		Winter Squashes,	
Muskmelons,		Grapes,	
Nasturtions,			

On shrubs,

Currants,	3	Rasberries,	5
Gooseberries,			

On trees,

* Almonds,		Peaches,	
Apples,		Pears,	
* Apricots,		Plums,	
Cherries,		Quinces,	2
* Nectarines,			

On plants,

Strawberries,	6	Vegetable Egg.	
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The kinds, marked with an asterisk, have but one species in our gardens. The figures, on the right hand, denote the number of species. Of the kinds, to which no mark is annexed, there are so many species, that the number is not easily determined.

Cauliflowers are less prosperous here, than in a moister soil. The best mode of cultivating them, is to sow the seed as early, as the season will permit; and to set out the plants in trenches, dug to the depth and width of a spade, with a covering at the bottom of three inches of manure, and three inches of earth spread over the manure. The two great evils to which cauliflowers are exposed in this country, are these: They are often blown down by strong winds in August and September; and their stems are often shrivelled and cracked, by the intense heat. When they are only shrivelled, the vegetation is obstructed; and the flower is starved for want of nourishment. When they are cracked, the rain enters the stalk, and it perishes. Both of these are pre-

vented by setting them in trenches, and covering the stem with earth as fast as it rises.

The Madeira purple grape ordinarily sustains our winters without injury; but they are liable to be hurt by seasons of extraordinary severity. The raisin grape is more easily injured. The trouble of covering them is so small, that I have preferred it. The best way of covering them is to lay them on the ground; spread over them a quantity of refuse hay, or seaweed; and cover this with six inches of earth.

The best strawberry for cultivation, is the large meadow strawberry of this country. They are originally of the same species with that of Chili; but are ripe about a week earlier, and are a little larger, sweeter, and more prolific.

The best mode of cultivating strawberries is to set them out in beds, the second or third week in April. They should be set in longitudinal rows: the meadow and Chili strawberries about 9 inches, the hautboy about 6 inches, apart each way. They should be kept clean, until the shoots have spread so much, as to make it inconvenient. They will then speedily cover the ground, so as to render further weeding chiefly unnecessary. In the New-Haven gardens the large strawberries will continue in full bearing five years. Cultivating them in hills is far more laborious; in dry seasons they are shrunk; in wet seasons they are sprinkled with earth, and made gritty by every rain; and the quantity obtained is incomparably less. These evils are not balanced by a single advantage. It is much less trouble to set them out every year; as the labour can be done by small children.

The field strawberry, which is ten days earlier than that of the meadows, is also sweeter. But after eight years cultivation in my garden it has not increased its size at all, whereas the meadow strawberry has doubled its size.

The most productive raspberry is the English brown.

The peach tree is often injured by a worm, which inserts itself within the bark, just at the surface of the earth; and eats both the bark, and the wood till it destroys the tree. An effectual defence against this animal may be obtained by smearing the tree, about two inches

below the surface, and five above, with tar; an ointment of roll brimstone and hog's lard, a whitewash, made of lime, and water containing a strong solution of cow dung; and almost any other substance, which will effectually incase the tree. Before the application is made, however, the worm should be taken out. This is usually done with a knife; and is apt to be done imperfectly. An effectual mode of accomplishing it is, to place immediately around the tree about two quarts of fresh ashes, and to turn upon them a sufficient quantity of pretty warm water. The ley formed in this manner, will force the worm out immediately.

Here and in most parts of this country, the Morello cherry tree, and most kinds of plum trees, have been stung in the small twigs by an insect; which in this manner inserts its egg into the centre of the twig. After the maggot is hatched, it feeds upon the wood of the twig, until it has attained the proper size to leave its nidus. Still the growth of the twig goes on; and becomes fungous. The protuberance, thus formed, turns black, and becomes hard; in which state it is indifferently called a wart, and a knot. These warts have, for some years past, multiplied to such an extent, as to be found upon almost all the small branches of the trees; and, in many instances, to ruin them. If I may conjecture from the facts in my own garden, these insects, which I am persuaded are of different kinds, have, for the present, terminated their ravages, at least in this town.

The best mode of *extirpating the insects and worms, which generally molest gardens*, the best, I mean, within my knowledge, is to plough or dig them in the latter part of November. If this be done three years successively, in a garden which is not in the near neighbourhood of any other ground, cultivated with the plough, or spade, they will be nearly all destroyed. A strong decoction of the leaves of the elder, or the burdock, will expel most insects from the plants, which they injure. The late Abraham Burbank, Esq. of West Springfield, informed me, that he had found no method of exterminating worms from his garden so effectual as sowing it

with salt. The experiment is well worth repeating ; especially as salt is an excellent manure.

The quantity of cider, made in this town, is comparatively small.

To make the best cider, the following rules should be observed. The apples should be of good kinds, and thoroughly ripe. If not ripe when they are gathered, they should be collected in heaps under cover.

Those, which are rotten, should be carefully picked out.

They should be thoroughly ground.

The pumice should be left open to the atmosphere from twelve to twenty-four hours.

The liquor should be made clean as possible. For this purpose the first runnings from the cheese may be advantageously passed through it the second time. The same purpose may be also accomplished in several other modes. It may be placed in large vessels ; and drawn off, whenever the scum shall all have risen to the surface. It may be racked once or twice in the cellar ; and, the first time, at the moment when it has ceased to hiss.

After the liquor is put into casks, which should always be perfectly sweet, it should be kept uniformly cool. The English, in Herefordshire, place it in houses built for the purpose. The design of this is to check, as much as may be, the fermentation. Some persons accomplish this by drawing it off frequently ; others, by letting it freeze, and afterwards thaw again. Either mode may be pursued with success. If the fermentation is rendered very slow, the great point is gained. After the process has proceeded thus far, and the fermentation is completed, the chief things to be done towards preserving it, seem to be, to exclude the air entirely, to keep it cool, and to keep it in a temperature, which shall, as near as possible, be uniform. In a cold and moist cellar stout cider is well kept through the summer in good casks ; but this cannot easily be done in cellars, which are warm, and dry.

It is a bad practice to put cider into casks, which have contained rum, or brandy. It may, however, be successfully enriched by adding to it the lees of Lisbon, or strong currant, wine. But the only spirit, which can

be used to increase its strength without injuring its taste, is cider brandy.

Should the cider be bottled, the bottles should be filled scarcely to the neck : otherwise they will be in danger of bursting. If the fermentation should be too rapid after the liquor is bottled, the bottles should be covered with sand, almost to the cork, and occasionally wet with cold water.

Casks which have become acid, may be made sweet by slacking, in each, about a quart of stone lime with hot water ; bunging them ; rolling them ; and then letting them stand a few days before they are rinsed. This may be done by burning, in each, matches of brimstone.

Musty casks may be cleansed by taking out one of the heads, and washing them thoroughly : after which they should be well rinsed, and suffered to dry.

Apples can be very well preserved in dry sand ; or in air-tight casks. In this case, however, they should be taken out once in the winter ; the defective ones removed ; and those, which are sound, wiped dry.

Some of the most successful *inoculations*, which I have seen, have been done in the last of April, or the first of May. They were of peaches.

The bitter Almond, it is believed, would furnish the best stocks for peaches and apricots : as the peach worm is never known to attack this tree.

The wild plum, commonly called the red plum, of New-England, is also recommended for this purpose.

Any fruit may be multiplied, indefinitely, by planting the seeds, or stones, taken from a tree, standing singly : i. e. at such a distance from every other of the kind, or genus, that the farina of the blossoms shall not be mixed. This mixture is made partly by winds, blowing the farina a considerable distance, from blossom to blossom ; and partly by bees, which convey the farina, also, to a still greater distance. In this manner, the finest cherries, peaches, and plums, may be obtained from the stone.

Cherries should be planted by laying the stones on the surface, and spreading over them some loose brush. The brush will keep the ground light, and moist ; and will prevent the stones from being removed or buried. If they are buried, they will rarely spring at all.

Plums may be successfully planted in the same manner.

Peaches may be advantageously planted in the following manner. Depress a small spot of the earth, previously made light, a very little below the surface. In this spot set as many peach stones, as you choose, to such a depth, as that the sharp point of each shall be barely visible. Then cover the spot with a thin, flat stone, until they shall have begun to germinate. This you will learn by taking up the stone occasionally. When they have had a year's growth, they should be transplanted.

A very easy, and at the same time, successful, mode of obtaining fine peaches is the following. Take peach stones from a garden, which contains none but fine fruit. Scatter them over your garden in great numbers, and dig them in, without any attention. A considerable number of them will spring every year. All, or nearly all, these will produce fruit of an excellent quality: sometimes of the same sorts with those of the original trees; at other times, of new sorts, formed by various mixtures of the farina. The new sorts will be, regularly, fine; frequently as fine, and sometimes finer, than the very best of the original ones. The trees, also, will usually have more vigour than those, which have been inoculated. This experiment I have made with complete success.

The best time for pruning trees is when they are in blossom. The reason is, the wounds will be more effectually healed, than at any other time.

For the following account of vegetable productions, found in New-Haven, the Academy are indebted to Dr. Eli Ives. The words in CAPITAL letters denote the Genera, the small letters the Species.

<i>Scientific Name.</i>	<i>Common Name.</i>	<i>Scientific Name.</i>	<i>Common Name.</i>
ACER,	MAPLE,	calamus,	
negundo,	white,	ACTEA,	cohush,
rubrum	red,	racemosa,	
saccharinum,	sugar,	spicata,	cohush,
ACHILLEA,	YARROW,	ADIANTUM,	MAIDEN HAIR,
millefolia,	common,	AGARICUS,	AGARIC,
ACORUS,	SWEET FLAG,	AGRIMONIA,	AGRIMONY,

eupatoria,	common,	ARUM,	INDIAN TURNIP
ALISMA,	WATER PLAN-	tryphillum,	[or wake robin,
plantago,	common, [TAIN.	ASARUM,	ASARABACCA,
ALLIUM,	GARLICK,	arifolium,	heart snakeroot,
canadense,	wild,	canadense,	coltsfoot,
ALNUS,	ALDER,	ASCLEPIAS,	MILK WEED,
Communis, (Clayton)		decumbens,	white root,
ALOPECURUS,	FOX TAIL GRASS	lactifera,	common,
pratensis,	herds,	pubescens,	indian hemp,
ALTHŒA,	MARSH MAL-	undulata,	
officinalis,	common, [LOW,	verticellata,	
HIBISCUS,		ASPARAGUS,	ASPARAGUS,
palustris,		officinalis,	officinal,
AMARANTHUS,	Princes feathers,	ASTER,	STAR WORT,
albus,		novæ angliæ,	New-England,
hybridus,		ATRIPLEX,	ORACHE,
AMBROSIA,		AZALEA,	HONEYSUCKLE,
ANAGALLIS,	EYE BRIGHT,	viscosa,	upright,
arvensis,	common,	BARTSIA,	QUEEN OF THE
ANEMONE,	WIND FLOWER,	coccinea	[MEADOWS,
hepatica,	liver wort,	BERBERIS,	BARBERRY,
pennsylvanica,	thimble weed,	vulgaris,	common,
thalictroides,		BETULA,	BIRCH,
ANGELICA,	ANGELICA,	alba,	white,
archangelica,	officinal,	nigra,	black,
ANTHEMIS,	CHAMOMILE,	BIDENS,	CUCKOLD WEED
cotula,	may weed,	bipinnata,	hemlock leaved,
ANTIRRHINUM,	TOAD FLAX,	CACTUS,	ROCK PAIR,
canadense,	canadian,	opuntia,	common,
linaria,	common,	CAMPANULA,	BELL FLOWER,
APOCYNUM,	DOGS BANE,	perfoliata,	
androsemitifolium		CANABIS,	HEMP, } natur-
canabinum,	Indian hemp,	sativa,	common } alized
AQUILEGIA,	COLUMBINE,	CARDUUS,	THISTLE,
canadensis	wild,	canadensis,	canadian,
ARALIA,	ARALIA,	communis,	common,
nudicaulis,	wild sarsaparilla,	CARPINUS,	HORN BEAM,
racemosa,	spikenard,	americana,	american,
spinosa,	prickly ash,	CASSIA,	CASSIA,
ARCTIUM,	BURDOCK,	chamæcrista,	
lappa,	common,	marilandica,	wild senna,
ARENARIA,	SANDWORT,	CEANOTHUS,	N. JERSEY TEA,
liniflora,		americanus,	common,
rubra,	low century,	CELASTRUS,	BITTER SWEET,
tenuifolia,	orange grass,	scandens,	common,
ARISTOLOCHIA,	snakeroot,	CEPHALANTHUS	BUTTON WEED,
serpentaria,	common,	occidentalis,	or head flower,
ARTEMISIA,	WORMWOOD,	CERASTIUM,	MOUSE EAR
absinthium,	common,		[CHICK WEED,
santonica,	wormseed,	viscosum,	sticky,
vulgaris,	mugwort,	vulgatum,	common,

