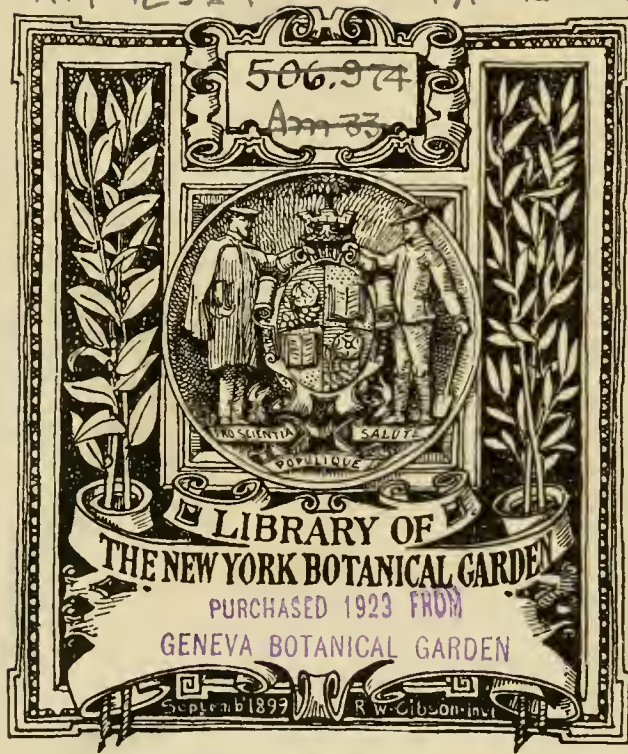




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OF THE

AMERICAN ACADEMY

OF

ARTS AND SCIENCES.

NEW SERIES.

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DR. KIRKLAND'S DISCOURSE

IN COMMEMORATION OF

JOHN ADAMS AND THOMAS JEFFERSON.





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A DISCOURSE IN COMMEMORATION

OF

JOHN ADAMS AND THOMAS JEFFERSON ;

*Delivered before the American Academy of Arts and Sciences,  
October 30, 1826.*

By JOHN THORNTON KIRKLAND,

VICE-PRESIDENT OF THE SOCIETY.

---

GENTLEMEN OF THE AMERICAN ACADEMY OF ARTS AND SCIENCES,

THE fiftieth anniversary of American Independence witnessed the decease of two out of the three surviving individuals, who affixed their signatures to the act declaring us a nation. As citizens and men, you partook in the deep emotion excited by this event, and joined in the solemn and affecting notice taken of their character and their removal. As members of this literary and scientific association, you reserved your particular expressions of honour to their memories for this, the birth-day of one of them, the original proposer of our Institution, and for a succession of years its presiding officer.

“The recent death” (this is the language of your vote) “of John Adams and Thomas Jefferson, distinguished members of this Institution, calls for a tribute of respectful remembrance from their surviving associates ; a tribute which we would not fail to render to men, who, in the lofty contemplation of American Independence, saw, with wise discernment, its essential connexion with intellectual improvement ; who brightened the darkest hours of a perilous conflict with the light of letters, and adorned

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their elevated stations and their calm retirement by the promotion of science, and by generous and uniform encouragement of all good learning in the community."

In endeavouring to acquit myself of the trust you have assigned me, I shall give biographical notices of the men of renown, whom we commemorate.

I should next proceed to speak of the estimation in which we hold their agency in securing the liberty and guiding the councils of their country, and treat of their principles and views relative to our great public interests. On these topics the limits of the occasion forbid me to enlarge, since I am required, under the present appointment, to call your attention more particularly to the intellectual endowments and acquisitions of these distinguished members of our body, and the good service they performed as votaries of useful and ornamental knowledge.

I shall subjoin remarks on some of the lineaments of their private, social, and individual character.

In giving some account of Mr. Adams, it is due to his memory, as well as to usage in similar cases, to speak of his ancestry; for he did not affect to be independent of the feeling which prompts us to associate ourselves with our progenitors. On the other hand, he esteemed it a privilege and gratification to be able to trace his descent to the early settlement of the country, and to find, in the line from which he sprung, a succession of worthy, if not conspicuous persons; freeholders, of whom some gave one or more of their children a liberal education, others held the principal municipal offices in the towns where they lived, and all were in good repute. These men he delighted to honour for their piety, prudence, temperance, industry. His paternal ancestor in this country was Henry Adams from Devonshire, who with

eight sons emigrated to Massachusetts in 1630, having buried his wife in England, and established himself at Mount Wollaston, then a part of Boston ; and his maternal ancestor was John Alden, who was among the first one hundred and one, who landed at Plymouth on the 22d of December, 1620. He was in the third generation from the youngest of the sons above mentioned. He was born of John and Susannah Boylston Adams, in that part of Braintree which is now Quincy, on the 30th of October, 1735.

His parents subsisted by the care and cultivation of a small farm, and were held in respect for their good sense and excellent qualities. The son of a New-England yeoman, of such a standing and character, would be trained, from his earliest age, to simple habits of living, and be accustomed, as he became capable of exertion, to regular employment, to attendance at school, and to religious observances in the family and at church.

Possessing a healthy and active frame, and a relish of nature, Mr. Adams showed in boyhood a willingness to enter upon the vocation of a farmer. His father however saw indications of mental vigor and of a love of books, which pointed to a different walk of life, and encouraged him to go to College with a view to a liberal profession. The son readily acceded to the parental suggestion, and studied under Mr. Joseph Marsh, who kept a classical school in the neighbourhood, where some of the children of families of distinction were placed for instruction. With limited means, he accomplished his four years at Harvard College. During his connexion with the seminary he applied himself laboriously to his studies, without neglecting his health, held a distinguished literary rank, enjoyed the high esteem of the faculty and students, and formed some valuable friendships, which extended to after-life. The prescribed course of study at a place set

apart for enlarged education, including the languages of Greece and Rome, criticism, the mathematics, and mental science, should be considered as designed, first to exercise, and next to fructify the mind ; to serve for discipline and for knowledge. Mr. Adams made himself acquainted with the severer studies, and scrupulously prepared for the class-room before he indulged in private reading. He was accustomed to employ his argumentative talents in a debating society, of which he was a conspicuous member.

The affection he ever bore to his *Alma Mater*, and the good opinion he expressed of her system of study and discipline ; the complacency he took in the *genius loci*, the spirit and character that prevailed in her walls, afford so many pledges of his faithful use of the advantages he enjoyed whilst under her fostering care.

On leaving college he became teacher of the town school at Worcester. At this time he should seem not to have made a final choice of a profession, although he may have entered his name as a law student. After the interval of a year, as appears by a letter to a classmate, having deliberated between the profession of the law and the clerical office, he decided for the former. He prosecuted his legal studies with James Putnam, Esquire, of Worcester, a lawyer of high standing, who in the subsequent disputes took the side of royalty. He was a kind and useful friend to his pupil, making him an inmate of his family, and introducing him early to the acquaintance and good offices of the eminent barrister Gridley.

Mr. Adams, being duly admitted to the bar, began the exercise of his profession in his native place, where he resided with his father. As you have been told, he soon made himself a name, first, by a much famed defence in a cause at Plymouth, in which



he was engaged as counsel after he had come to the court, and next by an argument at Boston, when one of the judges at the court dinner after the trial, asking who this new advocate was, was answered, "You and I shall live to see him the first man in this country."

In 1764 he formed the conjugal connexion, which proved so great a blessing to his life, and which was prolonged to within eight years of his decease.

About this time he began to take an active concern in public affairs, although himself a private man. The cry of endangered liberty began to be uttered through the land; and could he hear it unmoved? His sympathetic nature made the interest, the honour, and danger of his country his own. He had been a writer in the newspapers in favour of American rights, but had not appeared for the cause in any public capacity, when, as his diary states, he received an invitation to join the counsel of the town of Boston in an argument, to be had before the judges, in favour of opening the courts for the administration of justice without the use of stamped paper. He regarded this as one of the eras of his life. He had not contemplated civil station. By accepting this call he would enter into the field of strife, might feel a necessity permanently to forego the quiet and security of privacy, and the benefits of his professional standing, opening before him in his chosen career, and possibly become the property of the public during the long agony that was threatened. Notwithstanding all these misgivings, he could not bring himself to reject the call. "Should such a man as I flee? — I, in principle, in feeling, by descent, by every pledge, a son of Liberty, a man of the people?" No; he would meet the hazard of the times. He said afterwards — "I was never fond of public life, but on the contrary I avoided it



with the utmost care for many years ; but stepping into the midst of civil dissensions, when I first entered on the stage of life, it was impossible for me to avoid having an opinion of my own, and principles like those of the majority of my countrymen. These principles I frankly professed, at all times, and in all circumstances, however critical and dangerous ; which involved me in an unavoidable necessity, when the times grew more tempestuous, to step on board the ship and to take my fortune with the crew. It is, and will ever be, the sweetest reflection of my life, that I did so." \*

I need not detail the particulars of his course till the declaration of Independence, including the publication of his treatise on Canon and Feudal Law, which has been justly said to breathe liberty throughout ; his removal to Boston in 1768 ; his election to the Massachusetts House of Representatives two years after ; his stepping forward under the sense of official duty with Josiah Quincy, Junior, as the counsel of Preston and his men, in disregard of the popular effervescence ; his appointment to the council, and rejection by the governor.

Being chosen to the first Continental Congress, he took his seat there on the first day of the session, and gave all his time and powers to the great concerns upon their hands. Soon after his return, he wrote a series of numbers under the signature of "Novanglus," against the able and plausible essays of "Massachusettsensis" (Jonathan Sewall), his private friend and political antagonist. On the 10th of May, 1775, he took his place in the second Continental Congress.

It devolved on this Congress to appoint a commander-in-chief of the armies raised and to be raised for the defence of American

\* *Memoir of the Life of Richard Henry Lee.* Vol. ii. p. 137.

liberty. Mr. Adams had a leading part in uniting all the suffrages for George Washington.

In this Congress began Mr. Adams's acquaintance with Mr. Jefferson, who joined that body on the 21st of June.

Mr. Jefferson, the eldest son of a respectable landholder, was born on the 2d of April, 1743, at Shadwell, in the county of Albemarle, within a short distance of his late residence, Monticello. He was distinguished by his powers, diligence, and improvement at the College of William and Mary, whose highest honours he received. He studied law with the celebrated George Wythe, afterwards Chancellor, was early in the legislature of Virginia, and took a decided part against the British aggressions. In 1774 he published his "Summary View of the Rights of British America," and in 1775 was called on by the legislature to reply to Lord North's propositions.

In the fourth Continental Congress the great question of Independence was decided, and Mr. Jefferson has the imperishable fame of having made the draught of the Declaration; a work which has always received the highest encomiums, as adapted to its end, worthy of the occasion, and marked by energy and felicity of style and force of argument: whilst Mr. Adams, one of the first who had contemplated separation, was, according to the avowal of the author of the Declaration, "the pillar of its support on the floor of Congress, its ablest advocate and defender against the multifarious assaults it encountered."

Mr. Adams was appointed Chief Justice of Massachusetts, but declined the place, desirous of serving his country in the more arduous duties of a representative in Congress. He retained his seat in this body till November, 1777; when he was made Commissioner to France in the place of Silas Deane, who was recalled.

During the time of his holding a seat in Congress, says one of my highly respected authorities, who has examined the Journals, he was on more committees than any other member; almost every measure of importance, in some stage, was committed to him. He was Chairman of the Board of War, also of the Board of Appeals; he was on the committees to give instructions to foreign ministers, to give commissions and instructions to military officers, to prepare various addresses, — on the medical department, and on the post-office.

Agreeably to his appointment as Commissioner, he sailed for France on the 4th of February, 1778; and returning in August of the next year, he took a principal part in framing the Constitution of this Commonwealth, a draught of which, in his hand-writing, made by him as one of the sub-committee with Mr. Samuel Adams, is deposited in the office of the secretary of the state. Before he had done his work at the Convention for preparing the Constitution of his native state, he received from Congress, on the 4th of November, a commission as Minister Plenipotentiary to conclude a peace, and also another to make a treaty of commerce, with Great Britain. On the 17th of the same month he sailed again for France, where he arrived on the 4th of February, 1780, having landed at Ferrol and travelled through Spain.

Between August of that year and April of the next, at different times he was by Congress appointed Minister to the States-General and to the Stadtholder, authorized to pledge the United States to the armed neutrality, and to negotiate a loan with Holland.

Mr. Adams was not satisfied with the French system of conducting the war, nor with their views respecting peace. He had early perceived at that court a wish to prolong the war, or have

peace made on such terms as would leave us dependent upon her, as would deprive us of the navigation of the Mississippi and of the Grand-Bank fisheries, limit our western border, and oblige us to treat without the preliminary acknowledgment of Independence. In his intercourse with Count de Vergennes, he signified plainly these impressions, and he was not therefore in favour with the cabinet of our ally; and Congress received an intimation, that it would be agreeable if Mr. Adams should be recalled. Congress declined recalling a minister in whom they had full confidence; but so far conceded to the wishes of the French Court, as to join Dr. Franklin, Mr. Laurens, Mr. Jay, and Mr. Jefferson in the commission with Mr. Adams.

A preliminary recognition of Independence was deemed essential, as confirming all the acts done in the course of the war, from the time of the declaration of that event by Congress.

Mr. Adams continued in Holland till he had accomplished the loan in the autumn of 1782; and then repaired to assist in the negotiations for peace at Paris, the honourable and successful termination of which is familiar history. He had a fit of sickness the ensuing winter: on his recovery in the spring, he made a visit to England for health and the gratification of curiosity; came back to Paris in the autumn to complete the definitive treaty; and had his residence the next year chiefly in France, being empowered, in concert with Dr. Franklin and Mr. Jefferson, to form commercial treaties with the powers of Europe.

In the year 1785 he went to England, our first Minister Plenipotentiary to Great Britain. Whilst Minister at the court of London, he published his "Defence of the Constitutions of the United States," designed to justify the constitutional division of power which prevailed in those forms of government.



He obtained leave to return home after February, 1788; having been nine years abroad, engaged in various important and, in some instances, very trying negotiations, on which the fortunes of the country seemed to turn.

The Federal Government was organized, and Mr. Adams, being the second choice for President, became Vice-President at two successive elections. As the government was taking its first steps, there was great occasion for good counsel, and Mr. Adams, though not of the cabinet, was often resorted to by President Washington for information or advice. He was also sometimes called to decide critical questions in the Senate by a casting vote.

The first year after he held this station he wrote his "Letters on Davila," intended, like his "Defence," to show the importance of checks and balances in a republican government, as an antidote to faction.

Already he began to realize one of the apprehensions expressed in a letter from Holland, just after he had intelligence of the adoption of our State Constitution. "There is nothing I dread so much as a division of the republic into two great parties, each arranged under its leader, and concerting measures in opposition to each other." He dreaded justly; for well he knew, that the seeds of party are sown deep and thick in the soil of liberty.

President Washington declining a re-election, Mr. Adams was chosen his successor, Mr. Jefferson being Vice-President. During his administration, the party, which had been long opposed to the leading measures of the federal government, obtained sufficient strength to prevent his second election, and placed his competitor in the chair. Mr. Adams from that time lived in retirement without public office, excepting that he was President



of the electoral college of this state, who chose Mr. Monroe President, and that he was member of the Convention for revising the State Constitution, which he contributed so much to form ; in which body he was requested to preside, but declined. The Convention expressed their sense of his character and services by a series of resolutions, representing, in emphatic and affectionate terms, his claims to the grateful veneration of his countrymen. From this time his books, his farm, his domestic engagements, with hospitable attentions to visitors, a large correspondence, occasional writing for the public, his attendance at the meetings of your Academy, and of the institution for agriculture and natural history, and his animated interest in passing events, furnished ample resources for his mind and his hours.

He was blessed with health and the use of his powers till a few months before his death. At length the frame, which had been for some time tottering, was to fall. After a season of much weakness and a recent more rapid failure, in the perfect exercise of his mind and affections, his thoughts and words answering to those of his life, on the hallowed anniversary that commemorated the most signal and decisive event of his patriotic career, he sunk into the arms of death.

I must recall your attention, respected auditors, to the notices which I have begun of his co-patriot. After the eventful year of 1776 in Congress, Mr. Jefferson was two years employed with Messrs. Wythe and Pendleton upon the Virginian code of laws, and next held the office of Governor in an anxious and trying period. He then went again to the legislature, where the law prohibiting the slave trade, that abolishing entails and the principle of primogeniture, and the bill for establishing religious freedom, were carried through under his auspices.

Mr. Jefferson had married the daughter of Mr. Wayles, an eminent counsellor in Virginia, of whom a few years afterwards he was deprived by death. This event devolved on him the care of his two daughters, who were reared under his immediate inspection.

In the year 1781, whilst under the pressure of public care and family solicitude, he wrote his celebrated work, the "Notes on Virginia." In the year 1782 he was again in Congress, and was appointed Minister to Spain, with a commission to unite with other commissioners already appointed for making peace with England; but that event being evidently near, he did not undertake the voyage.

In May, 1784, he was Minister to France, having a joint commission with Dr. Franklin and Mr. Adams to make treaties of commerce. He returned to this country in 1789, and being requested by President Washington to take the office of Secretary of State, he signified his preference of resuming his embassy to France, acknowledging that he took a lively interest in the changes which had then commenced in the political state of that country; but yet submitted himself to the disposal of the President, who renewing his application, he became Secretary of State. He resigned this office in January, 1794, and intended to relinquish public station altogether, observing that "a republican government was a good government to live under, but a bad one to serve." At the repeated solicitations of political friends he gave up his first intention, and became an acknowledged candidate for the chair;—was Vice-President four years, and President eight, when he returned to his home and to private life. Henceforth he gave himself to his studies, his friends, visitors, correspondence, and the care of his estates, which had become much encumbered during his public avocations.

For the last eight years of his life he was absorbed in procuring the blessings of good education for his native state, and especially in bringing forward the University of Virginia. He did not slacken his hand in this good work, though a new and dreaded evil pressed heavily upon him in his pecuniary embarrassments.

The time was near when he must be gathered to his fathers. He had enjoyed great health and tolerable vigor, and never been obliged to claim the repose which age commonly demands. A disease of some standing made rapid advances; and though he submitted to the prescriptions that were ordered, he was conscious that his strength was failing. With his impressions and affections alive, he saw the advancing step of death; gave directions to his family upon many points, saying he committed his soul to God, and his daughter to his country, and dictating the words which should be inscribed on his tombstone, "The Author of the Declaration of Independence and of the Preamble to the Religious Freedom Law, and Father of the University of Virginia"; and when fifty years had gone by from the day on which he associated his name with his country's liberty, he passed out of life.

You need not be reminded of the powerful and affecting impression made by the extraordinary concurrence of the death of these illustrious personages, and the augmented interest it gave to the posthumous honours they received. I have spoken to you of their biography.

SECONDLY, a sketch of the events in which they acted might afford a basis of reflections upon the value, the dignity, the importance of their agency in founding our republic, and guiding its councils after their establishment.

What a large space have they filled ! What labours, cares, solitudes, services, awaited their days and nights ! What exercise of ability, what resources of mind and heart, what wearing application and high excitement, belonged to their whole course, and especially to the more active scenes of their lives !

In what estimation do we hold the principles, doctrines, and opinions, relating to our rights and duties, which these lights and guides have proposed ! — the doctrine of natural rights maintained in the act of separation, our common nature, the right of every man to the liberty not incompatible with the liberty of another, a government of and for the people, and liable to be changed at their will !

The argument upon conventional and chartered rights was very concisely stated. ‘You must be taxed by Parliament,’ said the parent. We replied, ‘Let us tax ourselves, like other Englishmen.’ ‘But you do not know how much we want.’ ‘Nor you how much we can pay.’ ‘We have expended money in your behalf.’ ‘Was this for yourselves, or for us? If for us, we pay you in our industry ; you turn our commerce into the channels you please.’ Still they reply, ‘We want money and obedience.’ ‘And we, we want our rights.’

What report have fifty years made of the value of such principles ? For us they have proved safe and beneficial, with all our mistakes and passions. Our experiment has been long enough to be cited, though our extraordinary progress may bring new dangers or trials. But what have these principles done for others ? What did they do for France, when they changed a civilized government, first to a sanguinary democracy, and then to a military despotism ? We never asserted that such principles should be held or acted upon without knowledge, and prudence,



and justice, for their attendants. Whilst maintaining the sovereignty of the people, we protested against change for light and transient causes. We never said that revolutions were trifles; nor that liberty might not be hurried, and those called to rule, who were fit only to obey.

Mr. Adams interested himself greatly from the first in the manner of distributing power in the constitutions of this country; and he insisted on the importance of a division of the legislature into two branches, and of an independent executive. Dr. Franklin, M. Turgot, Abbé Mably, and Dr. Price thought little of this attempt at a balance of powers and interests. Some of the states established governments upon the principle of one assembly; and the first legislative body of France was constituted in like manner. The former opinions of Mr. Jefferson seem to have coincided mainly with those of the author of the "Defence." Expressions of views somewhat different have appeared in some of his late compositions.

We all agreed in the doctrine of religious freedom. We never thought of compulsive faith, piety, and charity. The essence of virtue is will. But it was supposed possible to reconcile with the exercise of this freedom a legal support of religious instruction. Practically, however, our religious establishment in this commonwealth has been nearly done away, and probably does not accord with the spirit of the times. The opinions on slavery, respecting which Mr. Jefferson used such vehement language, we trust are now nearly alike throughout our country. We all consider, with Adams and Jefferson, that it is a great evil; but it must be left to be mitigated or removed, as views of duty or interest shall suggest to those immediately concerned.

The portions of their principles and actions, most subject to different estimation by Americans, are those which appeared when they were at the head of two contending parties. These topics I hold it unnecessary and improper to treat. Must we refrain from paying an acknowledgment to the illustrious dead, unless we will consent at the same time to bring them into conflict with each other, and with fellow-citizens; unless we will give their faults, if faults we think they had, for their character, and are ready to rekindle the party or personal acrimony, which opposing views and exasperated feelings once produced? On this point what is required by the law of propriety, of prudence, of charity, of common humanity, has been stated with precision; namely, "that the acts about which differences exist, as practical questions, were canvassed when the measures which they regarded were acted upon and adopted; and, as belonging to history, the time has not come for their consideration."

THIRDLY. We now come to the intellectual endowments and acquisitions of the great men we propose to honour.

Mr. Adams had superior native talents, cultivated and exercised by habitual reading, reflection, and observation; a judgment perspicacious and comprehensive, seeing effects in their causes with prophetic discernment; and his powers of reasoning, convincing, and persuading enabled him to write and speak with commanding influence.

Mr. Adams's various knowledge and wide range of reading are well understood.

For many years he was precluded by studies of the first necessity from much attention to the sciences. "When,"

says he in a letter to a friend, "in 1755, I entered on the study of the law, I saw before me such a field of natural, civil, and common law, and such a group of men as Gridley, Pratt, Otis, Trowbridge, Thacher, Worthington, Hawley, Putnam, and others, among whom I must act a part upon the stage, not indeed to make my way to fame and fortune (for I thought little of either), but to procure a subsistence and live the life of an honest man, that I determined to renounce the pursuit of mathematics, natural philosophy, and metaphysics, in which I had chiefly delighted, in order to devote myself wholly to the law. The practice of the law and the avocations of public employment afterwards entirely confirmed me in the habit of inattention to the sciences, till, in 1784 at Auteuil in France, I had an opportunity and felt an obligation to go through a course of mathematics with my son John, then a child." — In a letter, dated April, 1785, recommending his son to a gentleman of our University, he observes; "In the course of the last year, instead of playing cards like the fashionable world, I have spent my evenings with him. We went with some accuracy through the Geometry in 'The Preceptor,' the eight books of Simpson's Euclid in Latin, and compared it, problem by problem, and theorem by theorem, with Le Père Dechalles in French; we went through Plain Trigonometry and Plain Sailing, Fenning's Algebra, and the Decimal Fractions, Arithmetical and Geometrical Proportions, and the Conic Sections, in Ward's Mathematics. I then attempted a sublime flight, and endeavoured to give him some idea of the Differential Method of Calculation of the Marquis de l'Hôpital, and the Method of Fluxions and Infinite Series of Sir Isaac Newton. But alas, it is thirty years since I thought of Mathematics, and I found I had lost the little I once knew, especially

of these higher branches ; so that he is as yet but a smatterer like his father. However, he has a foundation laid, which will enable him, with a year's attendance on the mathematical professor, to make the necessary proficiency for a degree."

In the intervals of business, and afterwards in his long season of ample leisure, Mr. Adams was a constant reader. He retained and increased his knowledge of Latin, which he read currently, and he occasionally applied himself to a Greek author.

When he went to France, he left nothing undone to master the French language. He learned to read it perfectly, to understand it in conversation, and to speak it with tolerable fluency, but not well.

His reading included works on general politics, the body of English and French literature, older and recent productions, ethics and mental philosophy, and the most important theological subjects. In his latter years he reviewed opinions in philosophy, in its largest definition ; the science that discovers and teaches those principles, by means of which happiness is acquired, preserved, and increased,—the nature of good ; perusing such works as Enfield's "History of Philosophy," and many of the original works of ancient and modern authors of which a summary account is there given. He read the free-thinkers, French and English, and re-examined the evidences of revealed religion, finding his faith confirmed by the result. Butler's "Analogy" and "Sermons" stood high in his estimation. The latter he said he had by heart long ago. He valued him as giving the key to the present state, teaching that the end of being is character. He approved of the ethical philosophy of Hutcheson, Wollaston, Samuel Clarke, and Brown, the lectures of the last having been read by him within a year of his death. He valued Paley, but deemed his theory



of moral obligation, and account of the nature of virtue, defective. He ceased not to hold Locke's writings in great esteem. The older English sermonists met his taste ; Tillotson, Samuel Clarke, Drs. Atterbury, Hoadly, Sherlock, Secker, South. Swift's, Sterne's, and Blair's Sermons also he was fond of perusing. He spoke of Addison's papers on "the Pleasures of the Imagination" with emphatic praise, and advised a young friend to transcribe them into his common-place book. He honoured the writings of Barrow, pronouncing him a quarry of taste, sentiment, and expression.

After Mr. Adams retired from public life to his farm, he perused some of the best works on agriculture, and paid some attention to natural history.

As to his manner of study, he read with selection, frequently with a particular purpose to gain a full view of a subject ; he read with attention, with patience, with meditation, and with revision, so that his reading all turned to use, and nourished and invigorated without encumbering his mind. He sometimes wrote an abstract of what he had acquired on a subject from a course of reading. I have seen a specimen of this sort of exercise in an essay on *Alga fucus* (sea-weed), containing all the information he could obtain from books, as well as his own observations and experience, and showing the qualities and uses of the plant, with which he had learned to enrich his lands.

His time was distributed by a general, not a punctilious method ; since, with the industrious, study and business commonly point out their own time. He profited himself by conversation as well as reading, ever ready to receive as well as to give. Whilst abroad, he made the acquaintance of many of the master-spirits in politics, philosophy, and letters.

I would say a word upon Mr. Adams as an author and writer. His productions are a multitude of official papers, numerous letters, published and unpublished, periodical essays, "The Defence of the American Constitutions," and the "Letters on Davila." His compositions are the expressions of an enlightened and opulent mind; instructive and generally interesting. His style is perspicuous and forcible, often undisciplined, with occasional periods of negligent construction; his epistolary writing, easy, diversified, and agreeable. Passages of great power are found in all his productions, which not merely enlighten and instruct, but are fitted to affect, excite, and touch the reader. The "Letters on Davila" exhibit ingenious views, the philosophy of history, and many passages of great force and beauty. We have often heard of his great resources in speaking, his fertility in argument, sentiment, and illustration.

Let me remind you of his patronage and promotion of that good learning, of which he had so large a store.

We owe to Mr. Adams the first proposal of this Association. When he travelled from Boston to Philadelphia in 1774-5, he several times visited, at Norwalk, a curious collection in natural history, of American birds and insects, made by Mr. Arnold. This was afterwards sold to Sir Ashton Lever, in whose apartments at London Mr. Adams saw it again, and felt a new regret at our imperfect knowledge of the productions of the three kingdoms of nature in our land. In France his visits to the museums and other establishments, with the inquiries of the Academicians and other men of science and letters respecting this country; their encomiums on the Philosophical Society of Philadelphia, and on some of the papers in their Memoirs, suggested to him the idea of engaging his native state to do something in the same good but neglec-

ted cause. In 1779 he returned in the French frigate *Le Sensible*, with the Chevalier de la Luzerne and M. Marbois ; and on a public occasion at Cambridge, being seated next to our distinguished clergyman, the late Reverend Dr. Cooper, he communicated to the Doctor his views and feelings, and concluded with proposing that the subsequent legislature of Massachusetts should be applied to, to institute an Academy of Arts and Sciences. Various objections which occurred being answered by Mr. Adams, the gentleman abovenamed interested himself in the design so judiciously and effectually, that at the first meeting of the legislature, under the new constitution, in 1780, the incorporation of the Academy took place. On the decease of our first President, his late Excellency Governor Bowdoin, Mr. Adams was chosen President, gave his regular attendance at the meetings for a succession of years, and afforded his countenance by generous donations to the library. The several volumes of our Transactions are, we trust, very respectable vouchers for the wisdom of our founder ; and these vouchers would have been more ample, if many of us had done as much as has been done by a few to justify his zeal, and if it had occurred to the Academy early to divide themselves into classes or committees for the several departments of knowledge, which are now under the charge of distinct societies.

Mr. Adams manifested his attachment to the same interests by inserting in the draughts of the project of the Constitution for the state, the second section of the fifth chapter ; which was adopted, making it the duty of the legislature to be the liberal patron of sciences, arts, and education, as well as of the social and moral virtues.

He cherished our institution for Agriculture and Natural History, by presiding at the meetings of the board, through a series of years.

Eight years before his death he made an endowment for an Academy (with many careful provisions) in his native town, to which he bequeathed his extensive and valuable library, and also a property for erecting a church.

The literary and scientific associations in this country, among others the Historical Society in this state and the Philosophical Society of Philadelphia, manifested their sense of his merit, by making him one of their number; and several Universities, besides the oldest, his own, conferred on him honorary degrees.

Whilst we acknowledge our obligation to his mind and learning, let us honour the qualities of his heart, and the moral excellences which claim our esteem and affection; — his patience of labour; his superiority to any unworthy indulgence of the appetites; his energy, vigor, and fearlessness; his probity, his warmth of affection, his public spirit and love of country; and these personal and social virtues crowned by faith and piety.

The pre-eminence of Mr. Jefferson's talents, and the variety and value of his acquirements are to be subjects of our attention. These talents and attainments have been exhibited to the public judgment, in the productions of his mind which are known. They have made themselves evident to enlightened individuals who have resorted to his dwelling or sought his intercourse. He was ever ready to lend the light of his mind, and communicate his knowledge to all who had an open ear. I avail myself of these general sources, and of more particular information of the most authentic kind, to present views of his mind and its pursuits.



His early relinquishment of legal practice gave him more time for general studies ; yet, as he did not postpone business to books, the engagements of a public kind, as well as the private duties, early devolving upon him, often drew him off from this liberal occupation, so agreeable to his taste and wishes.

He read Latin with facility and constantly, the books in that language being an every-day amusement and his favorite travelling companions ; though he complained, after his retirement from public life, of the failure of the critical skill he once had in Roman literature. He had studied Greek in his youth with success, but, during the long lapse of time in which he had neglected it, lost much of his knowledge ; which, however, by much effort, he recovered so as to read Homer and the tragic poets, Sophocles and Euripides, — also Plutarch, Dion Cassius, and the Byzantine historians.

Such was his attachment to the ancient languages, that he said he felt himself more indebted to his father for his classical education, than for his estate.

He learned French in a French family when a boy ; but had lost the habit of speaking it when he went to France. He recovered it so as to speak it with ease, but with occasional mistakes in minor particulars, and with a strong accent. He learned Italian early. One of the first authors he took up in that language was Davila, whom he read with great interest, and whose work he said had exerted an influence on his opinions through life.

Notwithstanding his attachment to Italian, he rather recommended Spanish for those who wanted time for both. He learned it late, after he was appointed minister to France. He took it up on his voyage, and, pursuing it with his characteristic energy

and perseverance, made progress enough, before his arrival, to read Spanish authors with considerable ease.

