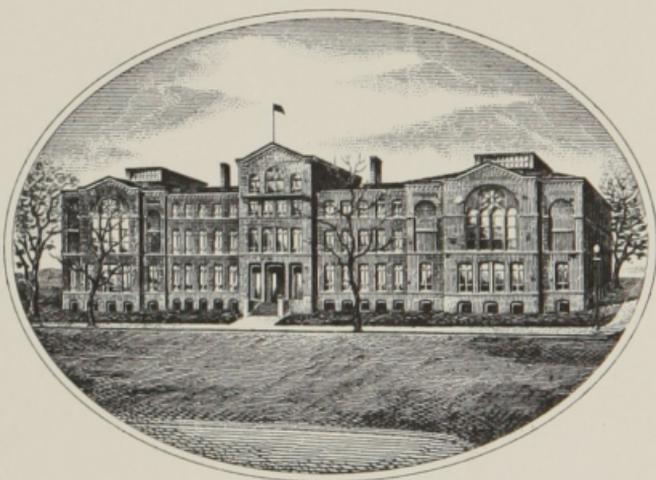




NATIONAL LIBRARY OF MEDICINE
Washington



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U. S. Department of Health, Education, and Welfare
Public Health Service

STATE OF NEW YORK

Year	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900
Population	1,100,000	1,150,000	1,200,000	1,250,000	1,300,000	1,350,000	1,400,000	1,450,000	1,500,000	1,550,000
Area (sq. miles)	47,000	47,000	47,000	47,000	47,000	47,000	47,000	47,000	47,000	47,000
Value of property	\$1,000,000,000	\$1,100,000,000	\$1,200,000,000	\$1,300,000,000	\$1,400,000,000	\$1,500,000,000	\$1,600,000,000	\$1,700,000,000	\$1,800,000,000	\$1,900,000,000
Value of manufactures	\$500,000,000	\$550,000,000	\$600,000,000	\$650,000,000	\$700,000,000	\$750,000,000	\$800,000,000	\$850,000,000	\$900,000,000	\$950,000,000
Value of agriculture	\$200,000,000	\$210,000,000	\$220,000,000	\$230,000,000	\$240,000,000	\$250,000,000	\$260,000,000	\$270,000,000	\$280,000,000	\$290,000,000
Value of commerce	\$100,000,000	\$110,000,000	\$120,000,000	\$130,000,000	\$140,000,000	\$150,000,000	\$160,000,000	\$170,000,000	\$180,000,000	\$190,000,000
Value of transportation	\$50,000,000	\$55,000,000	\$60,000,000	\$65,000,000	\$70,000,000	\$75,000,000	\$80,000,000	\$85,000,000	\$90,000,000	\$95,000,000
Value of other industries	\$100,000,000	\$110,000,000	\$120,000,000	\$130,000,000	\$140,000,000	\$150,000,000	\$160,000,000	\$170,000,000	\$180,000,000	\$190,000,000

The following table shows the population, area, and value of property, manufactures, agriculture, commerce, transportation, and other industries in the State of New York from 1891 to 1900. The population has increased from 1,100,000 in 1891 to 1,550,000 in 1900. The value of property has increased from \$1,000,000,000 in 1891 to \$1,900,000,000 in 1900. The value of manufactures has increased from \$500,000,000 in 1891 to \$950,000,000 in 1900. The value of agriculture has increased from \$200,000,000 in 1891 to \$290,000,000 in 1900. The value of commerce has increased from \$100,000,000 in 1891 to \$190,000,000 in 1900. The value of transportation has increased from \$50,000,000 in 1891 to \$95,000,000 in 1900. The value of other industries has increased from \$100,000,000 in 1891 to \$190,000,000 in 1900.