CHELIDONIUM,	CELANDINE,	palustre,	
majus,	greater,	ERYTHRONIUM,	} [olet,
CHENOPODIUM,		dens canis,	
album,	white pig weed,	EUPATORIUM,	
anthelminticum,	Jerusalem oak,	canabinum,	
CHRYSANTHE-	DAISY,	perfoliatum,	thorough wort,
[MUM,		scandens,	
leucanthemum,	common,	sessilifolium,	
CICORIUM,	SUCCORY,	verticillatum,	gravel root,
intybus,	wild,	FAGUS,	BEECH,
CIRCEA,	ENCHANTERS	castanea,	chesnut,
	[NIGHT SHADE,	sylvatica,	beech nut,
lutetiana,	common,	FRAGARIA,	STRAWBERRY,
CISTUS,	Rock Rose,	carolinia,	meadow,
canadensis,	canadian,	vesca,	common,
caroliniana,		virginiana,	wild,
CLEMATIS,	VIRGIN'S BOW-	FRAXINUS,	Ash,
dioica,	[ER,		white,
purpureus,	purple,		swamp,
CLETHRA,		GALENTA,	
alnifolia,	white bush,	decumbens,	phthisic weed,
CLINOPODIUM,		GALIUM,	LADIES' BED
vulgare,	wild hyssop,	bermudianum,	com'n, [STRAW,
COCHLEARIA,		parisience,	wild liquorice,
armoracia,	horse radish,	uliginosum,	bastard wild do.
Collinsonia,		GAULTHERIA,	WINTERGREEN
canadensis,	horse weed,	procumbens,	chickberry,
CONVALLARIA,	SOLOMON'S SEAL	GERARDIA,	
bifolia,		flava,	yellow,
polygonatum,	common,	purpurea,	
CONVOLVULUS,	BIND WEED,	quercifolia,	
purpureus,			
sepium,	common,	tenuifolia,	
CORNUS,	DOG WOOD,	GERANIUM,	CRANE'S BILL,
alba,	white berried,	robertianum,	
canadensis,		sanguineum,	
cericea,	red willow,	GEUM,	AVENS ROOT,
florida,	common,	rivale,	water,
sanguinea,		urbanum,	common,
CORYLUS,	HAZLE NUT,	GNAPHALIUM,	
americana,	common,	gratissimum,	everlasting,
CUSCUTA,	DODDER,	HAMAMELIS,	
reflexa,	common,	virginica,	witch hazel,
scolymus,		HEDYSARUM,	ST. FOIN WILD,
DATURA,	THORN APPLE,		
stramonium,	common,	HELIANTHUS,	SUN FLOWER,
DAUCUS,	CARROT,	divaricatus,	wild,
sylvestris,	wild,	HELLEBORUS,	
DRACONTIUM,	SKUNK'S CAB-	trifolius,	gold thread,
fœtidum,	common, [BAGE,	HUMULUS,	Hop,
EPILOBIUM,		sylvestris,	wild,

HYOSCYAMUS,	HENBANE,	diervilla,	
niger,	black,	semper virens,	[LANE,
HYPERICUM,	ST. JOHN'S WORT	LUDWEGIA,	WATER PURS-
maculatum,	spotted,	alternifolia,	
perforatum,	common,	LUPINUS,	Lupine,
HYPOXIS,	STAR FLOWER,	perennis,	[HOUND,
erecta,	common,	LYCOPUS,	WATER HORE-
IMPATIENS,		virginicus,	common,
noli me tangere,	clear wort,	LYTHRUM,	WILLOW HERB,
IMPERATORIA,		salicifolia,	common,
	master wort,	verticillata,	
INULA,		MALVA,	MALLOWS,
helenium,	elecampane,	americana,	common,
IRIS,	FLOWER DE	MARRUBIUM,	HOREHOUND,
pseudacorus,	blue flag, [LUCE,	vulgare,	common,
versicolor,		MATRICARIA,	FEVERFEW,
JUGLANS,	WALNUT,	aquatica,	water,
alba,	white,	MEDEOLA,	
amara,	bitter,	virginica,	wild cucumber,
cinerea,	butternut,	MENTHA,	MINT,
squamosa,	shagbark,	pulegium,	pennyroyal,
JUNIPERUS,	JUNIPER,	viridis,	spear,
communis,	common,	MIMULUS,	MONKEY FLOW-
virginiana,	red cedar,	ringens,	common, [ER,
KALMIA,	LAUREL,	MITCHELLA,	
latifolia,	ivy,	repens,	Partridge berry,
LACTUCA,	LETTUCE,	MONOTROPA,	BEECH DROP,
virosa,	wild,	hypopithys,	common,
LAURUS,	LAUREL,	MORUS,	MULBERRY,
benzoin,	spice bush,	alba,	white,
sassafras,	sassafras,	nigra,	black,
LEONTODON,	DANDELION,	MYRICA,	BAYBERRY,
taraxacum,	common,	cerifera,	common,
LEONURUS,	MOTHER WORT,	NEPETA,	CATNEP,
cardiaca,	common,	cataria,	common,
marrubiastrum,		NYMPHÆ,	POND LILY,
LIGUSTRUM,	PRIM,	alba,	white,
vulgare,	common,	lutea,	yellow,
LILIUM,	LILY,	NYSSA,	TUPELO TREE,
canadense,	Canadian,	aquatica,	Pepperidge,
pennsylvanicum,	Pennsylvanian,	ŒNOTHERA,	
LIQUID AMBER,	SWEET FERN,	biennis,	Scabish,
styraciflua,	common,	ONOSMA,	
LIRIODENDRON,	TULIP TREE, or	asperifolia,	
tulipifera,	white wood,	ORCHIS,	ORCHIS,
LOBELIA,	LOBELIA,	ciliaris,	orange colored,
cardinalis,	meadow pink,	palmata,	
inflata,	Indian tobacco,	OXALIS,	WOOD SORREL,
linearis,		acetocella,	common,
urens,		PENTHORUM,	
LONICERA,	HONEY SUCKLE,	sedoides,	

PHYSALIS,		PYRUS,	PEAR,
viscosa,	ground cherry,	communis,	common,
PHYTOLACCA,	POKEWEED,	coronaria,	crab apple,
decandra,	common,	QUERCUS	OAK,
PINUS,	PINE TREE,	alba,	white,
abies,	hemlock,	montana,	mountain,
pinca,	yellow,	nigra,	black,
strobis,	white,	rubra,	red,
PISUM,	PEA,	RANUNCULUS,	CROW FOOT,
maritimum,	sea,	bulbosus,	
PLANTAGO,	PLANTAIN,	scelleratus,	
major,	great,	RHEXIA,	
virginica,	Virginian,	mariana,	
PLATANUS,	BUTTON WOOD,	RHUS,	SUMACH,
occidentalis,	common,	copallinum,	
POA,	MEADOW GRASS	glabrum,	common,
annua,	dwarf,	radicans,	mercury,
compressa,	blue grass,	toxicodendron,	poison oak,
POLYGONUM,		typhnum,	stags horn,
arifolium,		vernix,	poison ash,
aviculare,	knot grass,	RIBES,	CURRENTS,
convolvulus,	bind weed,	nigra,	black,
hydropiper,	water pepper,	ROBINIA,	LOCUST TREE,
pennsylvanicum,		pseud-acacia,	common,
sagittatum,	scrach grass,	Rosa,	Rose,
setosum,		canina,	wild,
POLYPODIUM,	POLYPOD,	rubiginosa,	sweet briar,
vulgare,	common,	RUBUS,	RASBERRY,
POPULUS,	POPLAR TREE,	occidentalis,	wild,
nigra,	black,	odoratus,	mountain,
tremuloides,	aspen,	RUMEX,	DOCK,
PORTULACCA,	PURSLANE,	acetosella,	sheep sorrel,
oleracia,	common,	acutus,	sharp pointed,
POTENTILLA,	CINQUEFOIL,	britannica,	
canadensis,		SAGITTARIA,	ARROW HEAD,
frageroides,		sagitifolia,	arrow leaved,
pennsylvanica,		SALICORNIA,	
POTERIUM,	BURNET,	virginica,	samphire,
sanguisorba,	common,	SALIX,	WILLOW,
PRUNELLA,	SELF HEAL,	alba,	white,
pennsylvanica,	common,	viticellina,	yellow,
PRUNUS,	CHERRY TREE,	SAMBUCUS,	ELDER,
americana,	yellow plum,	canadensis,	
canadensis,		nigra,	common,
maritima,	beach plum,	SANICULA,	SANICLE,
montana,	mountain,	marilandica,	common,
virginiana,	black,	SARACENIA,	SIDE SADDLE
PYROLA,	WINTERGREEN		[FLOWER,
minor,	princes pine,	purpurea,	purple,
rotundifolia,	shin leaf,	SCANDIX,	CICELY,
umbellata,		odorata,	sweet scented,

procumbens,		bursa pastoris,	shepherd's purse
SCROPHULARIA,	FIGWORT,	THUYA,	
marilandica,	common,	occidentalis,	white cedar,
SCUTELLARIA,	SCULL-CAP,	TILIA,	BASS WOOD,
galericulata,	helmet shaped,	americana,	common,
hyssopifolia,		TRIFOLIUM,	CLOVER,
SENECIO,	GROUND SEL,	arvense,	downy,
hieracifolius,		pratense,	meadow,
SERRATULA,	DEVIL'S BIT,	repens,	white,
SIDA,	SIDA MALLOWS,	TRIOSTEUM,	
SILENE,		perfoliatum,	wild gentian,
stellata,		TUSSILAGO,	COLT'S FOOT,
viscosa,		TYPHA,	
SINAPIS,	MUSTARD,	latifolia,	CAT'S TAIL,
nigra,	black,	VACCINIUM,	WHORTLEBER-
SISYMBRIUM,		corymbosum,	Bilberry, [RY,
nasturtium,	watercress,	ligustrum,	common,
SISYRINCHIUM,		macro carpon,	cranberry,
anceps,	blue grass,	VERATRUM,	
SMILAX,		album,	WhiteHellebore
laurifolia,	green briar,	VERBASCUM,	MULLEIN,
SOLANUM,	NIGHTSHADE,	thaspus,	great,
dulcamara,	woody bitter-	VERBENA,	VERVAIN,
nigrum,	common, [sweet	hastata,	
SOLIDAGO,	GOLDEN ROD,	urticifolia,	
canadensis,		VERONICA,	[ic Root,
virga aurea,	common,	virginica,	Culver or Phys-
SONCHUS,	SOW THISTLE,	VIBURNUM,	
palustris,	marsh,	dentatum,	
SOPHORA,		opulus,	snow ball,
flavescens,	wild indigo,	VICIA,	VETCH,
SPIREA,	SPIREA,	craca,	common,
salicifolia,		VIOLA,	VIOLET,
ulmaria,		canadensis,	
STATICE,		obliqua,	
limonium,	marsh rosemary	VITIS,	GRAPE,
SIMUM,	WATER PAR-	labrusca,	black,
	[SNIP,	vulpina,	frost,
rigidum,	rough cow par-	ULMUS,	ELM TREE,
SYMPHITUM,	COMFREY, [snip	americana,	common,
officinale,	officinal,	fulva,	slippery,
TANACETUM,	TANSEY,	URTICA,	NETTLE,
vulgaris,	common,	aquatica,	water,
TEUCRIUM,	GERMANDER,	inermis,	smooth,
canadense,	common,	UVULARIA,	GRAPE WORT,
THALICTRUM,		perfoliata,	common,
dioicum,	meadow rue,	XYSIS,	YELLOW-EYED
THLASPI,		indica,	common, [GRASS,

The *number of tenants* is here so small, and the circumstances are so far peculiar, that no valuable information can be derived from the existing state of facts. The lands leased are commonly taken, on the condition of returning a part of the produce, according to a specific agreement between the proprietor and the lessee. They are commonly leased, only for one, or a very few years.

The *emigrations* from the city of New-Haven are so irregular, as to admit of no correct estimate. The great body of the emigrants are merchants, mechanics or seamen; the principal part of whom remove to other commercial towns in the U. States, and the rest to foreign countries, for the purpose of carrying on their respective occupations to greater advantage. The places of these emigrants are continually supplied by immigration; as is evident from the fact, that, although new houses are annually erected here, every house is full; and many contain two or more families. The same fact is still more definitely exhibited, by the increase of the citizens since the year 1800.

As New-Haven is the shire town of this county, *all the capital punishments* in the county have been inflicted here. The whole number of these is thirteen: one of them, however, was the execution of a man, pursuant to the sentence of a court martial, for enlisting soldiers to fight against the country, in the time of the revolutionary war. In what part of the country the man was resident, I am ignorant. He had lately crossed from Long-Island; and was apprehended somewhere on the coast. His name was Griswold.

The first person executed, was a Pequod; who was hung for some of his conduct in the Pequod war. He was executed in 1639.

The two next were executed for bestiality, in 1642 and 1655.

The next for sodomy, in 1655.

The next for bestiality, in 1662.

Three of these, perhaps the fourth, came from England.

The three next were Indians; probably Quinnipiacks;

who, in the woods of East-Haven, murdered one of the colonists in 1700.

The next was a black woman, who cut the throat of her master's daughter, at Wallingford; apparently with the hope, that she might cease to be a slave, and return, as she said, to her own country.

The next was an Indian, Moses Paul, executed for murdering a Mr. Cook, of Waterbury, in 1772.

The next was Griswold, in 1778.

The last was a black man, named Joseph Mountain, executed for a rape, in 1790. Of the whole number, executed during the one hundred and seventy-three years, which have elapsed since New-Haven was settled,

5 were whites;

5 were Indians; and

3 were blacks.

Of the whites, all, except Griswold, and one more, were born in England; and all but Griswold were executed during the first twenty-four years after the arrival of the colonists. It is to be remembered, that, although the superior classes of the New-Haven colonists were distinguished for excellence of character, the peasantry, and servants, were generally not less distinguished for vice and profligacy.

One native of New-Haven, only, has ever suffered for a capital crime; a boy 15 years of age; if, indeed, he was born here. It is to be observed however, that two children in New-Haven, and one in Milford, were, in the years 1653, 1656, and 1663, convicted of arson; but had their lives spared, on account of their tender age.

There have been also thirteen instances of suicide in this town, since its first settlement. One, a woman, supposed to be under the influence of disappointed love.

One, a man, under the influence of jealousy.

One, a Frenchman, from vexation.

One, a Dutchman, intoxicated.

One, a young gentleman from South-Carolina, who was studying law at Litchfield, rode to the skirts of this town; and, having sent his servant forward, alighted under a tree on the western border of the new burying

ground, and shot himself upon the day of the public Commencement of Yale College, anno 1796.

One, a woman, is said to have been afflicted with religious melancholy.

One is said to have been insane.

Four of these were not natives of New-Haven. Of the remainder, some, it is not known how many, were born here.