He made himself acquainted with the Anglo-Saxon, which he considered as the parent stock of the English. He honoured Locke and Stewart, but ceased to take an interest in metaphysical theories. As a practical ethical treatise, explaining duties to God and man, he esteemed the French work on Wisdom by Charron. He was accustomed to read Demosthenes and Cicero in the original, preferring the former.

His favorite study had been mathematics from his youth; which he esteemed an essential part of high education for a young man, both for the improvement of his thinking powers and general benefit of his mind, and for practical usefulness. As he advanced in life, this science influenced all his tastes; he was more attached to the exact, and less fond of what was speculative and imaginative.

He had been attached to poetry, of the classic, not romantic school; but, as he grew old, retained almost none but Shakspeare and Pope. He had been in early years passionately fond of music, using the violin; on which he excelled, and practised, till the bustle of public life forbade him the recreation.

He possessed a taste and skill in the mechanic arts, having an apartment with tools appropriated to his use in this exercise. For his invention of a model of a Mould-board, executed by his own hand, he received a gold medal from the Society for Agriculture of the Department of the Seine. He studied architecture, and drew the plan of the beautiful University edifices.

He sought knowledge among the living as well as the dead. When minister abroad, he formed his society rather among the academicians and philosophers, than the members of the diplomatic corps.

The quality of his composition is peculiar and characteristic ; marked by terse and graphical language, by felicity of phrase, by striking allusion and analogy. So also the uncommon attractions of his conversation have been the theme of constant remark and encomium.

The various ways in which he has promoted knowledge and improvement are too many to be here detailed. He was President of the Philosophical Society, after Dr. Rittenhouse, till the year 1815, and member of many literary and scientific societies at home and abroad. He also received the honorary notices of many of our public colleges and universities.

The last service he rendered to the cause of improvement consisted of a series of indefatigable exertions and anxious cares, in effecting the establishment of the University of Virginia ; and his last, most grateful reflections and cheering hopes accrued from the auspicious beginning of that seminary. Numerous difficulties and obstacles were in the way of the success of this institution, to all which he opposed that inflexibility of purpose, and straight forward, patient, and active perseverance which formed a part of his character. He shrunk from no labour of body or mind, and from no sacrifices, which were required. He extended his already laborious correspondence to get information, and effect purposes, connected with the University. He drew up reports with his own hand, and various papers of business ; and when the first catalogue of books arrived, of perhaps two thousand volumes, he arranged them according to his own method, every volume passing through his hands. "Whilst his mind delighted to expand itself," says an observer, "over the great results which he hoped from it, there was no detail however small to which he would not give his cheerful attention. In short, to those acquainted with Mr. Jeffer-

son it will be sufficient to say, that he poured into this channel all the energy of his vigorous mind, all the enthusiasm of his ardent temper, and all the generous devotion of his noble heart."

I have made remarks on the intellectual endowments of Mr. Jefferson ; I will present a few traits of his personal, private, and social character. He was remarkable for an even and happy temperament, for readiness to every expression of kind feeling, compassion, generosity, alms-giving, and pecuniary bounty of every species ; for good neighbourhood and urbanity, and warmth of attachment ; for patience under pain ; for temperance ; for thrift of time and order in affairs, through fifty years rising before the sun except when ill ; for moderation in personal expenses, and simple personal habits. He was the kindest of masters, and his general confidence in the virtue of his fellow-beings remained unshaken by particular instances of depravity. He considered ignorance, false judgment, and bad reasoning, rather than malignity, as affording the solution of their vice ; and the popular leaning of his politics, and the hard opinion he entertained of those he thought greedy of power for its own sake, are supposed by many, who knew him intimately, to have been produced by his good opinion of human nature, and his sympathy with the humbler classes of mankind.

We look back on the vicissitudes of prosperity and adversity, of success and disappointment, of joy and sorrow, which attended the long and interesting career of the personages we commemorate, — their domestic blessings and afflictions. We find one compelled to resign prematurely the beloved wife of his youth, the object of his devoted attachment ; the other retaining, till within a few years of his own departure, his nearest earthly friend, the assistant of his virtues, the partaker of his griefs, who,



to a superior understanding, and uncommon elevation of mind and strength of character, united the feminine and domestic qualities, always important, and especially so where the head is engrossed by public cares.

The temporary alienation and distance, which existed between these leaders of parties, disappeared in the latter years of their lives; and they, who had shared together the labours and perils of olden time, were joined again in their affections and sympathies, and united in their deaths.

A cloud gathered over the setting sun of Mr. Jefferson. From a sense of duty to his family and to those who had claims upon him, he felt bound to have recourse to the expedient of presenting himself to the public, by which he looked to have the utmost severity of the evil warded off; and under the expectation of the success of this expedient he had peace at the last. Whether the country should suffer this resource to fail without any substitute, and see his bereaved family deprived of all that belonged to him, is a question to be determined by those who would give the most substantial proof of their respect.

Let us take a devout notice of the providence of God, which furnishes agents for his benevolent purposes, and brings individuals upon the stage of human affairs qualified for trying and momentous exigencies in the fortunes of states.

We render respect to those who have gone before us in conspicuous scenes, by a just sense of what is due to their memories. Let us not be wanting in other expressions of respect. Let us feel and act on the occasion as we have reason to think they would desire. As good men, they would wish us to estimate rightly the value of their lives and services: but they would exhort us to manifest our sentiments of regard, not merely

by praises, but by the practice of the virtues which make us at once happy and useful; by emulating their industry in seeking knowledge and doing good; by holding in due estimation the public blessings which they laboured and suffered to secure; and by a perpetual co-operation in maintaining and advancing the welfare of our common country.

When those, whom we desire in this way to celebrate and honour, are endeared not only by the name of common country, but by the tie of consanguinity; when public cares in an elevated and arduous station are in concurrence with filial duty and affection, and a Son is summoned by divine Providence to administer the great concerns, and to help forward the improvement, of the country to which the Father devoted his powers and affections, and with which his name is blended;—the work of patriotism and duty may well be performed with augmented zeal and a deeper interest.

The young should feel themselves peculiarly called to study the characters and principles, to understand the value of the labours and the institutions, to hand down the merits, and to copy the excellencies, of the great and good who have preceded them; that “instead of the fathers may be the children,” to improve and perfect what has been so well begun.

Let the achievements and efforts of eminent predecessors be emulated by those who succeed to their places. With increased opportunities and a wider sphere, we ought proportionably to excel. The circumstances are indeed different, but the principle of conduct is the same for us and them,—a faithful discharge of our duty as men, as Christians, and as citizens, according to the means in our power, and the stations and relations in which we are placed.

Our fathers were allotted to a field of strife, a scene of difficulty and danger. We have a conflict of another kind, but not less severe. We are to resist the wiles, and baffle the temptations, incident to a condition of prosperity, security, and ease. We are to exercise the virtues, whilst exempt from the privations, pertaining to those who laid the foundations of the state.

To the other motives and excitements of patriotism is added the sentiment congenial with an ingenuous mind, — the reflection that in our cares and exertions, in our respective places, for the civil, religious, and literary community, and in every act which answers to the duty of a good citizen, we are associated with sages, patriots, and heroes of past times; we are justifying their toils, accomplishing their wishes and hopes, and consummating their glory.

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MEMOIRS  
OF THE  
AMERICAN ACADEMY.

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I.

*Remarks on Longevity and the Expectation of Life in the United States, relating more particularly to the State of New Hampshire, with some Comparative Views in relation to Foreign Countries.*

BY J. E. WORCESTER, A. A. S.

THE inquiry respecting longevity and the expectation of life, in the United States, compared with that of other countries, has never been very thoroughly pursued. We frequently meet with casual remarks or a short essay respecting some branch of the inquiry, but no one is known to have attempted an extended comparative view of the subject. It is to be regretted that there is a want of sufficient data for furnishing so full and satisfactory views of it as could be desired; and particularly that the census of the United States has hitherto been taken in such a form, as to be almost useless in the investigation. And a leading inducement with the author of this communication, in preparing and offering it to the Academy, has been the hope, that, by calling the attention of others to the subject, an improved mode of taking the census may in future be adopted.



The information contained or made use of in this essay, has been collected from a great variety of sources. The greater part of that which relates to New Hampshire, has been derived from the "New Hampshire Historical Collections," by Messrs. Farmer and Moore, from their valuable Gazetteer of that State, and from the communications of Mr. Farmer to the Massachusetts Historical Society. From these has been taken, with some corrections and additions, the list of persons in New Hampshire, who have lived to their 100th year or upwards.

For considerable information with respect to persons in the United States, who have reached the age of 110 years or upwards, the writer has been indebted to the politeness of the Honourable William Plumer, late governor of New Hampshire; a gentleman who has paid much attention to inquiries of this sort.

It is not to be supposed that the names of all the persons, who have lived in New Hampshire to the age of 100 years, or in the United States to 110, are here collected, or that any means exist of collecting all of them. It is not improbable that the ages of some of the persons in the following lists are incorrectly stated. A considerable portion of those who live to extreme old age, are persons in the humblest walks of life, destitute of education, and in some instances ignorant of the time of their birth. There is also, in cases of this kind, a tendency in most persons to exaggerate from a love of the marvellous, as well as a readiness to believe on slender evidence. "Instances of long life," says Dr. Johnson, "are often related, which those who hear them are more willing to credit than examine. To be told that a man has attained a hundred years, gives hope and comfort to him who stands trembling on his own climacteric."



In a number of instances, the statements of age, as given in different publications, have been ascertained to be incorrect. It is stated in the *Gazetteer of New Hampshire*, and likewise in the 10th volume of the *Second Series of the Massachusetts Historical Collections*, that "*Mrs. Hayley*" died at Exeter, in 1790, at the age of 101. In the *Transactions of the American Philosophical Society*, [vol. v.] the name is "*Thomas Hayley*," and the age 101. In the 4th volume of the *Massachusetts Historical Collections*, the name is "*Benjamin Hayley*," and the age about 100. But by information obtained from the son of this man, it has been found that his name was *Thomas Hayley*, and his age only 98; and that no other person of the name of *Hayley* has died at Exeter at so great an age. In a Magazine, published at Philadelphia, in 1804, it was stated that *Samuel Bartrou* died at Boothbay, Maine, at the age of 135. But instead of this, it appears that a man of the name of *Barter* died at that place, at the age of 105. Several newspapers and journals, in 1823, mentioned the death of a Moor, of the name of *Yarrow*, at Georgetown, Columbia, at the age of 135; but it has been found that his age was only about 85. It was stated in a Magazine, published in London, and also in one of Philadelphia, that a Mulatto man died at Fredericktown, in 1797, said to be 180 years of age; but with regard to this statement, no information either to contradict or to confirm it, has been procured. In some publications *Sarah Norton*, a coloured woman, of Barnstable, Massachusetts, has been stated to have died, in 1818, at the age of 116; but it has been ascertained that her age fell short of this period by about ten years. Other similar exaggerations have been detected which it is not necessary to specify; and it is probable that if all the instances enumerated in the following lists, were thoroughly

investigated, some of them would be found not to be supported by any satisfactory evidence.

There are some things in this essay, particularly the notices of a few persons remarkable for longevity in foreign countries, which may, perhaps, be thought out of place, not sufficiently connected with the principal design of the article, and calculated to give it too miscellaneous a character. In reference to this, the writer would observe, that when he began to collect the information contained in this paper, he had no design to make it the subject of a communication to the Academy; and having collected most of these notices from sources not very common, he has thought proper to retain them, as it may, perhaps, be interesting to see some account of a few of the most singular instances of longevity in foreign countries, in connexion with those of our own.

*Instances of Longevity in New Hampshire, with the Places of Residence, the Time of Decease, and the Age.*

YEAR.	PLACE.	AGE.
1732 William Perkins	Newmarket	116
1736 John Buss	Durham	108
1739 James Wilson	Chester	100
1754 William Scoby	Londonderry	110
1754 James Shirley	Chester	105
1765 Elizabeth Hight	Newington	100
1767 Anna Glover	Pelham	106
1772 Howard Henderson	Dover	100
1775 William Craige	Chester	100
1775 Mrs. Craige (his wife)	Chester	100
1775 Mrs. Lear	Portsmouth	103
1775 Mrs. Mayo	Portsmouth	106
1787 Robert Metlin	Wakefield	115

YEAR.	PLACE.	AGE.	
1789	Mrs. Ulrick	Hollis	104
1791	Jacob Green	Hanover	100
1791	Mrs. Davis		102
1791	James Shirley	Chester	100
1792	Mrs. Stagpole	Dover	101
1793	James Wilson	Chester	100
1795	Hugh Tallant	Pelham	101
1796	Mrs. Parker	Chesterfield	103
1798	Noah Johnson	Plymouth	100
1800	Sarah Newmarch	Portsmouth	101
1800	Thomas Wason	Chester	100
1801	Ezekiel Leathers	Durham	100
1802	Abednego Leathers	Durham	101
1805	Hannah Lovejoy	Amherst	102
1806	Abigail Sanborn	Canterbury	101
1808	Martha Chesmore	Dunbarton	101
1808	Daniel Davis	Allenstown	105
1808	Margaret Bacon		101
1808	Mrs. M'Clench	Merrimack	100
1808	Martha Porter	Lebanon	100
1808	Catharine Sherburne	Conway	101
1808	Mrs. Welch	Rumney	100
1809	Joshua Foss	Barrington	100
1810	Catharine Sanborn	Sanbornton	100
1810	Mrs. Hixon	Portsmouth	100
1810	Tabitha Bohannon	Salisbury	101
1811	Mrs. M'Intire	Goffstown	106
1811	Ezra Deolph	Hopkinton	102
1811	Mary Bean	Sutton	100
1811	Nathan Blake	Keene	100
1811	Benjamin Conner	Exeter	100
1812	James Atwood	Hampstead	100

YEAR.	PLACE.	AGE.
1813	Joanna Hixon	Newington 105
1813	Mary Davidson	Goffstown 100
1815	Anna Leavitt	Hampton 100
1815	Sarah Morse	Salem 100
1815	John Shaw	Holderness 101
1815	John Crocker	Richmond 100
1816	Elizabeth Richards	Newington 101
1816	Phebe Dow	Seabrook 101
1816	Comfort Collins	Seabrook 105
1816	Deborah (a woman of colour)	Canterbury 102
1816	Zeno (a negro)	Nottingham 101
1817	Elizabeth Darling	Portsmouth 102
1817	Elizabeth Pitman	Epsom 100
1817	Abigail Craig	Rumney 105
1817	Mrs. Bunker	Barnstead 105
1817	Mary Fernald	Portsmouth 100
1818	Hannah Foss	Gilmanton 103
1818	Dorcas Rowe	Meredith 100
1818	Dye (an Indian woman)	Exeter 105
1818	Corydon (a negro)	Exeter 100
1819	Eleanor Pike	Meredith 100
1819	Jacob Davis	Sutton 105
1819	William Prescott	Gilford 102
1820	Dorothy Creighton	Epping 101
1820	Samuel Downs	Somersworth 100
1820	Patience Sibley	Poplin 101
1821	Jonathan Foster	Mason 101
1821	Joanna Aplin	Keene 100
1821	Jane M'Lellan	Wentworth 100
1821	Mrs. Godfrey	Deerfield 101
1821	Mary Smith	Salem 101
1821	Isaac Small	Canterbury 101



YEAR.	PLACE.	AGE.	
1822	Hannah Small (widow of I. Small)	Canterbury	102
1822	Reuben Abbot	Concord	100
1822	Thomas Walker	Sutton	103
1822	Hannah Bailey	Chesterfield	104
1823	Abigail Roberts	Durham	104
1823	Samuel Welch	Bow	112
1823	Sarah Dame	Newington	101
1823	Mary Barnard	Amherst	101
1823	Job Kidder	Goffstown	100
1823	Nathaniel Pallote	Canterbury	105
1824	Abigail Owen	Winchester	102
1824	Tryphena Siles	Somersworth	103
1824	Sarah Smart	Sanbornton	101
1824	Francis Como	Sutton	100
1824	Hannah Wilson	Keene	103

*Of uncertain date.*

Zaccheus Lovewell	Dunstable	120
James Otterson	Chester	103
Mrs. Belknap	Atkinson	107
Mrs. Beals	Keene	101
Mrs. Tucker	Rye	100
Mrs. Ela or Healy	Chester	100

There are known to have been at least *twelve* persons living in New Hampshire, in 1823, at the age of 100 years and upwards.

The above list, containing 93 persons, is numerous, considering it as limited to the small state of New Hampshire, and to the period of only 93 years. As the materials were collected from various unofficial sources, the enumeration is doubtless imperfect. This will appear evident from a little examination of the table

itself. Of the 93 years, there are only 37 for which any names are given ; and there are several periods of considerable length, as from 1735 to 1754, 1754 to 1765, and 1775 to 1787, including, in these three intervals, 35 years, during which none are enumerated. Less than a fourth part of the towns in the State are found in the table ; and it is observable, that of the first 25 persons mentioned, 7 belonged to the town of Chester. The disproportion between the several counties is also noticeable. Taking the divisions of the State as they were before the new county of Merrimack was formed, the 96 persons whose residence is given, will be distributed as follows : 47 to the county of Rockingham, 18 to Strafford, 16 to Hillsborough, 3 to Cheshire, 7 to Grafton, and 0 to Coos.

Dr. Belknap states that “in Londonderry, the first planters lived, on an average, to 80 years;” and it has been said that the earlier inhabitants of this country were a stouter, more vigorous, and longer lived race, than their descendants. This may probably have been the fact, as their circumstances and habits were more favourable to longevity than those of the present generation, inasmuch as they were more universally industrious, frugal, and temperate ; and possessed all the necessaries, but none of the luxuries of life. The preceding table, however, furnishes no evidence of a diminution of instances of longevity ; nor, on the other hand, can it be considered as affording any evidence of the contrary, as the table is undoubtedly more complete with regard to the later years than the earlier ones.

The five following persons, *Lovewell*, *Perkins*, *Metlin*, *Welch*, and *Scoby*, lived to the age of 110 years or upwards.

Zaccheus Lovewell is said to have reached the age of 120 years, which is the longest life that is known to have been attained



in New Hampshire. He was a native of England, and served as an ensign in the army of Oliver Cromwell ; but on the restoration of Charles II. he came to this country, and was one of the first settlers of Dunstable. He was the father of Zaccheus Lovewell, a colonel in the French war, and of Captain John Lovewell, the commander in the celebrated action at Pequawkett, known by the name of " Lovewell's Fight." But few particulars can be ascertained respecting his history, and the precise time of his death is not known.

William Perkins, of Newmarket, was a native of the west of England. Governor Burnet visited him at his residence, in 1729, and examined him respecting many facts and occurrences during the civil war in England. A son of his died in 1757, at the age of 87 ; and Thomas Perkins, of Wakefield, N. H., a great grandson, died in 1824, at the age of 92.

Robert Metlin (called by Dr. Belknap, Robert Macklin), who died at Wakefield, in 1787, at the age of 115, was a native of Scotland. He lived for some time at Portsmouth, and followed the occupation of a baker. The following anecdote respecting him is related by Mr. Adams, in his " Annals of Portsmouth," under the year 1787, the year of Metlin's death.

" He was a great pedestrian. He usually bought his flour in Boston, and always travelled thither on foot ; he performed the journey in a day, the distance being then about sixty-six miles, made his purchases, put his flour on board a coaster, and returned home the next day. He was eighty years of age the last time he performed this journey. At that time this was thought an extraordinary day's journey for a horse. The stages required the greatest part of two days. Col. Atkinson, with a strong horse, in a very light sulky, once accomplished it in a day. He set out

early in the morning, and before he reached Greenland, overtook Metlin, and inquired where he was bound: Metlin answered, to Boston. Atkinson asked if he ever expected to reach there; and drove on. Atkinson stopped at Greenland, and Metlin passed him; they alternately passed each other every stage on the road, and crossed Charlestown ferry in the same boat, before sunset."

Samuel Welch, who died at Bow on the 5th of April, 1823, was born at Kingston, N. H. September 1, 1710. His mother, and also a sister of his, lived each to the age of about 100 years, and a brother to the age of 90. He enjoyed hardly any advantages of education, was in very moderate circumstances, and followed the occupation of a farmer. For the last fifty years of his life he lived in Bow, in an obscure corner, and in an uncomfortable habitation, cultivating a little farm. He was a man of industry, temperance, and almost uninterrupted health. By a gentleman, who visited him the last year of his life, he was described as in person rather above the middle size, of Grecian features, with dark expressive eyes; his locks of a clayey white, looking as if they had already mouldered in the grave; his face fair, though wrinkled with the cares of a century and an eighth; his frame feeble, so that he was unable to walk; his mental faculties, however, but little impaired; his memory retentive, and his judgment sound. "His appearance," says one describing him just after his decease, "was truly venerable. Time had made deep inroads upon his frame; his locks had been touched by the silvery wand; his eye, originally dark and brilliant, gave evidence of decaying lustre; while his countenance, wrinkled with years, and his frame, tottering and feeble, could not but deeply impress the beholder. He spoke of life, as one weary of its burdens, and wishing 'to be away.' His death corresponded with his life;—it was calm and tranquil."

William Scoby, a native of Ireland, died at Londonderry at the age of 110 years. It is recorded of him, that when 100 years of age, he travelled on foot from Londonderry to Portsmouth, more than thirty-five miles, in one day; an exploit which many would find it difficult to do at any period of life.—The age of William Scoby is stated in the first edition of Dr. Belknap's History of New Hampshire at only 104; but at 110 in the second edition, as it is also in the New Hampshire Gazetteer, the Massachusetts Historical Collections, and likewise by a correspondent of the writer at Londonderry.

From a calculation on the bills of mortality of 32 townships, situated in different parts of New Hampshire,—the average length of the time for which the observations were made being 21 years, and in no instance less than 10 years,—it appears that the annual mortality in the State is only as 1 to 83. This ratio is so small as to excite, perhaps, reasonable suspicion respecting the accuracy of the bills. At any rate, however, the ratio of mortality in New Hampshire, compared with that of countries in Europe, is doubtless small. The proportion between the deaths and the number of inhabitants, differs greatly in different countries. With regard to large cities in Europe it is stated at the ratio 1 to about 22; in France, 1 to 30; Sweden, 1 to 39; England, 1 to 49; Russia, 1 to 59; Wales, 1 to 60; and in the counties of Anglesea and Cardigan in Wales, 1 to 71.

From this statement it appears that the ratio of mortality in Wales is much less than in the other countries of Europe, that are above mentioned. But on the supposition that the climate of Wales and that of New Hampshire are equally salubrious, the ratio of mortality in the latter must be less than in the former, for the

following reasons:—1st. The population of New Hampshire is almost wholly engaged in agriculture, whereas in Wales the number of inhabitants employed in agriculture, is to that employed in trade and manufactures, only about as 5 to 3. 2dly. A much greater proportion of the population of the latter country reside in towns and villages, than in the former. 3dly. Luxury, on the one hand, and extreme poverty on the other, are much less common in New Hampshire than in Wales. 4thly. In New Hampshire the poorer class of people are not only much better provided with the necessaries and comforts of life, but are also better educated and are of better morals, than the same class in Wales. For these reasons, it is believed, if the above statement of the law of mortality in Wales is correct, that respecting New Hampshire cannot deviate very widely from the truth.

On the supposition that the ratio of mortality in New Hampshire is as 1 to 30, the average annual number of deaths during 16 years, from 1808 to 1823 inclusive, by taking the mean of the two enumerations of 1810 and 1820, will be found to have been 2,866: total number of deaths during the 16 years, 45,856. Of these, 59 at least, as appears by the above list, were of persons of the age of 100 years or upwards;—equal to 1 in 789.

In 1784, an order was issued by Kian Long, emperor of China, for assembling before him all the old men in his empire; yet throughout his extensive dominions, and out of a population estimated at about 200,000,000, *four* persons only could be found who were over 100 years of age. In Sweden, which is esteemed a healthy country, there were, according to the enumeration of 1815, in a population of 2,465,066, only 9 persons of 100 years of age, equal to 1 in about 270,000. In England, in 1821, in a population of 9,330,461, there were 168 centenarians; equal to



1 in 58,514 : in Wales, in a population of 700,210, 21 centenarians ; 1 in 33,343 : in Scotland, in a population of 1,956,706, 102 centenarians ; 1 in 19,133 : in Ireland, in 1824, in a population of 6,801,327, 349 centenarians ; 1 in 19,833. In New Hampshire, in 1823, in a population of 244,161, there were at least 12 centenarians ; equal to 1 in 20,000. It is stated by Larrey, chief surgeon in the French army in Egypt, that in the city of Cairo, there were, in 1800, 35 persons of 100 years of age, which, supposing the population to be 400,000, will make 1 to 11,423.—Dr. Ramsay, in his History of South Carolina, enumerates 9 persons who were living in that State, in 1809, at the age of 100 years or upwards ; and 9 who had died in that State at the age of 100 or more, from 1798 to 1809.

“ Russia, Norway, Sweden, Denmark, Scotland, Ireland, and Switzerland,” says Malte-Brun, “ are the countries which furnish the most numerous and the most authentic examples of men and women having had their lives extended beyond the period of 100 years. In these countries we may reckon one centenarian for every 3,000 or 4,000 individuals.” The New Edinburgh Encyclopædiâ observes : [Vol. XII. p. 561.] “ From a comparative view of many tables of mortality it results that \* \* \* of 8,119, 1 may complete a century.” According to Duvillard’s table of mortality in France, only one in 4,830, in that country, attains the age of 100 years.

In the preceding quotation from Malte-Brun, the proportion of persons who arrive at the age of 100 years, in the countries specified, is probably stated too low.

The following *table* exhibits the results of observations for several countries and cities. The first column of figures represents the *number of years* for which the observations were made.

the second the *whole number of deaths during those years*, the third the *number of centenarians*, and the fourth the *number of deaths to one centenarian*.

	<i>Years.</i>	<i>Deaths.</i>	<i>Centenarians.</i>	<i>Deaths to 1 Cent.</i>
Diocesses of Bergen and Christiana	1	9,509	81	117
New Hampshire	16	45,856	59	789
Naples, City of, (1818)	1	11,471	13	882
Philadelphia	10	21,688	24	904
Sweden	9	791,501	710	1,114
Russia	3	2,615,316	1,997	1,309
Montpellier	21	23,366	13	1,797
Vienna (1823)	1	11,060	4	2,790
London	38	723,599	157	4,609

It is to be observed that the statements, in the above table, with regard to the cities of Naples and Vienna, and the diocesses of Bergen and Christiana, in Norway, are given for only a single year. The period is, therefore, too short, and the result deduced from too small a number of deaths to be safely considered as the general average. The statement with regard to New Hampshire is the result of calculations which have already been explained : that respecting Philadelphia is formed on the bills of mortality for 10 years, ending with the year 1816, as given in the Transactions of the American Philosophical Society : that with respect to Sweden from official returns for 9 years, ending with 1763 : that respecting Russia from official returns of deaths of persons belonging to the Greek church, in that empire, during the years 1801, 1813, and 1820 : that with regard to London from the bills of mortality during 38 years, ending with 1820.

From a comparison of the above results, it appears that New Hampshire furnishes a greater proportion of centenarians than Sweden or Russia, both of which countries are distinguished for



longevity. Philadelphia, also, in this respect, compares advantageously with Montpellier, and more especially so with London.

The statement in the table respecting the diocesses in Norway, relates to the year 1761, and indicates that country to be remarkably distinguished for longevity. The following statement, taken from Easton, furnishes further evidence of the same fact. There were, in the diocess of Christiana, in 1763, 150 married couples who had lived together upwards of 80 years; 70 others who had lived together 90 years and upwards; 12 from 100 to 105 years; and one 110 years.

*The following Table shows what proportion of 10,000 persons in the respective countries and cities mentioned, die at the several ages specified. The number standing over each column denotes the number of deaths on which the calculations, in the several cases, have been founded; each being reduced to a radix of 10,000.*

	918	15744	1519	210,476	23,366		
<i>Between ages of</i>	<i>N. Hamp.</i>	<i>Philadelphia.</i>	<i>Carlisle.</i>	<i>London.</i>	<i>Montpellier.</i>	<i>France.</i>	<i>Sweden.</i>
0 & 1	1739	2601	2119	(0 & 10)	2518	2325	2605
1 & 10	1821	1771	2777	4201	2922	2164	2165
10 & 20	567	432	424	335	272	489	458
20 & 30	930	1060	521	705	453	641	558
30 & 40	535	1311	473	902	481	687	599
40 & 50	599	974	641	1030	549	724	644
50 & 60	588	673	559	926	675	835	735
60 & 70	920	507	940	830	772	959	975
70 & 80	984	364	824	594	709	829	929
80 & 90	716	225	532	317	542	309	351
90 & 100	224	63	154	60	92	36	40
100 & upwards	32	11	22	2	5	2	7

In the above table the calculations respecting New Hampshire are founded on the bills of mortality of only three towns, those of

Deerfield for 20 years, Amherst for 15 years, and Epping for 5 years. These calculations, and also those respecting Carlisle, are founded on too small a number of deaths to be regarded a safe criterion, and particularly the proportion of centenarians, here exhibited, doubtless much exceeds, in both these cases, the general average; but with regard to the other ages, the deviation from the general law may not, perhaps, be very great. The column relating to New Hampshire, it will be seen, indicates a much greater expectation of life than either of the others.

“Carlisle,” says Mr. Milne, “is probably one of the healthiest towns in England for its size. The law of mortality in it, probably differs very little from the general law throughout the kingdom, taking the towns and country together, if we except children under 5 years of age, or at most under 10.”

By this table it would seem, that in the expectation of life, Philadelphia ranks below London and Montpellier, with regard to the principal results; although, in the proportion of centenarians, it ranks above London, both in this table and in the preceding one.

*The following Table shows what proportion of the deaths in several countries and cities are of persons of 70 years of age and upwards; and also of 90 and upwards.*

	Years.	Deaths.	Of 70 & upwards.	One in	Of 90 & upwards.	One in
New Hampshire	22	3756	708	5	124	30
Carlisle, England	6	1519		6½		57
London	11	210476	20514	10	1321	159
Sweden	9	791501			6227	127
Philadelphia	7	16000	1044	15	117	136
France				31		361

In this table, the statement with regard to New Hampshire, is founded on the bills of mortality of seven towns, as given for a series of years, amounting, on an average, to 22 years, including, in all, 3,756 deaths. From this it appears that one in 5 lived to the age of 70 years, and one in 30 to 90; a greater proportion than in either of the other cases.

According to Dr. Halley, in the city of Breslaw, of 1,000 persons 34 live to the age of 80 or upwards; that is, one in 29. In Berlin 1 in 37; in Philadelphia 1 in 40; in Edinburgh 1 in 41; in London (according to Dr. Price) 1 in 62; and in Vienna 1 in 66, are computed to complete their 80th year. According to the bills of mortality in Hingham, Mass. one in 13; and in Hamilton, one in 8, lives to the same age. Of the persons, who died in Russia in 1813, one in 106 was of the age of 85 years.