1807

	Endemial Causus,	Bilious Remit. Fever	Intermitting Fever.	Typhus.	Small Pox.	Pleurit. vera.	Influenza.	Cynanche Trach.	Angina Pectoris.	Catharr.	Phthisis Pulm.	Pneumonia.	Whooping Cough.	Scarlatina Anginosa	Dysentery.	Diarrhæa.	Diarrhæa Infant.	Worms.	Hæmoptoe.	Dropsy.	Hæpatitis.	Dispepsia.	Hysteria.	Dysuria.	Tetanus.	Trismus Nas.	Epilepsy.	Apoplexy.	Rheumatism.	Scrofula.	Herpes.	Average heat.	Fall of Rain.	Prevailing Winds.
January.			1						2	3		2				1	2							2		1	1		1	2	36	2 ¹⁰ / ₁₀	21W 10 E	
February.	1	1			6		4		3	1						1	1					1	1	2		1	1				48 ¹ / ₃	7 ³ / ₁₀	16W 12 E	
March.	1	1			11	1				3	1						1		1	1		1	1			1	1	2		1	53	6 ^{6 1/2} / ₁₀	15W 16 E	
April.	2				3	8			3	1	4						1			1		2					2	1	1		62	2 ^{5 1/2} / ₁₀	22W 8 E	
May.	2	2		1	3							1			1	1	3	1						1	2		1	4			69 ⁴ / ₅	3 ^{6 1/2} / ₁₀	24W 7 E	
June.	2		1	1	4		1					2	1		3	1	3	2					2			1	1				83 ¹ / ₃	4 ^{8 1/2} / ₁₀	14W 16 E	
July.	9	1		1										10		5				1			1								86	3 ⁴ / ₁₀	25W 6 E	
August.	7	9	2		1		1					1		3		3	2			1			3		1	1					84	5 ^{5 1/2} / ₁₀	13W 18 E	
Septem.	18	27	3	3	1		3	1			3			2		3	3	2	1	2	2	1						3	2		81 ¹ / ₅	3 ^{2 1/2} / ₁₀	14W 16 E	
October.	5	3		3	24							1		4		1						1						1	1		68 ¹ / ₃	6 ¹ / ₁₀	9W 22 E	
November		1	1	4	4	6				1	1	2		3							1							1			54	6 ¹ / ₂ / ₁₀	22W 8 E	
Decem.		1		6	2			1	1	1	2		5						2		1	1					2	1			56 ¹ / ₂	1 ⁹ / ₁₀	21W 10 E	

N. B. In September about one third of my Patients were those of the Dispensary, the number here set down must be considered in that proportion more than my own.

1851

Month	1	2	3	4	5	6	7	8	9	10	11	12
January												
February												
March												
April												
May												
June												
July												
August												
September												
October												
November												
December												

M. B. in September about one third of my
 considered

AN
ORATION,

DELIVERED BEFORE

THE MEDICAL SOCIETY

OF

SOUTH-CAROLINA,

AT THEIR ANNIVERSARY MEETING,

Dec. 24th, 1807.

AND

PUBLISHED AT THEIR REQUEST.

BY JOSEPH JOHNSON, M. D.

President of the Medical Society of South-Carolina.

CHARLESTON:

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NO. 143, BROAD-STREET, NEAR THE EXCHANGE.



ORATION

DELIVERED BY

THE MEDICAL SOCIETY

GENTLEMEN,



The history of this city, since the year 1791, being generally the same, and the symptoms nearly the same in each succeeding year, such that period, few or no remarks, which to you may appear novel or interesting, can be expected in their history. A sense of duty to our successors in office, and to the laws of our society, have urged me to this undertaking, with a purpose that my endeavours to compile a view of the changes in the weather, and of the diseases in which we are exposed, will meet with your indulgence.

The history you will find with the next volume will contain that history known since the commencement of our journal, in the year 1791. Occasional showers since

ORATION, &c.



GENTLEMEN,

THE diseases prevalent in this city, since the year 1792, being generally the same, and their symptoms varying but little in each succeeding year, since that period, few or no remarks, which to you may appear novel or interesting, can be expected in their history. A sense of duty to our successors in practice, and to the laws of our society, have urged me to this undertaking; with a reliance, that my endeavours to complete a view of the changes in the weather, and of the diseases to which we are exposed, will meet with your indulgence.