It is not easy to determine when *pleasure carriages* first began to be used in New-Haven. Fifty years since, there were but four chaises and chairs. There are now from ninety to a hundred made in a year.

The manufactures of this town are chiefly included in the following list :

Leather,	Candles,
Boots,	Scythes,
Shoes,	Nails,
Saddlery,	Axes,
Morocco Leather,	Tin Ware,
Bellows,	Combs,
Leather Gloves,	Paper,
Worsted Gloves,	Powder,
Mittins,	Brushes,
Pleasure Carriages,	Cabinet work,
Cordage,	Windsor and other Chairs,
Hats,	A great variety of articles in
Clocks,	gold and silver,
Brass Furniture, &c.	Trunks,
Bells,	Straw Hats.
Soap,	

Eli Whitney, Esq. a gentleman born at Westborough, in Massachusetts, educated at Yale College, and afterward for many years a resident in this town, is the author of a machine, entirely new, both in its form and principles, for cleansing the upland cotton, cultivated in the southern states, from its seeds. They were formerly picked out with the hand: and to cleanse a pound was esteemed a laborious day's work. With the aid of this machine, one person will cleanse a thousand pounds in a day with great ease. As a labour-saving machine, therefore, it has probably never been equalled.

From the returns made to the Treasury Department, it appears, that in the year ending Sept. 30th, 1807, more than fifty-five millions of pounds of this cotton were exported from the United States to foreign markets. The quantity manufactured in the United States, in the same time, is estimated at five millions more. Sixty millions of pounds, therefore, valued at twenty cents per pound, and amounting to twelve millions of dollars, have, in a single year, been added, by the operation of this machine, to the stock of human comforts.

The manufacture of these machines was, for a number of years, carried on by Mr. Whitney in this town.

This species of cotton was never brought to market, until after the invention of this machine.

The same gentleman has established, near the northern boundary of New-Haven, a manufactory of fire arms. It stands upon Mill river, already mentioned; a stream which, furnishing a copious supply of water round the year, is happily fitted for every kind of water works.

In this manufactory muskets are made in a manner which I believe to be singular. In forming the various parts of the musket, machinery, put in motion by water, and remarkably well adapted to the end, is used for hammering, cutting, turning, perforating, grinding, polishing, &c. The proportions and relative positions of the locks are so exactly alike, and the screws, springs, and other limbs so nearly similar, that they may be transferred from one lock and adjusted to another, without any material alteration. This desirable object is accomplished by an apparatus which is simple, and at the same time ingenious and peculiar. By an application of the same principles, a much greater uniformity has also been given to every part of the muskets, made in this manufactory, than can be found in those made in any other place. The advantages, in actual service, resulting from this unusual degree of uniformity, are too obvious to need explanation.

This establishment was undertaken by the proprietor without having, himself, had any experience in the manufacture of fire arms: and all the workmen, employed in bringing it into operation, were wholly unskilled in

the art: none of them having ever wrought at any branch of the business. Under these circumstances he was necessitated to adopt methods of his own: and, as skilful artists were not to be obtained, to devise a system, in which the more faithful and correct operations of machinery should supply the want of experience in the workmen. Hence modes of working iron, steel, and other metals and materials, have been introduced, which are new and peculiar; and which experience has shewn to be practically and eminently useful.

There are in New-Haven,

- | | |
|---------------------------------------|-------------------------|
| 29 houses concerned in foreign trade, | |
| 41 stores of dry goods, | |
| 42 grocery stores, | |
| 4 ship chandlery do. | |
| 2 wholesale hardware do. | |
| 3 wholesale dry goods do. | |
| 1 wholesale glass and crockery do. | |
| 1 furrier's do. | |
| 10 apothecary do. | |
| 6 traders in lumber, | 3 comb-makers, |
| 1 of paper hangings, | 4 windsor-chair-makers, |
| 5 tallow chandlers, | 1 engraver, |
| 2 brass founders, | 14 coopers, |
| 3 brasiers, | 1 wheelright, |
| 29 blacksmiths, | 1 leather dresser, |
| 1 bell founder, | 1 nailer, |
| 9 tanners, | 15 masons, |
| 30 shoe and boot makers, | 3 stone cutters, |
| 9 carriage makers, | 2 book binder, |
| 7 goldsmiths, | 26 tailors, |
| 4 watchmakers, | 7 curries, |
| 6 shoe stores, | 4 printers, |
| 7 manufactories of hats, | 5 barbers, |
| 5 hat stores, | 3 tanners, |
| 4 harness makers, | 2 paper makers, |
| 5 cabinet makers, | 2 block makers, |
| About 50 carpenters, | |
| There are | |
| 5 printing-presses, | |
| 4 book stores, | |

- 2 newspapers published,
- 3 rope-walks,
- 2 sail-lofts,
- 1 ship-yard,
- 5 bakers,
- 17 butcher's stalls.
- 16 schools; 12 inns.

There are also

- 6 clergymen,
- 16 lawyers,
- 9 practising physicians,
- 1 surgeon.

We have no *breweries*. A considerable brewery was erected here by some Englishmen, a few years since; but the principal buildings having been burned, it was discontinued.

Among the fish found in the harbour and streams of New-Haven, are the following:

Roach,	Shiners,
Place,	Yellow Fins,
Flounders,	Dumb fish,
River Bass, or Rock fish,	Blue fish,
Sea Perch,	Frost fish,
Shad,	Sheepshead,
Greenbacks,	Eels,
Black fish,	Trout, and, now and then, a
White fish,	Salmon.
Succomogs,	

None of these fish are caught in the winter, except Eels and Frost-fish. The rest, except *Shad* and *White-fish*, are not sufficiently numerous to make fishing a serious business. *Shad* are taken in considerable numbers, when the season is favourable, and were formerly much more numerous. In the *Quinnipiack*, a little below Dragon bridge, 2400 have been taken at a single draught. Considerable numbers are also taken about a mile above, at the place called Lime Hollow, and in various places, as high as Wallingford. Of such importance was the fishery esteemed, that a considerable number of law suits were carried on for the purpose of acquiring, or defending titles to the fishing places.

Beside these fish, a variety of others, which are not eatable, are found occasionally in our waters. Among them are the Shark, the Porpoise, the Sturgeon, the Dog-fish, the Toad-fish, &c. Sharks are rare; and neither the porpoise, nor the sturgeon, very common.

The shell fish, found here, are the oyster, the long clam, the round clam, the muscle, the escallop, the lobster, the crab, the tortoise, the periwinkle, the shrimp, &c.

Oysters abound. The principal oyster beds are in the Quinnipiack; where, according to the best computation, between four and five hundred thousand bushels are annually caught; principally between the two lower bridges. These oysters are small but well flavoured. Beside constituting a supply for the market in New-Haven, and for the neighboring towns, they are opened, and conveyed in kegs into the interior of this State, into Massachusetts, New-Hampshire, Vermont, and the State of New-York. A considerable village has been raised up by this fishery on the borders of the Quinnipiack.

Long and round clams are also, both caught in considerable quantities.

Formerly the harbor of New-Haven furnished oysters in great quantities, and of a very fine flavour. Those which were taken in Morris' Cove, which were found in great abundance till about the year 1770, were superior to any other, which I have ever tasted. The bed was destroyed about that period. The destruction was occasioned by a storm from the south-west, which overwhelmed the bed with a mass of mud.

Oysters, in order to flourish, demand a firm bottom, or some other firm substance, to which their spawn may adhere. The mud of this harbour is very soft and lubricous; and wherever it is spread, prevents the young fish from acquiring that stable position, which seems indispensable to its prosperity, and even to the continuance of its life. At the same time, the mud by its increase, and also by its fluctuations, covers these animals on the bottom; and in this manner becomes fatal to their multiplication. It is supposed, that the increase of mud in the harbour has been injurious to fish of other kinds.

Ship building is but little followed here, at the present time. Formerly it was a considerable employment.— The reason of its decline is undoubtedly this : that vessels can be built at a rate, somewhat cheaper, in the neighboring towns.

There are eight principal roads which centre at New-Haven; to New-York, to New-Milford, through Derby, to Woodbury through Humphreysville, to Litchfield, to Farmington, to Hartford, to Middletown, and to Saybrook. These, together with their branches, proceed to every part of the United States. The six first are turnpike roads.

There are seven bridges in New-Haven; Harbour bridge, Dragon bridge, Long bridge, Neck bridge, Thompson's bridge, Derby Turnpike bridge, and West bridge. The three first are over the Quinnipiack; the three last are over West river. The Harbour bridge, erected below the junction of Mill river with the Quinnipiack, and at the entrance of the common stream into the harbor, is the only one of these which deserves a description. This bridge is half a mile in length, and 27 feet in breadth. One half of it consisted originally of two piers of stone, commencing at the two shores, and occupying each, one fourth of the whole distance. The remainder was a bridge, built on wooden piers, or trestles. These were, in many instances, destroyed by the sea worms, within five or six years; and demanded continual repairs. In the beginning of February, 1807, this part of the structure was swept away by a deluge. The same year it was repaired; when the stone piers were so far extended, as to occupy the whole distance, except 30 rods. The whole expense has amounted to 60,000 dollars. The stock is divided into sixty shares; more than one half of which is the property of Isaac Tomlinson, Esq. Under the direction of this gentleman, a valuable wharf of stone has been extended from the south side of the bridge, along the western borders of the channel. From this wharf the largest vessels, used in our commerce, can take in their cargoes. In 1810, the profits of this Bridge were sold at auction for Fifteen Hundred Dollars.

I know of no efficacious defence against sea-worms, beside either sheathing with copper, or driving iron nails so near to each other, as to stain the whole surface of the wood. The Scottish larch is said not to be eaten by these worms; and the same has been asserted of the hickory. Wood, on which the bark has been left, is much less eaten than that, which has been stripped, or hewn.

There is no ferry in this town.

The number of houses for public worship in New-Haven is six; three Presbyterian, one Episcopalian, one Methodist, and the College Chapel.

The first Church in this town was formed under a very large oak tree in George-street, near the junction of College-street. The building, in which they first met, was finished in 1646.

The White-Haven Church was formed May, 1742.

Fair-Haven Church was formed June 10th, 1770.

White-Haven and Fair-Haven Churches and Congregations were reunited, under the name of the United Society, in 1796.

The Episcopal Congregation was formed in the year 1755.

The methodist Congregation was formed in the year 1807.

The first Minister of the First Society was the celebrated Mr. John Davenport; a man eminently distinguished in the history of his own times for his talents, learning, zeal and piety. With him Mr. Samuel Eaton, Mr. William Hook, and Mr. Nicholas Street, were teaching elders; and Mr. Robert Newman ruling Elder. Mr. Davenport removed to Boston in 1667; and died March 16th, 1670, aged 73. After his removal to Boston, Mr. Street continued the only teacher of this Congregation, until his death, April 22d, 1674. The Congregation was without a Minister from that time 'till July 2d, 1684; when the Rev. James Pierpont was ordained as their Pastor, and continued in this office till his death, which took place Nov. 14, 1714. Under his Ministry the Church and Congregation, which had never been entirely harmonious before, became, and con-

tinued, very happily united. Mr. Pierpont was a man of exemplary piety, uncommon prudence, and very amiable manners; and was eloquent and mighty in the Scriptures.

From the death of Mr. Street the offices of teaching and ruling Elder ceased.

Mr. Pierpont was succeeded by the Rev. Joseph Noyes, July 4, 1716.

March 1st, 1758, the Rev. Chauncey Whittlesey was ordained his colleague.

Mr. Noyes died June 14, 1761, in the 73d year of his age. He was a discerning and judicious man, prudent, hospitable and patient; but more distinguished for the readiness and propriety of his prayers, than for the eloquence of his discourses. He was first a Tutor and afterwards a Fellow, of Yale-College.

Mr. Whittlesey died July 24, 1787, aged 70. He was six years a Tutor in Yale-College, and was greatly respected by his pupils for his learning and science, his affability and dignity, his philanthropy and integrity. As a Minister he was deservedly holden in high respect; and the Congregation under his pastoral care was harmonious and happy.

Mr. Whittlesey was succeeded April 29, 1789, by the Rev. Doctor James Dana, who was dismissed January 21, 1806, at his own request. Doctor Dana is still living.

The Rev. Moses Stuart was ordained March 5th, 1806; and was dismissed January 9, 1810, having been chosen Professor of Sacred Literature in the Theological Seminary at Andover, in Massachusetts.

The first Minister of the White-Haven Congregation was the Rev. Samuel Bird, formerly pastor of the church in Dunstable, Massachusetts. He was installed here October, 13, 1751, and was dismissed at his request, January 19th, 1768. He died May 3, 1784, aged 64.

Mr. Bird was succeeded by the Rev. Doctor Jonathan Edwards. He was dismissed May 19, 1795. In January 1796, he was installed pastor of the church in Colebrook, in the County of Litchfield. In June, 1799, he was elected President of Union College in Shenectady.

In this office he continued till his death; which took place August 1st, 1801, in the 57th year of his age. The character of Dr. Edwards is sufficiently well known.

The first pastor of Fair-Haven church was the Rev. Allyn Mather, who was ordained February 3d, 1773. He died Nov. 4, 1784, at Savannah, in Georgia, (whither he went for the recovery of his health,) aged 37.

The Rev. Samuel Austin, successor to Mr. Mather, was ordained pastor of this Church Nov. 9, 1786; and dismissed Jan. 19, 1790. Doctor Austin is now pastor of the first church in Worcester, Massachusetts.

The first Minister of the United Congregation was the Rev. John Gemmil; who was installed Nov. 7th, 1798; and was dismissed Nov. 22, 1802. He is still living. The second Minister of this Congregation is the Rev. Samuel Merwin; ordained February 13, 1805.

The Rev. Ebenezer Punderson was the first Minister of the Episcopal Society; in which he continued from 1755 to 1762; when he removed to Rye, in the State of New-York, where he died at an advanced age.

The Rev. Solomon Palmer succeeded him, in 1763, and continued until 1766. He removed to Litchfield, in this State, where he died soon after.