*The following Table exhibits a list of such persons in the United States as have attained the age of 110 years or upwards.*

	PLACE.	YEAR.	AGE.
Flora Thompson, a negress	Harba Island, Pa.	1808	150
Solomon Nabit	Laurens Co. S. C.	1820	143
Abraham Paiba	Charleston S. C.		142
Cady la Fontaine	Bay of Baluxi, Mis.	1823	137
Matthew Bayley	North Carolina	1809	136
A Negro	Richmond, Va.	1817	136
Michael Dougherty	Goose Creek, Geo.	1808	135
Henry Francisco	Whitehall, N. Y.	1820	134
Francis Agne	Somerset Co. Md.	1767	134
James Thomas	Georgia	1804	134
Flora Ferguson, a negress	Smyrna, Del.	1819	130
—— Wright	Bryan Creek, Geo.	1805	130
Nell Courcey, a negress	Charlotte Hall	1821	130

	PLACE.	YEAR.	AGE.
Lucy Mainey, a negress	Maryland	1816	130
Lucretia Stewart, a negress	Falmouth, N. J.	1817	130
William M'Kim	Richmond, Va.	1818	130
John de la Somet	Virginia	1766	130
Elgebert Hoff	Fishkill, N. Y.	1764	128
Thomas Vance	Chesterfield Co. Va.	1767	127
Cæsar Augustus Wetherbee, a negro	Boxborough, Mass.	1808	126
Wonder Booker, a negro	Prince Edward Co. Va.	1819	126
John Dance	Chesterfield Co. Va.		125
Thomas Hathcooke	Richmond Co. N. C.	1818	125
Robert Cordley, a man of colour	Richmond, Va.	1820	125
John Gilley	Augusta, Me.	1813	124
William Dunkin	Fincastle, Va.	1805	124
Matthew Williams	Frankfort, N. J.	1814	124
Abraham Van Verts	Albany, N. Y.	1790	124
George Palmer, a free negro	Georgia	1813	121
Eleanor Spicer	Accomac Co. Va.	1773	121
Charles Layne	Campbell Co. Va.	1821	121
John Peter Fellow	Harrison, Pa.	1809	121
Mrs. Starr Barret, a Jewess	Charleston, S. C.	1820	121
Zaccheus Lovewell	Dunstable, N. H.		120
Pompey, a negro	Delaware	1804	120
Alexander Ross	Milton, N. Y.	1818	120
John Parker	Marlborough, Mass.	1817	120
Barnet Wier	Davidson Co. N. C.	1824	120
Charles Cotterel	Philadelphia, Pa.	1761	120
Martha, a Mohegan Indian	Mohegan, Ct.	1805	120
Jack Clement, a negro	Baltimore, Md.	1810	120
Davy, a negro	Charles Co. Md.	1818	120
Mrs. Strickland	Chesterfield Dist. S. C.	1819	120
Deborah, a negress	Talbot Co. Md.	1816	120
Joshua Brooks	Hudson, N. Y.	1822	120



*Mr. Worcester on Longevity.*

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	PLACE.	YEAR.	AGE.
Frederick Harpswell	Fishkill, N. Y.	1791	120
Uldrick Stower	Claverack, N. Y.	1810	120
John Camson	Patrick Co. Va.	1824	120
Mary Thompson, a coloured woman	Newark, N. J.	1822	119
A Negro (living)	Charleston, S. C.	1818	118
Jeremiah Ward	Cabell Co. Va.	1824	118
John Summers	Indiana	1822	117
Ephraim Pratt	Shutesbury, Mass.	1804	117
Mrs. Davis	Newton, Mass.	1752	116
John Gilleland	Pendleton Dist. S. C.	1817	116
Mr. Van Gelder	Piscataway, N. J.	1817	116
Mary Sutton	Bladen Co. N. C.	1810	116
Charles Roberts	Bullskin, Va.	1796	116
Mary Parks	Somerset Co. Md.	1823	116
William Perkins	Newmarket, N. H.	1732	116
George Harding	Winchester	1825	116
Jack Chambers, a negro	Middleton, Pa.	1805	116
Chloe, a negress	Delaware	1825	116
Philip Crull	Fairfax Co. Va.	1813	115
Thomas Brit	Near Georgetown, S. C.	1825	115
Mrs. Cotterel, wife of C. Cotterel	Philadelphia, Pa.	1761	115
Morris Wheeler	Readfield, Me.	1817	115
Orono, wife of the Indian chief Orono	Old Town, Me.	1808	115
William Metlin	Wakefield, N. H.	1787	115
Prince, a negro	New Rochelle, N. Y.	1819	115
Anne Bailey	Harrison, Ohio	1825	115
Samuel Dalton	North Carolina	1807	115
Dido, a negress	Vienna, Md.	1825	115
Mr. Lilly	Washington, N. C.	1815	115
Anna Lawton	Portsmouth, R. I.	1825	114
William Taylor	Pitt Co. Va.	1794	114
Lucy, a negress	Halifax, N. C.	1825	114

	PLACE.	YEAR.	AGE.
Mr. Neighbours	Laurens Dist. S. C.	1798	114
John Weeks	New London, Ct.	1798	114
Ephraim Bunche	St. James Parish, S. C.	1814	114
Frank, a negro	Woodstock, Va.	1820	114
Charles Jordan	North Carolina	1803	114
Adam Smith, a negro	Philadelphia, Pa.	1819	114
Alexander Berkley*	Charlotte Co. Va.	1825	114
Orono, a Penobscot Indian Chief	Old Town, Me.	1801	113
Mrs. Belknap†			113
Shenandoah, an Indian chief	Oneida Castle, N. Y.	1816	113
Dinah M'Intire, a negress	Philadelphia, Pa.	1819	113
Priscilla Carmichael	Surrey Co. Va.	1818	113

\* Alexander Berkley was a native of Scotland, and came to this country at the age of 15 years. At the age of 110 he recovered the perfect use of his sight, which had been partially injured, and entire blindness ensued thirty days after. He died on the 22d of October, 1825, and his wife, whom he married at the age of 21, died on the 19th of January, 1826. They had lived together 93 years, and had 14 children, 12 of whom lived to mature age.

† Mrs. Belknap's husband is said to have come from England and settled in Haverhill in Massachusetts; but the time and place of the death of Mrs. Belknap are not known. Her daughter, Mrs. Sarah Newton, of Southborough, Mass. (mentioned in the *Am. Phil. Trans.* Vol. III. p. 46) died in 1790, at the age of 106. The following particulars are stated respecting five other children, viz.—that her son, John Belknap, died in Westborough, Mass. in his 101st year; that another son lived to upwards of 100; that her daughter, Mrs. Flagg, of Boston. (probably the same as Mrs. Hannah Flagg, stated in the *Am. Phil. Trans.* Vol. III. p. 47, to have died in Boston, in 1787, aged 102) lived to 101; and that two other daughters, Mrs. Cunningham and Mrs. Merrill, each exceeded the age of 100 years. The particulars respecting this extraordinary instance of family longevity, were communicated to the writer by a clergyman of respectability, who stated that he received them from two great grandsons of Mrs. Belknap, and that he has “reason to believe them to be substantially correct.”



	PLACE.	YEAR.	AGE.
Susan Ford	M'Intosh Co. Geo.	1821	113
Samuel Welch	Bow, N. H.	1823	112
George Reelman	Guilderlandt, N. Y.	1819	112
William Spicer	North Carolina	1823	112
Mrs. M'Allister	North Carolina		112
Mrs. Newby	Laurens Dist. S. C.	1806	112
Mrs. Poak	Biddeford, Me.	1770	112
Mrs. Blake	Portland, Me.	1824	112
Sarah, a negress	Kent Co. Md.	1822	112
Sarah Carter	Petersburg, Va.	1825	112
Catharine Rush	Philadelphia	1817	112
Mr. Ramsbottom (living)	Cape Elizabeth, Me.	1826	113
Mrs. Berkley (wife of A. Berkley)	Charlotte Co. Va.	1826	111
William Wootten	Virginia	1773	111
Peter Sine	Doylestown, Pa.	1820	111
Margaret Miller (living)	Philadelphia	1824	111
Angela Millet	Philadelphia	1825	111
Daniel Anderson	Tennessee	1818	111
Mrs. Moody	Portland, Me.	1824	111
Cato Overing, a negro	Newport, R. I.	1821	110
William Scoby	Londonderry, N. H.	1754	110
Richard Furniss	Cushing, Me.	1810	110
John Thomas, an Indian	Natick, Mass.	1727	110
Arthur Bibbins	Windham, Ct.	1786	110
Melchior Geiffer	Middletown, Ct.	1799	110
Mrs. Buroy	Rutland, N. Y.	1823	110
Morris Lawrence	Pennsylvania	1792	110
Catharine Carea	Chambersburgh, Pa.	1822	110
Hannah Dean	Concord, Pa.	1801	110
Alice Jennet	Benham, Pa.	1808	110
Abigail Cook	Baltimore, Md.	1802	110
Quashee, a negro	New York	1815	110

		PLACE.	YEAR.	AGE.
Mrs. Magdalene		Baltimore, Md.	1819	110
Catharine Cerla		Hagerstown, Md.	1822	110
Mrs. Harrison		Brunswick Co. Va.	1805	110
Robert Higgens		Kentucky	1805	110
Phebe Perry		Wilmington, N. C.	1818	110
Thomas Kilgore		Tennessee	1822	110
Abraham Eades*	(living)	Campbell Co. Va.	1793	110
Mrs. Layne	do.	Campbell Co. Va.	1821	110
Mrs. Jackson	do.	Santee Hills, S. C.	1809	110
Mary Miller	do.	Orangeburgh, S. C.	1809	110
John Cary, a man of colour		Petersburgh, Va.	1825	110

Of the persons in the above list, a large proportion of those, whose origin is known, were of foreign birth. Some short notices of a few of them may not be uninteresting.

Of Solomon Nabit, an old hunter, the following particulars have been stated; viz. : that he was a native of England, where he lived till he was 19 years of age; that he then came to this country, and resided in the state of Maryland till about 55 years before his death; that he then removed to South Carolina, where he passed the remainder of his life; that he never lost his teeth nor his eyesight; and that a few days before his death, he joined a hunting party, and actually killed a deer.

Henry Francisco is stated to have been born in France, in 1686; but at the age of five years he left that country in company with his father, who fled from religious persecution, and went first to Holland, and afterwards to England. Henry was present at the coronation of Queen Anne, and was at that time sixteen years old. He

\* The wife of Abraham Eades died at the age of 100. They lived together 80 years.

fought in the wars of that queen under the duke of Marlborough. In the early part of the last century he came to New York with his father. He was wounded in Braddock's defeat; was carried a prisoner to Quebec during the revolutionary war; and was much cut up by wounds. He died on the 26th of October, 1820, in the 135th year of his age, after an illness of forty-five days, brought on by an attack of the fever and ague.

In the latter part of his life he resided about two miles from the village of Whitehall, N. Y. The year before his death he was visited by Professor Silliman, from whose account the following extracts are taken.

“When we arrived at his residence (a plain farmer's house, not painted, rather out of repair, and much open to the wind), he was up stairs, at his daily work of spooling and winding yarn. This occupation is auxiliary to that of his wife, who is a weaver, and although more than eighty years old, she weaves six yards a day, and the old man can supply her with more yarn than she can weave. Supposing he must be very feeble, we offered to go up stairs to him, but he soon came down, walking somewhat stooping, and supported by a staff, but with less apparent inconvenience than most persons exhibit at eighty or ninety.

“His stature is of middle size, and although his person is rather delicate and slender, he stoops but little, even when unsupported. His complexion is very fair and delicate, and his expression bright, cheerful, and intelligent; his features are handsome, and considering that they have endured through one third part of a second century, they are regular, comely, and wonderfully undisfigured by the hand of time; his eyes are of a lively blue; his profile is Grecian, and very fine; his head is completely covered with the most beautiful and delicate white locks imagina-

ble; they are so long and abundant as to fall gracefully from the crown of his head, parting regularly from a central point, and reaching down to his shoulders; his hair is perfectly snow white, except where it is thick in his neck; when parted there, it shows some few dark shades, the remnants of a former century.

“He still retains the front teeth of his upper jaw; his mouth is not fallen in, like that of old people generally, and his lips, particularly, are like those of middle life; his voice is strong and sweet-toned, although a little tremulous; his hearing very little impaired, so that a voice of usual strength, with distinct articulation, enables him to understand; his eyesight is sufficient for his work, and he distinguishes large print, such as the title page of the Bible, without glasses: his health is good, and has always been so, except that he has now a cough and expectoration. He is really a most remarkable and interesting old man; there is nothing either in his person or dress, of the negligence and squalidness of extreme age, especially when not in elevated circumstances; on the contrary, he is agreeable and attractive, and were he dressed in a superior manner, and placed in a handsome and well furnished apartment, he would be a most beautiful old man.

“He has had two wives, and twenty-one children; the youngest child is the daughter, in whose house he now lives, and she is fifty-two years old; of course he was eighty-two when she was born. They suppose several of the older children are still living, at a very advanced age, beyond the Ohio.

“Henry Francisco has been all his life a very active and energetic, though not a stout-framed man. He was formerly fond of spirits, and did, for a certain period, drink more than was proper, but that habit appears to have been long abandoned. In other respects he is remarkably abstemious, eating but little, and particularly ab-



staining, almost entirely, from animal food ; his favourite articles being tea, bread and butter, and baked apples. His wife said, that after such a breakfast, he would go out and work till noon ; then dine upon the same, if he could get it, and then take the same at night, and particularly that he always drank tea, whenever he could obtain it, three times a day. Except his cough, which they told us had not been of long standing, we saw nothing in Francisco's appearance that might indicate speedy dissolution, and he seemed to have sufficient mental and bodily powers to endure for years to come.

“The old man manifested a great deal of feeling and even tenderness, which increased as we treated him with respect and kindness : he often shed tears, and particularly when on coming away, we gave him money, he looked up to heaven and *thanked God*, but did not thank us : he however pressed our hands very warmly, wept, and wished us every blessing, and expressed something serious with respect to our meeting in another world. His character appears remarkably sincere, guileless, and affectionate.”

Wonder, a negro belonging to George Booker of Prince Edward county, Virginia, died March 15, 1819. He was born in April, 1693, and he was named *Wonder* from the circumstance that his mother was in her 58th year at the time of his birth. He was of great strength of body, and his mental powers, which were far superior to that of people of colour in general, he retained in a surprising degree. He was a constant labourer in his master's garden till within eight or ten years of his death.

John Gilley was born in Ireland, about 14 miles from Cork, in 1690. He came to America about the year 1750 ; resided on the Kennebec, near Fort Western, upwards of 50 years, and died at Augusta, July 9, 1813, aged 124. He was of small size,



weighing usually from 112 to 116 pounds—in his best health, 124 pounds ; but possessed considerable strength and activity of body till a short time before his decease. He was illiterate, of moderate intellect, and cheerful disposition. There was nothing peculiar in his diet ; he was not remarkably temperate, nor yet intemperate ; he was of industrious habits, and was accustomed to hard labour and coarse fare.

Ephraim Pratt, the grandson of one of the early settlers at Plymouth, in Massachusetts, was born in East Sudbury, in the same state, in 1686 or 1687. The last 50 years of his life, he passed in the town of Shutesbury, where he died, May 22, 1804. He married at the age of 21, and, it is stated in Dr. Allen's "American Biographical Dictionary," that he could number, before his death, among his decendants, about 1500 persons. In 1801 four of his sons were living, the oldest of whom was 90 years of age, and the youngest 82. He was through life remarkable for temperance, and drank no wine or distilled spirits during his last 50 years ; and for 40 years he ate no animal food, living mostly upon bread and milk. He enjoyed such uniform health, that he was not known to have ever consulted a physician ; and he was able to walk several miles in a day till a few years before his death.

John Summers, was born in Virginia, near the Potomac, July 12th, 1706. About the year 1785 he removed to the state of Kentucky, where he resided till 1820, when he again removed to the state of Indiana, where he died on the 29th of March, 1822. At an election in Kentucky, in 1818, being then 112 years of age, he walked from his residence to the town of Mount Sterling, a distance of five miles, in order to exercise his right of suffrage. He was described then to be in sound health,

and of considerable activity ; his hearing good, and his sight such that he was able to read without spectacles. Two years afterwards, when he left Kentucky for Indiana, he travelled on foot from twelve to twenty miles a day.

He had been twice married, and had had 19 children, of whom 14 were living in 1818, one of them only eleven years of age ; and he had had upwards of 300 descendants. He was a man of firm health, never known to be sick ; of cheerful disposition, and temperate habits. He was a professor of Christianity, of the Baptist denomination. He was a poor man, and was employed as a school master for 68 or 70 years.

In England there was published, a few years since, a list of such persons as were known to have lived, in different periods and countries, to the age of 120 years or upwards. The number amounted to 145, distributed as follows :

63 to England and Wales,	29 to Ireland,
23 to Scotland,	30 to other countries.

The table inserted above contains the names of 48 persons who have reached this age in the United States, and 37 of them have died since 1800. This country, therefore, considering its age and population, can produce its full share of instances of remarkable longevity,

It has been asserted by European philosophers, “ that the principle of life is deteriorated in the climate of America.” Smith, in his History of New York, says, that “ the inhabitants of this colony are shorter lived than Europeans.” Whitehurst likewise observes, that “ Englishmen in general are longer lived than Americans ; and that a British constitution will last longer even in that

climate, than a native one." It is doubtless true that a large proportion of those who have attained to extreme old age in this country, have been of foreign birth. Change of climate is esteemed favourable to long life; and many Englishmen, as well as other Europeans, by coming to America, have undoubtedly lived to a greater age than they would have done, had they remained in their native land. But the supposition that Europeans are longer lived than Americans, has been adopted by many on slender evidence.

Instances frequently occur of persons living to a great age in the Southern States, and a considerable part of the examples in the table, are from that portion of the Union. Such persons, in most cases, were natives of the States further to the north, or of Europe, or were people of colour. Dr. Ramsay, in his "History of South Carolina," observes: "Some emigrants from Germany, France, Ireland, Scotland, England, and the Northern States, have survived their 100th year, and a few their 110th. A few natives of the low country survive to from 80 to 89 years, beyond which no native but one, as far as can be recollected, has been known to live, who made the low country his or her residence." "Satisfactory evidence can be produced that at least one negro, born in Carolina, has approached to the age of 120."

The instance of the greatest age attained in America, in support of which authorities deserving much regard can be adduced, is perhaps that of Louisa Trexo, a negress, of Tucuman, in South America, living, in October, 1780, at the age of 175. Humboldt mentions a Peruvian Indian, who died at Lima while he was there, at the age of 147 years, having been married 90 years to the same woman, who had lived to the age of 117. Till he had attained the age of 130, this venerable personage was able to walk three or four leagues every day.



Both the Peruvian Indians and the Creoles are remarkably long lived, and retain their vigour and bodily faculties to a very advanced age. It is stated in the *Mercurio Peruviano* that in the small province of Caxamarca, containing hardly 70,000 inhabitants, there were eight persons living, in 1793, whose ages were 114, 114, 121, 131, 132, 135, 141, and 147; and the same year a Spaniard died in his 145th year, leaving 800 lineal descendants.

“ Within these last eight years,” says the Canadian Spectator, “ there have died in the village of Coghawaga [which contains less than 1000 inhabitants] 10 Indians, each of them upwards of 100 years of age. It may be worthy of remark that the life of these people is made up of a regular mixture of idleness and hardship, and upwards of ninety meals in a hundred consist of Indian corn cooked in a manner peculiar to Indians.”

The two most celebrated instances of longevity that have occurred in England, are those of Thomas Parre and Henry Jenkins, both of which cases are recorded in the Philosophical Transactions of the Royal Society. Parre, a peasant of Shropshire, died, in 1635, at the age of 152. He was twice married; the first time at the age of 80, the second at 120; and had offspring by each marriage. In 1635, he was brought to London, and introduced to Charles I., but the change of situation, and his altered mode of life, particularly his drinking wine, soon proved fatal to a constitution hitherto supported by more temperate and abstemious habits, and he died the same year. According to Easton, [“ On Longevity ”] a son of his reached the age of 113 years, one grandson that of 109, another that of 127, and a great-grandson the age of 124 years.

Henry Jenkins, a native of Yorkshire, died in 1670, at the age of 169. He was a fisherman the last century of his life, and often swam in rivers after he had attained 100 years. At the age of 157, he was produced in a court of justice and deposed as a witness of what had passed within his knowledge 140 years before. "Though he had not the use of his eyes nor much of his memory several years before he died; yet he had his hearing and apprehension very well, and was able, even in the 130th year of his age, to do any husbandman's work, even threshing corn."

Sir William Temple observes, that "Many of the Brachmans among the old Indians, and of the Brazilians at the time that country was discovered by the Europeans, were said to have lived two hundred, some three hundred years."—"It was in the Punjâb," says Malte-Brun [Geog. vol. III. p. 26], "and these other elevated countries, that the ancients collected numerous examples of Indian longevity. The *Cyrni*, and the subjects of prince *Musicanus*, often lived to the age of 130 or 200 years. The moderns have gone still further. The Portuguese historian, Faria, states that an inhabitant of Diu attained the age of three full centuries; and he adds that, according to the accounts of the natives, several individuals of 200 were to be found in Guzerat."

Captain Riley, in the "Journal of his Shipwreck," mentions an Arab of the Great Desert of Africa, who, according to Sidi Hamet, was nearly 300 years of age; and in connexion with this fact, he adds, "I am fully of opinion that a great many Arabs on this vast expanse of desert actually live to the age of 200 years and more."—Mr. Neumark, of Ratisbon, in a treatise recently published, on the "Means of Attaining to Advanced Age," has quoted one example of a person who had lived to the age of



200 years, two of 296, and one of 300. The individual, who is said to have attained the last mentioned age, was John de Temporibus, who was equerry to Charlemagne.

Such statements as the above are too extraordinary to gain belief, unless supported by the most unquestionable evidence. Of the person mentioned by Neumark, Lord Bacon speaks in the following manner: “Joannes de Temporibus, amongst all the men of our latter ages, out of common fame and vulgar opinion, was reputed long lived, even to a miracle, or rather even to a fable; his age hath been counted above three hundred years: he was by nation a Frenchman, and followed the wars of Charles the Great.—Being asked how he preserved himself so long, he is said to have answered, ‘By oil without and honey within.’”

We know of no evidence that there has been any great change during the last three thousand years, with regard to the frequency of longevity. Human life among the Jews, the Greeks, and the Romans, appears to have been of about the same duration as among modern nations. The following statement, quoted from Lord Bacon, is perhaps as extraordinary as any that is to be met with:—“The year of our Lord 76, falling into the time of Vespasian, is memorable; in which we shall find, as it were, a calendar of long lived men; for that year there was a taxing (now a taxing is the most authentional and truest informer touching the ages of men); and in that part of Italy which lies betwixt the Apennine mountains and the river Po, there were found 124 persons, that either equalled or exceeded an hundred years of age; namely,

54	persons of	100	years of age.
57	“	110	“
2	“	125	“
4	“	130	“
4	“	135 or 137	“
3	“	140	“

“ Besides these, Parma, in particular, afforded five, whereof three had fulfilled 120, and two 130 : Brussels afforded one 125 years old : Placentia, one aged 131 : Faventia, one woman aged 132 : a certain town, then called Velleiacium, situate in the hills about Placentia, afforded ten, whereof six fulfilled 110 years of age ; four, 120 : lastly, Rimino, one of 150 years, whose name was Marcus Apponius.”—Clodia, the wife of Ophilius, who lived to the age of 116 years, is mentioned by Pliny, the naturalist, as the oldest female who had died in ancient Rome.

The most extraordinary instance of longevity in modern times, with regard to which satisfactory information is to be found, is that of Peter Tortin, or Zorten, a native of Kofrock, four miles from Temesvar, in Hungary. He died January 5, 1724, at the age of 185. A few days before his death, he walked, with the assistance of a stick, to the post-house in Kofrock, to ask charity of the travellers. He had then but little sight, and his hair and beard were of a greenish white colour, like mouldy bread, and few of his teeth remained. Being a Greek by religion, the old man was a strict observer of fasts, and his food consisted of pulse, milk, and bread, with a little brandy. His youngest son, born of his third wife, was living at the time of his father's death, at the age of 97.

John Rovin and his wife, natives of Stadowa, in Temesvar, Hungary, both died in the place of their nativity, in 1741, the former in his 172d year, the latter in her 164th ; having been married 147 years. They left four children living at the time of their death, the youngest being 116 years of age. These instances are the more extraordinary, as the climate of Temesvar is not esteemed very salubrious.—See *Sir John Sinclair's "Code of Health and Longevity,"* Vol. II. pp. 274-276 ; also *Easton's "On Longevity."*

It is a well established fact that more women than men live to old age. According to the observations of Dr. Price, of the persons who attain the age of 80 years, the proportion of females to males is as 49 to 34. Yet it has been observed, that of the few who have lived beyond the age of 110 or 120 years, there are more men than women. The preceding tables of instances of longevity in this country, furnish evidence of the correctness of both of these principles. With regard to the 93 persons, in New Hampshire, who reached the age of from 100 to 110 years, 59 were women, and 34 men; while all the five who arrived at 110 or upwards were men. A large majority also, of the persons above enumerated, who, in the United States, lived to the age of 110 or upwards, were males.

Of the 145 persons who reached the age of 120, enumerated in an English publication [see the article "Longevity," in Gregory's Dictionary of the Arts and Sciences], before referred to, two thirds were men, yet the following statement of the number of males and females of advanced age in Great Britain, in 1821, shows that aged women in that country are much more numerous than aged men.

	Men.	Women.
Between the ages of 80 and 90 . . . .	34,964 . . . .	43,049
"          "      90 and 100 . . . .	2,873 . . . .	4,046
"          "      100 and upwards	100 . . . . .	191

The following statement of the number of aged persons of each sex, who died in Sweden in 9 years, ending in 1763, illustrates the same principles.

	Men.	Women.
Above . . . . 90 . . . .	2,036 . . . .	3,440
Above . . . . 100 . . . .	284 . . . .	424
Above . . . . 110 . . . .	23 . . . . .	20

Among centenarians are found few persons of rank or fortune; few professional men, or men of science and literature. Monarchs have not often exceeded the age of 70; and of about 300 popes, only 7 are said to have reached the age of 80. By far the greater



part of those, whose lives have been extended to a period beyond 100 years, have been persons of humble rank in society; such as enjoyed few of the luxuries or accommodations of life, but were accustomed to hard labour and coarse fare. Such are the persons, who, if temperate, are more likely to enjoy health and long life, two of the things most coveted by man, than those who are possessed of affluence, and occupy more enviable stations.

*Summary of the Ages of Persons in Great Britain, as returned by the Census of 1821.*

	Under 5	5 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	80 to 90	90 to 100	100 or upwards
England.													
Males	739,762	645,735	562,209	475,052	706,755	555,713	452,514	320,092	215,263	106,797	27,052	1,995	57
Females	725,202	636,604	530,226	499,638	845,469	607,867	468,336	328,077	230,009	114,572	32,564	2,888	111
Wales.													
Males	51,817	48,123	41,404	34,534	49,023	37,949	29,815	22,112	16,246	8,335	2,535	258	3
Females	49,487	45,853	39,140	35,931	55,869	41,640	32,641	24,083	19,175	10,076	3,751	392	18
Scotland.													
Males	137,956	125,298	115,183	95,319	137,615	101,107	82,695	60,014	42,309	19,977	5,377	620	40
Females	133,711	121,573	109,247	108,306	182,712	124,380	96,991	73,518	51,868	23,293	6,734	766	62
Islands.													
Males	6,160	5,672	4,758	4,128	6,104	4,946	3,976	2,892	1,894	873	255	14	—
Females	6,027	5,689	4,821	4,893	7,983	5,923	4,627	3,548	2,596	1,221	428	29	—
London.													
Males	61,284	48,030	41,072	37,937	75,385	67,938	52,824	32,058	15,513	5,639	986	74	9
Females	60,993	49,907	41,835	48,136	103,433	78,604	54,806	34,663	19,505	7,849	1,738	197	16

	England.	Wales.	Scotland.	Islands.	London.
Males	4,808,898	342,154	923,540	41,673	438,749
Females	5,021,563	358,056	1,033,166	47,785	501,682
Excess of females	212,665	15,902	109,626	6,112	62,933

The census was imperfect as it respects the *ages* of the inhabitants; and consequently the above table does not include the total of population. The following statement exhibits the total enumeration, and also the number of those whose ages were returned.

	Total enumeration.	Ages returned.
England . . . . .	11,261,437	9,830,461
Wales . . . . .	717,438	700,210
Scotland . . . . .	2,093,456	1,956,706
Islands . . . . .	89,508	89,458
London . . . . .	1,225,694	940,431

Summary of the Ages of the Free White Persons in the United States, as returned by the Census of 1820.

	Under 10.	10 to 16.	16 to 26.	26 to 45.	45 and upwards.
Males	1,344,263	612,102	755,520	765,546	494,735
Females	1,279,622	604,912	780,865	736,068	462,449
Totals	2,623,885	1,217,014	1,536,385	1,501,614	957,184

The following Table shows what rate per cent. of the whole White Population of several of the States, situated in different parts of the Union, together with the whole white population of the United States, were of the several ages specified, according to the census of 1820.

	Me.	N. H.	Mass.	Ct.	N. Y.	Pa.	Va.	S. C.	Geo.	Ohio.	Ind.	U. S.
Under 10	32.2	28.8	27.1	27 0	32.8	33.6	33.6	34.8	36.5	37.7	39.2	33.4
10 to 16	16.3	15.8	14.8	15.1	15.4	15.2	15.2	15.5	15.4	15.6	15.2	15.5
16 to 26	19.9	19.5	19.7	19.8	19.9	20.0	20.1	20.0	19.7	19.1	19.2	19.6
26 to 45	18.8	20.0	21.7	20.4	20.1	18.8	18.8	18.1	17.7	17.9	17.8	19.0
45 & upwards	12.6	15.7	16.4	17.5	11.5	12.2	12.2	11.4	10.6	9.6	8.3	12.2

The following Table exhibits the number of White Inhabitants in the same States, under and above the age of 16; the excess under and above 16; the ratio of the excess to the whole white population; also the rate per cent. of the increase of the respective States, in ten years, from 1810 to 1820.

	Under 16.	Above 16.	Excess under 16.	Excess above 16.	Ratio of Excess.	Ratio incr. for 10 years from 1810 to 1820.
Maine	144,292	153,048		8,756	2.9	30.4
N. Hampshire	108,636	134,500		25,864	10.6	13.8
Massachusetts	217,134	299,285		82,151	15.9	10.9
Connecticut	112,652	154,529		41,877	15.7	5.1
New York	644 822	687,422		42,600	3.2	43.1
Pennsylvania	499,566	519,528		21,962	2.1	29.5
Virginia	293,976	309,097		15,864	2.5	9.3
S. Carolina	116,794	115,218	1,576		0.6	21.1
Georgia	98,301	91,265	7,036		3.7	31.5
Ohio	307,683	268,889	38,794		6.7	152.0
Indiana	97,472	66,274	13,198		9.0	500.0
U. States	3,843,653	4,017,977		174,324	2.2	34.0

The irregularities observable in the last two preceding tables, are to be ascribed chiefly to the following causes. 1st. *Emigra-*



tion from the old states to the new. Among the emigrants there is a large proportion of the young and active, and but a small one of those advanced in life. This circumstance tends to increase the proportion of the aged in the old states, and to diminish it in the new.

2dly. *Difference in the ratio of increase of population.* In newly settled countries, where every man may easily obtain the means of living in as good a style as that of his neighbours, early marriages are almost universal. Of course the number of births, provided the country is tolerably healthy, greatly exceeds that of deaths, sometimes in the ratio of three or four to one. Those, therefore, in the early stages of life, will, in these circumstances, bear an uncommonly great proportion to those drawing near its close.

3dly. *Difference of climate.* It is to this cause that the differences observable in such of the old states as increase in nearly an equal ratio, is chiefly to be ascribed. But it is owing principally to the two former reasons, that in the newly settled states, there is found so great a proportion of the population under the age of 10 years, and so small a proportion upwards of 45. In addition to these there are other causes, of a moral nature, of more or less influence, arising from the difference in the condition and habits of the people in the several states.

Dr. Dwight, in his "Travels" [see Vol. I. Letter VI.], has given a view of the comparative healthiness of New England and some of the Southern States; and comes to the conclusion that the chance of living to the age of 45 in Connecticut, is to the chance in Georgia, as 2 to 1. That the chance of living to this age in Connecticut, is greater than in Georgia, is doubtless true; but the difference is by no means so great as stated by Dr. Dwight. Indeed it

could not be without making the chance of living to that period in Connecticut nearly a certainty. Dr. Dwight founds his estimate on the proportional difference in the ages of the inhabitants, without regard to the fact that this difference is affected by a difference in the ratio of increase. He also makes an allowance in *favour* of Connecticut on account of emigration; whereas the effect of emigration is the opposite of what is assumed. His calculation likewise implies, contrary to all experience, that the mortality of females is equal to that of males.

Dr. Williams, in his "History of Vermont," after giving a table exhibiting a comparative view of the inhabitants under and above 16 years of age, of the Northern, Middle, and Southern States, according to the census of 1790, makes the following remarks. "From this result it should seem that the Middle and Northern States are the most favourable to longevity and the preservation of life; and that the Southern States are most favourable to rapidity of production and increase. Whether these circumstances will not balance each other, and produce an equality in the period of doubling, cannot be determined without further observations."