THE present year set in with the most uniform cold weather that has been known since the commencement of our journal, in the year 1793. Occasional showers alone

prevented the occurrence of ice, on every night in January, except the last. The thermometer, though not so low at any time as in February, stood at a much lower average, having, until the last day of the month, ranged at thirty-three degrees, and, including the heat of the last day, averaged at thirty-six degrees. On the eighteenth there was a fall of snow. The winds prevailed twenty-two days from the northern, and nine from the eastern points of the compass. Throughout the continent the severity of the cold was, in proportion; in Boston the thermometer (probably in an exposed situation) fell to 0, and in Portsmouth to eight degrees below 0.

ALTHOUGH the coldest day, in this, or any other year, since 1796, occurred in February, the average of the thermometer was twelve and three quarter degrees higher than in the preceeding month; on the seventh, sheltered from the weather, it stood at twenty-four degrees, and when exposed fell to sixteen degrees.

THE changes in February and March were very great and sudden; on the sixth the thermometer fell thirty-two degrees in seventeen hours, as appears by our diary, and had, probably, been lower, but again risen at eight o'clock in the morning, the usual hour of observation. On the tenth it had increased twenty-seven degrees in thirty-one hours, and many other changes, of fifteen to twenty-four degrees, are observed in short periods during these months. Snow fell two hours and an half, on the third of February, and on the thirteenth there was smart thunder. The thermometer fluctuated from twenty-four to sixty-nine degrees. Seven inches and three tenths of rain fell in this month, and six inches and six and an half tenths in March. The country was overflowed, and the roads, for a time, were impassable to carriages.

THE spring was unusually cold and backward; as late as the third of May there was a frost; so that, the remark of GOLD-SMITH, respecting the climate of the Alps,

was applicable to ours, in this extraordinary season;—it was

“ Winter lingering in the lap of May.”

The plantations and gardens were much injured by this weather, and in a way, as extraordinary as the cause. The young crops having been repeatedly destroyed by frost, they were replaced with great industry, and when the planter thought the danger past, his prospects were blasted by myriads of caterpillars, which, like the locusts of Egypt, destroyed alike the whole vegetable world... The *chenille* had been repeatedly observed in cool seasons; but, now, a species, which, to the astonished planter appeared a new creation, not only destroyed the cotton, corn and rice, but swept even the grass from the meadows, that scarcely a vestige remained.

THE spring having been so backward, the accession of summer was as rapid in proportion, and the eleventh of June was one of the hottest days to which our climate is subject; the thermometer standing at ninety-two degrees, in a very cool situation, and at nine.

ty-four, generally, through the city. The average heat of July was eighty-six degrees; a range considerably higher than had been observed since 1796; and somewhat exceeding the great heat of that year. From the twenty-sixth of July to the eighteenth of August, there had been but one shower; the heat being steady and considerable, the *Endemial Causus* commenced about the latter date, and was aggravated by the extremely hot weather, from the first to the fifth of September, when the thermometer, at noon, in the coolest situation, varied from ninety degrees to ninety-two and an half. September was, from sickness and death, the blackest month ever recorded in Charleston, there having been three hundred and twenty-eight interments; of which one hundred and fourteen were from *Endemial Causus*; and at least one fourth of the inhabitants were affected with the *Infuenza* about the last of the month. From the second of October to the fifth of November, there had been no rain, and on the twenty-one days preceeding, there had only fallen one tenth and an half. During the first six weeks

of this time, the weather was clear and generally calm, but when the winds did increase, the inhabitants were distressed still more by the clouds of dust which drifted in every direction; the winds, fortunately, prevailed from the east, so that the heat was not oppressive. All the ponds, and many of the wells and springs, were dry, so that in country places many cattle died for want of water, and travellers could not obtain a sufficiency, near the roads, either for themselves or their horses. The atmosphere was hazy and thick, as if filled with a subtle dust, and the sun, as if deprived of its rays, appeared of a fiery redness. On the twentieth of October the weather became cool, and a frost took place within two miles of the city, which, being, occasionally, succeeded by others, the atmosphere was cleared and the effects of the drought not so oppressive in the city. It may, however, be said to continue even at this time, for, from the eleventh of September, to the twenty-first instant, a term of three months and ten days, there had only fallen one inch and four

tenths of rain; the usual quantity of a smart shower.

DOCTOR CHALMERS describes the distress of the inhabitants, in the year 1752, during a drought of only thirty days; but, then, the thermometer was, occasionally, as high as ninety-seven and ninety-eight degrees, in the shade. As we have never observed our thermometer above ninety-three degrees, it is probable the doctor may have kept his in some situation exposed to reflected heat.