The present Minister, the Rev. Doctor Bela Hubbard, took the charge of this Congregation in the autumn of 1767. The Rev. Henry Whitlock was instituted Assistant Minister, August 29th, 1811.

The salary of the last Minister, in the First Society, was 800 dollars per annum. Mr. Whitlock's salary is the same. Mr. Merwin's is 700.

Each of the Congregations in this town is possessed of a fund for the support of the Ministry. The fund of the First Society amounts to 11,685 dollars and 10 cents; and consists of bank stock and money at interest.

The fund of the United Society is 4,682 dollars; and consists of money at interest.

The fund of the Episcopal Society consists of lands in the city of New-Haven; the rents of which amount to 569 dollars and 75 cents, annually. They will soon

produce more ; as several of the leases will expire after a short time, and the rents will of course be raised.

The number of Schools in the township of New-Haven in the year 1801, as taken by Noah Webster, jun. Esq. one of the visitors, were fifteen public, and six private, schools ; 21. The number of children, taught in them, was 787. To these have been since added two private schools : one of them a female Academy, established by the Rev. Mr. Herrick.

The first of these, in order, is Hopkins' Grammar School.

The Hon. Edward Hopkins, Esq. for some time Governor of the colony of Connecticut, bequeathed "the principal part of his estate, in New-England, to Theophilus Eaton, Esq. Mr. Davenport, Mr. John Cullick, and Mr. William Goodwin, for the breeding up hopeful youths in a way of learning, both at the grammar school and college, for the public service of the country in future times." This property was estimated at about a thousand pounds sterling; and was ultimately divided into three parts; one of which was retained at New-Haven, another was carried to Hartford, and another to Hadley, in Massachusetts. That part of the legacy which was left in this town, produces annually the sum of 70%. There is a decent school house, together with the land on which it stands, belonging to this institution.

A small sum is paid by the students for tuition. The number of students is considerably varied at different times.

There are two schools designed for English students. One of these is called Union School, the other the New Township Academy. Both have two departments, one for males, the other for females : both are good schools. Each contains, ordinarily, from eighty to a hundred children. The Union School was incorporated Nov. 1801; the New Township Academy May, 1809. The remainder are either the ordinary parochial schools, or private schools of a similar character.

The object which, in this class, is undoubtedly far the most interesting in a statistical account of New-Haven, is Yale College.

This seminary is commonly said to have been founded

in the year 1700. Ten of the principal ministers, nominated by a general consent, both of the clergy and the inhabitants of Connecticut, viz.

The Rev. James Noyes, of Stonington,
Israel Chauncey, of Stratford,
Thomas Buckingham, of Saybrook,
Abraham Pierson, of Killingworth,
Samuel Mather, of Windsor,
Samuel Andrew, of Milford,
Timothy Woodbridge, of Hartford,
James Pierpont, of New-Haven,
Noadiah Russel, of Middletown, and
Joseph Webb, of Fairfield,

met at New-Haven; and formed themselves into a society, which, they determined, should consist of eleven ministers; including a rector; and agreed to found a college in the colony. At their next meeting, which was at Branford the same year, each of them brought a number of books; and, presenting them to the society, said, "I give these books for the founding of a college in this colony." Antecedently to this event, the subject had been seriously canvassed by the clergy, particularly Messrs. Pierpont, Andrew, and Russell, of Branford, and by the people at large, during the two preceding years; and had come thus far towards maturity.

The first house in the colony of Connecticut was erected in the year 1635; and the first in the colony of New-Haven in 1637.

The act of the legislature which gave birth to Harvard College, was passed in 1636. Only ten years, therefore, elapsed after the beginning of a settlement in Massachusetts, before a college was commenced in earnest: whereas sixty-five years passed away after the colonization of Connecticut was begun, and sixty-three after that of New-Haven, before any serious attempt was made toward the founding of Yale College. But we are not hence to conclude, that the colonists of Connecticut and New-Haven were at all less friendly to learning than those of Massachusetts. The project of establishing a college in each of these colonies was very early taken up; but was checked by well founded remonstrances from the people of Massachusetts; who very justly observed,

that the whole population of New-England was scarcely sufficient to support one institution of this nature, and that the establishment of a second would, in the end, be a sacrifice of both. These considerations put a stop to the design for a considerable time.

Of the serious design of the New-Haven colonists to establish a college, the following document, copied from the records of Guilford, furnishes decisive evidence.

"At a General Court, held at Guilford, June 28th, A. D. 1652.

"Voted, 'the matter about a college at New-Haven, was thought to be too great a charge for us of this jurisdiction to undergo alone; especially considering the unsettled state of New-Haven town; being publicly declared, from the deliberate judgment of the most understanding men, to be a place of no comfortable subsistence for the present inhabitants there. But if Connecticut do join, the planters are generally willing to bear their just proportions for erecting and maintaining of a college there. However, they desire thanks to Mr. Goodyear, for his kind proffer, to the setting forward of such a work."

In October, 1701, the legislature granted these gentlemen a charter, constituting them "Trustees of a Collegiate School in his Majesty's Colony of Connecticut;" and invested them with all the powers which were supposed to be necessary for the complete execution of their trust.

The following November, they chose one of their number, Mr. Pierson, rector of the school; and determined, that it should be fixed, for the present, at Saybrook.

In the year 1702, the first Commencement was held at Saybrook; at which five young gentlemen received the degree of A. M.

From this time many debates arose concerning the place where the school should be finally established; and continued to agitate the community until the year 1718. In 1716, a majority of the trustees voted, on the 17th of October, to remove the school to New-Haven. Four of their number, out of nine, were however strongly against

it: and the community was equally disunited. The trustees, nevertheless, proceeded to hold the Commencement, the following year, at New-Haven, and to order a college to be erected. It was accordingly raised in October, 1717, and finished the following year. This building they were enabled to erect by a considerable number of donations, which they had received for this purpose, both within and without the colony. Their principal benefactor, both during this period, and all which have succeeded, was the legislature.

Among the individuals who distinguished themselves by their beneficence to this infant institution, was the Hon. Elihu Yale, Esq. of London, Governor of the East-India Company. This gentleman was descended of an ancient and respectable family in Wales; which for many generations possessed the manor of Plas Grannow, near Rixon. His father, Thomas Yale, Esq. came from England with the first colonists of New-Haven. In this town his son Elihu was born, April 5th, 1648. He went to England at ten years of age; and to Hindoostan at thirty. In that country he resided about 20 years; was made Governor of Madras; and married the widow of Governor Hinners, his predecessor. By this lady he had three daughters: one of which married Dudley North, Esquire; and another, Lord James Cavendish, uncle to the Duke of Devonshire. Having acquired a large fortune, he returned to London; was chosen Governor of the East-India Company; and died at Rixon, July 8th, 1721.

This gentleman sent, in several donations, to the Collegiate school, 500 pounds sterling, between 1714 and 1718; and, a little before his death, ordered goods to be sent out, to the value of 500 pounds more; but they were never received.

In gratitude to this benefactor, the Trustees, by a solemn act, named their seminary Yale-College; a name, which, it is believed, will convey the memory of his beneficence to distant generations.

The College, which was erected at this time, was built of wood; 170 feet in length, 22 in breadth, and of three stories; and was, for that period, a handsome building. Before it was erected, the students were scattered

in various places; at Milford, Killingworth, Guilford, Saybrook, Wethersfield, &c. Soon afterward they all removed to New-Haven. From this time the Institution began to flourish. The number of students was about 40; and the course of education was pursued with system, and spirit. The benefactions also, which it received, were increased in number and value.

In the list of its principal benefactors, was the Rev. Doctor Berkley, dean of Derry, in Ireland, and afterward Bishop of Cloyne. This highly respectable man came to America in the year 1732, for the purpose of establishing a College in the island of Bermuda. The project failed, however, because 20,000 pounds sterling, promised to him by the Minister, was never paid. While he was in America, he became acquainted with the Rev. Mr. Williams, and with the design, and circumstances, of the Seminary. With all these he was so well pleased, that he made a present to it of a farm, which he had purchased at Middletown, on Rhode-Island; and after his return to Europe, sent to the library "the finest collection of books that ever came together at one time into America."*

Jeremiah Dummer, Esq. of Boston, and the Hon. James Fitch, Esq. of Norwich, deserve to be mentioned, as distinguished benefactors of the Institution. Sir Isaac Newton also, Sir Richard Steele, Doctors Barnet, Woodward, Halley, Bentley, Kennet, Calamy, Edwards, the Rev. Mr. Henry, and Mr. Whiston, presented their own works to the library. Many other respectable men afterwards made similar presents.

In 1745, a new charter, drawn by the Hon. Thomas Fitch, Esq. of Norwalk, afterwards Governor, was given to the Trustees; in which they were named *The President and Fellows of Yale-College*. This is the present charter of the Institution. A long course of experience has proved, that the provisions in it were wisely formed; and are sufficiently minute and comprehensive, to answer all the purposes, within the reach of the Institution.

In the year 1750 another College was built of brick;

* President Clap's Hist. of Yale-College.

100 feet long, 40 wide, and of three stories ; at the expense of 1660 pounds sterling.

In April 1761, a Chapel was begun ; and finished in 1763. The Hon. Richard Jackson, Esq. M.B.P. gave towards the finishing of this building 100 pounds sterling.

In the year 1792, the Rev. Doctor Salter, of Mansfield, left a legacy to the Institution, for the purpose of furnishing instruction in the Hebrew language.

In the year 1791, the Rev. Doctor Lockwood, of Andover, in this State, gave £ 336 14 0, the interest of which is to be employed in increasing the library ; and some time before, 100 pounds towards increasing the apparatus.

In the year 1807, the Hon. Oliver Wolcott, Esq. late Secretary of the Treasury of the United States, gave 2000 dollars for the purpose of increasing the library. The interest only of the three last donations, except the 100 pounds, given by Doctor Lockwood to increase the apparatus, is to be employed for the purposes specified.

In the year 1792, the Legislature, at their session in May, gave to the Institution the arrearages of certain taxes, which had for some time been due to the State, in its paper currency ; with the condition annexed, that the Governor, Lieut. Governor, and six senior Councilors, for the time being, should, by a vote of the Corporation, be received as members of their Board : the Clerical side of the Board, however, retaining the power of filling up its own vacancies. The proposal was unanimously accepted by the Corporation in June ; and the following September these gentlemen took their seats. From that time to the present the Trustees have consisted of the Governor, Lieut. Governor, and six senior Councilors ; the President, and ten Fellows, being Clergymen. This measure was on every account desirable, and has in all its consequences been happy.

In the year 1755, a Professorship of Divinity was established in this Seminary ; in 1770, a Professorship of Mathematics and Natural Philosophy ; in 1801, a Professorship of Law ; in 1804, a Professorship of Chemistry and Natural History ; and in 1805, a Professorship of Languages and Ecclesiastical History.

The College Faculty, to which the executive government is committed, consists of the President, Professors, and Tutors. The senior class is instructed by the President; and recites once every day. The three junior classes are distributed into two divisions each; and each is placed under its own Instructor. They recite three times a day, four days in the week; and twice, the two remaining days.

The Professor of Divinity preaches a system of Theology once in four years: a systematical sermon being delivered on the morning of every sabbath in Term time. He also delivers an informal lecture to the senior class every week; completing in this manner a system of Theology each year.

The Professor of Mathematics and Natural Philosophy goes through a course of Philosophical experiments with the junior class every year; and delivers two lectures to the senior class every week.

The Professor of Chemistry delivers 120 lectures in that science, every year, to the two elder classes; so that each class hears a complete course of chemical lectures twice. These are delivered in the Laboratory; a room peculiarly convenient for this purpose. Here they have the advantage of seeing every experiment, both preparatory and illustrative, commenced, and completed. In a common lecturing room this would be impracticable.

The Chemical Professor also delivers private lectures on Mineralogy.

The Professor of Languages and Ecclesiastical History will deliver a complete course of lectures on the latter subject.

The Professor of Law is required to go through a course of lectures on the Law of Nature, the American Constitution, and the Jurisprudence of Connecticut.... At present, this professorship is vacant.

A Medical Institution is established in this Seminary; but has not begun its operations. It is to consist of three Professorships, beside that of Chemistry; one, of the Materia Medica; one, of Anatomy and Surgery; and one of the Theory and Practice of Physic.

The academical buildings consist of three colleges; named Connecticut Hall, Union Hall, and Berkeley Hall;

a Chapel, containing in the third story a Philosophical Chamber, and rooms for the philosophical apparatus; and a building resembling the Chapel in form, and named the Connecticut Lyceum. This building contains seven recitation rooms, a chemical Laboratory and its appendages, two chambers occupied by Professors, and the Library. The three colleges contain ninety-six chambers.

The number of books in the library is between five and six thousand volumes.

The philosophical and chemical apparatus are, both, extensive and complete.

A valuable cabinet of mineralogical specimens is a part of the collegiate apparatus.

In May, 1811, George Gibbs, Esq. late of Newport, and now of Boston, deposited in this Seminary a superb cabinet of minerals; the original cost of which to the European Proprietor is said to have been 4,000 pounds sterling. These are arranged in a chamber 36 feet in length, and 16 in breadth; and cover the walls.

The situation of the academical buildings is eminently pleasant; fronting the green on the northwestern side, upon a handsome elevation, with a handsome court yard before them. The buildings are plain, but so well arranged, as to strike the eye with peculiar pleasure.

Beside these buildings there are belonging to the College, a kitchen and dining hall for the students, and three dwelling houses.

The female academy, under the instruction of the Rev. Mr. Herrick, is believed to be one of the best schools of this nature in the United States. The instructions given in it, are calculated to expand the mind, and amend the heart, with sound wisdom. Young persons of the female sex are here withdrawn from that frivolity, and those trifles, which unhappily are too often made significant parts of female education; and habitually allured to sober thought, useful knowledge, and the best principles.

The township of New-Haven is divided into two school districts.