These remarks are evidently made with but a very limited view of the subject. If the ages of the inhabitants, as given by the census, were a criterion, by which, without reference to any other circumstance, we could determine the comparative healthiness of the climate of the several states, or the chance of living to advanced age, Indiana would rank much lower, in this respect, than Georgia, or than any other state exhibited in the preceding tables. Of the inhabitants of Indiana only  $3\frac{3}{10}$  in 100 are of the age of 45 and upwards; while in Connecticut  $17\frac{5}{10}$ , that is, more than twice as many are of this age. This difference is not to be ascribed chiefly to difference of climate, but to the fact that Indiana

is augmenting in population much more rapidly than Connecticut, by natural increase, as well as by accessions from the other states. Of the states enumerated in the above tables, Indiana and Ohio have the greatest proportion of their inhabitants under the age of 10 years, and the smallest over the age of 45; and these are the two states which increased in population, from 1810 to 1820, much faster than the others,—the former at the rate of 152 per cent., the latter at the rate of 500 per cent.

The rates of increase from 1810 to 1820, in Maine and New Hampshire, are 30.4 per cent. and 13.8. The mean of these, 22.1, differs but little from the rate of increase in South Carolina, which is 21.1. In South Carolina, according to the above table, only  $11\frac{4}{10}$  in 100 of the inhabitants are of the age of 45 and upwards; while in Maine and New Hampshire, taking the mean,  $14\frac{1}{10}$  in 100 have reached this age. In South Carolina, likewise, more than half of the inhabitants are under the age of 16 years; while a large majority in Maine and New Hampshire are above this age. These differences may be ascribed chiefly to the circumstance that the probability of life is greater in the New England states, than it is in the Southern.

In agreement with these observations, it will be found that in European countries, where the increase of population is very moderate; in other words, where the deaths are nearly equal to the births, the number of inhabitants in the earlier years of life, bears a much smaller proportion to those more advanced, than in the United States. These differences, in some instances, it will be seen, are very remarkable.

In France the proportion of the population under 10 years, is estimated at but a little more than  $\frac{1}{4}$ : under 20, a little more than  $\frac{2}{7}$ . In Naples, according to the census of 1818, in a population of

5,052,262, there were under 10 years 1,347,045, a little more than  $\frac{1}{4}$ : under 20 years, 2,073,288, a little less than  $\frac{2}{3}$ . In Sweden, according to the census of 1815, in a population of 2,465,066, there were under 15 years, 778,647, less than  $\frac{1}{3}$ . By comparing the numbers of the several ages in the population of England and the United States, as given in the above tables [pp. 34 and 35] we find the following proportions of the different classes, to the whole population:—

England—Under 10, less than  $\frac{1}{4}$ ; under 20, less than  $\frac{1}{2}$ ; under 30, less than  $\frac{2}{3}$ ; upwards of 50, less than  $\frac{1}{3}$ .

United States—Under 10, less than  $\frac{1}{3}$ ; under 16, less than  $\frac{1}{2}$ ; under 26 more than  $\frac{2}{3}$ ; upwards of 45, less than  $\frac{1}{3}$ .

The tables are so dissimilar, with regard to ages, as not to admit of an accurate comparison; but it will be readily seen from the view here given, that the proportion of persons in the early stages of life in the United States, is much greater than in England, or in either of the other countries enumerated. Had the comparison been made with regard to the Western and Southern States, to the exclusion of the rest, the difference would have been still greater; for in those states more than half of the inhabitants are under the age of 16 years.

Another striking difference between the population of the United States and that of countries in Europe, relates to the proportion of the sexes. It is a well established fact, that in all countries where accurate observations have been made, there are more males born than females; in Europe, the proportion is stated as 21 to 20, or 26 to 25. The mortality also is greater among males in childhood, as well as in subsequent periods of life, computed to be in the proportion nearly as 27 to 26. Hence it



follows that at the age of 15 years, an equality in the numbers of persons of the two sexes, is nearly established. Afterwards war and other causes of the destruction of human life, which fall most heavily on the males, occasion the difference to be reversed, and the females to outnumber the males. But in the United States, where the waste of life by war and unhealthy occupations, is less than in Europe, the males outnumber the females. The majority, however, of males in this country, is increased in some measure by European emigrants, more than half of them being males. In several of the old states which annually lose a considerable number of their inhabitants by emigration, there is found a majority of females; while in the newly settled states there is a great excess of males. In France the proportion of females to males is computed as 17 to 16.

*The following Table exhibits a comparative View of the Number of Males and Females in several Countries.*

	Males.	Females.	Excess of Females.	Excess of Males.
Sweden	1,176,967	1,288,099	112,132	
Naples	2,423,295	2,628,967	205,672	
England	5,433,679	5,777,758	294,079	
Wales	350,487	366,951	16,464	
Scotland	933,552	1,109,904	126,352	
London	438,749	501,682	62,933	
United States	3,995,053	3,886,657		128,396

From the sum of the excesses of females in England, Wales, and Scotland, 426,395, deduct 319,300 (the number as officially stated in 1821) for the army, navy, and seamen, and 117,595 will be found the true excess of females above the males in Great Britain according to the census of 1821.—In the census of the United States, the army and navy appear to have been omitted. If they had been included, the majority of males would have been considerably greater than is stated in the above table.



It is a matter of regret that the census of the United States, from the manner in which it has hitherto been taken, affords so little satisfactory information in relation to the principal topics which have been here considered. The successive enumerations of the inhabitants of this country, by the rapid increase which they have exhibited, have attracted the attention of the philosophers of Europe, and have given them new views respecting the principle of population. But the census might be taken in such a manner that it would furnish a document vastly more interesting and useful both to them and to ourselves.

Since the first census, that of 1790, some valuable alterations have been made ; yet every one who will duly consider the subject, will be readily convinced that further important improvements might be introduced. In the census of 1790, the inhabitants were divided into the five following classes.

1. Free white males under 16 years of age.
2. Free white males of 16 years and upwards.
3. Free white females of all ages.
4. All other free persons.
5. Male and female slaves.

In the last census, that of 1820, the free white males and females were each divided into the five following classes.

1. All those under 10 years of age.
2. All those of 10 and under 16.
3. All those of 16 and under 26.
4. All those of 26 and under 45.
5. All those of 45 and upwards.

In addition to these divisions, the free white males between 16 and 18 were placed in a separate column.

In the three former enumerations, the free people of colour were thrown into one mass, without distinction of age or sex ; and the same course was adopted respecting the slaves. But in the census of 1820, each sex of both these descriptions of persons, was distinguished into the four following classes.

1. All those under 14 years of age.
2. All those of 14 and under 26.
3. All those of 26 and under 45.
4. All those of 45 and upwards.

Another important addition in this census, was a statement of the number of persons engaged in agriculture, commerce, and manufactures, in each state and territory.

The reasons why all the above divisions, with respect to age, were adopted, are not very obvious ; nor why different divisions were made with regard to the whites, the free people of colour, and the slaves. When the next census shall be taken, it is to be hoped that a more minute, uniform, and philosophical division will be formed. If, instead of the above divisions, the three descriptions of the inhabitants, the whites, the free coloured persons, and the slaves, were all divided respectively into classes of *fives* from the period of birth to the age of twenty years ; and into classes of *tens* from that age to the close of life, in the same manner as the population of Great Britain\* in the table inserted above, (page 34) the census would then become a highly interesting document, and would furnish data for various important calculations relating to the science of statistics and political economy. And although, on account of the migratory habits of our population,

\* In taking the census of Sweden, the population is divided into classes of persons under 5 years of age, from 5 to 10, 10 to 15, 15 to 20, 20 to 25, and so on in classes of *fives* from the period of birth to the close of life.

and the difference in condition between the old and the new states, there would be found, in the census, many irregularities in the different classes of the inhabitants, produced by various disturbing causes, which Europeans, if we may judge from past experience, would not well understand, and some of which might not admit of easy and satisfactory explanation among ourselves; yet, notwithstanding these circumstances, the census, thus taken, would furnish the means of presenting interesting comparative views with regard to longevity, or the chance of life, in different parts of the Union. It would also afford the means of confuting the unfounded assumptions of European theorists respecting the unhealthiness of our climate and the infrequency of longevity; and would probably furnish evidence, that among the agricultural population of the Eastern and Middle states, the chance of life is as great as in any country on the globe, of which the statistics are well known, of equal extent and population.

Other matters in addition to those which relate to the number of the different classes of the inhabitants, might be properly and advantageously embraced in the census, as the number of families; the number of married persons, male and female; the number of inhabited houses, distinguishing those of stone, of brick, and of wood, whether framed houses or of logs; houses of public worship; academies or grammar schools, and common schools, together with the number of pupils. Were these several matters embraced in the census, we should have, laid before us every ten years, a highly interesting view of the state of the country in all its parts: and a comparison of each new census with those that preceded it, would afford a correct, and, should the prosperity of the country continue, an animating view of the progress of improvement. In addition to a mere numerical increase of the inhabi-

tants, we should then see log houses giving place to framed houses and those of brick; school-houses and academies built, and filled with pupils; churches erected; and the whole machinery of civilized society advancing with a rapidity hitherto unknown, and corresponding to the progress of population.

Had the four past enumerations been made on the plan here suggested, they would have presented a mass of information more interesting and valuable to the present and future generations, than all that will probably be preserved from destruction by our Historical and Antiquarian Societies (useful as their labours are acknowledged to be) during a century. The views which they would have afforded of many parts of the country, at the first settlement, would have rendered them peculiarly interesting in future ages, and it may be presumed that they would have become incomparably more important and celebrated in the future history of the country, than Doomsday-Book is in that of England.

Exact enumerations of the population of the most improved countries of modern Europe, are of but recent date. The population of France was not accurately determined till since the French Revolution; nor that of England till 1801. The government of the United States is entitled to the honour, we believe, of having, at its first institution, set the example of establishing a system of an official census of the inhabitants, at regular periods. The results of this census, inasmuch as they exhibit a view of the strength and growth of the nation, are highly interesting, not only to the statesman and philosopher, but to every patriotic citizen; and it is desirable that, at this early period of the history of the country, the best method of taking it should be fixed upon, and that it should be carefully adhered to in all subsequent enumerations.

*[Presented to the Academy in 1825, and printed in 1826.]*



## II.

*A Table of the Longitude and Altitude of the Nonagesimal Degree, in 42° 23' 28" of North Latitude (the Ellipticity of the Earth being assumed to be  $\frac{1}{300}$ th, and the Obliquity of the Ecliptic 23° 27' 40"), for every Minute of the Right Ascension of the Meridian, — With the Corrections of the Table for a Decrease of 100" in the Obliquity, and of 1000" in the Geographical Latitude.*

BY R. T. PAINE, Esq.

THE corrections were computed for a decrease of 100" in Obliquity, and 1000" in geographical Latitude; for an increase, the signs of the corrections must be reversed.

By a *decrease* in either Latitude or Obliquity, the Longitude is *increased* if the Right Ascension of the Meridian is between six hours and eighteen hours, and *diminished* if between eighteen hours and six hours.

By a *decrease* in the *Obliquity*, the Altitude is *increased*, if the Longitude is between 180° and 360°, and *diminished* if between 0° and 180°.

By a *decrease* in the *Latitude*, the Altitude is *increased*.

\* \* The Right Ascension of the Meridian is the sum of the *Apparent* time at the place (reckoned according to the manner of astronomers), and the Sun's Right Ascension; or of the *Mean* time, reckoned in the same manner, and the Sidereal time.

### EXAMPLE.

What was the Longitude and Altitude of the Nonagesimal, in Boston, in Latitude 42° 20' 38".1 North, January 1st, 1831, at 6<sup>h</sup>. 22<sup>m</sup>. 9<sup>s</sup>.8, A. M., Mean time, or reckoned astronomically, 1830, Dec. 31st, 18<sup>h</sup>. 22<sup>m</sup>. 9<sup>s</sup>.8, the Sidereal time being 18<sup>h</sup>. 41<sup>m</sup>. 24<sup>s</sup>.64, and the Obliquity 23° 27' 32".0?

The A. R. of the Meridian is consequently 13<sup>h</sup>. 3<sup>m</sup>. 34<sup>s</sup>.44.

	Longitude.	Altitude.
At 13 <sup>h</sup> . 3 <sup>m</sup> .	173 21 42.9	45 52 21.4
Proportion for 34 $\frac{4}{5}$ seconds	7 31.1	— 3 24.4
Correction for — 170" in Lat.	2 6.5	+ 2 23.7
Correction for — 8" in Obliq.	7.7	— 0.9
Sum . . . . .	173 31 28	45 51 20



Longitude and Altitude of the Nonagesimal for the

Argument.		Longitude of the Nonagesimal.		Correction for -100' in Obliq.	Altitude of the Nonagesimal.		Correction for -100' in Obliq.	Corrections for -1000' in Latitude.		Argument.		
A. R.	M. of Mer.	°	'		°	'		Long.	Alt.	H.	M.	
0	0	19	51	0	51	57	40	-34.0	-639"	+863"	0	0
0	1	20	3	10	52	3	17	34.3	638	863	0	1
0	2	20	15	20	52	8	53	34.6	636	861	0	2
0	3	20	27	28	52	14	29	34.9	635	864	0	3
0	4	20	39	37	52	20	4	35.2	633	864	0	4
0	5	20	51	44	52	25	39	-35.5	-631	+865	0	5
0	6	21	3	52	52	31	14	35.8	630	865	0	6
0	7	21	15	58	52	36	48	36.0	628	866	0	7
0	8	21	28	4	52	42	22	36.3	626	866	0	8
0	9	21	40	10	52	47	55	36.6	625	866	0	9
0	10	21	52	15	52	53	28	-36.9	-623	+867	0	10
0	11	22	4	19	52	59	0	37.2	621	867	0	11
0	12	22	16	23	53	4	32	37.5	620	868	0	12
0	13	22	28	26	53	10	3	37.8	618	868	0	13
0	14	22	40	29	53	15	34	38.2	616	868	0	14
0	15	22	52	31	53	21	5	-38.5	-615	+869	0	15
0	16	23	4	33	53	26	34	38.9	613	869	0	16
0	17	23	16	34	53	32	4	39.3	612	870	0	17
0	18	23	28	35	53	37	33	39.6	610	870	0	18
0	19	23	40	35	53	43	1	39.9	608	871	0	19
0	20	23	52	35	53	48	29	-40.3	-607	+871	0	20
0	21	24	4	34	53	53	56	40.7	605	871	0	21
0	22	24	16	33	53	59	23	41.0	603	872	0	22
0	23	24	28	31	54	4	49	41.3	602	872	0	23
0	24	24	40	29	54	10	15	41.7	600	873	0	24
0	25	24	52	26	54	15	41	-42.0	-598	+873	0	25
0	26	25	4	23	54	21	6	42.4	597	873	0	26
0	27	25	16	19	54	26	30	42.7	595	874	0	27
0	28	25	28	16	54	31	54	43.0	593	874	0	28
0	29	25	40	11	54	37	17	43.4	592	875	0	29
0	30	25	52	6	54	42	40	-43.7	-590	+875	0	30
0	31	26	4	1	54	48	2	44.0	589	876	0	31
0	32	26	15	55	54	53	23	44.3	587	876	0	32
0	33	26	27	49	54	58	41	44.6	585	877	0	33
0	34	26	39	43	55	4	5	44.9	584	877	0	34
0	35	26	51	36	55	9	25	-45.2	-582	+878	0	35
0	36	27	3	23	55	14	44	45.5	580	878	0	36
0	37	27	15	21	55	20	3	45.8	579	878	0	37
0	38	27	27	13	55	25	21	46.1	577	879	0	38
0	39	27	39	4	55	30	39	46.4	575	879	0	39
0	40	27	50	53	55	35	56	-46.7	-574	+880	0	40
0	41	28	2	46	55	41	12	47.0	572	880	0	41
0	42	28	14	37	55	46	28	47.3	570	881	0	42
0	43	28	26	27	55	51	44	47.6	569	881	0	43
0	44	28	38	16	55	56	58	47.8	567	882	0	44
0	45	28	50	6	56	2	13	-48.1	-566	+882	0	45
0	46	29	1	55	56	7	26	48.4	564	883	0	46
0	47	29	13	43	56	12	39	48.7	562	883	0	47
0	48	29	25	32	56	17	52	49.0	561	884	0	48
0	49	29	37	19	56	23	3	49.3	559	884	0	49
0	50	29	49	7	56	28	15	-49.6	-557	+885	0	50
0	51	30	0	54	56	33	25	49.9	556	885	0	51
0	52	30	12	41	56	38	35	50.1	554	886	0	52
0	53	30	24	28	56	43	44	50.4	552	886	0	53
0	54	30	36	14	56	48	53	50.7	551	887	0	54
0	55	30	48	0	56	54	1	-51.0	-549	+887	0	55
0	56	30	59	46	56	59	9	51.2	547	888	0	56
0	57	31	11	32	57	4	15	51.5	546	888	0	57
0	58	31	23	17	57	9	22	51.8	544	888	0	58
0	59	31	35	3	57	14	27	52.0	543	889	0	59
1	0	31	46	47	57	19	32	52.3	541	889	1	0

Argument.		Longitude of the Nonagesimal.		Correction for -100'' in Obliq.	Altitude of the Nonagesimal.				Correction for -100'' in Obliq.	Corrections for -1000' in Latitude.		Argument.			
A. R. of Mer.										Long. Alt.		A. R. of Mer.			
H.	M.	°	'	''	°	'	''	'''	''	Long.	Alt.	H.	M.		
1	0	31	46	47	54.7	57	19	32	5	5	-52.3	-541''	+889''	1	0
1	1	31	58	32	54.4	57	24	37	5	3	52.6	539	890	1	1
1	2	32	10	16	54.1	57	29	40	5	3	52.9	538	890	1	2
1	3	32	22	0	53.8	57	34	43	5	3	53.3	536	891	1	3
1	4	32	33	44	53.5	57	39	46	5	3	53.6	534	891	1	4
1	5	32	45	27	-53.2	57	44	47	5	1	-53.9	-533	+892	1	5
1	6	32	57	10	52.9	57	49	48	5	1	54.2	531	892	1	6
1	7	33	8	53	52.6	57	54	49	5	1	54.5	529	893	1	7
1	8	33	20	36	52.3	57	59	48	4	59	54.8	528	893	1	8
1	9	33	32	18	52.1	58	4	47	4	59	55.1	526	894	1	9
1	10	33	44	1	-51.8	58	9	45	4	58	-55.4	-524	+894	1	10
1	11	33	55	42	51.5	58	14	43	4	58	55.7	523	895	1	11
1	12	34	7	24	51.2	58	19	40	4	57	56.0	521	895	1	12
1	13	34	19	5	50.9	58	24	36	4	56	56.3	519	896	1	13
1	14	34	30	47	50.6	58	29	32	4	56	56.6	518	896	1	14
1	15	34	42	28	-50.3	58	34	27	4	55	-56.9	-516	+897	1	15
1	16	34	54	9	50.1	58	39	21	4	54	57.1	514	897	1	16
1	17	35	5	49	49.8	58	44	15	4	54	57.4	513	898	1	17
1	18	35	17	30	49.5	58	49	8	4	53	57.7	511	898	1	18
1	19	35	29	10	49.2	58	54	0	4	52	58.0	509	899	1	19
1	20	35	40	50	-48.9	58	58	51	4	51	-58.3	-508	+900	1	20
1	21	35	52	30	48.7	59	3	42	4	51	58.5	506	900	1	21
1	22	36	4	10	48.4	59	8	32	4	50	58.8	504	901	1	22
1	23	36	15	49	48.1	59	13	21	4	49	59.1	503	901	1	23
1	24	36	27	28	47.8	59	18	9	4	48	59.3	501	902	1	24
1	25	36	39	7	-47.5	59	22	57	4	48	-59.6	-499	+902	1	25
1	26	36	50	46	47.2	59	27	44	4	47	59.9	498	903	1	26
1	27	37	2	25	47.0	59	32	31	4	47	60.1	496	903	1	27
1	28	37	14	3	46.7	59	37	16	4	45	60.4	494	904	1	28
1	29	37	25	42	46.4	59	42	1	4	45	60.7	493	904	1	29
1	30	37	37	20	-46.1	59	46	45	4	44	-60.9	-491	+905	1	30
1	31	37	48	58	45.9	59	51	29	4	44	61.2	489	905	1	31
1	32	38	0	36	45.6	59	56	12	4	43	61.5	488	906	1	32
1	33	38	12	14	45.3	60	0	53	4	41	61.7	486	906	1	33
1	34	38	23	52	45.0	60	5	35	4	42	62.0	484	907	1	34
1	35	38	35	29	-44.8	60	10	15	4	40	-62.3	-483	+907	1	35
1	36	38	47	7	44.5	60	14	55	4	40	62.5	481	908	1	36
1	37	38	58	44	44.2	60	19	34	4	39	62.8	479	908	1	37
1	38	39	10	21	44.0	60	24	12	4	38	63.1	478	909	1	38
1	39	39	21	58	43.7	60	28	49	4	37	63.3	476	909	1	39
1	40	39	33	35	-43.5	60	33	26	4	37	-63.6	-474	+910	1	40
1	41	39	45	11	43.2	60	38	2	4	36	63.9	473	910	1	41
1	42	39	56	48	43.0	60	42	37	4	35	64.2	471	911	1	42
1	43	40	8	25	42.7	60	47	11	4	34	64.4	469	911	1	43
1	44	40	20	1	42.5	60	51	45	4	34	64.7	468	912	1	44
1	45	40	31	37	-42.2	60	56	17	4	32	-65.0	-466	+912	1	45
1	46	40	43	13	42.0	61	0	49	4	32	65.3	464	913	1	46
1	47	40	54	49	41.7	61	5	21	4	32	65.5	463	914	1	47
1	48	41	6	25	41.5	61	9	51	4	30	65.8	461	914	1	48
1	49	41	18	1	41.2	61	14	21	4	30	66.1	459	915	1	49
1	50	41	29	37	-41.0	61	18	49	4	28	-66.3	-458	+915	1	50
1	51	41	41	13	40.7	61	23	17	4	28	66.6	456	916	1	51
1	52	41	52	48	40.5	61	27	45	4	28	66.8	454	916	1	52
1	53	42	4	24	40.3	61	32	11	4	26	67.1	453	917	1	53
1	54	42	15	59	40.0	61	36	37	4	26	67.3	451	917	1	54
1	55	42	27	34	-39.8	61	41	1	4	24	-67.6	-449	+918	1	55
1	56	42	39	10	39.6	61	45	25	4	24	67.8	448	918	1	56
1	57	42	50	45	39.3	61	49	48	4	23	68.1	446	919	1	57
1	58	43	2	20	39.1	61	54	11	4	23	68.3	444	919	1	58
1	59	43	13	55	38.9	61	58	32	4	21	68.6	442	920	1	59
2	0	43	25	30	38.7	62	2	53	4	21	68.8	441	920	2	0

Longitude and Altitude of the Nonagesimal for the

Argument.		Longitude of the Nonagesimal.				Correction for -100'' in Obliq.	Altitude of the Nonagesimal.				Correction for -100'' in Obliq.	Corrections for -1000'' in Latitude.		Argument.			
A. R. of Mer.												Long.	Alt.	A. R. of Mer.			
H.	M.	0	1	2	3	4	0	1	2	3	4	5	6	7	8	9	
2	0	43	25	30	11	35	-3.7	62	2	53	4	20	-68.8	-441''	+920''	2	0
2	1	43	37	5	11	34	38.4	62	7	13	4	19	69.0	439	921	2	1
2	2	43	48	39	11	35	38.2	62	11	32	4	19	69.3	437	921	2	2
2	3	44	0	14	11	35	37.9	62	15	50	4	18	69.5	436	922	2	3
2	4	44	11	49	11	34	37.7	62	20	7	4	17	69.7	434	922	2	4
2	5	44	23	23	11	35	-37.5	62	24	24	4	17	-70.0	-432	+923	2	5
2	6	44	34	58	11	35	37.3	62	28	39	4	15	70.2	431	923	2	6
2	7	44	46	33	11	34	37.0	62	32	54	4	15	70.4	429	924	2	7
2	8	44	58	7	11	34	36.8	62	37	8	4	14	70.7	427	925	2	8
2	9	45	9	41	11	35	36.6	62	41	21	4	13	70.9	425	925	2	9
2	10	45	21	16	11	34	-36.4	62	45	33	4	12	-71.1	-424	+926	2	10
2	11	45	32	50	11	34	36.1	62	49	45	4	12	71.4	422	926	2	11
2	12	45	44	24	11	35	35.9	62	53	55	4	10	71.6	420	927	2	12
2	13	45	55	59	11	35	35.7	62	58	5	4	10	71.8	419	927	2	13
2	14	46	7	33	11	34	35.5	63	2	14	4	9	72.0	417	928	2	14
2	15	46	19	7	11	34	-35.2	63	6	21	4	7	-72.3	-415	+928	2	15
2	16	46	30	41	11	34	35.0	63	10	28	4	7	72.5	413	929	2	16
2	17	46	42	15	11	34	34.8	63	14	35	4	7	72.7	412	929	2	17
2	18	46	53	49	11	34	34.6	63	18	40	4	5	72.9	410	930	2	18
2	19	47	5	24	11	35	34.3	63	22	44	4	4	73.2	408	930	2	19
2	20	47	16	58	11	34	-34.1	63	26	48	4	4	-73.4	-407	+931	2	20
2	21	47	28	32	11	34	33.9	63	30	50	4	2	73.6	405	931	2	21
2	22	47	40	6	11	34	33.7	63	34	52	4	2	73.8	403	932	2	22
2	23	47	51	40	11	34	33.4	63	38	53	4	1	74.1	401	932	2	23
2	24	48	3	14	11	33	33.2	63	42	53	4	0	74.3	400	933	2	24
2	25	48	14	47	11	34	-33.0	63	46	52	3	59	-74.5	-398	+933	2	25
2	26	48	26	21	11	34	32.8	63	50	50	3	58	74.7	396	934	2	26
2	27	48	37	55	11	34	32.5	63	54	47	3	57	75.0	394	934	2	27
2	28	48	49	29	11	34	32.3	63	58	44	3	57	75.2	393	935	2	28
2	29	49	1	3	11	34	32.1	64	2	39	3	55	75.4	391	935	2	29
2	30	49	12	37	11	34	-31.9	64	6	34	3	55	-75.6	-389	+936	2	30
2	31	49	24	11	11	34	31.6	64	10	27	3	53	75.9	388	936	2	31
2	32	49	35	45	11	34	31.4	64	14	20	3	53	76.1	386	937	2	32
2	33	49	47	19	11	34	31.2	64	18	12	3	52	76.3	384	937	2	33
2	34	49	58	53	11	34	31.0	64	22	3	3	51	76.5	382	938	2	34
2	35	50	10	27	11	34	-30.7	64	25	53	3	50	-76.8	-381	+938	2	35
2	36	50	22	1	11	34	30.5	64	29	42	3	49	77.0	379	939	2	36
2	37	50	33	35	11	34	30.3	64	33	30	3	48	77.2	377	939	2	37
2	38	50	45	9	11	34	30.1	64	37	17	3	47	77.4	375	940	2	38
2	39	50	56	43	11	34	29.9	64	41	3	3	46	77.6	374	940	2	39
2	40	51	8	17	11	34	-29.7	64	44	48	3	45	-77.8	-372	+941	2	40
2	41	51	19	51	11	34	29.5	64	48	33	3	45	78.0	370	941	2	41
2	42	51	31	25	11	34	29.3	64	52	16	3	43	78.3	368	942	2	42
2	43	51	42	59	11	34	29.0	64	55	59	3	43	78.5	367	942	2	43
2	44	51	54	33	11	34	28.8	64	59	40	3	41	78.7	365	943	2	44
2	45	52	6	7	11	34	-28.6	65	3	21	3	41	-78.9	-363	+943	2	45
2	46	52	17	41	11	34	28.4	65	7	0	3	39	79.1	361	944	2	46
2	47	52	29	15	11	34	28.2	65	10	39	3	39	79.3	360	944	2	47
2	48	52	40	49	11	34	28.0	65	14	17	3	38	79.5	358	945	2	48
2	49	52	52	23	11	34	27.8	65	17	53	3	36	79.7	356	945	2	49
2	50	53	3	58	11	35	-27.6	65	21	29	3	36	-79.9	-354	+946	2	50
2	51	53	15	32	11	34	27.4	65	25	4	3	35	80.1	353	946	2	51
2	52	53	27	6	11	34	27.2	65	28	38	3	34	80.3	351	947	2	52
2	53	53	38	40	11	34	27.0	65	32	11	3	33	80.5	349	947	2	53
2	54	53	50	15	11	35	26.8	65	35	43	3	32	80.7	347	948	2	54
2	55	54	1	49	11	34	-26.6	65	39	13	3	30	-80.8	-346	+948	2	55
2	56	54	13	23	11	35	26.5	65	42	43	3	30	81.0	344	949	2	56
2	57	54	24	58	11	34	26.3	65	46	12	3	29	81.2	342	949	2	57
2	58	54	36	32	11	35	26.1	65	49	40	3	28	81.4	340	950	2	58
2	59	54	48	7	11	34	25.9	65	53	7	3	27	81.6	339	950	2	59
3	0	54	59	41	11	34	25.7	65	56	33	3	26	81.8	337	951	3	0



Lat.  $42^{\circ} 23' 28'' N.$ , (reduced  $42^{\circ} 12' 2''.4$ ), and Obliquity  $23^{\circ} 27' 40''$ . 49