DURING this time the minds of the inhabitants were amused by their speculations on a Comet. It was discovered about the fifteenth of September, and had, probably, been visible several weeks before. On the twenty-ninth of that month, at nine o'clock, in the evening, it was ten degrees south-west of Saturn; and, to the naked eye, appeared somewhat larger than that planet. Its declination was thirty-five minutes south, and its right ascension two hundred and fourteen de-

grees from Aries, which would bring it vertical to fifteen minutes south latitude, and one hundred and seventy-one degrees, forty-five minutes east longitude from London; a spot near a small island in the Pacifick ocean. Its orbit intersected the Ecliptick, in the twenty-eighth degree of Libra, with an inclination of fifty-eight degrees, forty minutes. It moved eastwardly, a little inclining to the north, at the rate of eleven and an half miles an hour.

By many, the dreadful *Influenza* that oppressed them, with all the aggravations of the drought, were ascribed to this Comet... In the days of superstition, such appearances were alarming. As their nature was not understood, if any evils had occurred or were then operating, the Comet was the undoubted cause. If none had existed, man, groping in the dark, and fearful in the gloom of ignorance, would deem the appearance of a Comet ominous of some great, some national calamity. It is true the nature of Comets is far from being well

understood; but their course, distance, extent and velocity, being ascertained, their extreme distance from the Earth, their inconsiderable magnitude as heavenly bodies, and their probable crystalline nature, convince most men, that they have never approached near enough to have an influence, either on the Earth or its atmosphere. If changes, in the health of man, or in the weather, or in the tides, are to be ascribed to planetary influence, causes, infinitely greater than this, have occurred without producing a sensible effect. October the first 1803, six planets, viz: the Sun, Venus, Mars, Jupiter, Saturn, and Herschell, were nearly in conjunction; they were within a space of thirty-one degrees. It is said, that the tides rose so high, at that time, as to flow into the cellars on the wharves, although there was no gale. Your diary will explain this occurrence; by it we find that north-east winds prevailed at that time, and had continued, with but two exceptions, from the eleventh of the preceding month. Our uniform experience proves such high tides to be occasioned by

north-east winds retarding the gulf-stream; why, then, should we ascribe this elevation to causes so remote? Again, on the first of September 1805, five planets, viz: Mercury, Venus, Mars, Saturn, and Herschell, were within a space of seventeen degrees; no extraordinary occurrence was noticed.... But the advocates for lunar influence will observe, if the health and mind of man, the motion of the tides, and changes in the weather, are affected by the changes in the moon, why may not the conjoined attraction of so many greater planets produce an effect in proportion? Let them establish their position before any inference is drawn.

I will not deny that we are more subject to diseases about the periods of the new and full Moon, but the changes in the weather will fully account for this circumstance. Such changes may also be more frequent at these periods, but they likewise occur at other periods, and are followed by the same diseases. *Mania* and the *Menstrual Flux* cannot be influenced by the Moon,

although they may return at lunar months, for they occur alike at all ages of the Moon. What are the changes of the Moon, that they should be productive of such vast effects? Do they consist in any essential change in the Moon itself? Certainly not: they consist in mere *Moonshine*; in a greater or less degree of borrowed light reflected on the Earth.... Can this slight, this gradual change, be capable of such vast influence?

It may be deemed heretical to question an opinion which has been sanctioned by ages; an opinion first advanced by the Greek writer CLEOMENES, advocated by PLINY, and approved by NEWTON. But with the greatest reverence for these philosophers, I must offer a few of the many objections to their theory, for all physiologists discuss the question. If the Moon had power to raise the tides daily, there would be but one tide in twenty-four hours. They, however, say that the Sun, although not in so great a degree, has likewise the power of attracting or raising the tides. If this were true, the

second tide should always occur about the same hour of the day, as certainly as the Sun arrives at his zenith. Again, if this were true, in the first and last quarters of the Moon, when that planet rises and sets about the same time with the Sun, the only tide that could occur in twenty-four hours, should be in the day, and should be higher than other tides, in proportion to the combined influence of the Sun and Moon.... Modern astronomers introduce centrifugal force to assist them in accounting for these phenomena; although this is much more satisfactory, it cannot account for there being no tides in the Mediterranean and other inland seas. We are the more impressed with this, when we reflect that the smaller body should be most affected by the attracting power, and, that the surrounding shores, by opposing the current, if any, should give the tide a greater elevation.