Some of the Instructors receive fixed salaries; oth-

ers depend for their reward upon tuition. The highest salary given to a male Instructor, is 500 dollars; and the highest to a female Instructor, the same sum.

The price of board is from two to three dollars per week, including washing and lodging.

The highest price of tuition is six dollars per quarter: the lowest, 8 1-2 cents per week. In the public English schools, tuition is free.

In 1811 the public schools in the city, kept by men, were 4, and the number of scholars, 160: by women, 17, and the number of scholars 661. These schools were supported by the public money for the term of 13 weeks each. The stipend to the men is 25 dollars per month each: that to the women is proportioned to the number of scholars, at the rate of 8 1-2 cents per week each. The whole number of scholars in all the schools in the city, the present summer, was, between 1100 and 1200.

In some or other of these schools all the kinds of instruction are given, which precede an admission into a College; and several of those, which are taught in Colleges.

There are two interesting objects in this town, not alluded to in any question in the circular letter; which yet well-deserve to be mentioned.

The first of these, is the Long-Wharf. This is a pier extending from the head of the harbour, at the bottom of Fleet-street, to the channel. The last fourth of this distance is incomplete at the present time, but will be finished this season; and is built wholly of stone. The other three fourths are built of wood, sods, and earth. Its breadth for more than half the distance is 45 feet, for the rest 32. This structure is 3943 feet in length; and is more than twice the length of Boston Pier. About half the distance it is lined with ware houses, and their yards, to the number of 40. This work has been accomplished by a company, incorporated by the name of the Union Wharf Company of New-Haven. The property has hitherto yielded a good rent.

The other is the new Cemetery. This is a field, lying opposite to the north corner of the original town, handsomely smoothed and inclosed. It is divided into

parallelograms, neatly railed and separated by alleys of sufficient breadth to permit carriages to pass each other. The whole field, except four lots, given to the several Congregations, and the College, and a lot destined for the interment of the poor, is divided into family burying places, purchased at the expense actually incurred, and secured by law from every civil process. Each parallelogram is 64 feet in breadth, and from 180 to 200 feet in length. Each family burying ground is 32 feet in length, and 18 in breadth; and against each an opening is made, to admit a funeral procession. At the divisions between the lots, trees are set out in the alleys; and the name of each proprietor is marked on the railing.

The monuments in this ground are almost universally of marble: in a few instances from Italy; in the rest, found in this and the neighbouring States. A considerable number are obelisks; others are tables; and others, slabs, placed at the head and foot of each grave. The obelisks are arranged universally on the middle line of the lots, and thus stand in a line, successively, throughout each of the parallelograms.

After the ground was distributed into lots, they were all thrown into a common stock. A meeting was then summoned of such inhabitants, as wished to become proprietors. Such, as attended, drew their lots; and located them at their pleasure. Others have since purchased lots; so that a great part, or the whole, of the field is now taken up.

It is believed, that this cemetery is a novelty. I have accompanied to it many foreigners, and many Americans, who have travelled extensively on the Eastern continent; none of whom had ever seen, or heard, of any thing of a similar nature. An exquisite taste for propriety is discovered in every thing belonging to it; exhibiting a regard for the dead, reverential, but not ostentatious; and happily fitted to influence the feelings, and views, of succeeding generations. No spot of ground, within my knowledge, is equally solemn and impressive.

At the same time, it precludes the use of vaults, by taking away every inducement to build them. These melancholy, and I think I may say disgusting, mansions, seem not to have been dictated by nature; and are cer-

tainly not approved by good sense. Their salubrity is questionable; and the impression, made by them on the mind, transcends the bounds of mourning and sorrow, and borders, at least, upon loathing. But families naturally wish to be buried together; and this propensity is here gratified.

It ought to be added, that when the lots were originally distributed, the proprietors gave one to each of the Clergymen, who were then inhabitants of the city.

There is an Almshouse belonging to New-Haven, which is also a Work-house. All the poor, supported by the inhabitants, reside here, except those who need only a partial support; or who are supported only for a short time; or who are the subjects of some infectious disease. An Agent is employed by the Selectmen to make the proper provisions for the house; and a master, residing in it, has, under the control of the Selectmen, the immediate charge of its inhabitants.

Of these, such as are able, are employed in those services and labours, which circumstances permit; but so many of them are small children, aged, deranged, sick, or disabled, that the avails of their labour are, and must be, of no great value.

The number of poor in the Almshouse is, annually, from fifty to seventy-five. Of the utmost number about sixty may be considered as inhabitants of New Haven, and as supported at the expense of the town. The following statement of expense, incurred by maintaining the poor in New-Haven, for the years 1805 and 1806, is nearly exact.

1805.—Whole expence of Almshouse,	\$ 2,615 00
Whole expence out of Almshouse,	802 86
	3,417 86
Deduct receipts for State paupers,	616 26
do. do. avails of labour,	237 78
do. do. from the U. States,	93 49
do. do. from sundry towns } and individuals,	228 06
	1,175 59
Total expence to New-Haven,	2,242 27

1806.—Whole expense of Almshouse,	8 2,650 29
Whole expense out of Almshouse,	1,042 48
	3,692 77
Deduct receipts for State poor,	999 42
do. do. United States,	64 25
do. do. for avails of labour,	306 54
do. do. from sundry towns } and individuals,	593 82
	1,964 03
Total expense to New-Haven,	1,728 74

The year 1806 was a year of unusual health; which was probably the reason, why the expense was lower than that of the preceding year.

The poor, supported in the Almshouse, are supported, and treated, with humanity. The wandering poor, who are often received into it during the winter, consider it generally as their home: and return to it at the close of autumn, as the only habitation, in which they have found a comfortable and desirable residence.

I have no particular information concerning the modes of life, which they have pursued, previously to their enrolment on the list of paupers. By various circumstances I am, however, induced to believe, that a considerable number of them may safely attribute their indigence to sloth, and ardent spirits.

The number of free blacks in the city of New-Haven was, in the year 1800, 150.

Their vices are of all the kinds, usually intended by the phrase "*low vice*." Uneducated to principles of morality, or to habits of industry and economy, they labour, only to acquire the means of expense, and expend, only to gratify gross and vulgar appetite. Accordingly, many of them are thieves, liars, profane, drunkards, sabbath-breakers, quarrelsome, idle, and prodigal, the last in the extreme. Their ruling passion seems very generally to be a desire of being fashionable. Their ambition in dressing is not so much to be dressed richly, gaily, or splendidly, as to be dressed fashionably. Their wish is not merely to dance, and frolic, but to have genteel as-

semblies, collected by tickets, and regulated by managers. The difference between them, and the whites, who are the nearest to them in their circumstances, is entire. The whites are generally satisfied with being decent, with being dressed in such clothes, and living in such a manner, as they can afford: the blacks appear to covet nothing, but to be genteel; and ape those who are above them, or rather people of fashion, in a manner sufficiently ridiculous. No well bred people are mutually so respectful, or adopt so precise, and attentive a ceremonial. The expense of such a mode of life their earnings will not sustain; and, to supply it, a considerable number of them scruple not to engage in dishonest practices.

There are, however, exceptions to this character; and a greater number among the females, than among the males. Almost all, who acquire an attachment to property, appear to assume better principles; or, at least, better practices. Several of the men have in this manner become good members of society. A number of the females are well behaved.

Six of these people are communicants in the two presbyterian churches in this town.

The committee for completing the Long-Wharf, have contracted with two black men to execute 50 rods in length of this *work, and 32 in breadth, at 3 cents per cubic foot. This contract is an honourable proof of the character, which they sustain, both for capacity, and integrity, in the view of respectable men.

There are lately set up in this city two schools for the education of black children; one for males, and the other for females: the latter is a charity school. These institutions furnish the first rational hope of a reformation among the people.

The years 1762, and 1763, especially the last, were uncommonly dry, throughout New-England. In the year 1782 there was a severe drought during the latter part of the summer, and the autumn. In pastures, even where they were rich, the roots of the grass were in many places killed.

The year 1796 was also remarkably dry. The gardens here, and in many other places, chiefly perished.

* The depth is estimated at 16 feet.

In one garden, the use of fresh ashes, as manure, strewed around the plants at different times, appeared to be an efficacious defence against the drought.

The year 1800 was also very dry throughout a large part of the country; but less so in New-Haven than in many other places.

The year 1805 was very dry in this part of the country; and the gardens extensively perished.

The year 1795 was, during the summer, and the first part of the autumn, wetter than any other year within my knowledge. In ten weeks it rained thirty-five days; the whole of some days, and a part of others. The weather was also very hot. Every thing corruptible by weather, exhibited proofs of that corruption. Books, linen, other clothes and furniture, paper hangings, and even wood, moulded. Plants in the garden perished by dissolution, in every stage from their germination to maturity. The seeds of the hollyhock, the pea, and the bean, sprang in the pod; and grew in many instances several inches. At the foot of small declivities in the highways the ground suddenly sunk under a horse, as at the breaking up of the frost in February, or March.

The years 1807, 1808, 1809, were also very wet.

In the year 1796, on Sunday, October 8th, a tornado passed over New-Haven. Its ravages, according to the information which I have received, commenced at Lower Salem in the County of West-Chester. Here, and at Ridgefield in Connecticut, the devastation was great.—From this point to East-Haven its most violent progress was through a higher region of the atmosphere. At East-Haven it blew down the steeple of the Presbyterian church, destroyed some private buildings, and damaged several others. At Branford its ravages resembled those at East-Haven. The storm was violent at New-Haven; but little damage was done.

In the year 1792 there was also a storm of the same nature, accompanied with hail, which, in passing over this city broke the windows of several houses. A great snow fell on the 17th of February 1707. It is said to have been the first which fell that year. Another fell in 1739 or 1740. This snow was in some places so deep, that persons are said to have walked into the chamber

windows of several houses, which had low ceilings. If there is no error in this account; it was probably true, only where the snow was raised in drifts.

In the beginning of Jaunary, 1780, the snow fell four feet in some places, and four and a half in others, throughout New England, New-York, and New Jersey.

The greatest snow, within my knowledge, fell from the 20th to the 26th of February 1802. The storm blew with violence through the whole of this period; and appears to have covered the whole of New England, a great part of the state of New-York, and probably some of the countries further west and south, with a mass of snow and hail, full four feet deep. In the open grounds it was thrown, remarkably, into waves. It was at least twice as dense, as snows usually are. The stage, which left New-York on Monday, did not reach New-Haven 'till Thursday; although the passengers carried shovels, with which they forced a passage in the most difficult places. The stage driver, and several of the passengers, who came from New-London, were badly frozen. A farmer in Wallingford, who set out for New-Haven at the commencement of the storm, with his waggon, reached this town at the dusk of the evening; although the distance is only twelve miles. He was so exhausted by his sufferings, that he fell down in College street; and would have perished, had he not been taken up, and carried into a house.

A few years before 1667, the Canker-worm appeared at New-Haven, and did much mischief to the apple trees. Mrs. Jones, from whom is descended the present family of Jones in this town, and to whose manuscript journal I am indebted for this information, has not mentioned the year, in which they made their first appearance. They have perhaps existed here ever since; although at times they have been nearly extinct.

In the year 1795 the millers, or flies, were hindered by the frost from coming out of the ground at the usual season in February. The first Sunday in March was remarkably warm; and a small number of them escaped out of the ground. This fine weather continued through Monday, and Tuesday; on the evenings of both which they ascended the trees in immense multitudes. On

Wednesday there fell a wet, heavy snow, about five inches deep; which, lodging on the trees, benumbed them; and, when it fell, forced them to the ground, before they had deposited their eggs. Here they were buried, and destroyed. From that time until the year 1808, they scarcely appeared at all. They are now very numerous.

The only mode of preventing their ravages, which has been extensively used in this part of the country, is to form a swathe of tar around the stems of the trees, at a little distance from the ground, every night, during the period in which the millers ascend. Trees, which have been thus tarred forty years, are perfectly healthy and flourishing.

The Rose bug, one of the most destructive of all insects, began to appear in New-Haven, in considerable numbers, a few years since; and has increased not a little the present year. During seven years, while I resided at Greenfield, this insect, in numbers apparently infinite, ravaged that parish, and parts of the surrounding country, in a distressing manner. It consumes apples, cherries, apricots, plums, peaches, and grapes. It eats also quinces, strawberries, and raspberries, at times; but not to any great extent; and it regularly picks out all the best flavoured species of apples, cherries, plums, and peaches; but entirely neglects those, which are ill flavoured, unless compelled to eat them by a scarcity of those, which are better. It eats also, the leaves of several sorts of cherry trees, plum trees, and grapes; the leaves of the horse chesnut, of the snowball, &c. Like almost all other insects, they burrow in the ground; particularly in that which is cultivated. I destroyed two thirds, or three fourths, of those which ravaged my fruit, by plowing my garden in November 1794.

In 1739, or 1740, the large, black, travelling worm, called the Grass worm, and the Palmer worm, appeared in immense numbers in some parts of this country.

In 1770 the same worms appeared again, in countless multitudes, throughout a great part of Massachusetts and Connecticut. They were about two inches in length; were striped longitudinally, with a brilliant black and white; and had eyes remarkably large, black, and glistening. They moved directly forward in their course

from east to west; and devoured almost every thing in their way; particularly grass, and grain. A field of grass, over which they had passed, appeared as if it had been mown with a dull scythe. When they died, they filled the neighboring places with a loathsome foetor; which was followed in several parts of the country by an endemical fever, and frequently by death.

During the latter part of their ravages the farmers prevented them, in various places, from ravaging their fields, by inclosing them with a trench, formed by ploughing a single furrow, and turning the earth towards the field.—As they attempted to climb out of this trench, the loose particles of the earth gave way under their feet; so that they fell back into the trench, and died.