Argument.		Longitude of the Nonagesimal.	Correction for $-100''$ in Obliq.	Altitude of the Nonagesimal.		Correction for $-100''$ in Obliq.	Corrections for $-1000''$ in Latitude.		Argument.	
A. R.	M.			Long.	Alt.		A. R.	M.		
3	0	54 59 41	-25.7	65 56 33	3 25	-81.8	-337''	+951''	3	0
3	1	55 11 16	25.5	65 59 58	3 25	82.0	335	951	3	1
3	2	55 22 51	25.3	66 3 23	3 23	82.2	333	952	3	2
3	3	55 34 25	25.1	66 6 46	3 22	82.4	332	952	3	3
3	4	55 46 0	24.9	66 10 8	3 21	82.6	330	953	3	4
3	5	55 57 35	-24.7	66 13 29	3 20	-82.8	-328	+953	3	5
3	6	56 9 10	24.5	66 16 49	3 19	83.0	326	954	3	6
3	7	56 20 44	24.3	66 20 8	3 18	83.2	324	954	3	7
3	8	56 32 19	24.1	66 23 26	3 17	83.4	323	955	3	8
3	9	56 43 54	23.9	66 26 43	3 16	83.6	321	955	3	9
3	10	56 55 29	-23.7	66 29 59	3 15	-83.8	-319	+956	3	10
3	11	57 7 4	23.5	66 33 14	3 15	84.0	317	956	3	11
3	12	57 18 40	23.3	66 36 29	3 13	84.2	316	956	3	12
3	13	57 30 15	23.1	66 39 42	3 12	84.4	314	957	3	13
3	14	57 41 50	22.9	66 42 54	3 11	84.6	312	957	3	14
3	15	57 53 25	-22.8	66 46 5	3 9	-84.7	-310	+958	3	15
3	16	58 5 1	22.6	66 49 14	3 9	84.9	308	958	3	16
3	17	58 16 36	22.4	66 52 23	3 8	85.1	307	959	3	17
3	18	58 28 11	22.2	66 55 31	3 7	85.3	305	959	3	18
3	19	58 39 47	22.1	66 58 38	3 6	85.4	303	960	3	19
3	20	58 51 23	-21.9	67 1 44	3 5	-85.6	-301	+960	3	20
3	21	59 2 58	21.7	67 4 49	3 3	85.8	299	961	3	21
3	22	59 14 34	21.5	67 7 52	3 3	86.0	297	961	3	22
3	23	59 26 10	21.4	67 10 55	3 2	86.1	296	961	3	23
3	24	59 37 45	21.2	67 13 57	3 0	86.3	294	962	3	24
3	25	59 49 21	-21.0	67 16 57	3 0	-86.5	-292	+962	3	25
3	26	60 0 57	20.9	67 19 57	2 59	86.6	290	963	3	26
3	27	60 12 33	20.7	67 22 56	2 57	86.8	289	963	3	27
3	28	60 24 9	20.5	67 25 53	2 57	87.0	287	964	3	28
3	29	60 35 46	20.4	67 28 50	2 55	87.1	285	964	3	29
3	30	60 47 22	-20.2	67 31 45	2 54	-87.3	-283	+964	3	30
3	31	60 58 58	20.0	67 34 39	2 54	87.5	281	965	3	31
3	32	61 10 34	19.9	67 37 33	2 52	87.6	280	965	3	32
3	33	61 22 11	19.7	67 40 25	2 51	87.8	278	966	3	33
3	34	61 33 47	19.5	67 43 16	2 50	88.0	276	966	3	34
3	35	61 45 24	-19.4	67 46 6	2 49	-88.1	-274	+967	3	35
3	36	61 57 0	19.2	67 48 55	2 48	88.3	272	967	3	36
3	37	62 8 37	19.0	67 51 43	2 47	88.5	271	967	3	37
3	38	62 20 14	18.9	67 54 30	2 46	88.6	269	968	3	38
3	39	62 31 51	18.7	67 57 16	2 45	88.8	267	968	3	39
3	40	62 43 28	-18.5	68 0 1	2 43	-88.9	-265	+969	3	40
3	41	62 55 5	18.4	68 2 44	2 43	89.1	263	969	3	41
3	42	63 6 41	18.2	68 5 27	2 41	89.2	261	970	3	42
3	43	63 18 19	18.0	68 8 8	2 41	89.4	260	970	3	43
3	44	63 29 56	17.9	68 10 49	2 39	89.5	258	970	3	44
3	45	63 41 33	-17.7	68 13 28	2 38	-89.7	-256	+971	3	45
3	46	63 53 10	17.5	68 16 6	2 37	89.8	254	971	3	46
3	47	64 4 48	17.4	68 18 43	2 37	90.0	252	972	3	47
3	48	64 16 25	17.2	68 21 20	2 35	90.1	250	972	3	48
3	49	64 28 3	17.0	68 23 55	2 33	90.2	249	972	3	49
3	50	64 39 40	-16.9	68 26 28	2 33	-90.4	-247	+973	3	50
3	51	64 51 18	16.7	68 29 1	2 32	90.6	245	973	3	51
3	52	65 2 56	16.6	68 31 33	2 31	90.8	243	973	3	52
3	53	65 14 34	16.4	68 34 4	2 29	90.9	241	974	3	53
3	54	65 26 12	16.3	68 36 33	2 28	91.0	239	974	3	54
3	55	65 37 50	-16.1	68 39 1	2 28	-91.1	-238	+975	3	55
3	56	65 49 28	15.9	68 41 29	2 26	91.2	236	975	3	56
3	57	66 1 6	15.8	68 43 55	2 25	91.4	234	975	3	57
3	58	66 12 44	15.6	68 46 20	2 24	91.5	232	976	3	58
3	59	66 24 22	15.5	68 48 44	2 23	91.7	230	976	3	59
4	0	66 36 1	15.3	68 51 7	2 23	91.8	228	976	4	0

Longitude and Altitude of the Nonagesimal for the

Argument. A. R. of Mer.		Longitude of the Nonagesimal.				Correction for -100'' in Obliq.	Altitude of the Nonagesimal.			Correc. ion. for -100 in Obliq	Corrections for -1000'' in Latitude.		Argument. A. R. of Mer.			
H.	M.	°	'	''	'''	''	°	'	''	''	Long.	Alt.	H.	M.		
4	0	66	36	1	11	38	-15.3	68	51	7	142	-91.8	-228''	+976''	4	0
4	1	66	47	39	11	38	15.1	68	53	29	140	91.9	226	977	4	1
4	2	66	59	17	11	39	15.0	68	55	49	140	92.1	225	977	4	2
4	3	67	10	56	11	39	14.8	68	58	9	138	92.2	223	978	4	3
4	4	67	22	35	11	39	14.7	69	0	27	137	92.3	221	978	4	4
4	5	67	34	13	11	39	-14.5	69	2	44	137	-92.4	-219	+978	4	5
4	6	67	45	52	11	39	14.4	69	5	1	137	92.6	217	979	4	6
4	7	67	57	31	11	39	14.2	69	7	16	135	92.7	215	979	4	7
4	8	68	9	10	11	39	14.1	69	9	29	133	92.8	213	979	4	8
4	9	68	20	49	11	39	13.9	69	11	42	133	92.9	212	980	4	9
4	10	68	32	28	11	39	-13.8	69	13	54	132	-93.1	-210	+980	4	10
4	11	68	44	7	11	40	13.6	69	16	4	130	93.2	208	980	4	11
4	12	68	55	47	11	39	13.5	69	18	14	130	93.3	206	981	4	12
4	13	69	7	26	11	39	13.4	69	20	22	128	93.4	204	981	4	13
4	14	69	19	5	11	40	13.2	69	22	29	127	93.5	202	981	4	14
4	15	69	30	45	11	39	-13.1	69	24	35	126	-93.6	-200	+982	4	15
4	16	69	42	24	11	40	12.9	69	26	40	125	93.7	199	982	4	16
4	17	69	51	4	11	40	12.8	69	28	44	124	93.8	197	982	4	17
4	18	70	5	44	11	39	12.6	69	30	46	122	94.0	195	983	4	18
4	19	70	17	23	11	40	12.5	69	32	48	122	94.1	193	983	4	19
4	20	70	29	3	11	40	-12.4	69	34	48	120	-94.2	-191	+983	4	20
4	21	70	40	43	11	40	12.2	69	36	47	119	94.3	189	984	4	21
4	22	70	52	23	11	40	12.1	69	38	45	118	94.4	187	984	4	22
4	23	71	4	3	11	40	11.9	69	40	42	116	94.5	186	984	4	23
4	24	71	15	43	11	40	11.8	69	42	38	116	94.6	184	984	4	24
4	25	71	27	23	11	41	-11.7	69	44	32	114	-94.7	-182	+985	4	25
4	26	71	39	4	11	40	11.5	69	46	26	114	94.8	180	985	4	26
4	27	71	50	44	11	40	11.4	69	48	18	112	94.9	178	985	4	27
4	28	72	2	24	11	41	11.3	69	50	9	111	95.0	176	986	4	28
4	29	72	14	5	11	40	11.1	69	51	59	110	95.1	174	986	4	29
4	30	72	25	45	11	41	-11.0	69	53	47	108	-95.2	-172	+986	4	30
4	31	72	37	26	11	41	10.9	69	55	35	108	95.3	170	987	4	31
4	32	72	49	7	11	40	10.7	69	57	21	106	95.4	169	987	4	32
4	33	73	0	47	11	41	10.6	69	59	7	106	95.5	167	987	4	33
4	34	73	12	28	11	41	10.5	70	0	51	104	95.6	165	987	4	34
4	35	73	21	9	11	41	-10.3	70	2	34	103	-95.7	-163	+988	4	35
4	36	73	35	50	11	41	10.2	70	4	16	102	95.8	161	988	4	36
4	37	73	47	31	11	41	10.1	70	5	56	100	95.9	159	988	4	37
4	38	73	59	12	11	41	9.9	70	7	36	100	96.0	157	988	4	38
4	39	74	10	53	11	41	9.8	70	9	14	98	96.1	155	989	4	39
4	40	74	22	34	11	42	-9.7	70	10	51	97	-96.2	-153	+989	4	40
4	41	74	34	16	11	41	9.5	70	12	27	96	96.3	152	989	4	41
4	42	74	45	57	11	41	9.4	70	14	2	95	96.4	150	989	4	42
4	43	74	57	38	11	41	9.3	70	15	35	93	96.4	148	990	4	43
4	44	75	9	20	11	41	9.1	70	17	7	92	96.5	146	990	4	44
4	45	75	21	1	11	42	-9.0	70	18	39	92	-96.6	-144	+990	4	45
4	46	75	32	43	11	42	8.9	70	20	9	90	96.7	142	990	4	46
4	47	75	41	25	11	41	8.7	70	21	37	88	96.8	140	991	4	47
4	48	75	56	6	11	42	8.6	70	23	5	88	96.9	138	991	4	48
4	49	76	7	48	11	42	8.5	70	24	32	87	97.0	136	991	4	49
4	50	76	19	30	11	42	-8.3	70	25	57	85	-97.1	-135	+991	4	50
4	51	76	31	12	11	42	8.2	70	27	21	84	97.1	133	992	4	51
4	52	76	42	54	11	42	8.1	70	28	44	83	97.2	131	992	4	52
4	53	76	54	36	11	42	7.9	70	30	6	82	97.3	129	992	4	53
4	54	77	6	18	11	42	7.8	70	31	26	80	97.4	127	992	4	54
4	55	77	18	0	11	42	-7.7	70	32	46	80	-97.4	-125	+993	4	55
4	56	77	29	42	11	42	7.5	70	34	4	78	97.5	123	993	4	56
4	57	77	41	24	11	42	7.4	70	35	21	77	97.6	121	993	4	57
4	58	77	53	6	11	42	7.3	70	36	37	76	97.7	119	993	4	58
4	59	78	4	49	11	43	7.1	70	37	51	74	97.7	117	993	4	59
5	0	78	16	31	11	42	7.0	70	39	5	74	97.8	116	994	5	0



Lat.  $42^{\circ} 23' 28''$  N. (reduced  $42^{\circ} 12' 2''$ .4), and Obliquity  $23^{\circ} 27' 40''$ . 51

Argument.		Longitude of the Nonagesimal.	Correction for $-100''$ in Obliq.	Altitude of the Nonagesimal.	Correction for $-100''$ in Obliq.	Corrections for $-1000'$ in Latitude.		Argument.	
A. R. of Mer.	h. M.					Long.	Alt.	A. R. of Mer.	h. M.
5	0	78 16 31	-7.0	70 39 5	-97.8	-116''	+ 99.4''	5	0
5	1	78 28 13	6.9	70 40 17	97.9	114	99.4	5	1
5	2	78 39 56	6.8	70 41 28	97.9	112	99.4	5	2
5	3	78 51 38	6.7	70 42 38	98.0	110	99.4	5	3
5	4	79 3 21	6.6	70 43 47	98.1	108	99.4	5	4
5	5	79 15 4	-6.5	70 44 54	-98.1	-106	+ 99.4	5	5
5	6	79 26 46	6.3	70 46 0	98.2	104	99.5	5	6
5	7	79 38 29	6.2	70 47 5	98.3	102	99.5	5	7
5	8	79 50 12	6.1	70 48 9	98.3	100	99.5	5	8
5	9	80 1 55	6.0	70 49 12	98.4	98	99.5	5	9
5	10	80 13 38	-5.9	70 50 13	-98.5	-96	+ 99.5	5	10
5	11	80 25 20	5.8	70 51 13	98.5	94	99.5	5	11
5	12	80 37 3	5.7	70 52 12	98.6	93	99.6	5	12
5	13	80 48 46	5.6	70 53 10	98.6	91	99.6	5	13
5	14	81 0 29	5.4	70 54 7	98.7	89	99.6	5	14
5	15	81 12 13	-5.3	70 55 2	-98.7	-87	+ 99.6	5	15
5	16	81 23 56	5.2	70 55 56	98.8	85	99.6	5	16
5	17	81 35 39	5.1	70 56 49	98.8	83	99.6	5	17
5	18	81 47 22	4.9	70 57 41	98.9	81	99.7	5	18
5	19	81 59 5	4.8	70 58 32	98.9	79	99.7	5	19
5	20	82 10 49	-4.7	70 59 21	-98.9	-77	+ 99.7	5	20
5	21	82 22 32	4.6	71 0 9	99.0	75	99.7	5	21
5	22	82 34 15	4.4	71 0 56	99.0	73	99.7	5	22
5	23	82 45 59	4.3	71 1 42	99.1	71	99.7	5	23
5	24	82 57 42	4.2	71 2 26	99.1	69	99.7	5	24
5	25	83 9 25	-4.1	71 3 10	-99.1	-68	+ 99.8	5	25
5	26	83 21 9	3.9	71 3 52	99.2	66	99.8	5	26
5	27	83 32 52	3.8	71 4 33	99.2	64	99.8	5	27
5	28	83 44 36	3.7	71 5 12	99.2	62	99.8	5	28
5	29	83 56 20	3.6	71 5 51	99.3	60	99.8	5	29
5	30	84 8 3	-3.4	71 6 28	-99.3	-58	+ 99.8	5	30
5	31	84 19 47	3.3	71 7 4	99.3	56	99.8	5	31
5	32	84 31 30	3.2	71 7 39	99.4	54	99.8	5	32
5	33	84 43 14	3.1	71 8 12	99.4	52	99.8	5	33
5	34	84 54 58	2.9	71 8 45	99.4	50	99.8	5	34
5	35	85 6 11	-2.8	71 9 16	-99.5	-48	+ 99.9	5	35
5	36	85 18 25	2.7	71 9 46	99.5	46	99.9	5	36
5	37	85 30 9	2.6	71 10 14	99.5	44	99.9	5	37
5	38	85 41 53	2.5	71 10 42	99.6	43	99.9	5	38
5	39	85 53 37	2.3	71 11 8	99.6	41	99.9	5	39
5	40	86 5 21	-2.2	71 11 33	-99.6	-39	+ 99.9	5	40
5	41	86 17 4	2.1	71 11 57	99.6	37	99.9	5	41
5	42	86 28 48	2.0	71 12 20	99.7	35	99.9	5	42
5	43	86 40 32	1.9	71 12 41	99.7	33	99.9	5	43
5	44	86 52 16	1.8	71 13 1	99.7	31	99.9	5	44
5	45	87 4 0	-1.6	71 13 20	-99.7	-29	+ 99.9	5	45
5	46	87 15 41	1.5	71 13 33	99.8	27	99.9	5	46
5	47	87 27 23	1.4	71 13 51	99.8	25	99.9	5	47
5	48	87 39 12	1.3	71 14 10	99.8	23	99.9	5	48
5	49	87 50 56	1.2	71 14 24	99.8	21	99.9	5	49
5	50	88 2 40	-1.1	71 14 37	-99.8	-19	+ 99.9	5	50
5	51	88 11 24	1.0	71 14 48	99.9	17	99.9	5	51
5	52	88 26 8	0.9	71 14 59	99.9	16	99.9	5	52
5	53	88 37 52	0.8	71 15 8	99.9	14	99.9	5	53
5	54	88 49 36	0.6	71 15 16	99.9	1	99.9	5	54
5	55	89 1 20	-0.5	71 15 22	-99.9	-10	+ 99.9	5	55
5	56	89 13 4	0.4	71 15 28	100.0	8	99.9	5	56
5	57	89 24 48	0.3	71 15 32	100.0	6	99.9	5	57
5	58	89 36 32	0.2	71 15 35	100.0	4	1000	5	58
5	59	89 48 16	0.1	71 15 37	100.0	2	1000	5	59
6	0	90 00 00	0.0	71 15 38	100.0	0	1000	6	0

## Longitude and Altitude of the Nonagesimal for the

Argument.		Longitude of the Nonagesimal.		Correction for -100' in Obliq.	Altitude of the Nonagesimal.		Correction for -100' in Obliq.	Corrections for -1000' in Latitude.		Argument.	
A. R. of Mer.	H. M.	° ' "	° ' "		° ' "	° ' "		Long. 0''	Alt. 1000''	A. R. of Mer.	H. M.
6 0	0	90 0 0	11 44	+0.0	71 15 38	1	-100.0	+ 0	+1000	6 0	0
6 1	1	90 11 44	11 44	0.1	71 15 37	2	100.0	+ 2	1000	6 1	1
6 2	2	90 23 28	11 44	0.2	71 15 35	3	100.0	+ 4	1000	6 2	2
6 3	3	90 35 12	11 44	0.3	71 15 32	4	100.0	+ 6	999	6 3	3
6 4	4	90 46 56	11 44	0.4	71 15 28	6	100.0	+ 8	999	6 4	4
6 5	5	90 58 40	11 44	+0.5	71 15 22	8	-99.9	+10	+999	6 5	5
6 6	6	91 10 24	11 44	0.6	71 15 16	8	99.9	+12	999	6 6	6
6 7	7	91 22 8	11 44	0.8	71 15 8	9	99.9	+11	999	6 7	7
6 8	8	91 33 52	11 44	0.9	71 14 59	11	99.9	+16	999	6 8	8
6 9	9	91 45 36	11 41	1.0	71 14 48	11	99.9	+17	999	6 9	9
6 10	10	91 57 20	11 44	+1.1	71 14 37	13	-99.8	+19	+999	6 10	10
6 11	11	92 9 4	11 44	1.2	71 14 24	14	99.8	+21	999	6 11	11
6 12	12	92 20 48	11 44	1.3	71 14 10	16	99.8	+23	999	6 12	12
6 13	13	92 32 32	11 44	1.4	71 13 54	16	99.8	+25	999	6 13	13
6 14	14	92 44 16	11 41	1.5	71 13 38	18	99.8	+27	999	6 14	14
6 15	15	92 56 0	11 41	+1.6	71 13 20	19	-99.7	+29	+999	6 15	15
6 16	16	93 7 44	11 44	1.8	71 13 1	20	99.7	+31	999	6 16	16
6 17	17	93 19 28	11 44	1.9	71 12 41	21	99.7	+33	999	6 17	17
6 18	18	93 31 12	11 44	2.0	71 12 20	23	99.7	+35	999	6 18	18
6 19	19	93 42 56	11 44	2.1	71 11 57	24	99.6	+37	999	6 19	19
6 20	20	93 54 40	11 43	+2.2	71 11 33	25	-99.6	+39	+999	6 20	20
6 21	21	94 6 23	11 44	2.3	71 11 8	26	99.6	+41	999	6 21	21
6 22	22	94 18 7	11 41	2.5	71 10 42	28	99.6	+43	999	6 22	22
6 23	23	94 29 51	11 44	2.6	71 10 14	28	99.5	+44	999	6 23	23
6 24	24	94 41 35	11 44	2.7	71 9 46	30	99.5	+46	999	6 24	24
6 25	25	94 53 19	11 43	+2.8	71 9 16	31	-99.5	+48	+999	6 25	25
6 26	26	95 5 2	11 44	2.9	71 8 45	33	99.4	+50	998	6 26	26
6 27	27	95 16 46	11 44	3.1	71 8 12	33	99.4	+52	998	6 27	27
6 28	28	95 28 30	11 43	3.2	71 7 39	35	99.4	+54	998	6 28	28
6 29	29	95 40 13	11 44	3.3	71 7 4	36	99.3	+56	998	6 29	29
6 30	30	95 51 57	11 44	+3.4	71 6 28	37	-99.3	+58	+998	6 30	30
6 31	31	96 3 41	11 43	3.6	71 5 51	39	99.3	+60	998	6 31	31
6 32	32	96 15 24	11 44	3.7	71 5 12	39	99.2	+62	998	6 32	32
6 33	33	96 27 8	11 43	3.8	71 4 33	41	99.2	+64	998	6 33	33
6 34	34	96 38 51	11 44	3.9	71 3 52	42	99.2	+66	998	6 34	34
6 35	35	96 50 35	11 43	+4.1	71 3 10	44	-99.1	+68	+998	6 35	35
6 36	36	97 2 18	11 44	4.2	71 2 26	44	99.1	+69	997	6 36	36
6 37	37	97 14 2	11 43	4.3	71 1 42	46	99.1	+71	997	6 37	37
6 38	38	97 25 45	11 43	4.4	71 0 56	47	99.0	+73	997	6 38	38
6 39	39	97 37 28	11 44	4.6	71 0 9	48	99.0	+75	997	6 39	39
6 40	40	97 49 12	11 43	+4.7	70 59 21	49	-98.9	+77	+997	6 40	40
6 41	41	98 0 55	11 43	4.8	70 58 32	51	98.9	+79	997	6 41	41
6 42	42	98 12 38	11 43	4.9	70 57 41	52	98.9	+81	997	6 42	42
6 43	43	98 24 21	11 43	5.1	70 56 49	53	98.8	+83	996	6 43	43
6 44	44	98 36 4	11 44	5.2	70 55 56	54	98.8	+85	996	6 44	44
6 45	45	98 47 48	11 43	+5.3	70 55 2	55	-9.7	+87	+996	6 45	45
6 46	46	98 59 31	11 43	5.4	70 54 7	57	98.7	+89	996	6 46	46
6 47	47	99 11 14	11 43	5.6	70 53 10	57	98.6	+91	996	6 47	47
6 48	48	99 22 57	11 43	5.7	70 52 12	58	98.6	+93	996	6 48	48
6 49	49	99 34 40	11 43	5.8	70 51 13	59	98.5	+94	995	6 49	49
6 50	50	99 46 23	11 42	+5.9	70 50 13	60	-98.5	+96	+995	6 50	50
6 51	51	99 58 5	11 43	6.0	70 49 12	61	98.4	+98	995	6 51	51
6 52	52	100 9 48	11 43	6.1	70 48 9	63	98.3	+100	995	6 52	52
6 53	53	100 21 31	11 43	6.2	70 47 5	64	98.3	+102	995	6 53	53
6 54	54	100 33 14	11 42	6.3	70 46 0	65	98.2	+104	995	6 54	54
6 55	55	100 44 56	11 43	+6.5	70 44 54	66	-98.1	+106	+994	6 55	55
6 56	56	100 56 39	11 43	6.6	70 43 47	67	98.1	+108	994	6 56	56
6 57	57	101 8 22	11 42	6.7	70 42 38	70	98.0	+110	994	6 57	57
6 58	58	101 20 4	11 43	6.8	70 41 28	71	97.9	+112	994	6 58	58
6 59	59	101 31 47	11 42	6.9	70 40 17	72	97.9	+114	994	6 59	59
7 0	0	101 43 29	11 42	7.0	70 39 5	72	97.8	+116	994	7 0	0

Argument.		Longitude of the Nonagesimal.				Correctio for -100'' in Obliq.	Altitude of the Nonagesimal.			Correction for -100'' in Obliq.	Corrections for -1000'' in Latitude.		Argument.		
A. R. of Mer.	H. M.	°	'	''	'''	''	°	'	''	'''	Long.	Alt.	A. R. of Mer.	H. M.	
7	0	101	43	29	''	+ 7.0	70	39	5	'''	-97.8	+116''	+994''	7	0
7	1	101	55	11	'''	7.1	70	37	51	'''	97.7	117	993	7	1
7	2	102	6	54	'''	7.3	70	36	37	'''	97.7	119	993	7	2
7	3	102	18	36	'''	7.4	70	35	21	'''	97.6	121	993	7	3
7	4	102	30	18	'''	7.5	70	34	4	'''	97.5	123	993	7	4
7	5	102	42	0	'''	+ 7.7	70	32	46	'''	-97.4	+125	+993	7	5
7	6	102	53	42	'''	7.8	70	31	26	'''	97.4	127	992	7	6
7	7	103	5	24	'''	7.9	70	30	6	'''	97.3	129	992	7	7
7	8	103	17	6	'''	8.1	70	28	44	'''	97.2	131	992	7	8
7	9	103	28	48	'''	8.2	70	27	21	'''	97.1	133	992	7	9
7	10	103	40	30	'''	+ 8.3	70	25	57	'''	-97.1	+135	+991	7	10
7	11	103	52	12	'''	8.5	70	24	32	'''	97.0	136	991	7	11
7	12	104	2	54	'''	8.6	70	23	5	'''	96.9	138	991	7	12
7	13	104	15	36	'''	8.7	70	21	37	'''	96.8	140	991	7	13
7	14	104	27	17	'''	8.9	70	20	9	'''	96.7	142	990	7	14
7	15	104	38	59	'''	+ 9.0	70	18	39	'''	-96.6	+144	+990	7	15
7	16	104	50	40	'''	9.1	70	17	7	'''	96.5	146	990	7	16
7	17	105	2	22	'''	9.3	70	15	35	'''	96.4	148	990	7	17
7	18	105	14	3	'''	9.4	70	14	2	'''	96.4	150	989	7	18
7	19	105	25	44	'''	9.5	70	12	27	'''	96.3	152	989	7	19
7	20	105	37	26	'''	+ 9.7	70	10	51	'''	-96.2	+153	+989	7	20
7	21	105	49	7	'''	9.8	70	9	14	'''	96.1	155	989	7	21
7	22	106	0	48	'''	9.9	70	7	36	'''	96.0	157	988	7	22
7	23	106	12	29	'''	10.1	70	5	56	'''	95.9	159	988	7	23
7	24	106	24	10	'''	10.2	70	4	16	'''	95.8	161	988	7	24
7	25	106	35	51	'''	+10.3	70	2	34	'''	-95.7	+163	+988	7	25
7	26	106	47	32	'''	10.5	70	0	51	'''	95.6	165	987	7	26
7	27	106	59	13	'''	10.6	69	59	7	'''	95.5	167	987	7	27
7	28	107	10	53	'''	10.7	69	57	21	'''	95.4	169	987	7	28
7	29	107	22	34	'''	10.9	69	55	35	'''	95.3	170	987	7	29
7	30	107	34	15	'''	+11.0	69	53	47	'''	-95.2	+172	+986	7	30
7	31	107	45	55	'''	11.1	69	51	59	'''	95.1	174	986	7	31
7	32	107	57	36	'''	11.3	69	50	9	'''	95.0	176	986	7	32
7	33	108	9	16	'''	11.4	69	48	18	'''	94.9	178	985	7	33
7	34	108	20	56	'''	11.5	69	46	26	'''	94.8	180	985	7	34
7	35	108	32	37	'''	+11.7	69	44	32	'''	-94.7	+182	+985	7	35
7	36	108	44	17	'''	11.8	69	42	58	'''	94.6	184	984	7	36
7	37	108	55	57	'''	11.9	69	40	42	'''	94.5	186	984	7	37
7	38	109	7	37	'''	12.1	69	38	45	'''	94.3	187	984	7	38
7	39	109	19	17	'''	12.2	69	36	47	'''	94.2	189	984	7	39
7	40	109	30	57	'''	+12.4	69	34	48	'''	-94.1	+191	+983	7	40
7	41	109	42	37	'''	12.5	69	32	48	'''	94.0	193	983	7	41
7	42	109	54	17	'''	12.6	69	30	46	'''	93.8	195	983	7	42
7	43	110	5	56	'''	12.8	69	28	44	'''	93.7	197	982	7	43
7	44	110	17	36	'''	12.9	69	26	40	'''	93.6	199	982	7	44
7	45	110	29	15	'''	+13.1	69	24	35	'''	-93.5	+200	+982	7	45
7	46	110	40	55	'''	13.2	69	22	29	'''	93.4	202	981	7	46
7	47	110	52	34	'''	13.4	69	20	22	'''	93.3	204	981	7	47
7	48	111	4	14	'''	13.5	69	18	14	'''	93.2	206	981	7	48
7	49	111	15	53	'''	13.6	69	16	4	'''	93.1	208	980	7	49
7	50	111	27	32	'''	+13.8	69	13	54	'''	-92.9	+210	+980	7	50
7	51	111	39	11	'''	13.9	69	11	42	'''	92.8	212	980	7	51
7	52	111	50	50	'''	14.1	69	9	29	'''	92.7	213	979	7	52
7	53	112	2	29	'''	14.2	69	7	16	'''	92.6	215	979	7	53
7	54	112	14	8	'''	14.4	69	5	1	'''	92.5	217	979	7	54
7	55	112	25	47	'''	+14.5	69	2	44	'''	-92.4	+219	+978	7	55
7	56	112	37	25	'''	14.7	69	0	27	'''	92.3	221	978	7	56
7	57	112	49	4	'''	14.8	68	58	9	'''	92.2	223	978	7	57
7	58	113	0	43	'''	15.0	68	55	49	'''	92.1	225	977	7	58
7	59	113	12	21	'''	15.1	68	53	29	'''	92.0	226	977	7	59
8	0	113	24	0	'''	15.3	68	51	7	'''	91.8	228	976	8	0



## Longitude and Altitude of the Nonagesimal for the

Argument.		Longitude of the Nonagesimal.				Correction for $-100''$ in Obliq.	Altitude of the Nonagesimal.				Correction for $-100''$ in Obliq.	Corrections for $-1000''$ in Latitude.		Argument.	
A. R. of Mer.												Long.	Alt.	A. R. of Mer.	
H.	M.	°	'	''	'''		°	'	''	'''				H.	M.
8	0	113	24	0	11 38	+15.3	68	51	7	2 23	-91.8	+228''	+976''	8	0
8	1	113	35	38	11 38	15.5	68	48	44	2 24	91.7	230	976	8	1
8	2	113	47	16	11 38	15.6	68	46	20	2 25	91.5	232	976	8	2
8	3	113	58	54	11 38	15.8	68	43	55	2 26	91.4	234	975	8	3
8	4	114	10	32	11 39	15.9	68	41	29	2 28	91.2	236	975	8	4
8	5	114	22	11	11 38	+16.1	68	39	1	2 28	-91.1	+238''	+975''	8	5
8	6	114	33	49	11 37	16.3	68	36	33	2 29	91.0	239	974	8	6
8	7	114	45	26	11 38	16.4	68	34	4	2 31	90.9	241	974	8	7
8	8	114	57	4	11 38	16.6	68	31	33	2 32	90.8	243	973	8	8
8	9	115	8	42	11 38	16.7	68	29	1	2 32	90.6	245	973	8	9
8	10	115	20	20	11 37	+16.9	68	26	28	2 33	-90.4	+247''	+973''	8	10
8	11	115	31	57	11 38	17.0	68	23	55	2 33	90.2	249	972	8	11
8	12	115	43	35	11 37	17.2	68	21	20	2 35	90.1	250	972	8	12
8	13	115	55	12	11 38	17.4	68	18	43	2 37	90.0	252	972	8	13
8	14	116	6	50	11 37	17.5	68	16	6	2 38	89.8	254	971	8	14
8	15	116	18	27	11 37	+17.7	68	13	28	2 39	-89.7	+256''	+971''	8	15
8	16	116	30	4	11 38	17.9	68	10	49	2 39	89.5	258	970	8	16
8	17	116	41	42	11 37	18.0	68	8	8	2 41	89.4	260	970	8	17
8	18	116	53	19	11 37	18.2	68	5	27	2 41	89.2	261	970	8	18
8	19	117	4	56	11 37	18.4	68	2	44	2 43	89.1	263	969	8	19
8	20	117	16	33	11 36	+18.5	68	0	1	2 45	-88.9	+265''	+969''	8	20
8	21	117	28	9	11 37	18.7	67	57	16	2 46	88.8	267	968	8	21
8	22	117	39	46	11 37	18.9	67	54	30	2 47	88.6	269	968	8	22
8	23	117	51	23	11 37	19.0	67	51	13	2 48	88.5	271	967	8	23
8	24	118	3	0	11 36	19.2	67	48	55	2 48	88.3	272	967	8	24
8	25	118	14	36	11 37	+19.4	67	46	6	2 49	-88.1	+274''	+967''	8	25
8	26	118	26	13	11 36	19.5	67	43	16	2 50	88.0	276	966	8	26
8	27	118	37	49	11 37	19.7	67	40	25	2 51	87.8	278	966	8	27
8	28	118	49	26	11 36	19.9	67	37	33	2 52	87.6	280	965	8	28
8	29	119	1	2	11 36	20.0	67	34	39	2 54	87.5	281	965	8	29
8	30	119	12	38	11 37	+20.2	67	31	15	2 55	-87.3	+283''	+964''	8	30
8	31	119	24	15	11 36	20.4	67	28	50	2 55	87.1	285	964	8	31
8	32	119	35	51	11 36	20.5	67	25	53	2 57	87.0	287	964	8	32
8	33	119	47	27	11 36	20.7	67	22	56	2 57	86.8	289	963	8	33
8	34	119	59	3	11 36	20.9	67	19	57	2 59	86.6	290	963	8	34
8	35	120	10	39	11 36	+21.0	67	16	57	3 0	-86.5	+292''	+962''	8	35
8	36	120	22	15	11 35	21.2	67	13	57	3 0	86.3	294	962	8	36
8	37	120	33	50	11 36	21.4	67	10	55	3 2	86.1	296	961	8	37
8	38	120	45	26	11 36	21.5	67	7	52	3 3	86.0	297	961	8	38
8	39	120	57	2	11 35	21.7	67	4	49	3 3	85.8	299	961	8	39
8	40	121	8	38	11 35	+21.9	67	1	44	3 5	-85.6	+301''	+960''	8	40
8	41	121	20	13	11 36	22.1	66	58	38	3 6	85.4	303	960	8	41
8	42	121	31	49	11 35	22.2	66	55	31	3 7	85.3	305	959	8	42
8	43	121	43	24	11 35	22.4	66	52	23	3 8	85.1	307	959	8	43
8	44	121	54	59	11 35	22.6	66	49	14	3 9	84.9	308	958	8	44
8	45	122	6	35	11 35	+22.8	66	46	5	3 9	-84.7	+310''	+958''	8	45
8	46	122	18	10	11 35	22.9	66	42	54	3 11	84.6	312	957	8	46
8	47	122	29	45	11 36	23.1	66	39	42	3 12	84.4	314	957	8	47
8	48	122	41	21	11 35	23.3	66	36	29	3 13	84.2	316	956	8	48
8	49	122	52	56	11 35	23.5	66	33	14	3 15	84.0	317	956	8	49
8	50	123	4	31	11 35	+23.7	66	29	59	3 15	-83.8	+319''	+956''	8	50
8	51	123	16	6	11 35	23.9	66	26	43	3 16	83.6	321	955	8	51
8	52	123	27	41	11 35	24.1	66	23	26	3 17	83.4	323	955	8	52
8	53	123	39	16	11 35	24.3	66	20	8	3 18	83.2	324	954	8	53
8	54	123	50	51	11 34	24.5	66	16	49	3 19	83.0	326	954	8	54
8	55	124	2	25	11 35	+24.7	66	13	29	3 20	-82.8	+328''	+953''	8	55
8	56	124	14	0	11 35	24.9	66	10	8	3 22	82.6	330	953	8	56
8	57	124	25	35	11 35	25.1	66	6	46	3 22	82.4	332	952	8	57
8	58	124	37	10	11 34	25.3	66	3	23	3 23	82.2	333	952	8	58
8	59	124	48	41	11 35	25.5	65	59	58	3 25	82.0	335	951	8	59
9	0	125	0	19	11 35	25.7	65	56	33	3 25	81.8	337	951	9	0