It may not be doing well, to oppose so respectable a theory, without being able to offer a better; but this was not my object,

I only wished to weaken the general opinion of lunar and planetary influence, that it might not be supposed the health of man is affected thereby, and that we might be the more immediately guarded against the changes in the weather for the preservation of health.

I do not, however, wish to discourage investigations of this kind, because we have not yet discovered the truth. We may approximate, although we do not arrive at certainty, and he who assigns a reason for an operation of nature, and convinces us that a particular effect may proceed from an assigned cause, is entitled to our respect and gratitude. The man who is enterprising and diligent in the study of nature, is like a body luminous and vivifying to the literary world. Let us not cease to hope, that the same effort of reason and observation which developed the mysteries of the planetary system, of electricity, and of the composition of water, may yet unfold the different disiderata in science!

ALTHOUGH the cold weather in the fall commenced at the usual time, and with the usual degree, it afterwards became warm; the thermometer fluctuating from seventy to seventy-five so late as the fifteenth of December, and even now it continues unseasonably warm.

To render a minute detail of the diseases unnecessary, I have prepared a table from my own practice, of the diseases occurring in each month, with a proportional addition of such diseases as are reported in our medical journal, where they had not occurred in my own; of these the instances were few...I submit it for your future inspection.

FROM several circumstances, my practice is small, compared with that of many gentlemen of this society; still, I presume, the table will be found correct, in proportion with the practice of others, as nearly as possible; the casualties and diseases,

which occur alike at all seasons of the year are omitted.

VACCINATION was preserved throughout the year, except from the middle of November to that of December; during which time the natural *Small-Pox* increased, and several physicians reluctantly inoculated. It is now, very happily, revived from a scab of the late stock, about four weeks old; of fifty vaccinations, or more, made from this scab, only one succeeded.

DYSENTERY was much more general and severe than had been known for many years; it was, probably, introduced and kept up by the continued importations of Africans; and this, succeeded by dropsies, carried off great numbers of those wretched people. Among the inhabitants it differed, in one respect, from *Dysentery* in former years, in very few instances were tonick or astringent remedies admissible, at any stage of the disease.

INFLUENZA is noticed as occurring in March and April, although not sanctioned by our journals. My opinion was then supported by the concurrence of several eminent physicians, and has since been confirmed by a correspondence of symptoms with that which prevailed in the fall. On the first of its appearance, in the latter period, the symptoms were so mild that few required the attendance of a physician... This lulled many into a fatal security; and when about half the inhabitants had been attacked by it, a cold change took place in the weather, during which many relapsed, and several lost their lives. So general was the prevalence of this disease, about the middle of October, that many families had from fifteen to twenty sick at one time: servants could not be hired to do the duties of a family, nor nurses procured to attend the sick. Relapses were very frequent; in all such cases the symptoms were greatly aggravated, and frequently accompanied by violent determinations to the *Pleura* and *Mediastinum*. However severe the *Influenza*

was in Charleston, it was much more destructive in the interior country, and along the northern boundary of the state. In Georgetown, eight persons were lying dead of it in one day; and in Allantown, in North-Carolina, out of nine masters of families, seven are said to have died of this complaint, whole families were sick at the same time; and in a small neighbourhood at Cashaway ferry, nine families of children are likewise said to have been left orphans by this prevailing malady. With persons advanced in years it was most violent; next to these, with persons having irritable lungs; next, with persons left debilitated by previous inflammatory complaints; and, lastly, with pregnant women: in these, miscarriage was a frequent consequence..... Bleeding and other evacuants, with emolient drinks were the only remedies necessary at the first, but frequent blisters were afterwards requisite. In the country places above mentioned, bleeding is said to have been injurious, and probably was so; the difficulties attending country practice render

it impossible for so active a remedy to be always seasonably applied.