Between thirty and forty years since there was, in many places, a sudden and unprecedented destruction of the vines of the watermelon. I first saw it in my own garden, at Northampton, (Mass.) in a very large and remarkably flourishing bed of watermelons. When the fruit had begun to be about half the full size, the vines began to die at one corner, and in three weeks were all destroyed. The most critical investigation did not enable me to discover the cause of the mischief, until about six or seven years afterward. I then found upon the root a louse, not very unlike that which destroys cabbages; but larger, of a faded green colour, approximating to brown. This animal eats the bark of the root, and finally destroys the plant. It adheres so loosely, that when the plant is pulled up, the earth generally brushes it off, and therefore fails of being discovered. Wherever this enemy attacks the plant, the leaves, near the root, become stiffened, assume a glassy appearance, and fade into a brown hue. Soon the vines will die very suddenly, to a great extent. The fruit, also, becomes spotted with decaying spots, of the colour of iron mold upon linen. This insect has spread so extensively through the country, that a great multitude of persons, finding their watermelons regularly destroyed, and attributing the destruction to some unknown change in the climate or in the soil, have given up all attempts to cultivate them.

One year I preserved my watermelons at Greenfield,

by frequently drenching the earth immediately round the roots, with a strong decoction of Burdock leaves and elder twigs; which I took care to direct to the roots of the plant, by making eight or ten holes around them, about six inches deep, with a stick three fourths of an inch in diameter. This process I was obliged to repeat after every shower: For the rain diluted the bitter liquid to such a degree, that the louse, which had been only driven off by its disagreeable taste, returned again to its prey. In a dry season it may be adopted without any serious inconvenience: In a wet one it is too laborious to be pursued.

Antecedently to the year 1735 and 1736, no particular accounts of the diseases, in this town, are recorded. About the year 1736 the Angina maligna was prevalent, and extensively fatal. It appeared in 1742; and most of those, whom it seized, it carried off. The constitutions of those who survived are said, by persons who were witnesses of its effects, to have been greatly impaired. It visited this town again in 1773 and 1774; and was followed, in the autumn of each year, by a destructive dysentery. In 1794 about 750 persons were affected by it, of whom 52 died.

The most prevalent autumnal disease is the dysentery. Its greatest ravages were in 1751, 1773, 1774, 1775, 1776, 1777, and 1795.

In 1761 an inflammatory fever prevailed here, which was fatal in a considerable number of instances. In East-Haven it carried off the same year above forty of the most robust inhabitants.

In 1794 the Yellow fever appeared in New-Haven. Of 160 persons, who were seized by it, 64 died.

In 1805 a few cases of fever, resembling the Yellow fever, appeared in July; and one, in October.

The Typhus fever became epidemic in the autumn of 1805, and continued through the winter following. It was near forty years since it had appeared before. But from that time, the existing fevers have generally assumed a Typhus character.

Of Chronic diseases, Dyspepsia, consumptions, and affections of the liver, appear to be the most common.

The measles were epidemic in 1739, 1748, 1758, 1772, 1783, 1789, 1790, 1795, and 1802.

Influenza, 1737, 1747, 1757, 1761, 1771, 1781, 1789, 1790, 1802.

In the year 1796, the town of New-Haven granted 200 dollars, for the purpose of destroying the barberry bushes, within its limits. Individuals are supposed to have expended at least as much more. They were principally destroyed, except upon Mount Pleasant. The method adopted to destroy them, was to eradicate them. The following year there was no blast; and from that time to the present both the wheat, and the rye, have been generally free from this evil.

That these bushes have a serious influence in blasting wheat, and rye, has long been belived both in this, and other countries; and the facts, by which this opinion is supported, are so numerous and decisive, as to place it, apparently, beyond any reasonable dispute. A farmer, in Brookhaven, sowed a particular field with wheat every other year, for near twenty years. On the southern limit of this field grew a single barberry bush. The southern winds prevailing at the season, in which this bush was in bloom, carried the effluvia, and afterwards the decayed blossoms, over a small breadth of the field, to a considerable distance: and, wherever they fell, the wheat was blasted; while throughout the remainder of the field it was sound. This account I had from a respectable gentleman, who received it from the farmer himself; a man of fair reputation.

In Southborough, a town in the county of Worcester, a Mr. Johnson sowed with rye a field of new ground; or ground lately disforested. At the south end of this field, also, grew a single barberry bush. The grain was blasted throughout the whole breadth of the field, on a narrow tract, commencing at the bush, and proceeding directly in the course, and to the extent, in which the blossoms were diffused by the wind.

In another field, the property of a Mr. Harrington, an inhabitant of the same town, exactly the same circumstances existed: and exactly the same mischief followed.

These two accounts I received from Mr. Johnson, a

son of the proprietor of the field first mentioned: a student at that time in Yale College, and afterwards a respectable clergyman in Milford.

As no part of the grain was blasted in either of these cases, except that which lay in a narrow tract, leeward of the barberry bushes; these facts appear to be decisive, and to establish the correctness of the common opinion. Should the conclusion be admitted, we cannot wonder, that wheat and rye should be blasted, wherever these bushes abound.

The chief cause of blasting, however, is, in all probability, the too rapid growth of the grain in the month of June. Whenever the weather is wet and warm, at this season, grain is blasted almost of course. Whenever it is cool and dry, grain is bright and clean. A rapid vegetation, at this season, forces the juices through the stalk in such quantities, and with so much celerity, that they burst in various places; particularly at the neck, immediately below the ear; and the kernel is shrivelled for want of nourishment. The juices which thus exude, adhering to the outside of the stalk, become sour in the mean time, acrid, and ultimately what is termed rust. This process is universally increased by manure from the yard, and the stable. A dressing, formed of this manure, produces a more rapid vegetation, than any other used in this country; and is probably the chief cause, why fields in New-England, which used to yield wheat abundantly, are now extensively subject to blasting. Vegetable manure, such as vegetable mould, wood-ashes, clover, buckwheat, or oats, ploughed in, and suffered to decay, will rarely be followed by a blast. The same is true of mineral manures; such as lime and gypsum; and if I mistake not, of the white fish.

Of the cause of mildew I am ignorant.

The honey dew is nothing but the exuding of the saccharine juices of plants; as is evident from the fact, that it is never found on rocks, or any other substances, beside living vegetables.

A peculiar disease has, within a few years, attacked pear trees. A single limb begins to die at the extremities, and continues to die, till the mortification reaches

the stem. Another is then affected in the same manner; and another; until the tree perishes.

The only remedy for this evil, within my knowledge, is, to cut off the limb below the mortification. This has succeeded in a number of instances, and so far as I know, in all, where the experiment has been made.

A friend of mine has lately informed me, that pear trees are, in cases of this nature, attacked by a peculiar kind of worm.

The following statements will, in different ways, exhibit, in some degree, the state of the Commerce of this town.

Articles, cleared out in the District of New-Haven, between May 1st, 1773, and May 1st, 1774, taken from the books of George Mills, Esq. his Britannic Majesty's Collector for said District.

Horses,	1405	Bushels of wheat,	15,350
Oxen,	2005	Bushels of rye,	18,840
Hoops,	728,000	Bushels of In- } dian corn, }	32,780
Staves,	1,186,000	Pounds of flax,	120,200
Barrels of pork,	8152	Bushels of flax seed,	21,980
Barrels of pot and } pearl ashes, }	424	Barrels of flour,	2061

The District of New-Haven included at that time the whole coast of Connecticut, from Killingworth to its western boundary. I have not been able to obtain a statement for any other year, preceding the Revolution.

The number of vessels, entered at the New-Haven Custom-House, between the years 1783 and 1803 inclusive.

1783	<i>British.</i>	<i>American.</i>	<i>Danish.</i>
84	1	36	1
85	8	66	1
86	8	74	
87	2	89	
88	5	79	1
89	5	79	
90	4	67	
91	6	64	
92	5	57	
93	1	47	
94		51	
95	2	39	

	<i>British.</i>	<i>American.</i>	<i>Danish.</i>
1796		52	
97		47	
98	1	52	1
99	1	74	1 & 1 Spanish.
1800		67	
1	2	99	
2	1	81	
3		78	

Account of articles exported from the port of New-Haven in the year 1806, taken from the custom-house books.

Fish, cwt.	429	Cattle, heads,	2,198
bbls.	233	Poultry, doz.	897
Hoops,	387,000	Indian corn, bush.	6,203
Staves,	389,000	Oats, bush.	9,015
Beef, bbls.	5,349	Beans, bush.	340
Pork, bbls.	1,469	Flour, bbls.	5,597
Hams, lbs.	10,878	Indian meal, bbls.	16,995
Butter, lbs.	67,648	Leather, lbs.	20,298
Cheese, lbs.	18,693	Candles, lbs.	119,297
Lard, lbs.	24,589	Nails, lbs.	1,720

together with sundry small articles, as hats, shoes, &c. exported, all amounting to 466,367 dollars.

The foreign trade of New-Haven is, however, very imperfectly exhibited in this statement. A considerable number of its vessels, and cargoes, are entered annually in New-York; supposed to amount to nearly half of its tonnage. Some of them are also loaded at New-York, and cleared out from that port.

Of its coasting trade, the following account, taken from the shipping books of those who are concerned in it, for the year 1801, will furnish a correct view, so far as it is extended. The articles enumerated in it, were shipped wholly, or almost wholly, to New-York.

Pork, bbls.	1,889	Soal leather, lbs.	17,696
Beef, bbls.	1,689	Oars, feet,	3,708
Corn meal, hhds.	1,115	Bees' wax, lbs.	465
do. do. bbls.	1,193	Cider, bbls.	36
Rye flour, bbls.	232	Duck, bolts,	3
Butter, fir.	828	Ship bread, bbls.	6
Lard, fir.	609	Cordage, lbs.	12,531
Pork and beef hams, lbs.	23,624	Powder, casks,	41

Cheese, lbs.	219,702	Ground sumach, hhds.	18
Flax seed, bush.	6,372	Apples, bbls.	1
Clover seed, bush.	101	Shad, bbls.	23
Country gin, galls.	6,321	Barley, bush.	1,564
Nails, lbs.	13,990	Anchors, lbs.	13,280
Ale, galls.	1,200	Flannel, yds.	33
Flax, lbs.	11,146	Beans, bush.	279
Brooms, doz.	721	Walnuts, bush.	24
Pot-ashes, bbls.	102	Chesnuts, bush.	3
Candles, lbs.	38,746	Wooden bowls, feet,	600
Soap, boxes,	349	Wool cards, doz.	18
Tow cloth, yds.	14,129	Potatoes, bush.	139
Wrapping paper, reams,	2,027	Oats, bush.	530
Printing paper, reams,	160	Paper rags, lbs.	5,003
Writing paper, reams,	289	Tin ware, boxes,	6
Scythes, doz.	246	Indian corn, bush.	300
Linseed oil, bbls.	7	Maple sugar, tierces,	2
Cider brandy, galls.	3,894	Hay, bundles,	9
Iron, tons,	3	Bellows, doz.	12
Tallow, lbs.	6,982	Rye, bush.	200

Value of exports from the port of New-Haven,

beginning Oct. 1st, 1790, and ending Sept. 31st, 1791,	\$ 151,043
1791,	1792, 307,041
1792,	1793, 146,387
1793,	1794, 171,869
1794,	1795, 184,082

Tonnage of the port of New-Haven.

Dec. 31, 1798,	7,430
1800,	11,011
1804,	9,624

Duties on imports and tonnage in the port of New-Haven.

Merchandise.		Tonnage.
In 1792,	\$ 39,484	599
1793,	48,447	382
1794,	47,250	306
1795,	42,770	307
1796,	60,244	340
1803,	136,429	657

In 1807 there were belonging to the town and sailing from the port of New-Haven 60 Captains of vessels employed in foreign commerce, and 16 in the Coasting Trade.

In mentioning the men of distinction, who have been either natives, or inhabitants, of this town, it will be unnecessary to add any thing to what I have said concerning the Clergymen.

The character of Mr. Eaton, of Mr. Gilbert, Mr. Jones, and Mr. Bishop, who were all held in high esteem in the Colony of New-Haven, has been so well drawn by Doctor Trumbull in the first volume of his history of Connecticut; a work in every body's hands; that nothing more can be necessary here, than merely to mention their names.

It is equally unnecessary, to say any thing concerning Col. Dixwell.

The Rev. Samuel Johnson, D. D. the first Minister of West-Haven, afterwards the first Episcopal Minister of Stratford, and afterwards President of Columbia College, was distinguished for his learning, and worth. The life of this gentleman has, however, been so lately published, and so extensively read, as to render it useless for me to dwell upon it here.

The Presidents of Yale College were

<i>Accessus.</i>	<i>Exitus.</i>
A. D.	A. D.
1701 Rev. Abraham Pierson,	1707
1719 Rev. Timothy Cutler, S. T. D.	1722
1726 Rev. Elisha Williams,	1739
1739 Rev. Thomas Clap,	1766
1766 Rev. Naphtali Daggett, S. T. D.	1777
1777 Rev. Ezra Stiles, S. T. D. L. L. D.	1795

Mr. Pierson was educated at Harvard College; and took the degree of A. B. in 1668; was a hard student, a good scholar, a great divine, and a wise, steady, and judicious gentleman in all his conduct. He instructed, and governed, the infant College with general approbation. He composed a system of Natural Philosophy, which the students studied for many years.*

Doctor Cutler was educated at Harvard College, and took his first degree in 1701. In 1710 he was ordained Minister of the first Congregational church in Stratford. In 1719 he was elected President of Yale College, but having changed his religious system, and become professedly an Episcopalian, was, in 1722, by a vote of the Trustees, "excused from all further service" in this office. Doctor Cutler "was a gentlemen of superior natural

* President Clap.

powers and learning; had a high opinion of the Constitution of the Church of England, and was zealously attached to it."* He is said to have been an excellent linguist; and to have been celebrated, particularly, for his knowledge of the Hebrew and Arabic languages. He is also said to have been possessed of an extensive acquaintance with learning, and general science.† After he left the presidency he went to England; took Episcopal orders; and received the degree of D. D. from both the universities of Oxford and Cambridge. Soon after his return to America he became Rector of Christ's Church in Boston; and died there in 1765, being 82 years of age. He was a native of Charlestown in Massachusetts.