Argument.		Longitude of the Nonagesimal.	Correction for -100'' in Obliq.	Altitude of the Nonagesimal.	Correction for -100'' in Obliq.	Corrections for -1000' in Latitude.		Argument.	
A. R. of Mer.	H. M.					Long.	Alt.	H. M.	A. R. of Mer.
9	0	125 0 19	+25.7	65 56 33	-81.8	+337''	+951''	9	0
9	1	125 11 53	25.9	65 53 7	81.6	339	950	9	1
9	2	125 23 28	26.1	65 49 40	81.4	340	950	9	2
9	3	125 35 2	26.3	65 46 12	81.2	342	949	9	3
9	4	125 46 37	26.5	65 42 43	81.0	344	949	9	4
		11 34		3 30					
9	5	125 58 11	+26.6	65 39 13	-80.8	+346	+948	9	5
9	6	126 9 45	26.8	65 35 43	80.7	347	948	9	6
9	7	126 21 20	27.0	65 32 11	80.5	349	947	9	7
9	8	126 32 54	27.2	65 28 38	80.3	351	947	9	8
9	9	126 44 28	27.4	65 25 4	80.1	353	946	9	9
		11 35		3 35					
9	10	126 56 3	+27.6	65 21 29	-79.9	+354	+946	9	10
9	11	127 7 37	27.8	65 17 53	79.7	356	945	9	11
9	12	127 19 11	28.0	65 14 17	79.5	358	945	9	12
9	13	127 30 45	28.2	65 10 39	79.3	360	944	9	13
9	14	127 42 19	28.4	65 7 0	79.1	361	944	9	14
		11 34		3 39					
9	15	127 53 53	+28.6	65 3 21	-78.9	+363	+943	9	15
9	16	128 5 27	28.8	64 59 40	78.7	365	943	9	16
9	17	128 17 1	29.0	64 55 59	78.5	367	942	9	17
9	18	128 28 35	29.3	64 52 16	78.3	368	942	9	18
9	19	128 40 9	29.5	64 48 33	78.0	370	941	9	19
		11 34		3 45					
9	20	128 51 43	+29.7	64 44 48	-77.8	+372	+941	9	20
9	21	129 3 17	29.9	64 41 3	77.6	374	940	9	21
9	22	129 14 51	30.1	64 37 17	77.4	375	940	9	22
9	23	129 26 25	30.3	64 33 30	77.2	377	939	9	23
9	24	129 37 59	30.5	64 29 42	77.0	379	939	9	24
		11 34		3 49					
9	25	129 49 33	+30.7	64 25 53	-76.8	+381	+938	9	25
9	26	130 1 7	31.0	64 22 3	76.5	382	928	9	26
9	27	130 12 11	31.2	64 18 12	76.3	384	927	9	27
9	28	130 24 15	31.4	64 14 20	76.1	386	927	9	28
9	29	130 35 49	31.6	64 10 27	75.9	388	926	9	29
		11 34		3 53					
9	30	130 47 23	+31.9	64 6 34	-75.6	+389	+926	9	30
9	31	130 58 57	32.1	64 2 39	75.4	391	925	9	31
9	32	131 10 31	32.3	63 58 44	75.2	393	925	9	32
9	33	131 22 5	32.5	63 54 47	75.0	394	924	9	33
9	34	131 33 39	32.8	63 50 50	74.7	396	924	9	34
		11 34		3 58					
9	35	131 45 13	+33.0	63 46 52	-74.5	+398	+923	9	35
9	36	131 56 47	33.2	63 42 53	74.3	400	923	9	36
9	37	132 8 20	33.4	63 38 53	74.1	401	922	9	37
9	38	132 19 54	33.7	63 34 52	73.8	403	922	9	38
9	39	132 31 28	33.9	63 30 50	73.6	405	921	9	39
		11 34		4 2					
9	40	132 43 2	+34.1	63 26 48	-73.4	+407	+921	9	40
9	41	132 54 37	34.3	63 22 44	73.2	408	920	9	41
9	42	133 6 11	34.6	63 18 40	72.9	410	920	9	42
9	43	133 17 45	34.8	63 14 35	72.7	412	920	9	43
9	44	133 29 19	35.0	63 10 28	72.5	413	920	9	44
		11 34		4 7					
9	45	133 40 53	+35.2	63 6 21	-72.3	+415	+923	9	45
9	46	133 52 27	35.5	63 2 14	72.0	417	928	9	46
9	47	134 4 1	35.7	62 58 5	71.8	419	927	9	47
9	48	134 15 36	35.9	62 53 55	71.6	420	927	9	48
9	49	134 27 10	36.1	62 49 45	71.4	422	926	9	49
		11 34		4 12					
9	50	134 38 44	+36.4	62 45 33	-71.1	+424	+926	9	50
9	51	134 50 19	36.6	62 41 21	70.9	425	925	9	51
9	52	135 1 53	36.8	62 37 8	70.7	427	925	9	52
9	53	135 13 28	37.0	62 32 54	70.4	429	924	9	53
9	54	135 25 2	37.3	62 28 39	70.2	431	923	9	54
		11 35		4 15					
9	55	135 36 37	+37.5	62 24 24	-70.0	+432	+923	9	55
9	56	135 48 11	37.7	62 20 7	69.7	434	922	9	56
9	57	135 59 46	37.9	62 15 50	69.5	436	922	9	57
9	58	136 11 21	38.2	62 11 32	69.3	437	921	9	58
9	59	136 22 55	38.4	62 7 13	69.0	439	921	9	59
10	0	136 34 30	38.7	62 2 53	68.8	441	920	10	0

## Longitude and Altitude of the Nonagesimal for the

Argument.		Longitude of the Nonagesimal.		Correction for — 100' in Obliq.	Altitude of the Nonagesimal.		Correction for — 100' in Obliq.	Corrections for — 1000' in Latitude.		Argument.		
A. R. of Mer.								Long.	Alt.	A. R. of Mer.		
H.	M.	°	'		°	'		''	''	H.	M.	
10	0	136	34	30	11	35	+38.7	62	2	53	4	21
10	1	136	46	5	11	35	38.9	61	58	32	4	21
10	2	136	57	40	11	35	39.1	61	54	11	4	23
10	3	137	9	15	11	35	39.3	61	49	48	4	23
10	4	137	20	50	11	36	39.6	61	45	25	4	24
10	5	137	32	26	11	35	+39.8	61	41	1	4	24
10	6	137	44	1	11	35	40.0	61	36	37	4	24
10	7	137	55	36	11	36	40.3	61	32	11	4	26
10	8	138	7	12	11	36	40.5	61	27	45	4	26
10	9	138	18	47	11	35	40.7	6	23	17	4	28
10	10	138	30	23	11	36	+41.0	61	18	49	4	28
10	11	138	41	59	11	36	41.2	61	14	21	4	28
10	12	138	53	35	11	36	41.5	61	9	51	4	30
10	13	139	5	11	11	36	41.7	61	5	21	4	30
10	14	139	16	47	11	36	42.0	61	0	49	4	32
10	15	139	28	23	11	36	+42.2	60	56	17	4	32
10	16	139	39	59	11	37	42.5	60	51	45	4	32
10	17	139	51	36	11	37	42.7	60	47	11	4	34
10	18	140	3	12	11	37	43.0	60	42	37	4	34
10	19	140	14	49	11	37	43.2	60	38	2	4	35
10	20	140	26	25	11	37	+43.5	60	33	26	4	36
10	21	140	38	2	11	37	43.7	60	28	49	4	37
10	22	140	49	39	11	37	44.0	60	24	12	4	38
10	23	141	1	16	11	37	44.2	60	19	34	4	38
10	24	141	12	53	11	38	44.5	60	14	55	4	39
10	25	141	24	31	11	37	+44.8	60	10	15	4	40
10	26	141	36	8	11	38	45.0	60	5	35	4	40
10	27	141	47	46	11	38	45.3	60	0	53	4	42
10	28	141	59	24	11	38	45.6	59	56	12	4	43
10	29	142	11	2	11	38	45.9	59	51	29	4	43
10	30	142	22	40	11	38	+46.1	59	46	45	4	44
10	31	142	34	18	11	39	46.4	59	42	1	4	44
10	32	142	45	57	11	38	46.7	59	37	16	4	45
10	33	142	57	35	11	39	47.0	59	32	31	4	45
10	34	143	9	14	11	39	47.2	59	27	44	4	47
10	35	143	20	53	11	39	+47.5	59	22	57	4	47
10	36	143	32	32	11	39	47.8	59	18	9	4	48
10	37	143	44	11	11	40	48.1	59	13	21	4	48
10	38	143	55	51	11	39	48.4	59	8	32	4	49
10	39	144	7	30	11	40	48.7	59	3	42	4	50
10	40	144	19	10	11	40	+48.9	58	58	51	4	51
10	41	144	30	50	11	40	49.2	58	54	0	4	51
10	42	144	42	30	11	41	49.5	58	49	8	4	52
10	43	144	54	11	11	41	49.8	58	44	15	4	53
10	44	145	5	51	11	41	50.1	58	39	21	4	54
10	45	145	17	32	11	41	+50.3	58	34	27	4	54
10	46	145	29	13	11	42	50.6	58	29	32	4	55
10	47	145	40	55	11	41	50.9	58	24	36	4	56
10	48	145	52	36	11	42	51.2	58	19	40	4	56
10	49	146	4	18	11	42	51.5	58	14	43	4	57
10	50	146	16	0	11	42	+51.8	58	9	45	4	58
10	51	146	27	42	11	42	52.1	58	4	47	4	58
10	52	146	39	4	11	43	52.3	57	59	48	4	59
10	53	146	51	7	11	43	52.6	57	54	49	4	59
10	54	147	2	50	11	43	52.9	57	49	48	5	1
10	55	147	14	33	11	43	+53.2	57	44	47	5	1
10	56	147	26	16	11	44	53.5	57	39	46	5	1
10	57	147	38	0	11	44	53.8	57	34	43	5	3
10	58	147	49	44	11	44	54.1	57	29	40	5	3
10	59	148	1	28	11	44	54.4	57	24	37	5	3
11	0	148	13	13	11	45	54.7	57	19	32	5	5

Lat. 42° 23' 28" N. (reduced 42° 12' 2".4), and Obliquity 23° 27' 40". 57

Argument.		Longitude of the Nonagesimal.	Correction for -100" in Obliq.	Altitude of the Nonagesimal.				Correction for -100" in Obliq.	Corrections for -1000'' in Latitude.		Argument.	
A. R. of Mer.	H. M.			Long.	Alt.	H. M.	A. R. of Mer.					
11 0	0	148 13 13	+54.7	57 19 32	5 5	-52.3	+541''	+889''	11 0			
11 1	148 24 53	11 45	55.0	57 14 27	5 5	52.0	543	889	11 1			
11 2	148 36 43	11 45	55.3	57 9 22	5 5	51.8	544	888	11 2			
11 3	148 48 23	11 46	55.6	57 4 15	5 7	51.5	546	888	11 3			
11 4	149 0 14	11 46	55.8	56 59 9	5 6	51.2	547	888	11 4			
11 5	149 12 0	11 46	+56.1	56 54 1	5 8	-51.0	+549	+887	11 5			
11 6	149 23 46	11 47	56.4	56 48 53	5 8	50.7	551	887	11 6			
11 7	149 35 33	11 47	56.7	56 43 44	5 9	50.4	552	886	11 7			
11 8	149 47 19	11 47	57.0	56 38 35	5 9	50.1	554	886	11 8			
11 9	149 59 6	11 47	57.3	56 33 25	5 10	49.9	556	885	11 9			
11 10	150 10 53	11 48	+57.6	56 28 15	5 10	-49.6	+557	+885	11 10			
11 11	150 22 41	11 47	57.9	56 23 3	5 12	49.3	559	884	11 11			
11 12	150 34 28	11 47	58.2	56 17 52	5 11	49.0	561	884	11 12			
11 13	150 46 17	11 49	58.5	56 12 39	5 13	48.7	562	883	11 13			
11 14	150 58 5	11 45	58.8	56 7 26	5 13	48.4	564	883	11 14			
11 15	151 9 54	11 49	+59.1	56 2 13	5 13	-48.1	+566	+882	11 15			
11 16	151 21 44	11 50	59.4	55 56 58	5 15	47.8	567	882	11 16			
11 17	151 33 33	11 49	59.7	55 51 44	5 14	47.6	569	881	11 17			
11 18	151 45 23	11 50	60.0	55 46 28	5 16	47.3	570	881	11 18			
11 19	151 57 14	11 51	60.3	55 41 12	5 16	47.0	572	880	11 19			
11 20	152 9 5	11 51	+60.6	55 35 56	5 16	-46.7	+574	+880	11 20			
11 21	152 20 56	11 51	60.9	55 30 39	5 17	46.4	575	879	11 21			
11 22	152 32 48	11 52	61.2	55 25 21	5 18	46.1	577	879	11 22			
11 23	152 44 39	11 51	61.5	55 20 3	5 18	45.8	579	878	11 23			
11 24	152 56 32	11 53	61.8	55 14 44	5 19	45.5	580	878	11 24			
11 25	153 8 24	11 52	+62.1	55 9 25	5 19	-45.2	+582	+878	11 25			
11 26	153 20 17	11 53	62.4	55 4 5	5 20	44.9	584	877	11 26			
11 27	153 32 11	11 54	62.7	5 58 41	5 21	44.6	585	877	11 27			
11 28	153 44 5	11 54	63.0	54 53 23	5 21	44.3	587	876	11 28			
11 29	153 55 59	11 54	63.4	54 48 2	5 21	44.0	589	876	11 29			
11 30	154 7 54	11 55	+63.7	54 42 40	5 22	-43.7	+590	+875	11 30			
11 31	154 19 49	11 55	64.0	54 37 17	5 23	43.4	592	875	11 31			
11 32	154 31 45	11 56	64.4	54 31 54	5 23	43.0	593	874	11 32			
11 33	154 43 41	11 56	64.7	54 26 30	5 24	42.7	595	874	11 33			
11 34	154 55 37	11 56	65.0	54 21 6	5 24	42.4	597	873	11 34			
11 35	155 7 34	11 57	+65.4	54 15 41	5 25	-42.0	+598	+873	11 35			
11 36	155 19 31	11 57	65.7	54 10 15	5 26	41.7	600	873	11 36			
11 37	155 31 29	11 58	66.0	54 4 49	5 26	41.3	602	872	11 37			
11 38	155 43 27	11 58	66.4	53 59 23	5 26	41.0	603	872	11 38			
11 39	155 55 26	11 59	66.7	53 53 56	5 27	40.7	605	871	11 39			
11 40	156 7 25	12 0	+67.0	53 48 29	5 27	-40.3	+607	+871	11 40			
11 41	156 19 25	12 0	67.4	53 43 1	5 28	39.9	608	871	11 41			
11 42	156 31 25	12 0	67.7	53 37 33	5 28	39.6	610	870	11 42			
11 43	156 43 26	12 1	68.0	53 32 4	5 29	39.3	612	870	11 43			
11 44	156 55 28	12 2	68.4	53 26 34	5 30	38.9	613	869	11 44			
11 45	157 7 29	12 1	+68.7	53 21 5	5 29	-38.5	+615	+869	11 45			
11 46	157 19 31	12 2	69.0	53 15 34	5 31	38.2	616	868	11 46			
11 47	157 31 34	12 3	69.4	53 10 3	5 31	37.8	618	868	11 47			
11 48	157 43 37	12 3	69.7	53 4 32	5 31	37.5	620	868	11 48			
11 49	157 55 41	12 4	70.0	52 59 0	5 32	37.2	621	867	11 49			
11 50	158 7 45	12 4	+70.3	52 53 28	5 32	-36.9	+623	+867	11 50			
11 51	158 19 50	12 5	70.6	52 47 55	5 33	36.6	625	866	11 51			
11 52	158 31 56	12 6	71.0	52 42 22	5 33	36.3	626	866	11 52			
11 53	158 44 2	12 6	71.3	52 36 48	5 34	36.0	628	866	11 53			
11 54	158 56 8	12 6	71.6	52 31 14	5 34	35.8	630	865	11 54			
11 55	159 8 16	12 8	+71.9	52 25 39	5 35	-35.5	+631	+865	11 55			
11 56	159 20 23	12 7	72.2	52 20 4	5 35	35.2	633	864	11 56			
11 57	159 32 32	12 9	72.5	52 14 29	5 35	34.9	635	864	11 57			
11 58	159 44 41	12 9	72.8	52 8 53	5 36	34.6	636	864	11 58			
11 59	159 56 50	12 9	73.2	52 3 17	5 36	34.3	638	863	11 59			
12 0	160 9 0	12 10	73.5	51 57 40	5 37	34.0	639	863	12 0			



Longitude and Altitude of the Nonagesimal for the

Argument.		Longitude of the Nonagesimal.				Correction for — 100'' in Obliq.	Altitude of the Nonagesimal.				Correction for — 100'' in Obliq.	Corrections for — 1000'' in Latitude.		Argument.	
A. R.	M.	°	'	''	'''		°	'	''	'''		Long.	Alt.	A. R.	M.
12	0	160	9	0	12 11	+73.5	51	57	40	5 38	-34.0	+639''	+863''	12	0
12	1	160	21	11	12 11	73.8	51	52	2	5 38	33.7	641	862	12	1
12	2	160	33	22	12 12	74.2	51	46	25	5 37	33.3	643	862	12	2
12	3	160	45	34	12 13	74.5	51	40	47	5 38	33.0	644	862	12	3
12	4	160	57	47	12 13	74.9	51	35	8	5 39	32.7	646	861	12	4
12	5	161	10	0	12 14	+75.2	51	29	29	5 39	-32.3	+648	+861	12	5
12	6	161	22	14	12 14	75.5	51	23	50	5 40	32.0	649	861	12	6
12	7	161	34	28	12 16	75.8	51	18	10	5 40	31.7	651	860	12	7
12	8	161	46	44	12 16	76.2	51	12	30	5 40	31.3	652	860	12	8
12	9	161	59	0	12 16	76.5	51	6	50	5 40	31.0	654	860	12	9
12	10	162	11	16	12 17	+76.9	51	1	9	5 41	-30.7	+656	+859	12	10
12	11	162	23	33	12 18	77.2	50	55	27	5 42	30.3	657	859	12	11
12	12	162	35	51	12 19	77.6	50	49	46	5 43	30.0	659	859	12	12
12	13	162	48	10	12 19	77.9	50	44	3	5 43	29.6	661	858	12	13
12	14	163	0	29	12 20	78.3	50	38	21	5 43	29.3	662	858	12	14
12	15	163	12	49	12 21	+78.6	50	32	38	5 43	-28.9	+664	+858	12	15
12	16	163	25	10	12 21	79.0	50	26	55	5 43	28.6	665	857	12	16
12	17	163	37	31	12 23	79.3	50	21	11	5 44	28.2	667	857	12	17
12	18	163	49	54	12 23	79.7	50	15	27	5 44	27.8	669	857	12	18
12	19	164	2	17	12 24	80.1	50	9	43	5 44	27.4	670	856	12	19
12	20	164	14	41	12 24	+80.5	50	3	58	5 45	-27.1	+672	+856	12	20
12	21	164	27	5	12 26	80.8	49	53	13	5 45	26.7	673	856	12	21
12	22	164	39	31	12 26	81.2	49	52	28	5 45	26.4	675	855	12	22
12	23	164	51	57	12 26	81.5	49	46	42	5 46	26.0	677	855	12	23
12	24	165	4	23	12 28	81.9	49	40	56	5 46	25.7	678	855	12	24
12	25	165	16	51	12 28	+82.3	49	35	10	5 47	-25.3	+680	+854	12	25
12	26	165	29	19	12 30	82.6	49	29	23	5 47	25.0	682	854	12	26
12	27	165	41	49	12 30	83.0	49	23	36	5 48	24.6	683	854	12	27
12	28	165	54	19	12 31	83.1	49	17	48	5 48	24.2	685	854	12	28
12	29	166	6	50	12 32	83.7	49	12	1	5 48	23.9	686	853	12	29
12	30	166	19	22	12 32	+84.1	49	6	13	5 48	-23.5	+688	+853	12	30
12	31	166	31	54	12 31	84.5	49	0	25	5 49	23.1	690	853	12	31
12	32	166	44	28	12 34	84.8	48	54	36	5 49	22.8	691	852	12	32
12	33	166	57	2	12 36	85.2	48	48	47	5 49	22.4	693	852	12	33
12	34	167	9	38	12 36	85.6	48	42	58	5 49	22.0	695	852	12	34
12	35	167	22	14	12 37	+85.9	48	37	8	5 50	-21.7	+696	+852	12	35
12	36	167	34	51	12 37	86.3	48	31	18	5 50	21.3	698	851	12	36
12	37	167	47	28	12 39	86.7	48	25	28	5 50	20.9	699	851	12	37
12	38	168	0	7	12 40	87.1	48	19	38	5 50	20.5	701	851	12	38
12	39	168	12	47	12 41	87.4	48	13	47	5 51	20.2	703	851	12	39
12	40	168	25	28	12 41	+87.8	48	7	56	5 51	-19.8	+704	+850	12	40
12	41	168	38	9	12 43	88.2	48	2	5	5 51	19.4	706	850	12	41
12	42	168	50	52	12 44	88.6	47	56	14	5 52	19.0	707	850	12	42
12	43	169	3	36	12 44	88.9	47	50	22	5 52	18.7	709	850	12	43
12	44	169	16	20	12 46	89.3	47	44	30	5 52	18.3	711	849	12	44
12	45	169	29	6	12 46	+89.7	47	38	38	5 52	-17.9	+712	+849	12	45
12	46	169	41	52	12 48	90.1	47	32	46	5 53	17.5	714	849	12	46
12	47	169	54	40	12 48	90.4	47	26	53	5 53	17.2	715	849	12	47
12	48	170	7	28	12 48	90.8	47	21	0	5 53	16.8	717	849	12	48
12	49	170	20	17	12 49	91.2	47	15	7	5 53	16.4	718	848	12	49
12	50	170	33	8	12 51	+91.5	47	9	14	5 54	-16.0	+720	+848	12	50
12	51	170	45	59	12 53	91.9	47	3	20	5 54	15.7	722	848	12	51
12	52	170	58	52	12 54	92.3	46	57	26	5 53	15.3	723	848	12	52
12	53	171	11	46	12 55	92.6	46	51	33	5 55	14.9	725	848	12	53
12	54	171	24	41	12 56	93.0	46	45	38	5 54	14.5	726	847	12	54
12	55	171	37	37	12 56	+93.4	46	39	44	5 55	-14.2	+728	+847	12	55
12	56	171	50	33	12 58	93.7	46	33	49	5 54	13.8	730	847	12	56
12	57	172	3	31	13 0	94.1	46	27	55	5 55	13.4	731	847	12	57
12	58	172	16	31	13 0	94.5	46	22	0	5 56	13.0	733	847	12	58
12	59	172	29	31	13 1	94.8	46	16	4	5 55	12.7	734	846	12	59
13	0	172	42	32		95.2	46	10	9	5 55	12.3	736	846	13	0



Argument.		Longitude of the Nonagesimal.	Correction for -100" in Obliq.	Altitude of the Nonagesimal.		Correction for -100" in Obliq.	Corrections for -1000" in Latitude.		Argument.	
A. R. of Mer.	H. M.			Long.	Alt.		A. R. of Mer.	H. M.		
13 0	172 42 32	13 3	+ 95.2	46 10 9	5 56	-12.3	+736"	+846"	13 0	
13 1	172 55 35	13 3	95.6	46 4 13	5 56	11.9	737	846	13 1	
13 2	173 8 38	13 5	95.9	45 58 17	5 56	11.5	739	846	13 2	
13 3	173 21 43	13 6	96.3	45 52 21	5 56	11.2	741	846	13 3	
13 4	173 34 49	13 7	96.7	45 46 25	5 56	10.8	742	846	13 4	
13 5	173 47 56	13 9	+ 97.0	45 40 29	5 56	-10.4	+744	+846	13 5	
13 6	174 1 5	13 9	97.4	45 34 33	5 56	10.0	745	845	13 6	
13 7	174 14 14	13 11	97.8	45 28 37	5 57	9.7	747	845	13 7	
13 8	174 27 25	13 12	98.1	45 22 40	5 57	9.3	748	845	13 8	
13 9	174 40 37	13 14	98.5	45 16 43	5 57	8.9	750	845	13 9	
13 10	174 53 51	13 14	+ 98.9	45 10 47	5 57	- 8.5	+751	+845	13 10	
13 11	175 7 5	13 16	99.2	45 4 50	5 57	8.2	753	845	13 11	
13 12	175 20 21	13 17	99.6	44 58 53	5 57	7.8	754	845	13 12	
13 13	175 33 38	13 18	100.0	44 52 56	5 57	7.4	756	845	13 13	
13 14	175 46 56	13 20	100.4	44 46 59	5 58	7.0	757	844	13 14	
13 15	176 0 16	13 21	+100.8	44 41 1	5 57	- 6.6	+759	+844	13 15	
13 16	176 13 37	13 22	101.1	44 35 4	5 58	6.3	760	844	13 16	
13 17	176 26 59	13 24	101.5	44 29 6	5 58	5.9	762	844	13 17	
13 18	176 40 23	13 25	101.9	44 23 8	5 58	5.5	763	844	13 18	
13 19	176 53 48	13 27	102.3	44 17 11	5 58	5.1	765	844	13 19	
13 20	177 7 15	13 27	+102.7	44 11 13	5 58	- 4.7	+766	+844	13 20	
13 21	177 20 42	13 30	103.1	44 5 15	5 58	4.3	768	844	13 21	
13 22	177 34 12	13 30	103.4	43 59 17	5 58	4.0	769	844	13 22	
13 23	177 47 42	13 32	103.8	43 53 19	5 58	3.6	771	844	13 23	
13 24	178 1 14	13 33	104.2	43 47 21	5 58	3.2	772	844	13 24	
13 25	178 14 47	13 35	+104.6	43 41 23	5 58	- 2.8	+774	+844	13 25	
13 26	178 28 22	13 36	105.0	43 35 25	5 58	2.4	775	844	13 26	
13 27	178 41 58	13 38	105.4	43 29 26	5 59	2.0	777	844	13 27	
13 28	178 55 36	13 39	105.7	43 23 28	5 58	1.7	778	844	13 28	
13 29	179 9 15	13 41	106.1	43 17 30	5 58	1.3	780	844	13 29	
13 30	179 22 56	13 43	+106.5	43 11 32	5 59	- 0.9	+781	+844	13 30	
13 31	179 36 39	13 44	106.9	43 5 33	5 58	0.5	783	844	13 31	
13 32	179 50 23	13 45	107.3	42 59 35	5 58	- 0.2	784	844	13 32	
13 33	180 4 8	13 47	107.7	42 53 37	5 58	+ 0.2	786	844	13 33	
13 34	180 17 55	13 48	108.0	42 47 39	5 59	0.6	787	844	13 34	
13 35	180 31 43	13 50	+108.4	42 41 40	5 58	+ 1.0	+789	+844	13 35	
13 36	180 45 33	13 51	108.8	42 35 42	5 58	1.4	790	844	13 36	
13 37	180 59 24	13 53	109.2	42 29 44	5 59	1.8	791	844	13 37	
13 38	181 13 17	13 55	109.6	42 23 45	5 58	2.2	793	844	13 38	
13 39	181 27 12	13 57	109.9	42 17 47	5 58	2.6	794	844	13 39	
13 40	181 41 9	13 58	+110.3	42 11 49	5 58	+ 3.0	+796	+844	13 40	
13 41	181 55 7	13 59	110.7	42 5 51	5 58	3.4	797	844	13 41	
13 42	182 9 6	14 2	111.1	41 59 53	5 58	3.8	799	844	13 42	
13 43	182 23 8	14 3	111.4	41 53 55	5 58	4.2	800	844	13 43	
13 44	182 37 11	14 5	111.8	41 47 57	5 58	4.6	801	844	13 44	
13 45	182 51 16	14 6	+112.2	41 41 59	5 58	+ 5.0	+803	+844	13 45	
13 46	183 5 22	14 8	112.6	41 36 1	5 58	5.4	804	844	13 46	
13 47	183 19 30	14 10	112.9	41 30 3	5 58	5.8	805	844	13 47	
13 48	183 33 40	14 12	113.3	41 24 6	5 57	6.2	807	844	13 48	
13 49	183 47 52	14 13	113.7	41 18 8	5 58	6.6	808	844	13 49	
13 50	184 2 5	14 16	+114.0	41 12 10	5 57	+ 7.0	+810	+844	13 50	
13 51	184 16 21	14 17	114.4	41 6 13	5 57	7.5	811	845	13 51	
13 52	184 30 38	14 19	114.7	41 0 16	5 57	7.9	812	845	13 52	
13 53	184 44 57	14 21	115.1	40 54 19	5 57	8.3	814	845	13 53	
13 54	184 59 18	14 22	115.5	40 48 22	5 57	8.7	815	845	13 54	
13 55	185 13 40	14 25	+115.8	40 42 25	5 57	+ 9.1	+816	+845	13 55	
13 56	185 28 5	14 26	116.2	40 36 28	5 57	9.5	817	845	13 56	
13 57	185 42 31	14 29	116.5	40 30 32	5 56	10.0	819	845	13 57	
13 58	185 57 0	14 30	116.9	40 24 35	5 57	10.4	820	845	13 58	
13 59	186 11 30	14 32	117.2	40 18 39	5 56	10.8	821	846	13 59	
14 0	186 26 2		117.6	40 12 43	5 56	11.2	823	846	14 0	