ON the subject of *Yellow Fever*, I regret having nothing new to offer, towards the cure of the disease. The symptoms varied from those of former years in a greater disposition to *Typhus*, so that bark and other tonicks, formerly rejected in every stage, were now kindly received, and, frequently, beneficial; mercury is still the favourite remedy. This dreadful disease having raged in different parts of the United States, ever since the year 1792, still baffles the greatest medical skill. The greatest human strength is prostrated before the pestilential breath of this, as of the Iernian hydra; respect is ^{not} paid to the pride of manhood, or to the loveliness of the weaker sex: vigour, youth and beauty are the chosen victims of its rage. A sympathetick grief pervades the breast of each inhabitant; scarcely a father or a brother, or a son, whose heart does not throb with apprehension for, who has not too frequently to lament the loss of, some

infant hope, or beloved relative, lately returned from the acquirement of an education, or the completion of urgent business; returned to fan the warmth of his affection, and brighten his hopes, too soon to be blasted by this fell disease.

If all human strength, supported by medical skill, cannot avail against the furious attack of this monster, may not enterprise, conducted by observation and reason prevent its origin. Observation points to the drains and other receptacles of filth, and reservoirs of stagnant water, as the sources of its being. Reason convinces us, that if these receptacles of filth, were daily cleansed of their putrifying contents, so as to prevent exhalation, this hydra could not exist. Enterprise, confirmed by experience, assures us that water may be conducted through our streets, so as not only to remove the fermenting matter from the drains, but answer many other valuable purposes. Let, then, the talents and influence of this society, be exerted to

promote so desirable an object; let a committee of your members be appointed to prove that this dreadful disease originates from these sources, and state the most striking instances of similar results from similar causes; let them prove, that this disease may probably be prevented by frequently cleansing the drains of their impure contents; and recommend the distribution of water through the city by conduits, with a view to this great object. This foe to the prosperity and happiness of Charleston, may thus be vanquished without Herculean aid. Rescued from this fiend, trade and commerce will again flourish in the summer season, and their increase be, at the least, in proportion to the extension of time allotted for these pursuits. Protected from danger, men of wealth, industry and talents will become your inhabitants: nay, you will preserve the many valuable friends who now wish to remove, rather than be exposed, with their families, to such scenes of distress and danger.

THE obituary which I now present for your inspection, will, although very imper-

fect, be, nevertheless, useful. The want of a regular system for affording a correct knowledge of the diseases will now be felt and probably remedied. The number of newly imported Africans swells our bills of mortality to so great an extent, that I congratulate you on the time approaching when that aggravation will cease; they now compose one half of all the deaths in the year. Even the proportion of deaths among themselves has greatly increased; at first a twenty-ninth part of the number imported died; but now a fourteenth of the whole. The diseases and deaths in the year 1803, are only recorded from the first of July, yet this defect affords some light. It proves that a great proportion of deaths from *Tetanus* and *Worms* occurs in the summer months: That *Convulsions*, *Pulmonick Affections*, *Apoplexy*, and *Sore Throats*, are much more fatal in the first part of the year. The proportion of deaths among children is distressing; one fifth, and in some years one fourth of all that are born, die under five years of age. The proportion of such deaths is likewise increased in the summer season, as we observe them rated at nearly

one third in 1803. From inaccuracy in the reports, all deaths from *Diarrhæas* are set down under the head of *Diarrhæa Infantum*; one fifth or one sixth of this number should probably be taken off, and set down under the head *Diarrhæa*. The number of deaths under the head of *Consumption*, including those of *Debility*, amounts to an average of rather less than one sixth; of these it is fair to remark, that many cases are brought to us from the Northern States, on account of the mildness of our climate in the winter season; and it is fondly to be hoped that less attention to fashion, and more to health, in the tender sex, will hereafter greatly decrease the numbers who fall victims to this disease. Although the changes are great and sudden, our climate is certainly more favourable to *Pulmonick Affections*, than that of the eastern and middle states; for even in New-York, from one fourth to one third of all that die, perish by these complaints. Among children, likewise, however unfavourable to them, our climate may be reputed, the number of deaths is one seventh less, in proportion, than in New-York.

Med. Hist.
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