Mr. Williams was the son of the Rev. William Williams, Minister of Hatfield, (Mass.) He was educated at Harvard College; where he took his first degree in 1711. He was afterwards Minister of Newington, in Wethersfield. From this place he was removed to the Presidency of Yale College in 1726; and continued here with the greatest advantage to the seminary, and the highest approbation of the public, till 1739; when the decayed state of his health compelled him to resign his office. From New-Haven he went to Wethersfield; and was soon appointed one of the Justices of the Superior Court. In 1745, he went, as Chaplain, in an expedition against Cape Breton. The following year he was appointed to the command of a regiment; and engaged in an expedition against Canada. Not long after he went to England; where he married a lady of distinguished excellence. Upon his return he fixed himself in Wethersfield; and died there July 24th, 1755, aged 61. His character is given by the celebrated Doctor Doddridge in the following words: "I look upon Col. Williams to be one of the most valuable men on earth. He has joined to an ardent sense of Religion, solid learning, consummate prudence, great candour, and sweetness of temper, and a certain nobleness of soul, capable of contriving, and acting, the greatest things, without seeming to be conscious of his having done them."

Mr. Clap was born at Scituate, in Massachusetts, in 1703. He was educated at Harvard College, where he

* President Clap. † President Stiles.

took his first degree in 1722. In 1726 he was settled in the Ministry in Windham, in Connecticut. In 1739 he was chosen President of Yale College. This office he resigned Sept. 10, 1766; and died in January 7th, 1767, in the 64th year of his age. His character is extensively given, in a manner highly honourable to him, in an appendix to the life of President Stiles, from the diary of that gentleman, by the Rev. Doctor Holmes of Cambridge. As President Stiles knew him intimately; the character, which he has given of him, cannot be questioned. To him, who reads this character, there will remain little doubt, that he was the greatest man, who ever sat at the head of this Institution.

Mr. Richard Woodhull, who was five years a Tutor under his administration, and was himself eminently distinguished for his learning and science, once gave me the following character of President Clap, in answer to some inquiries, which I made concerning this subject. If I were to give his character in concise terms, said Mr. Woodhull, I should give it in this manner: In whatever company he was, and whatever was the subject of conversation, he appeared evidently to understand it more clearly, and more comprehensively, than any other person present. As Mr. Woodhull had, not long before, had a controversy with President Clap; he cannot be supposed to have been prejudiced in his favour. The only serious defect in his presidential character was, that he was prone to consider boys as being men.

Doctor Daggett was respectable as a scholar, a divine, and a preacher. He had very just conceptions of the manner, in which a College should be governed; but was not always equally happy in the mode of administering its discipline. A number of persons were not willing to do justice to his merits. I say this with confidence; because I was acquainted with him, for a long time, in the most intimate manner. The College was eminently prosperous under his presidency. He was born at Attleborough in Massachusetts; and was educated at Yale College, where he took his first degree in 1748. In 1751 he was settled in the Ministry at Smithtown on Long Island. In 1756 he was chosen Professor of Divinity in Yale College; and continued in this office

until his death. In 1766 he was chosen President; and resigned his Presidency in 1777. In 1779, while opposing the British in their invasion of New-Haven, he was wounded; and declined in his health till Nov. 25, 1780; when he died. His sermons were judicious, clear, solemn, and impressive.

After the copious account of the life and character of Doctor Stiles, published by Doctor Holmes, it will be unnecessary to expatiate upon his character here. Doctor Stiles was probably the most learned man in America, at the time of his death; and was probably excelled by few in the world. A very learned Jewish Rabbi, who lived in America, where he corresponded for some years with Doctor Stiles, and who afterwards came to America, declared, that Doctor Stiles understood, and wrote, Hebrew better than any other Gentile, whom he had ever known.

Doctor Stiles was the son of the Rev. Isaac Stiles of North-Haven, and was born Dec. 15th, 1727. He was educated at Yale College; took his first degree in 1746; was chosen Tutor in 1749, and continued in this office six years. In 1765 he was ordained Minister of the second Congregational Church in Rhode-Island. In 1778 he was installed President of this seminary; and died in the office, May 12th, 1795, in the 68th year of his age.

The Rev. Nehemiah Strong, the first Professor of Mathematics, and Natural Philosophy, in Yale College, was born at Northampton in the year 1728; was educated at this seminary; and took his first degree in 1755. In 1757 he was chosen Tutor, and continued in this office three years. He was soon after settled as a Minister, in the parish of Turkey Hill, in Simsbury; now Granby. In 1770 he was chosen to the Professorship; which he left in 1781. The remainder of his life he spent in retirement. He was a man of vigorous understanding, and possessed very respectable attainments in learning and science. He died at Bridgeport August 12th, 1807, in the 80th year of his age.

The Rev. Doctor Wales was born in Raynham in Massachusetts. He was educated at Yale College; where he took his first degree in 1767. In 1769 he was chosen Tutor. This office he resigned in 1770; and

was soon after ordained Minister of the first Congregation in Milford. In 1782 he was elected Professor of Divinity in this seminary, and died in that office, Feb. 18, 1794. For several years before his death he was afflicted with the epilepsy.

Doctor Wales "was an excellent preacher; and, by his distinguished abilities, in union with exemplary piety, he added lustre and dignity to the Theological chair. His discourses were the result of close thought, and laborious study. Methodical, without stiffness; clothed in language chaste and nervous; and pronounced with a singular solemnity and energy; they were admirably adapted to the purposes of instruction and persuasion."*

The piety of all these gentlemen has been amply acknowledged.

The Hon. Jared Ingersoll, Esq. was born in Milford, in the year 1722. He was educated in Yale College; and took his first degree in 1742. Soon after, he commenced the practice of law in this town, and acquired great reputation as an advocate. Few men have excelled him in clear and comprehensive thought, and strong powers of reasoning; and few men ever managed a cause with more skill. At his entrance upon the argument, he conceded every thing to his antagonist, which was not, in his own view, of serious moment to his client; and often conceded so much, that he was believed, by men of less understanding, to have given up his cause. But he always reserved the essential points; which he exhibited with the utmost strength and advantage. His eloquence was remarkably calm and dispassionate; but was exhibited with so much candour and fairness, as to be remarkably persuasive. Indeed, of the eloquence, which is designed to convince, it was almost a perfect pattern. The same candour and fairness appeared in all his deportment. In the year 1757 he was sent by the Legislature of this State, as their Agent, to the Court of Great Britain. In 1764 he went again to England; and while he was in that country, was persuaded to take the office of Stamp Master, under the Act, which was the first, in that train of unwise and oppressive measures,

* Doctor Holmes.

which finally proved the means of separating the British Colonies from their parent country. For this acceptance he was not a little censured by his countrymen; more, I think, than justice would warrant. The office was urged upon him; and he appears to have accepted it, only from a desire to render its operations less burdensome, and oppressive, than they would probably be in the hands of a foreigner. The acceptance was unwise; but not accompanied with any ill design, on his part, against his country.

In 1770 he was appointed Judge of Vice Admiralty in the middle District of the Colonies. The duties of this office required, that he should reside in Philadelphia. He removed to that city in the year 1771; but after his office had ceased, in consequence of the American Revolution, he returned to New-Haven, where he continued till his death.

Gen. David Wooster was born at Stratford in the year 1711; and took his first degree in Yale College, in 1738. In the year 1745 he commanded the Connecticut sloop of war, and was employed to convey the Connecticut troops to Louisburgh; and, in company with a sloop of war from Rhode-Island, engaged the *Renonnee*, a French frigate of 36 guns, which had been sent with dispatches from France. The French frigate was obliged to sheer off, although superior in force to both of her assailants. In the last Canadian war he was appointed to the command of a regiment; and acquired an honourable reputation as a brave man, and a good officer. At the commencement of the Revolution in 1775, he was appointed to the chief command of the Connecticut troops; and was made a Brigadier General in the Continental service. This commission he resigned; and was soon after appointed the first Major-General of the Militia, in his native State. When the British landed at Compo, for the purpose of destroying the public stores at Danbury, Gen. Wooster hastened to oppose them, with such men, as the exigence permitted him to collect. At the head of about 300, he fell upon the rear of the British, as they were retiring from Danbury. A sharp skirmish ensued, in which he was mortally wounded, fighting gallantly in the van of his little army, April 27th, 1777. He died on

the 2d of May following, at Danbury. Congress voted him a monument, which however has not been erected.

Gen. Wooster was a brave, generous minded man; respectable for his understanding, and for his conduct, both in public and private life; ardent in his friendships, and his patriotism; diffusive in his charities, and stedfast in his principles. He was long a professor of Religion; and adorned the profession by an irréproachable, and exemplary life. He married the eldest daughter of President Clap; a lady distinguished for the first intelligence and virtue.

Col. Nathan Whiting was born at Windham (Conn.) and educated at Yale College; where he took the degree of A. B. in 1743. In the year 1755 he commanded a regiment at lake George, under Sir William Johnson; and was second in command in the detachment led out by Col. Williams to meet Baron Dieskau. When Col. Williams fell the command of the detachment devolved upon Col. Whiting; and he conducted the retreat of the corps with a skill, coolness and intrepidity which did him the highest honour, and preserved his men from being destroyed, in circumstances of extreme peril.

Col. Whiting was greatly esteemed as an officer, both by his own countrymen and the British. He was an exemplary professor of the Christian religion; and for refined and dignified manners, and nobleness of mind, has rarely been excelled.

The Hon. James Abraham Hillhouse, Esquire, was born at New-London. In early youth he publicly professed the Christian Religion. In 1749 he received the degree of A. B. in Yale College; and in 1750 was chosen Tutor. In this office he continued, with much reputation, six years. At the bar he acquired, as an advocate, a high reputation; and very few men have been more successful, particularly in the management of causes before a jury. In private life his character was in an eminent degree amiable, as well as irréproachable. Few persons have been more generally beloved or respected. Some years before his death he was chosen into the Legislative Council of the Colony, and was annually reelected until the year of his death, 1775.

The Hon. Roger Sherman, Esq. was born at New-

town, in Massachusetts, April 19, 1721. His education was only that of a common school. In 1743 he removed to New-Milford, in Connecticut. Here he applied himself to the study of law. He was admitted to the bar in 1754. The next year he was appointed a Justice of the Peace; and speedily after a Representative in the Legislature, and a deacon in the church. In 1761 he removed to New-Haven. In 1776 he was elected a member of the Council, and appointed a Judge of the Superior Court; and continued on the bench 23 years. In 1774 he was chosen a member of the first Congress; and continued to be a member, except when he was excluded by the law of rotation. He was one of the committee, who drew up the Declaration of Independence; and a member of the General Convention, which framed the present American Constitution. Under that Constitution he was chosen a Representative to the first Congress. In 1791 he was removed to the Senate, and held his seat in that body until his death, in 1793, July 2d, and in the 73d year of his age.

Mr. Sherman possessed a powerful mind; and habits of industry, which no difficulties could discourage, and no toil impair. In early life he began to apply himself, with inextinguishable zeal, to the acquisition of knowledge. In this pursuit, although he was always actively engaged in business, he spent more hours than most of those, who are professedly students. In his progress he became extensively acquainted with Mathematical science, with Natural philosophy, with Moral and Metaphysical philosophy, with History, Logic and Theology. As a lawyer, and a statesman, he was eminent. The late Judge Ingersoll, who has been already mentioned, once observed to me, that, in his opinion, the views which Mr. Sherman formed of political subjects, were more profound, just, and comprehensive, than those of almost any other man, with whom he had been acquainted on this continent. His mind was remarkably clear and penetrating; and, more than that of almost any other man, looked from the beginning of a subject to the end. Nothing satisfied him but proof; or where that was impossible, the predominant probability which equally con-

trols the conduct of a wise man. He had no fashionable opinions, and could never be persuaded to swim with the tide. Independent of every thing but argument, he judged for himself; and rarely failed to convince others, that he judged right.

As a man, as a patriot, and as a Christian, Mr. Sherman left behind him an unspotted name. Profoundly versed in Theology, he held firmly the doctrines of the Reformation. Few men understood them so well; and few were equally able to defend them. What he believed, he practised. It can excite no wonder, therefore, that he died with bright hopes of a glorious immortality.

It is not known, that any peculiar vices prevail in this town; or that any vices prevail in a peculiar degree. I remember no instance, in which a house, and very few, in which stores, have been broken open in this town, since I came in it; almost sixteen years ago. The children, in our streets, are, I think, evidently more addicted to profaneness, than in the interior; and the labourers, to drunkenness. Generally, the morals of our citizens are believed not to be on a lower scale, than those of any other town, of the same size, in the United States. Our churches are usually filled upon the Sabbath; and public worship is attended with every appearance of decorum and solemnity. The citizens are generally distinguished for industry, economy, and good order; and the commerce of New-Haven is carried on in a manner, equally honourable to the skill, diligence, and integrity, of the merchants.

There are two Social libraries in this town. One of them, named *The Mechanics' Library*, was established in 1793. It consists of more than 800 volumes. The other is styled "*The Social Library*." The company of proprietors was formed in the year 1807. The library consists at present of 500 well-chosen volumes. No "Novel, Play, or Tale," may by the Constitution be introduced into the Library, except by a vote of three fourths of the members present. Five dollars are paid by every member on admission, and an annual tax of one dollar, fifty cents.

There are three Female charitable societies in this city: one in each Congregation. Every member pays a cent

a week to the society, and furnishes such other voluntary contributions, as she pleases. They also receive benefactions from other sources. On these foundations each society has set up, and maintained for several years, a charity school for the education of poor female children. The Societies, in the two Presbyterian Congregations, have established, and, for about two years, supported, a school for the education of black female children. In addition to this they have distributed, extensively, clothes and other necessities to the women and children in poor families. I know of no charitable institutions, in which beneficence has more wisely, or usefully, extended its happy efficacy with the same means; or in which its good offices have been more skilfully directed.