Longitude and Altitude of the Nonagesimal for the

Argument.		Longitude of the Nonagesimal.		Correction for — 100' in Obliq.	Altitude of the Nonagesimal.		Correction for — 100' in Obliq.	Corrections for — 1000' in Latitude.		Argument.	
A. R. of Mer.	H. M.	°	'		°	'		Long.	Alt.	A. R. of Mer.	H. M.
14 0	0	186	26 2	+117.6	40	12 43	+11.2	+823''	+846''	14 0	0
14 1	1	186	40 36	118.0	40	6 47	11.6	824	846	14 1	1
14 2	2	186	55 12	118.3	40	0 51	12.1	825	846	14 2	2
14 3	3	187	9 50	118.7	39	54 55	12.5	827	846	14 3	3
14 4	4	187	24 30	119.0	39	49 0	12.9	828	846	14 4	4
14 5	5	187	39 12	+119.4	39	43 4	+13.3	+829	+847	14 5	5
14 6	6	187	53 56	119.7	39	37 9	13.8	830	847	14 6	6
14 7	7	188	8 42	120.1	39	31 15	14.2	831	847	14 7	7
14 8	8	188	23 30	120.4	39	25 20	14.6	833	847	14 8	8
14 9	9	188	38 21	120.8	39	19 26	15.0	834	847	14 9	9
14 10	10	188	53 13	+121.1	39	13 32	+15.5	+835	+848	14 10	10
14 11	11	189	8 7	121.5	39	7 38	15.9	836	848	14 11	11
14 12	12	189	23 4	121.8	39	1 44	16.3	837	848	14 12	12
14 13	13	189	38 2	122.1	38	55 51	16.7	838	848	14 13	13
14 14	14	189	53 3	122.5	38	49 57	17.2	840	849	14 14	14
14 15	15	190	8 6	+122.8	38	44 4	+17.6	+841	+849	14 15	15
14 16	16	190	23 12	123.1	38	38 12	18.0	842	849	14 16	16
14 17	17	190	38 19	123.4	38	32 20	18.5	843	850	14 17	17
14 18	18	190	53 29	123.8	38	26 28	18.9	844	850	14 18	18
14 19	19	191	8 41	124.1	38	20 36	19.3	845	850	14 19	19
14 20	20	191	23 56	+124.4	38	14 45	+19.8	+846	+850	14 20	20
14 21	21	191	39 12	124.7	38	8 54	20.2	847	851	14 21	21
14 22	22	191	54 31	125.1	38	3 3	20.6	848	851	14 22	22
14 23	23	192	9 52	125.4	37	57 12	21.1	849	851	14 23	23
14 24	24	192	25 16	125.7	37	51 22	21.5	850	852	14 24	24
14 25	25	192	40 42	+126.0	37	45 32	+21.9	+851	+852	14 25	25
14 26	26	192	56 10	126.3	37	39 43	22.4	852	852	14 26	26
14 27	27	193	11 41	126.6	37	33 54	22.8	853	853	14 27	27
14 28	28	193	27 14	126.9	37	28 5	23.3	854	853	14 28	28
14 29	29	193	42 49	127.2	37	22 17	23.7	855	853	14 29	29
14 30	30	193	58 28	+127.5	37	16 29	+24.2	+856	+854	14 30	30
14 31	31	194	14 8	127.8	37	10 42	24.6	857	854	14 31	31
14 32	32	194	29 51	128.1	37	4 55	25.0	858	854	14 32	32
14 33	33	194	45 37	128.4	36	59 8	25.5	859	855	14 33	33
14 34	34	195	1 25	128.7	36	53 22	25.9	860	855	14 34	34
14 35	35	195	7 16	+129.0	36	47 36	+26.4	+860	+855	14 35	35
14 36	36	195	33 9	129.3	36	41 50	26.8	861	856	14 36	36
14 37	37	195	49 4	129.6	36	36 5	27.3	862	856	14 37	37
14 38	38	196	5 3	129.9	36	30 21	27.7	863	857	14 38	38
14 39	39	196	21 4	130.2	36	24 37	28.2	864	857	14 39	39
14 40	40	196	37 7	+130.5	36	18 53	+28.6	+864	+858	14 40	40
14 41	41	196	53 14	130.8	36	13 10	29.1	865	858	14 41	41
14 42	42	197	9 23	131.0	36	7 27	29.5	866	858	14 42	42
14 43	43	197	25 35	131.3	36	1 45	30.0	866	859	14 43	43
14 44	44	197	41 49	131.6	35	56 4	30.4	867	859	14 44	44
14 45	45	197	58 7	+131.8	35	50 23	+30.9	+868	+860	14 45	45
14 46	46	198	14 27	132.1	35	44 42	31.3	868	860	14 46	46
14 47	47	198	30 50	132.4	35	39 2	31.8	869	861	14 47	47
14 48	48	198	47 15	132.6	35	33 23	32.2	869	861	14 48	48
14 49	49	199	3 43	132.9	35	27 44	32.7	870	862	14 49	49
14 50	50	199	20 15	+133.1	35	22 5	+33.1	+871	+862	14 50	50
14 51	51	199	36 49	133.4	35	16 27	33.6	871	863	14 51	51
14 52	52	199	53 26	133.6	35	10 50	34.0	872	863	14 52	52
14 53	53	200	10 6	133.8	35	5 13	34.5	872	864	14 53	53
14 54	54	200	26 49	134.0	34	59 37	35.0	872	864	14 54	54
14 55	55	200	43 35	+134.3	34	54 2	+35.4	+873	+865	14 55	55
14 56	56	201	0 24	134.5	34	48 27	35.9	873	865	14 56	56
14 57	57	201	17 16	134.7	34	42 53	36.3	874	866	14 57	57
14 58	58	201	34 11	134.9	34	37 20	36.8	874	866	14 58	58
14 59	59	201	51 9	135.1	34	31 47	37.2	874	867	14 59	59
15 0	0	202	8 9	135.3	34	26 14	37.7	875	868	15 0	0

Lat.  $42^{\circ} 23' 28'' N.$  (reduced  $42^{\circ} 12' 2'' .4$ ), and Obliquity  $23^{\circ} 27' 40''$ . 61

Argument.		Longitude of the Nonagesimal.		Correction for $-100''$ in Obliq.	Altitude of the Nonagesimal.		Correction for $-100''$ in Obliq.	Corrections for $-1000''$ in Latitude.		Argument.		
A. R.	M. of Mer.	°	'	''	°	'	''	Long.	Alt.	A. R.	M. of Mer.	
15	0	202	8	9	34	26	14	+37.7	+875	+868	15	0
15	1	202	25	13	34	20	43	38.2	875	868	15	1
15	2	202	42	20	34	15	12	38.6	875	869	15	2
15	3	202	59	31	34	9	42	39.1	875	869	15	3
15	4	203	16	44	34	4	12	39.5	875	870	15	4
15	5	203	34	1	33	58	43	+40.0	+876	+871	15	5
15	6	203	51	21	33	53	15	40.5	876	871	15	6
15	7	204	8	44	33	47	48	40.9	876	872	15	7
15	8	204	26	10	33	42	22	41.4	876	873	15	8
15	9	204	43	40	33	36	56	41.8	876	873	15	9
15	10	205	1	12	33	31	31	+42.3	+876	+874	15	10
15	11	205	18	48	33	26	6	42.7	876	874	15	11
15	12	205	36	27	33	20	43	43.2	876	875	15	12
15	13	205	54	10	33	15	20	43.7	876	876	15	13
15	14	206	11	56	33	9	58	44.1	875	876	15	14
15	15	206	29	45	33	4	37	+44.6	+875	+877	15	15
15	16	206	47	38	32	59	17	45.1	875	878	15	16
15	17	207	5	34	32	53	57	45.5	875	878	15	17
15	18	207	23	34	32	48	39	46.0	874	879	15	18
15	19	207	41	37	32	43	21	46.5	874	880	15	19
15	20	207	59	43	32	38	4	+46.9	+874	+881	15	20
15	21	208	17	53	32	32	48	47.4	873	881	15	21
15	22	208	36	7	32	27	33	47.9	873	882	15	22
15	23	208	54	24	32	22	19	48.3	872	883	15	23
15	24	209	12	44	32	17	6	48.8	872	883	15	24
15	25	209	31	8	32	11	54	+49.3	+871	+884	15	25
15	26	209	49	36	32	6	42	49.8	871	885	15	26
15	27	210	8	7	32	1	32	50.2	870	886	15	27
15	28	210	26	42	31	56	22	50.7	869	886	15	28
15	29	210	45	21	31	51	14	51.2	869	887	15	29
15	30	211	4	4	31	46	7	+51.7	+868	+888	15	30
15	31	211	22	50	31	41	0	52.1	867	889	15	31
15	32	211	41	40	31	35	55	52.6	866	890	15	32
15	33	212	0	33	31	30	51	53.1	865	890	15	33
15	34	212	19	30	31	25	47	53.6	864	891	15	34
15	35	212	38	31	31	20	45	+54.0	+863	+892	15	35
15	36	212	57	36	31	15	44	54.5	862	893	15	36
15	37	213	16	44	31	10	44	55.0	861	894	15	37
15	38	213	35	57	31	5	45	55.4	860	894	15	38
15	39	213	55	13	31	0	47	55.9	859	895	15	39
15	40	214	14	32	30	55	50	+56.3	+858	+896	15	40
15	41	214	33	57	30	50	54	56.8	856	897	15	41
15	42	214	53	25	30	46	0	57.3	855	898	15	42
15	43	215	12	57	30	41	7	57.7	854	899	15	43
15	44	215	32	33	30	36	15	58.2	852	900	15	44
15	45	215	52	13	30	31	24	+58.6	+851	+900	15	45
15	46	216	11	57	30	26	34	59.1	849	901	15	46
15	47	216	31	44	30	21	45	59.5	848	902	15	47
15	48	216	51	36	30	16	58	60.0	846	903	15	48
15	49	217	11	31	30	12	12	60.5	844	904	15	49
15	50	217	31	31	30	7	27	+60.9	+842	+905	15	50
15	51	217	51	35	30	2	43	61.4	841	906	15	51
15	52	218	11	43	29	58	1	61.8	839	907	15	52
15	53	218	31	55	29	53	20	62.3	837	908	15	53
15	54	218	52	11	29	48	41	62.8	835	908	15	54
15	55	219	12	31	29	44	3	+63.2	+833	+909	15	55
15	56	219	32	55	29	39	26	63.7	831	910	15	56
15	57	219	53	23	29	34	50	64.1	828	911	15	57
15	58	220	13	56	29	30	16	64.6	826	912	15	58
15	59	220	34	33	29	25	43	65.0	824	913	15	59
16	0	220	55	13	29	21	11	65.5	821	914	16	0



## Longitude and Altitude of the Nonagesimal for the

Argument.		Longitude of the Nonagesimal.		Correction for -100'' in Obliq.	Altitude of the Nonagesimal.		Correction for -100'' in Obliq.	Corrections for -1000'' in Latitude.		Argument.		
A. R.	M.	°	'		°	'		Long.	Alt.	A. R.	M.	
16 0		220	55 13	20 45	+	134.3	29 21 11	4 30	+65.5	+821''	+914''	16 0
16 1		221	15 58	20 49		134.0	29 16 41	4 29	66.0	819	915	16 1
16 2		221	36 47	20 54		133.7	29 12 12	4 27	66.4	817	916	16 2
16 3		221	57 41	20 57		133.4	29 7 45	4 26	66.9	814	917	16 3
16 4		222	18 38	21 2		133.1	29 3 19	4 24	67.3	811	918	16 4
16 5		222	39 40	21 7	+	132.7	28 58 55	4 22	+67.8	+809	+919	16 5
16 6		223	0 47	21 10		132.4	28 54 33	4 22	68.3	806	920	16 6
16 7		223	21 57	21 15		132.0	28 50 11	4 19	68.7	803	921	16 7
16 8		223	43 12	21 19		131.6	28 45 52	4 18	69.2	800	922	16 8
16 9		224	4 31	21 23		131.3	28 41 34	4 17	69.6	797	923	16 9
16 10		224	25 54	21 27	+	130.9	28 37 17	4 15	+70.1	+794	+924	16 10
16 11		224	47 21	21 31		130.4	28 33 2	4 14	70.5	791	925	16 11
16 12		225	8 52	21 36		130.0	28 28 48	4 12	71.0	788	926	16 12
16 13		225	30 28	21 41		129.6	28 24 36	4 10	71.4	785	926	16 13
16 14		225	52 9	21 44		129.1	28 20 26	4 9	71.9	781	927	16 14
16 15		226	13 53	21 49	+	128.6	28 16 17	4 7	+72.3	+778	+928	16 15
16 16		226	35 42	21 53		128.1	28 12 10	4 5	72.8	775	929	16 16
16 17		226	57 35	21 58		127.6	28 8 5	4 4	73.2	771	930	16 17
16 18		227	19 33	22 2		127.1	28 4 1	4 2	73.6	767	931	16 18
16 19		227	41 35	22 6		126.6	27 59 59	4 0	74.1	764	932	16 19
16 20		228	3 41	22 10	+	126.0	27 55 59	3 59	+74.5	+760	+933	16 20
16 21		228	25 51	22 15		125.5	27 52 0	3 57	74.9	756	934	16 21
16 22		228	48 6	22 19		124.9	27 48 3	3 55	75.4	752	935	16 22
16 23		229	10 25	22 23		124.3	27 44 8	3 53	75.8	748	936	16 23
16 24		229	32 48	22 28		123.7	27 40 15	3 52	76.2	744	937	16 24
16 25		229	55 16	22 32	+	123.1	27 36 23	3 50	+76.6	+740	+938	16 25
16 26		230	17 48	22 37		122.5	27 32 33	3 48	77.0	736	939	16 26
16 27		230	40 25	22 40		121.8	27 28 45	3 46	77.5	731	940	16 27
16 28		231	3 5	22 45		121.1	27 24 59	3 44	77.9	727	941	16 28
16 29		231	25 50	22 49		120.5	27 21 15	3 42	78.3	723	942	16 29
16 30		231	48 39	22 54	+	119.8	27 17 33	3 41	+78.7	+718	+943	16 30
16 31		232	11 33	22 58		119.1	27 13 52	3 39	79.1	713	944	16 31
16 32		232	34 31	23 2		118.3	27 10 14	3 37	79.5	709	945	16 32
16 33		232	57 33	23 6		117.6	27 6 37	3 35	79.9	704	946	16 33
16 34		233	20 39	23 11		116.9	27 3 2	3 33	80.3	699	947	16 34
16 35		233	43 50	23 15	+	116.1	26 59 29	3 31	+80.7	+694	+948	16 35
16 36		234	7 5	23 19		115.3	26 55 58	3 29	81.1	689	949	16 36
16 37		234	30 21	23 24		114.5	26 52 29	3 28	81.5	684	950	16 37
16 38		234	53 48	23 27		113.7	26 49 1	3 25	81.9	679	951	16 38
16 39		235	17 15	23 32		112.9	26 45 36	3 23	82.3	673	952	16 39
16 40		235	40 47	23 36	+	112.0	26 42 13	3 21	+82.6	+668	+953	16 40
16 41		236	4 23	23 40		111.2	26 38 52	3 19	83.0	662	954	16 41
16 42		236	28 3	23 44		110.3	26 35 33	3 16	83.1	657	955	16 42
16 43		236	51 47	23 49		109.4	26 32 17	3 15	83.8	651	956	16 43
16 44		237	15 36	23 52		108.5	26 29 2	3 13	84.1	645	957	16 44
16 45		237	39 28	23 57	+	107.6	26 25 49	3 10	+84.5	+640	+958	16 45
16 46		238	3 25	24 1		106.6	26 22 39	3 9	84.9	634	959	16 46
16 47		238	27 26	24 5		105.7	26 19 30	3 6	85.3	628	960	16 47
16 48		238	51 31	24 9		104.7	26 16 24	3 5	85.6	622	961	16 48
16 49		239	15 40	24 12		103.7	26 13 19	3 2	86.0	616	962	16 49
16 50		239	39 52	24 17	+	102.7	26 10 17	3 0	+86.3	+609	+962	16 50
16 51		240	4 9	24 21		101.7	26 7 17	2 58	86.7	603	963	16 51
16 52		240	28 30	24 25		100.6	26 4 19	2 55	87.0	597	964	16 52
16 53		240	52 55	24 29		99.6	26 1 24	2 53	87.4	590	965	16 53
16 54		241	17 24	24 32		98.5	25 58 31	2 51	87.7	584	966	16 54
16 55		241	41 56	24 37	+	97.4	25 55 40	2 49	+88.1	+577	+967	16 55
16 56		242	6 33	24 40		96.3	25 52 51	2 46	88.4	570	968	16 56
16 57		242	31 13	24 44		95.2	25 50 5	2 44	88.7	564	969	16 57
16 58		242	55 57	24 48		94.1	25 47 21	2 42	89.1	557	970	16 58
16 59		243	20 45	24 51		93.0	25 44 39	2 40	89.4	550	971	16 59
17 0		243	45 36			91.8	25 41 59		89.7	543	972	17 0



Argument.		Longitude of the Nonagesimal.		Correction for -100'' in Obliq.	Altitude of the Nonagesimal.		Correction for -100'' in Obliq.	Corrections for -1000' in Latitude.		Argument.	
A. R. of Mer.	H. M.	°	'		°	'		Long.	Alt.	H. M.	A. R. of Mer.
17 0		243	45 36	91.8	25	41 59	89.7	543	972	17 0	
17 1		244	10 32	90.6	25	39 22	90.0	535	973	17 1	
17 2		244	35 31	89.4	25	36 47	90.3	528	973	17 2	
17 3		245	0 33	88.2	25	34 14	90.6	521	974	17 3	
17 4		245	25 39	87.0	25	31 44	90.9	513	975	17 4	
17 5		245	50 49	85.8	25	29 16	91.2	506	976	17 5	
17 6		246	16 2	84.5	25	26 51	91.5	498	977	17 6	
17 7		246	41 19	83.3	25	24 28	91.8	491	977	17 7	
17 8		247	6 39	82.0	25	22 7	92.1	483	978	17 8	
17 9		247	32 2	80.7	25	19 49	92.4	475	979	17 9	
17 10		247	57 29	79.4	25	17 33	92.7	467	980	17 10	
17 11		248	22 59	78.0	25	15 20	92.9	459	980	17 11	
17 12		248	48 32	76.7	25	13 9	93.2	451	981	17 12	
17 13		249	14 9	75.3	25	11 1	93.5	443	982	17 13	
17 14		249	39 49	74.0	25	8 55	93.7	435	983	17 14	
17 15		250	5 31	72.6	25	6 52	94.0	427	983	17 15	
17 16		250	31 17	71.2	25	4 51	94.2	418	984	17 16	
17 17		250	57 6	69.8	25	2 53	94.5	410	985	17 17	
17 18		251	22 58	68.3	25	0 57	94.7	401	985	17 18	
17 19		251	48 53	66.9	24	59 4	94.9	393	986	17 19	
17 20		252	14 50	65.4	24	57 14	95.2	384	986	17 20	
17 21		252	40 51	64.0	24	55 26	95.4	376	987	17 21	
17 22		253	6 54	62.5	24	53 40	95.6	367	988	17 22	
17 23		253	32 59	61.0	24	51 58	95.8	358	988	17 23	
17 24		253	59 8	59.5	24	50 18	96.0	349	989	17 24	
17 25		254	25 19	58.0	24	48 40	96.2	340	989	17 25	
17 26		254	51 32	56.5	24	47 5	96.4	331	990	17 26	
17 27		255	17 47	54.9	24	45 33	96.6	322	990	17 27	
17 28		255	44 5	53.4	24	44 3	96.8	313	991	17 28	
17 29		256	10 26	51.8	24	42 36	97.0	304	991	17 29	
17 30		256	36 49	50.3	24	41 12	97.1	295	992	17 30	
17 31		257	3 14	48.7	24	39 50	97.3	285	992	17 31	
17 32		257	29 41	47.1	24	38 31	97.5	276	993	17 32	
17 33		257	56 10	45.5	24	37 15	97.7	267	993	17 33	
17 34		258	22 42	43.9	24	36 2	97.8	257	994	17 34	
17 35		258	49 15	42.3	24	34 51	98.0	248	994	17 35	
17 36		259	15 50	40.7	24	33 43	98.1	238	994	17 36	
17 37		259	42 27	39.1	24	32 37	98.2	229	995	17 37	
17 38		260	9 6	37.4	24	31 35	98.4	219	995	17 38	
17 39		260	35 46	35.8	24	30 35	98.5	209	996	17 39	
17 40		261	2 27	34.2	24	29 38	98.6	200	996	17 40	
17 41		261	29 10	32.5	24	28 43	98.7	190	997	17 41	
17 42		261	55 55	30.8	24	27 52	98.8	180	997	17 42	
17 43		262	22 41	29.2	24	27 3	99.0	170	997	17 43	
17 44		262	49 29	27.5	24	26 17	99.1	160	997	17 44	
17 45		263	16 17	25.8	24	25 33	99.1	151	998	17 45	
17 46		263	43 7	24.1	24	24 53	99.2	141	998	17 46	
17 47		264	9 57	22.4	24	24 15	99.3	131	998	17 47	
17 48		264	36 49	20.7	24	23 40	99.4	121	998	17 48	
17 49		265	3 42	19.0	24	23 8	99.5	111	998	17 49	
17 50		265	30 35	17.3	24	22 38	99.6	101	999	17 50	
17 51		265	57 29	15.6	24	22 11	99.6	91	999	17 51	
17 52		266	24 24	13.8	24	21 48	99.7	81	999	17 52	
17 53		266	51 20	12.1	24	21 27	99.8	71	999	17 53	
17 54		267	18 16	10.4	24	21 8	99.8	61	999	17 54	
17 55		267	45 13	8.7	24	20 53	99.9	51	999	17 55	
17 56		268	12 10	6.9	24	20 40	99.9	40	999	17 56	
17 57		268	39 7	5.2	24	20 30	99.9	30	999	17 57	
17 58		269	6 5	3.5	24	20 23	100.0	20	999	17 58	
17 59		269	33 2	1.8	24	20 19	100.0	10	1000	17 59	
18 0		270	0 0	0.0	24	20 18	100.0	0	1000	18 0	

Argument.		Longitude of the Nonagesimal.		Correction for -100' in Obliq.	Altitude of the Nonagesimal.		Correction for -100' in Obliq.	Corrections for -1000' in Latitude.		Argument.	
A. R. of Mer.	H. M.	° ' "	° ' "		° ' "	° ' "		Long. - 0''	Alt. +1000''	A. R. of Mer.	H. M.
18 0		270 0 0	26 58	- 0.0	24 20 18	1	+100.0	- 0''	+1000''	18 0	
18 1		270 26 58	26 57	1.8	24 20 19	4	100.0	10	1000	18 1	
18 2		270 53 55	26 58	3.5	24 20 23	7	100.0	20	999	18 2	
18 3		271 20 53	26 57	5.2	24 20 30	10	99.9	30	999	18 3	
18 4		271 47 50	26 57	6.9	24 20 40	13	99.9	40	999	18 4	
18 5		272 14 47	26 57	- 8.7	24 20 53	15	+ 99.9	- 51	+ 999	18 5	
18 6		272 41 44	26 56	10.4	24 21 8	19	99.8	61	999	18 6	
18 7		273 8 40	26 56	12.1	24 21 27	21	99.8	71	999	18 7	
18 8		273 35 36	26 55	13.8	24 21 48	23	99.7	81	999	18 8	
18 9		274 2 31	26 54	15.6	24 22 11	27	99.6	91	999	18 9	
18 10		274 29 25	26 53	-17.3	24 22 38	30	+ 99.6	-101	+ 999	18 10	
18 11		274 56 18	26 53	19.0	24 23 8	32	99.5	111	998	18 11	
18 12		275 23 11	26 52	20.7	24 23 40	35	99.4	121	998	18 12	
18 13		275 50 3	26 50	22.4	24 24 15	38	99.3	131	998	18 13	
18 14		276 16 53	26 49	24.1	24 24 53	40	99.2	141	998	18 14	
18 15		276 43 43	26 49	-25.8	24 25 33	44	+ 99.1	-151	+ 998	18 15	
18 16		277 10 32	26 47	27.5	24 26 17	46	99.1	160	997	18 16	
18 17		277 37 19	26 46	29.2	24 27 3	49	99.0	170	997	18 17	
18 18		278 1 5	26 45	30.8	24 27 52	51	98.8	180	997	18 18	
18 19		278 30 50	26 43	32.5	24 28 43	55	98.7	190	996	18 19	
18 20		278 57 33	26 42	-34.2	24 29 38	57	+ 98.6	-200	+ 996	18 20	
18 21		279 24 15	26 40	35.8	24 30 35	60	98.5	209	996	18 21	
18 22		279 50 55	26 38	37.4	24 31 35	62	98.4	219	995	18 22	
18 23		280 17 33	26 37	39.1	24 32 37	66	98.2	229	995	18 23	
18 24		280 44 10	26 35	40.7	24 33 43	68	98.1	238	994	18 24	
18 25		281 10 45	26 33	-42.3	24 34 51	71	+ 98.0	-248	+ 994	18 25	
18 26		281 37 18	26 32	43.9	24 36 2	73	97.8	257	994	18 26	
18 27		282 3 50	26 29	45.5	24 37 15	76	97.7	267	993	18 27	
18 28		282 30 19	26 27	47.1	24 38 31	79	97.5	276	993	18 28	
18 29		282 56 46	26 25	48.7	24 39 50	82	97.3	285	992	18 29	
18 30		283 23 11	26 23	-50.3	24 41 12	84	+ 97.1	-295	+ 992	18 30	
18 31		283 49 34	26 21	51.8	24 42 36	87	97.0	304	991	18 31	
18 32		284 15 55	26 18	53.4	24 44 3	90	96.8	313	991	18 32	
18 33		284 42 13	26 15	54.9	24 45 33	92	96.6	322	990	18 33	
18 34		285 8 28	26 14	56.5	24 47 5	95	96.4	331	990	18 34	
18 35		285 34 42	26 10	-58.0	24 48 40	98	+ 96.2	-340	+ 989	18 35	
18 36		286 0 52	26 9	59.5	24 50 18	100	96.0	349	989	18 36	
18 37		286 27 1	26 6	61.0	24 51 58	102	95.8	358	988	18 37	
18 38		286 53 7	26 3	62.5	24 53 40	106	95.6	367	988	18 38	
18 39		287 19 10	26 0	64.0	24 55 26	108	95.4	376	987	18 39	
18 40		287 45 10	25 57	-65.4	24 57 14	110	+ 95.2	-384	+ 986	18 40	
18 41		288 11 7	25 55	66.9	24 59 4	113	94.9	393	986	18 41	
18 42		288 37 2	25 52	68.3	25 0 57	116	94.7	401	985	18 42	
18 43		289 2 54	25 49	69.8	25 2 53	118	94.5	410	985	18 43	
18 44		289 28 43	25 46	71.2	25 4 51	121	94.2	418	984	18 44	
18 45		289 54 29	25 43	-72.6	25 6 52	123	+ 94.0	-427	+ 983	18 45	
18 46		290 20 12	25 39	74.0	25 8 55	126	93.7	435	983	18 46	
18 47		290 45 51	25 37	75.3	25 11 1	128	93.5	443	982	18 47	
18 48		291 11 28	25 33	76.7	25 13 9	131	93.2	451	981	18 48	
18 49		291 37 1	25 30	78.0	25 15 20	133	92.9	459	980	18 49	
18 50		292 2 31	25 27	-79.4	25 17 33	136	+ 92.7	-467	+ 980	18 50	
18 51		292 27 58	25 23	80.7	25 19 49	138	92.4	475	979	18 51	
18 52		292 53 21	25 20	82.0	25 22 7	141	92.1	483	978	18 52	
18 53		293 18 41	25 17	83.3	25 24 28	143	91.8	491	977	18 53	
18 54		293 43 58	25 13	84.5	25 26 51	145	91.5	498	976	18 54	
18 55		294 9 11	25 10	-85.8	25 29 16	148	+ 91.2	-506	+ 976	18 55	
18 56		294 34 21	25 6	87.0	25 31 44	150	90.9	513	975	18 56	
18 57		294 59 27	25 3	88.2	25 34 14	153	90.6	521	974	18 57	
18 58		295 24 30	24 59	89.4	25 36 47	155	90.3	528	973	18 58	
18 59		295 49 29	24 55	90.6	25 39 22	157	90.0	535	973	18 59	
19 0		296 14 24	24 55	91.8	25 41 59	157	89.7	543	972	19 0	

Lat.  $42^{\circ} 23' 28''$  N. (reduced  $42^{\circ} 12' 2''.4$ ), and Obliquity  $23^{\circ} 27' 40''$ . 65

Argument.		Longitude of the Nonagesimal.	Correction for $-100''$ in Obliq.	Altitude of the Nonagesimal.				Correction for $-100''$ in Obliq.	Corrections for $-1000''$ in Latitude.		Argument.	
A. R.	M.			o	'	''	'''		Lang.	Alt.	A. R.	M.
19 0		296 14 24	-91.8	25 41 59	2 40	+89.7	-543''	+972''				
19 1		296 39 15	93.0	25 44 39	2 42	89.4	550	971				
19 2		297 4 3	94.1	25 47 21	2 44	89.1	557	970				
19 3		297 28 47	95.2	25 50 5	2 44	88.7	564	969				
19 4		297 53 27	96.3	25 52 51	2 46	88.4	570	968				
19 5		298 18 4	-97.4	25 55 40	2 49	+88.1	-577	+967				
19 6		298 42 37	98.5	25 58 31	2 51	87.7	584	966				
19 7		299 7 5	99.6	26 1 24	2 53	87.4	590	965				
19 8		299 31 30	100.6	26 4 19	2 55	87.0	597	964				
19 9		299 55 51	101.7	26 7 17	2 58	86.7	603	963				
19 10		300 20 8	-102.7	26 10 17	3 0	+86.3	-609	+962				
19 11		300 44 21	103.7	26 13 19	3 2	86.0	616	962				
19 12		301 8 29	104.7	26 16 24	3 5	85.6	622	961				
19 13		301 32 34	105.7	26 19 30	3 6	85.3	628	960				
19 14		301 56 35	106.6	26 22 39	3 9	84.9	631	959				
19 15		302 20 32	-107.6	26 25 49	3 10	+84.5	-640	+958				
19 16		302 44 24	108.5	26 29 2	3 13	84.1	645	957				
19 17		303 8 13	109.4	26 32 17	3 15	83.8	651	956				
19 18		303 31 57	110.3	26 35 33	3 16	83.4	657	955				
19 19		303 55 37	111.2	26 38 52	3 19	83.0	662	954				
19 20		304 19 13	-112.0	26 42 13	3 21	+82.6	-668	+953				
19 21		304 42 45	112.9	26 45 36	3 23	82.3	673	952				
19 22		305 6 13	113.7	26 49 1	3 25	81.9	679	951				
19 23		305 29 36	114.5	26 52 29	3 28	81.5	684	950				
19 24		305 52 55	115.3	26 55 58	3 29	81.1	689	949				
19 25		306 16 10	-116.1	26 59 29	3 31	+80.7	-694	+948				
19 26		306 39 21	116.9	27 3 2	3 33	80.3	699	947				
19 27		307 2 27	117.6	27 6 37	3 35	79.9	704	946				
19 28		307 25 29	118.3	27 10 14	3 37	79.5	709	945				
19 29		307 48 27	119.1	27 13 52	3 38	79.1	713	944				
19 30		308 11 21	-119.8	27 17 33	3 41	+78.7	-718	+943				
19 31		308 34 10	120.5	27 21 15	3 42	78.3	723	942				
19 32		308 56 55	121.1	27 24 59	3 44	77.9	727	941				
19 33		309 19 36	121.8	27 28 45	3 46	77.5	731	940				
19 34		309 42 12	122.5	27 32 33	3 48	77.0	736	939				
19 35		310 4 44	-123.1	27 36 23	3 50	+76.6	-740	+938				
19 36		310 27 12	123.7	27 40 15	3 52	76.2	744	937				
19 37		310 49 35	124.3	27 44 8	3 53	75.8	748	936				
19 38		311 11 51	124.9	27 48 3	3 55	75.4	752	935				
19 39		311 31 9	125.5	27 52 0	3 57	74.9	756	934				
19 40		311 56 19	-126.0	27 55 59	3 59	+74.5	-760	+933				
19 41		312 18 25	126.6	27 59 59	4 0	74.1	764	932				
19 42		312 40 27	127.1	28 4 1	4 2	73.6	767	931				
19 43		313 2 25	127.6	28 8 5	4 4	73.2	771	930				
19 44		313 24 18	128.1	28 12 10	4 5	72.8	775	929				
19 45		313 46 7	-128.6	28 16 17	4 7	+72.3	-778	+928				
19 46		314 7 51	129.1	28 20 26	4 9	71.9	781	927				
19 47		314 29 32	129.6	28 24 36	4 10	71.4	785	926				
19 48		314 51 8	130.0	28 28 48	4 12	71.0	788	926				
19 49		315 12 39	130.4	28 33 2	4 14	70.5	791	925				
19 50		315 34 7	-130.9	28 37 17	4 15	+70.1	-794	+924				
19 51		315 55 30	131.3	28 41 34	4 17	69.6	797	923				
19 52		316 16 48	131.6	28 45 52	4 18	69.2	800	922				
19 53		316 38 3	132.0	28 50 11	4 19	68.7	803	921				
19 54		316 59 13	132.4	28 54 32	4 21	68.3	806	920				
19 55		317 20 20	-132.7	28 58 55	4 23	+67.8	-809	+919				
19 56		317 41 22	133.1	29 3 19	4 24	67.3	811	918				
19 57		318 2 19	133.4	29 7 45	4 26	66.9	814	917				
19 58		318 23 13	133.7	29 12 12	4 27	66.4	817	916				
19 59		318 44 2	134.0	29 16 41	4 29	66.0	819	915				
20 0		319 4 47	134.3	29 21 11	4 30	65.5	821	914				