The only association for Intellectual improvement, in this city, is *the Connecticut Academy*; of which a summary account will be published in the beginning of this volume.

The Mechanics of this city formed themselves into a society, by the style of the General Society of Mechanics of New-Haven, March 23, 1807; and were incorporated the following October. Their professed objects are, to relieve such of the members, as are reduced to a state of suffering; to assist young Mechanics by loans; and to promote the mechanical arts. Their present number is ninety-five.

Their funds are about 450 dollars.

The New-Haven Bank was incorporated in October, 1792; and commenced its operations February 26, 1796. Its capital, for several years, was 80,000 dollars; but has been augmented to 300,000; and may by the charter be increased to 400,000. It is under the superintendence of nine Directors, chosen annually on the first Thursday of July.

The New-Haven Marine Insurance Company was incorporated in October, 1797. It is governed by nine Directors. Its capital is 50,000 dollars; and may be augmented at pleasure.

Both these Companies have been prosperous.

The New-Haven Chamber of Commerce was voluntarily formed, in 1794. Its officers are a President, Vice-President, Treasurer, and Secretary, elected annually,

on the last Wednesday of March. Its stated meetings are quarterly. Its objects are the same with those of other similar institutions.

The following article is extracted from the "New-Haven Gazette and Connecticut Magazine."

"New-Haven, September 20, 1787.

"The following account of the number of the inhabitants of this city, and their different ages, together with the number of buildings, is the result of an accurate enumeration, made by a number of gentlemen in this city.

Age.	No.		Age.	No.		Age.	No.	
1	175		31	45		61	11	
2	113		32	42		62	8	
3	100		33	38		63	9	
4	119		34	33		64	10	
5	107	614	35	49	207	65	13	51
6	100		36	50		66	8	
7	87		37	31		67	3	
8	96		38	31		68	5	
9	89		39	36		69	3	
10	85	457	40	52	200	70	6	25
11	70		41	29		71	1	
12	80		42	33		72	2	
13	86		43	29		73	2	
14	95		44	18		74	2	
15	71	402	45	28	137	75	3	10
16	103		46	22		76	1	
17	62		47	34		77	5	
18	84		48	9		78	2	
19	62		49	12		79	3	
20	74	385	50	35	112	80	4	15
21	77		51	17		81	0	
22	57		52	14		82	0	
23	58		53	16		83	1	
24	55		54	12		84	1	
25	66	313	55	17	76	85	0	2
26	51		56	18		86	1	
27	55		57	10		87	1	
28	50		58	11		88	0	
29	40		59	7		89	0	
30	66	262	60	28	74	90	1	3

The whole number of families, is	614
Average number of persons to a family,	5, 47
The whole number of houses is,	466
The average number of persons to a house, is	7, 21
The whole number of males,	1657
The whole number of females,	1707
The whole number of Students in Y. College,	176
The whole number of stores,	103
The whole number of barns and shops,	324
The whole number of private buildings,	1041
The numbers on each side of 17 years are equal.	

In the year 1724 there were 163 buildings of all kinds. The number of buildings, and the number of persons also, have probably been doubled in periods of about 25 years.

In the First Society there died, from 1763 to 1786 inclusive, twenty-four years,

Under 2 years,	106	90 and 100	6
Between 2 and 5	52		—
5 and 10	26		458
10 and 20	24	Dead born,	7
20 and 30	34		—
30 and 40	43	Total,	465
40 and 50	32		—
50 and 60	25	Males,	226
60 and 70	31	Females,	239
70 and 80	48		—
80 and 90	31		465

Baptisms from 1758 to 1787, 981

Marriages, 376

Deaths, 591

The number of births was much greater than the number of baptisms.

From the year 1770 to the year 1786 inclusive, there died 36 of the consumption, out of 329, about one ninth of the whole.

BILL OF MORTALITY FOR THE CITY, including, also, that part of the Township, the inhabitants of which belong to the religious congregations in the city, from 1797 to 1801, inclusive.

1797—Total 58—Of these 4 were strangers.

Under 1 year	16	50 and 60	5
Between 1 and 5	6	60 and 70	4
5 and 20	0	70 and 80	9
20 and 30	3	80 and 90	1
30 and 40	5	90 and 100	3
40 and 50	6		—
			58

1798—Total 78—Of these 4 were strangers.

Between 2 and 5	4	40 and 50	6
5 and 10	0	50 and 60	5
10 and 20	6	60 and 70	4
20 and 30	8	70 and 80	8
30 and 40	5	80 and 90	7

1799—Total 69—Of these 5 were strangers.

Under 2 years	15	40 and 50	14
Between 2 and 5	4	50 and 60	7
5 and 10	3	60 and 70	6
10 and 20	5	70 and 80	4
20 and 30	4	80 and 90	2
30 and 40	5		

1800—Total 79—Of these 7 were strangers.

Under 5 years,	25	40 and 50	12
Between 5 and 10	1	50 and 60	8
10 and 20	5	60 and 70	11
20 and 30	5	70 and 80	5
30 and 40	7		

1801—Total 95—Of these 15 were strangers.

Under 5 years,	45	40 and 50	12
Between 5 and 10	5	50 and 60	6
10 and 20	5	60 and 70	8
20 and 30	3	70 and 80	6
30 and 40	3	80 and 90	1
		90 and 100	1

The reason why so many strangers are found in this list is, that many persons, from the interior, resort to this city, in bad health, for the benefit of air, and food, from the sea. The number of deaths in 1798, attributed to the several ages, is erroneous: but the error cannot now be corrected, since it is found on the register.

In the year 1800, there were in the City of New-Haven 4049 inhabitants; in the township without the city 1108. It is supposed, that 600 of these at least, belong to the societies in the city. These added to 4049 make 4649.

This gives one death to sixty-two persons.

In 1756, the Township of New-Haven contained 5085 inhabitants: and, in 1774, 8095. It then included the townships of Woodbridge, Hamden, North-Haven, and East-Haven. In 1790, there were within the same limits 10,291: in 1800, 10,978: in 1810, 13,161. In 1790 in the present township of New-Haven, the inhabitants amounted to 4484: in 1800, to 5157: in 1810, to 6967. In 1800, the number of inhabitants in the *City* was 4049: in 1810, 5772.

There have been burnt in this city, in 75 years 2 Dwelling Houses, 1 Brewery, 2 Stores, 1 workshop, and 1 small Turpentine Distillery.

Such a list forcibly exhibits the care of Divine Providence in preserving a town, raised of such combustible materials. It is ardently to be wished, that, hereafter, buildings of a safer and more solid structure may be erected, and that both ourselves, and our descendants, may, as early as possible, be secured from such ravages, as have been lately experienced by the unfortunate inhabitants of Portsmouth, and Newburyport.

Permit me, Sir, at the close of this Account, to return my thanks to the several Members of the Academy, who have supplied materials for its completion, and to subscribe myself,

very respectfully,

yours,

T. DWIGHT.

*Mr. JEREMIAH DAY, Prof. of Math. and }
Nat. Phil. in Y. Coll. and Rec. Sec. of the }
Conn. Acad. of Arts and Sciences.*

[The following account of the Commerce of New-Haven came to hand too late to be inserted in its proper place.]

Abstract of the amount of Duties, value of Imports, value of Exports, and quantity of Tonnage in the District of New-Haven, in the State of Connecticut.

Yrs.	Duties	Value of Imports	Value of Exports.			Tonnage.
			Domes.	Foreign	Total	
1801	237,599	950,396	509,173	141,298	650,471	Close of 1801.
2	109,804	439,216	347,264	136,646	483,910	registered 5100 95.85
3	136,400	545,600	411,621	5,152	416,773	enrolled, 2152,03
4	145,488	581,952	448,495	27,926	476,421	Total, 7252,88
5	205,316	821,264	490,657	117,763	608,420	
6	146,614	586,456	471,202	12,275	483,477	
7	167,589	630,356	489,362	16,482	505,844	Close of 1810.
8	106,356	425,424	embargo			registered, 4486,09
9	56,088	224,352	306,650	3,212	309,862	enrolled, 1691,03
10	94,600	378,400	387,210	3,125	390,335	Total, 6177,12
	1,395,854	5,583,416	3,861,634	463,879	4,325,513	

NOTE.

Most of the above duties have been secured by bonds, all of which have been collected in full. The imports, including salt, hides, dyeing woods, &c. not subject to duties, are supposed to be equal in value to an average of four times the amount of the duties.

About one third of the imports in vessels of this district are landed and bonded directly in New-York. Of the coffee and sugar, imported here, a considerable part has been transported coastwise to New-York, and thence exported from the United States. These are not included in the above value of exports.

Collector's Office, District and Port of New-Haven,

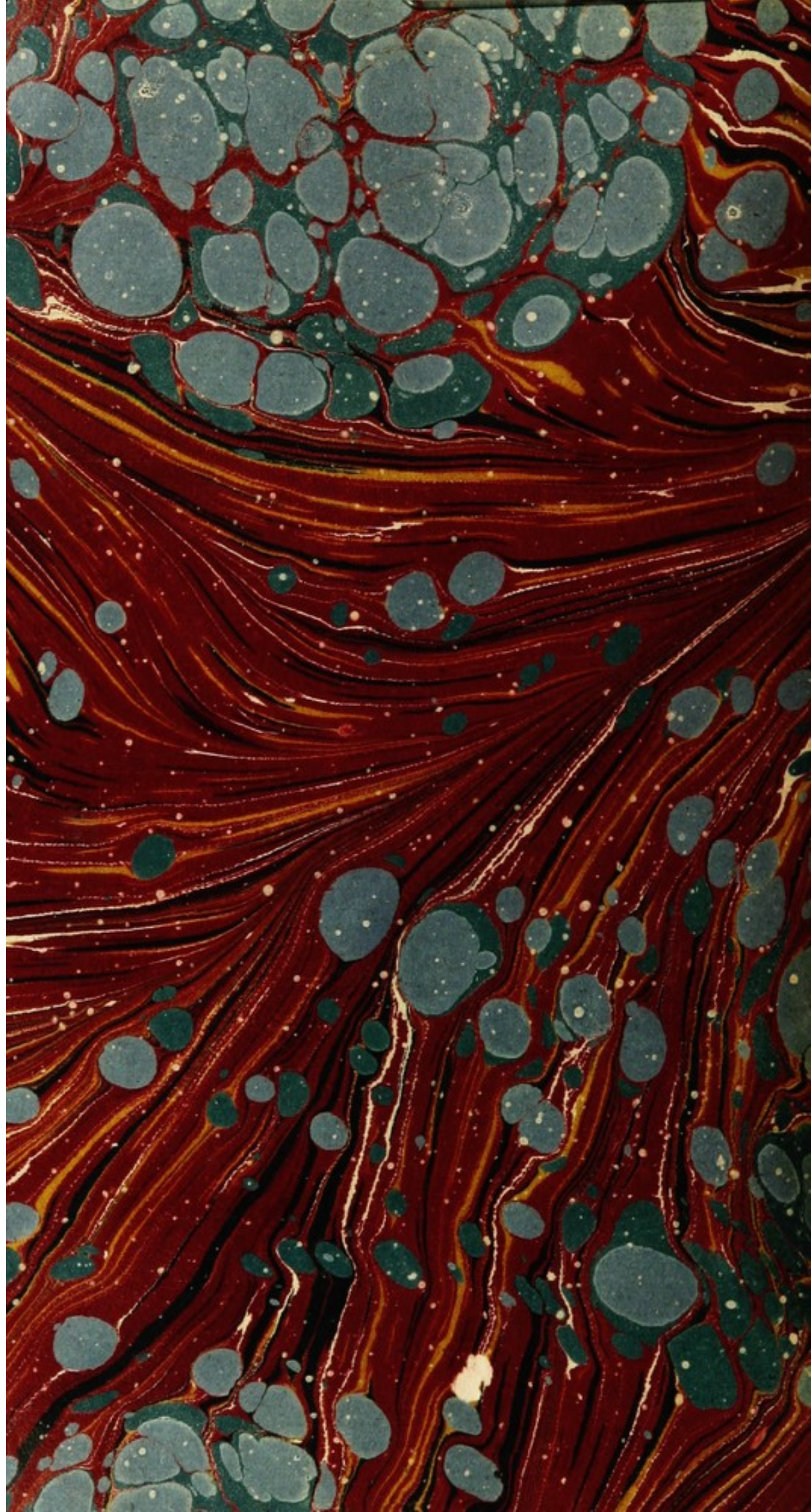
October 11, 1811.

ABM. BISHOP, *Collector.*

For the following errata the writer hopes it will be admitted as a partial apology, that he was absent during the printing of the work.

Page	Line	For	Read
13,	12,	<i>common, asbestous,</i>	<i>common asbestus.</i>
18,	32,	<i>after handsomest ground,</i>	<i>of this kind.</i>
24,	7,	<i>Somatos,</i>	<i>Tomatos.</i>
25,	37,	<i>produtive,</i>	<i>productive.</i>
36,	39,	<i>was studying,</i>	<i>while studying.</i>
37,	23,	<i>Mittins,</i>	<i>Mittens.</i>
39,	22,	<i>of paper hangings,</i>	<i>in paper hangings.</i>
ib.	30,	<i>book-binder,</i>	<i>book-binders.</i>
ib.	32,	<i>curries,</i>	<i>curriers.</i>
44,	last,	<i>Shenectady,</i>	<i>Schenectady.</i>
56,	31,	<i>expence,</i>	<i>expense.</i>
62,	30,	<i>and therefore fails,</i>	<i>and it therefore, &c.</i>
74,	21,	<i>convey,</i>	<i>convoy.</i>
ib.	23,	<i>Renonnee,</i>	<i>Renommee.</i>





Accession no. 20353

Author 1752-1817
Dwight, Timothy

A statistical
account of New-
Call no. Haven, 1811.

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