*Longitude and Altitude of the Nonagesimal for the*

Argument.		Longitude of the Nonagesimal.				Correction for -100'' in Obliq.	Altitude of the Nonagesimal.				Correction for -100'' in Obliq.	Corrections for -1000'' in Latitude.		Argument.		
A. R. of Mer.												Long.	Alt.	A. R. of Mer.		
H.	M.	°	'	''	'''	''	°	'	''	'''	''	''	''	H.	M.	
20	0	319	4	47		-131.3	29	21	11	4	32	+65.5	-821	+914	20	0
20	1	319	25	28		134.5	29	25	43	4	33	65.0	824	913	20	1
20	2	319	46	4		134.9	29	30	16	4	34	64.6	826	912	20	2
20	3	320	6	37		135.1	29	34	50	4	35	64.1	828	911	20	3
20	4	320	27	5		135.4	29	39	25	4	35	63.7	831	910	20	4
20	5	320	47	29		-135.6	29	44	2	4	37	+63.2	-833	+909	20	5
20	6	321	7	49		135.8	29	48	41	4	39	62.8	835	908	20	6
20	7	321	28	5		136.1	29	53	20	4	39	62.3	837	908	20	7
20	8	321	48	17		136.3	29	58	1	4	41	61.8	839	907	20	8
20	9	322	8	25		136.5	30	2	43	4	42	61.4	841	906	20	9
20	10	322	28	29		-136.7	30	7	27	4	44	+60.9	-842	+905	20	10
20	11	322	48	29		136.8	30	12	12	4	45	60.5	844	904	20	11
20	12	323	8	24		137.0	30	16	58	4	46	60.0	846	903	20	12
20	13	323	28	16		137.2	30	21	45	4	47	59.5	848	902	20	13
20	14	323	48	4		137.3	30	26	34	4	49	59.1	849	901	20	14
20	15	324	7	47		-137.5	30	31	24	4	50	+58.6	-851	+900	20	15
20	16	324	27	27		137.6	30	36	15	4	51	58.2	852	900	20	16
20	17	324	47	3		137.7	30	41	7	4	52	57.7	854	899	20	17
20	18	325	6	35		137.8	30	46	0	4	53	57.3	855	898	20	18
20	19	325	26	3		137.9	30	51	54	4	54	56.8	856	897	20	19
20	20	325	45	27		-138.0	30	55	50	4	56	+56.3	-858	+896	20	20
20	21	326	4	47		138.1	31	0	47	4	57	55.9	859	895	20	21
20	22	326	24	3		138.2	31	5	45	4	58	55.4	860	894	20	22
20	23	326	43	16		138.2	31	10	44	4	59	55.0	861	894	20	23
20	24	327	2	24		138.3	31	15	44	5	0	54.5	862	893	20	24
20	25	327	21	29		-138.3	31	20	45	5	1	+54.0	-863	+892	20	25
20	26	327	40	30		138.4	31	25	47	5	2	53.6	864	891	20	26
20	27	327	59	27		138.4	31	30	51	5	4	53.1	865	890	20	27
20	28	328	18	21		138.4	31	35	55	5	4	52.6	866	890	20	28
20	29	328	37	10		138.5	31	41	0	5	5	52.1	867	889	20	29
20	30	328	55	56		-138.5	31	46	7	5	7	+51.7	-868	+888	20	30
20	31	329	14	39		138.5	31	51	14	5	7	51.2	869	887	20	31
20	32	329	33	18		138.4	31	56	22	5	8	50.7	869	886	20	32
20	33	329	51	53		138.4	32	1	32	5	10	50.2	870	886	20	33
20	34	330	10	24		138.4	32	6	42	5	10	49.8	871	885	20	34
20	35	330	28	52		-138.4	32	11	54	5	12	+49.3	-871	+884	20	35
20	36	330	47	16		138.3	32	17	6	5	12	48.8	872	883	20	36
20	37	331	5	36		138.3	32	22	19	5	13	48.3	872	883	20	37
20	38	331	23	53		138.2	32	27	33	5	14	47.9	873	882	20	38
20	39	331	42	7		138.1	32	32	48	5	15	47.4	873	881	20	39
20	40	332	0	17		-138.1	32	38	4	5	16	+46.9	-874	+881	20	40
20	41	332	18	23		138.0	32	43	21	5	17	46.5	874	880	20	41
20	42	332	36	27		137.9	32	48	39	5	18	46.0	874	879	20	42
20	43	332	54	26		137.8	32	53	57	5	18	45.5	875	878	20	43
20	44	333	12	22		137.7	32	59	17	5	20	45.1	875	878	20	44
20	45	333	30	15		-137.6	33	4	37	5	20	+44.6	-875	+877	20	45
20	46	333	48	5		137.5	33	9	58	5	21	44.1	875	876	20	46
20	47	334	5	51		137.3	33	15	20	5	22	43.7	876	876	20	47
20	48	334	23	33		137.2	33	20	43	5	23	43.2	876	875	20	48
20	49	334	41	12		137.1	33	26	6	5	23	42.7	876	874	20	49
20	50	334	58	48		-136.9	33	31	31	5	25	+42.3	-876	+874	20	50
20	51	335	16	21		136.8	33	36	56	5	25	41.8	876	873	20	51
20	52	335	33	50		136.7	33	42	22	5	26	41.4	876	873	20	52
20	53	335	51	16		136.5	33	47	48	5	26	40.9	876	872	20	53
20	54	336	8	39		136.4	33	53	15	5	27	40.5	876	871	20	54
20	55	336	25	59		-136.2	33	58	43	5	28	+40.0	-876	+871	20	55
20	56	336	43	16		136.0	34	4	12	5	29	39.5	875	870	20	56
20	57	337	0	29		135.9	34	9	42	5	30	39.1	875	869	20	57
20	58	337	17	40		135.7	34	15	12	5	30	38.6	875	869	20	58
20	59	337	34	47		135.5	34	20	43	5	31	38.2	875	868	20	59
21	0	337	51	51		135.3	34	26	14	5	31	37.7	875	868	21	0



Argument.		Longitude of the Nonagesimal.	Correction for $-100'$ in Obliq.	Altitude of the Nonagesimal.		Correction for $-100''$ in Obliq.	Corrections for $-1000'$ in Latitude.		Argument.	
A. R. of Mer.	H. M.			of	of		in	Long.	Alt.	A. R. of Mer.
21 0	337 51 51	17 0	-135.3	34 26 14	5 33	+37.7	-875"	+868"	21 0	
21 1	338 8 51	16 58	135.1	34 31 47	5 33	37.2	874	867	21 1	
21 2	338 25 49	16 55	134.9	34 37 20	5 33	36.8	874	867	21 2	
21 3	338 42 44	16 52	134.7	34 42 53	5 33	36.3	874	866	21 3	
21 4	338 59 36	16 49	134.5	34 48 27	5 34	35.9	873	865	21 4	
21 5	339 16 25	16 46	-134.3	34 54 2	5 35	+35.4	-873	+865	21 5	
21 6	3 9 33 11	16 43	134.0	34 59 37	5 35	35.0	872	864	21 6	
21 7	339 49 54	16 40	133.8	35 5 13	5 36	34.5	872	864	21 7	
21 8	340 6 34	16 37	133.6	35 10 50	5 37	34.0	872	863	21 8	
21 9	240 23 11	16 35	133.4	35 16 27	5 37	33.6	871	863	21 9	
21 10	340 39 46	16 31	-133.1	35 22 5	5 38	+33.1	-871	+862	21 10	
21 11	340 56 17	16 28	132.9	35 27 44	5 39	32.7	870	862	21 11	
21 12	341 12 45	16 28	132.6	35 33 23	5 39	32.2	869	861	21 12	
21 13	341 29 11	16 26	132.4	35 39 2	5 39	31.8	869	861	21 13	
21 14	341 45 33	16 22	132.1	35 44 42	5 40	31.3	868	860	21 14	
21 15	342 1 53	16 18	-131.8	35 50 23	5 41	+30.9	-838	+860	21 15	
21 16	342 18 11	16 14	131.6	35 56 4	5 41	30.4	867	859	21 16	
21 17	342 34 25	16 12	131.3	36 1 45	5 41	30.0	866	859	21 17	
21 18	342 50 37	16 9	131.0	36 7 27	5 42	29.5	866	858	21 18	
21 19	343 6 46	16 7	130.8	36 13 10	5 43	29.1	865	858	21 19	
21 20	343 22 53	16 4	-130.5	36 18 53	5 43	+28.6	-864	+858	21 20	
21 21	343 38 57	16 1	130.2	36 24 37	5 44	28.2	864	857	21 21	
21 22	343 54 58	15 58	129.9	36 30 21	5 44	27.7	863	857	21 22	
21 23	344 10 56	15 55	129.6	36 36 5	5 45	27.3	862	856	21 23	
21 24	344 26 51	15 53	129.3	36 41 50	5 45	26.8	861	856	21 24	
21 25	344 42 44	15 51	-129.0	36 47 36	5 46	+26.4	-860	+855	21 25	
21 26	344 58 35	15 48	128.7	36 53 22	5 46	25.9	860	855	21 26	
21 27	345 14 23	15 48	128.4	36 59 8	5 46	25.5	859	855	21 27	
21 28	345 30 9	15 46	128.1	37 4 55	5 47	25.0	858	854	21 28	
21 29	345 45 52	15 43	127.8	37 10 42	5 47	24.6	857	854	21 29	
21 30	346 1 32	15 40	-127.5	37 16 29	5 47	+24.2	-856	+854	21 30	
21 31	346 17 10	15 38	127.2	37 22 17	5 48	23.7	855	853	21 31	
21 32	346 32 46	15 36	126.9	37 28 5	5 48	23.3	854	853	21 32	
21 33	346 48 20	15 34	126.6	37 33 54	5 49	22.8	853	853	21 33	
21 34	347 3 50	15 30	126.3	37 39 43	5 49	22.4	852	852	21 34	
21 35	347 19 18	15 28	-126.0	37 45 32	5 49	+21.9	-851	+852	21 35	
21 36	347 34 44	15 26	125.7	37 51 22	5 50	21.5	850	852	21 36	
21 37	347 50 8	15 24	125.4	37 57 12	5 50	21.1	849	851	21 37	
21 38	348 5 29	15 21	125.1	38 3 3	5 51	20.6	848	851	21 38	
21 39	348 20 48	15 19	124.7	38 8 54	5 51	20.2	847	851	21 39	
21 40	348 36 4	15 16	-124.4	38 14 45	5 51	+19.8	-846	+850	21 40	
21 41	348 51 19	15 15	124.1	38 20 36	5 51	19.3	845	850	21 41	
21 42	349 6 31	15 12	123.8	38 26 28	5 52	18.9	844	850	21 42	
21 43	349 21 41	15 10	123.4	38 32 20	5 52	18.5	843	850	21 43	
21 44	349 36 48	15 7	123.1	38 38 12	5 52	18.0	842	849	21 44	
21 45	349 51 54	15 6	-122.8	38 44 4	5 52	+17.6	-841	+849	21 45	
21 46	350 6 57	15 3	122.5	38 49 57	5 53	17.2	840	849	21 46	
21 47	350 21 58	15 1	122.1	38 55 51	5 54	16.7	838	848	21 47	
21 48	350 36 56	14 58	121.8	39 1 44	5 53	16.3	837	848	21 48	
21 49	350 51 53	14 57	121.5	39 7 38	5 54	15.9	836	848	21 49	
21 50	351 6 47	14 54	-121.1	39 13 32	5 54	+15.5	-835	+848	21 50	
21 51	351 21 39	14 52	120.8	39 19 26	5 54	15.0	834	847	21 51	
21 52	351 36 30	14 51	120.4	39 25 20	5 54	14.6	833	847	21 52	
21 53	351 51 18	14 48	120.1	39 31 15	5 55	14.2	831	847	21 53	
21 54	352 6 4	14 46	119.7	39 37 9	5 54	13.8	830	847	21 54	
21 55	352 20 48	14 44	-119.4	39 43 4	5 55	+13.3	-829	+847	21 55	
21 56	352 35 30	14 41	119.0	39 49 0	5 55	12.9	828	846	21 56	
21 57	352 50 11	14 38	118.7	39 54 55	5 56	12.5	827	846	21 57	
21 58	353 4 49	14 35	118.3	40 0 51	5 56	12.1	825	846	21 58	
21 59	353 19 24	14 35	118.0	40 6 47	5 56	11.6	824	846	21 59	
22 0	353 33 58	14 34	117.6	40 12 43	5 56	11.2	823	846	22 0	

## Longitude and Altitude of the Nonagesimal for the

Argument. A. R. of Ver		Longitude of the Nonagesima <sup>1</sup> .		Correction for -100'' in Obliq.	Altitude of the Nonagesimal.		Correction for -100'' in Obliq.	Corrections for -1000'' in Latitude.		Argument. A. R. of Mer.	
H.	M.	°	'		°	'		Long.	Alt.	H.	M.
22 0		353	33 58	-117.6	40 12 43	5 56	+11.2	-823''	+846''	22 0	
22 1		353	48 30	117.2	40 18 39	5 56	10.8	821	846	22 1	
22 2		354	3 0	116.9	40 24 35	5 57	10.4	820	845	22 2	
22 3		354	17 29	116.5	40 30 32	5 57	10.0	819	845	22 3	
22 4		354	31 55	116.2	40 36 28	5 56	9.5	817	845	22 4	
22 5		354	46 20	-115.8	40 42 25	5 57	+9.1	-816	+845	22 5	
22 6		355	0 42	115.5	40 48 22	5 57	8.7	815	845	22 6	
22 7		355	15 3	115.1	40 54 19	5 57	8.3	814	845	22 7	
22 8		355	29 22	114.7	41 0 16	5 57	7.9	812	845	22 8	
22 9		355	43 39	114.4	41 6 13	5 57	7.5	811	845	22 9	
22 10		355	57 55	-114.0	41 12 10	5 57	+7.0	-810	+844	22 10	
22 11		356	12 8	113.7	41 18 8	5 58	6.6	808	844	22 11	
22 12		356	26 20	113.3	41 24 6	5 58	6.2	807	844	22 12	
22 13		356	40 30	112.9	41 30 3	5 57	5.8	805	844	22 13	
22 14		356	54 38	112.6	41 36 1	5 58	5.4	804	844	22 14	
22 15		357	8 44	-112.2	41 41 59	5 58	+5.0	-803	+844	22 15	
22 16		357	22 49	111.8	41 47 57	5 58	4.6	801	844	22 16	
22 17		357	36 52	111.4	41 53 55	5 58	4.2	800	844	22 17	
22 18		357	50 54	111.1	41 59 53	5 58	3.8	799	844	22 18	
22 19		358	4 53	110.7	42 5 51	5 58	3.4	797	844	22 19	
22 20		358	18 51	-110.3	42 11 49	5 58	+3.0	-796	+844	22 20	
22 21		358	32 48	109.9	42 17 47	5 58	2.6	794	844	22 21	
22 22		358	46 43	109.6	42 23 45	5 58	2.2	793	844	22 22	
22 23		359	0 36	109.2	42 29 44	5 59	1.8	791	844	22 23	
22 24		359	14 27	108.8	42 35 42	5 58	1.4	790	844	22 24	
22 25		359	28 17	-108.4	42 41 40	5 59	+1.0	-789	+844	22 25	
22 26		359	42 5	108.0	42 47 39	5 58	0.6	787	844	22 26	
22 27		359	55 52	107.7	42 53 37	5 58	+0.3	786	844	22 27	
22 28		000	9 38	107.3	42 59 35	5 58	-0.1	784	844	22 28	
22 29		0 23 22	13 44	106.9	43 5 33	5 58	0.5	783	844	22 29	
22 30		0 37 4	13 42	-106.5	43 11 32	5 59	-0.9	-781	+844	22 30	
22 31		0 50 45	13 41	106.1	43 17 30	5 58	1.3	780	844	22 31	
22 32		1 4 24	13 39	105.7	43 23 28	5 58	1.7	778	844	22 32	
22 33		1 18 2	13 38	105.4	43 29 26	5 58	2.0	777	844	22 33	
22 34		1 31 38	13 36	105.0	43 35 25	5 59	2.4	775	844	22 34	
22 35		1 45 13	13 35	-104.6	43 41 23	5 58	-2.8	-774	+844	22 35	
22 36		1 58 46	13 33	104.2	43 47 21	5 58	3.2	772	844	22 36	
22 37		2 12 18	13 32	103.8	43 53 19	5 58	3.6	771	844	22 37	
22 38		2 25 48	13 30	103.4	43 59 17	5 58	4.0	769	844	22 38	
22 39		2 39 18	13 30	103.1	44 5 15	5 58	4.3	768	844	22 39	
22 40		2 52 46	13 28	-102.7	44 11 13	5 58	-4.7	-766	+844	22 40	
22 41		3 6 12	13 26	102.3	44 17 11	5 57	5.1	765	844	22 41	
22 42		3 19 37	13 25	101.9	44 23 8	5 57	5.5	763	844	22 42	
22 43		3 33 1	13 24	101.5	44 29 6	5 58	5.9	762	844	22 43	
22 44		3 46 23	13 22	101.1	44 35 4	5 58	6.3	760	844	22 44	
22 45		3 59 41	13 21	-100.8	44 41 1	5 57	-6.6	-759	+844	22 45	
22 46		4 13 4	13 20	100.4	44 46 59	5 58	7.0	757	844	22 46	
22 47		4 26 22	13 18	100.0	44 52 56	5 57	7.4	756	845	22 47	
22 48		4 39 39	13 17	99.6	44 58 53	5 57	7.8	754	845	22 48	
22 49		4 52 55	13 16	99.2	45 4 50	5 57	8.2	753	845	22 49	
22 50		5 6 10	13 15	-98.9	45 10 47	5 57	-8.5	-751	+845	22 50	
22 51		5 19 23	13 13	98.5	45 16 43	5 56	8.9	750	845	22 51	
22 52		5 32 35	13 12	98.1	45 22 40	5 57	9.3	748	845	22 52	
22 53		5 45 46	13 11	97.8	45 28 37	5 57	9.7	747	845	22 53	
22 54		5 58 55	13 9	97.4	45 34 33	5 56	10.0	745	845	22 54	
22 55		6 12 4	13 9	-97.0	45 40 29	5 56	-10.4	-744	+846	22 55	
22 56		6 25 11	13 7	96.7	45 46 25	5 56	10.8	742	846	22 56	
22 57		6 38 17	13 6	96.3	45 52 21	5 56	11.2	741	846	22 57	
22 58		6 51 22	13 5	95.9	45 58 17	5 56	11.5	739	846	22 58	
22 59		7 4 26	13 4	95.6	46 4 13	5 56	11.9	737	846	22 59	
23 0		7 17 28	13 2	95.2	46 10 9	5 56	12.3	736	846	23 0	

Argument.		Longitude of the Nonagesimal.				Correction for -100'' in Obliq.	Altitude of the Nonagesimal.				Correction for -100'' in Obliq.	Corrections for -1000' in Latitude.		Argument.		
A. R. of Mer.												Long.	Alt.	A. R. of Mer.		
H.	M.	0	1	2	3		0	1	2	3				H.	M.	
23	0	7	17	28	13	1	46	10	9	5	56	-12.3	-736''	+846''	23	0
23	1	7	30	29	13	0	46	16	5	5	55	12.7	734	846	23	1
23	2	7	43	29	13	0	46	22	0	5	55	13.0	733	847	23	2
23	3	7	56	29	13	0	46	27	55	5	55	13.4	731	847	23	3
23	4	8	9	27	12	58	46	33	49	5	54	13.8	730	847	23	4
23	5	8	22	24	12	57	46	39	44	5	55	-14.2	-728	+847	23	5
23	6	8	35	19	12	55	46	45	38	5	54	14.5	726	847	23	6
23	7	8	48	14	12	54	46	51	32	5	54	14.9	725	848	23	7
23	8	9	1	8	12	53	46	57	26	5	54	15.3	723	848	23	8
23	9	9	14	1	12	51	47	3	20	5	54	15.7	722	848	23	9
23	10	9	26	52	12	51	47	9	14	5	53	-16.0	-720	+848	23	10
23	11	9	39	43	12	49	47	15	7	5	53	16.4	718	848	23	11
23	12	9	52	32	12	48	47	21	0	5	53	16.8	717	849	23	12
23	13	10	5	20	12	48	47	26	53	5	53	17.2	715	849	23	13
23	14	10	18	8	12	46	47	32	46	5	52	17.5	714	849	23	14
23	15	10	30	54	12	46	47	38	38	5	52	-17.9	-712	+849	23	15
23	16	10	43	40	12	45	47	44	30	5	52	18.3	711	849	23	16
23	17	10	56	25	12	45	47	50	22	5	52	18.7	709	850	23	17
23	18	11	9	8	12	43	47	56	14	5	52	19.0	707	850	23	18
23	19	11	21	51	12	41	48	2	5	5	51	19.4	706	850	23	19
23	20	11	34	32	12	41	48	7	56	5	51	-19.8	-704	+850	23	20
23	21	11	47	13	12	40	48	13	47	5	51	20.2	703	851	23	21
23	22	11	59	53	12	39	48	19	38	5	50	20.5	701	851	23	22
23	23	12	12	32	12	38	48	25	28	5	50	20.9	699	851	23	23
23	24	12	25	10	12	37	48	31	18	5	50	21.3	698	851	23	24
23	25	12	37	47	12	36	48	37	8	5	50	-21.7	-696	+852	23	25
23	26	12	50	23	12	35	48	42	58	5	50	22.0	695	852	23	26
23	27	13	2	58	12	35	48	48	47	5	49	22.4	693	852	23	27
23	28	13	15	32	12	34	48	54	36	5	49	22.8	691	852	23	28
23	29	13	28	6	12	34	49	0	25	5	49	23.1	690	853	23	29
23	30	13	40	38	12	32	49	6	13	5	48	-23.5	-688	+853	23	30
23	31	13	53	10	12	31	49	12	1	5	48	23.9	686	853	23	31
23	32	14	5	41	12	31	49	17	48	5	47	24.2	685	854	23	32
23	33	14	18	11	12	30	49	23	36	5	48	24.6	683	854	23	33
23	34	14	30	41	12	30	49	29	23	5	47	25.0	682	854	23	34
23	35	14	43	9	12	28	49	35	10	5	47	-25.3	-680	+854	23	35
23	36	14	55	37	12	28	49	40	56	5	46	25.7	678	855	23	36
23	37	15	8	3	12	26	49	46	42	5	46	26.0	677	855	23	37
23	38	15	20	29	12	26	49	52	28	5	46	26.4	675	855	23	38
23	39	15	32	55	12	26	49	58	13	5	45	26.7	673	856	23	39
23	40	15	45	19	12	24	50	3	58	5	45	-27.1	-672	+856	23	40
23	41	15	57	43	12	24	50	9	43	5	45	27.4	670	856	23	41
23	42	16	10	6	12	23	50	15	27	5	44	27.8	669	857	23	42
23	43	16	22	29	12	23	50	21	11	5	44	28.2	667	857	23	43
23	44	16	34	50	12	21	50	26	55	5	44	28.6	665	857	23	44
23	45	16	47	11	12	21	50	32	38	5	43	-28.9	-664	+858	23	45
23	46	16	59	31	12	20	50	38	21	5	43	29.3	662	858	23	46
23	47	17	11	50	12	19	50	44	3	5	42	29.6	661	858	23	47
23	48	17	24	9	12	19	50	49	45	5	42	30.0	659	859	23	48
23	49	17	36	27	12	18	50	55	27	5	42	30.3	657	859	23	49
23	50	17	48	44	12	17	51	1	9	5	42	-30.7	-656	+859	23	50
23	51	18	1	1	12	17	51	6	50	5	41	31.0	654	860	23	51
23	52	18	13	17	12	16	51	12	30	5	40	31.3	652	860	23	52
23	53	18	25	32	12	15	51	18	10	5	40	31.7	651	860	23	53
23	54	18	37	46	12	14	51	23	50	5	40	32.0	649	861	23	54
23	55	18	50	0	12	14	51	29	29	5	39	-32.3	-648	+861	23	55
23	56	19	2	13	12	13	51	35	8	5	39	32.7	646	861	23	56
23	57	19	14	26	12	12	51	40	47	5	38	33.0	644	862	23	57
23	58	19	26	38	12	12	51	46	25	5	38	33.3	643	862	23	58
23	59	19	38	49	12	11	51	52	2	5	37	33.7	641	862	23	59
0	0	19	51	0	12	11	51	57	40	5	38	34.0	639	863	0	0

### III.

#### *On the Latitude of Boston.*

BY ROBERT T. PAINE, A. A. S.

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IN the year 1825, a highly recommended sextant, by Ramsden, having been put in my possession, I was induced to determine with it the difference between the latitude of my residence at that time and of the new State House, estimated at about twenty-seven seconds. On the first, second, third, fourth, and sixth days of November of that year, I measured with it the sun's meridian altitude, but was greatly surprised at the result; as although the observations agreed with each other exceedingly well, they made the position of the house only  $42^{\circ} 20' 30''$ , or one hundred and eighteen seconds less than that of the State House, as laid down in the 297th page of the third volume of the Transactions of the Society. The accuracy of the position of that building not then being suspected, the difference was ascribed to some undiscovered error in the instrument.

In 1827, after many and repeated examinations of the sextant, I measured twenty-eight meridional altitudes of the Sun, which, by allowing for the difference of position of the two places of observation, gave almost exactly the same result, and of course placed the State House, Harvard Hall in Cambridge, and Salem



about ninety seconds nearer the equator than had been supposed. My absence from the United States in the winter of 1827–28 interrupted my observations, which were resumed in the autumn of the latter year, with another instrument by the same maker. With this, 194 altitudes were measured in October, November, and December, 1828, and in January, 1829. Although this instrument was small, the result shows, that it is equally to be depended on with the larger. The altitudes were measured within a few minutes of noon, and reduced to the meridian, by the rules of spherical trigonometry. In January, 1829, I again had recourse to the sextant first used, and, in the course of that month, of February, March, and April, measured with it 369 altitudes more; having continued my observations until the double altitude of the Sun became too great to be ascertained with an instrument of reflection.

Within a very short time I have also obtained a few altitudes with a new sextant by Parkinson and Frodsham, and with a repeating circle made by Troughton for the United States, which have verified the results given by the two sextants by Ramsden.

The surprising agreement between the results of these two instruments is rendered the more satisfactory from the circumstance, that the smaller was used when the Sun was near the winter solstice, and the double altitude between  $48^{\circ}$  and  $68^{\circ}$ , and the larger, when the Sun was in general much nearer the elevated pole, and the double altitude between  $56^{\circ}$  and  $124^{\circ}$ .

On reference to the manuscript containing my observations, which I have the honor herewith to present to the Society, it will be observed, that the Refraction, the Reduction to noon, and the Declination of the Sun, were calculated for, and the latitude deduced from each altitude; that the last 350 observations did

not produce any change in the result, and that the mean of the first 50 differs only two thirds of a second from the mean of all.

The difference between the latitude of the State House and of my residence was determined by the latest and most accurate map of the city, but may be in a very slight degree erroneous, a point which will soon be ascertained by a trigonometrical admeasurement.

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Latitude of the new State House in the city of Boston as determined by nearly six hundred observations, made in the house at the southeasterly corner of Essex and Short streets, supposed to be 2310 feet South  $29^{\circ} 41'$  East, of the State House.

#### Instruments.

Ramsden's Sextant No. 1375, of nine inches' radius.

“ “ “ 1403, of six inches' radius.

Mean of 194 Observations by No. 1403, in October, November, and December, 1828, and in January, 1829. (Greatest lat. $42^{\circ} 20' 60''\cdot4$ . Least $42^{\circ} 20' 14''\cdot6$ )	- - - -	$42^{\circ} 20' 37''\cdot97$
Mean of 390 Observations by No. 1375, in March, April, September, October, and November, 1827, and in January, February, March, and April, 1829, (Greatest lat. $42^{\circ} 20' 59''\cdot7$ . Least $42^{\circ} 20' 16''\cdot1$ )	- - - -	38·08
Mean of 584 Observations by both instruments	- -	38·04
Reduction to the State House	- - - -	19·8
Latitude of the State House	- - - -	<u><math>42^{\circ} 20' 57''\cdot8</math></u>

#### IV.

*Tables of the present Value of a Life-Annuity at any Age, according to Dr. Wigglesworth's Bill of Mortality.*

BY J. INGERSOLL BOWDITCH.

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THE Table, exhibiting the Law of Mortality in the northern part of the United States, given by Dr. Wigglesworth, in the second volume of the Memoirs of the American Academy, being generally used in Massachusetts, to ascertain the value of a Dower-right, it was thought advisable to construct the following Tables to facilitate such calculations.

TABLE I. Exhibits the Expectation of Life, expressed in years and decimals of a year, in the United States, and in the City of Carlisle (England), at intervals of five years. These agree nearly with each other in the middle ages, but there is a considerable difference in ages below 20 years; the Carlisle bill of mortality giving a much greater expectation than most tables, which have been published.

TABLE II. Exhibits the Expectation of Life in the United States at every age, according to Dr. Wigglesworth's Table. Thus at the age of 50 years, the expectation of life is  $21\frac{17}{100}$  years.

TABLE III. Exhibits the value of a life-right in the income of \$ 100, supposing the rate of interest to be 5 or 6 per cent. Thus the value of the life-right of a person aged 50, interest being six per cent., is  $62 \frac{7\frac{1}{2}}{100}$  per cent. Subtracting this from \$ 100, leaves the present value of the reversion  $37 \frac{2\frac{1}{2}}{100}$  per cent. Hence if the estate was worth \$ 10,000, the present value of the life-right would be \$ 6272, and the present value of the reversion \$ 3728.

TABLE IV. Exhibits the value of a Widow's Dower in the income of \$ 100. It is exactly one third of the value given by Table III.

Thus if a widow has a right of dower in an estate worth \$ 3000, her age being 40 years, and the rate of interest 5 per cent., we should find by the Table the present value of her life right to be worth 21 per cent.; hence we get the present value of her dower, \$ 630. We get nearly the same result from Table III., where the life-right is  $62 \frac{7\frac{1}{2}}{100}$  per cent. on her third part of \$ 3000, or \$ 1000 set off to her for dower, making its present value \$ 629.90.

TABLE V. Exhibits the value of an annuity on a single life at every age. Thus a person at the age of 30 must pay \$ 13.27 to secure an annuity of one dollar per annum, interest being at five per cent.; or \$ 11.80, interest being at six per cent.



TABLE I. Showing the Expectation of Life at Intervals of five Years, according to Dr. Wigglesworth's Table, for the United States, and Milne for the City of Carlisle in England.

Age	U. States.	Carlisle.	Age.	U. States.	Carlisle.	Age.	U. States.	Carlisle.
years.	years.	years.	years.	years.	years.	years.	years.	years.
0	28.15	38.72	35	28.22	31.00	65	12.43	11.79
5	40.88	51.25	40	26.04	27.61	70	10.06	9.18
10	39.23	48.82	45	23.92	24.46	75	7.83	7.01
15	36.17	45.00	50	21.17	21.11	80	5.85	5.51
20	34.22	41.46	55	18.35	17.58	85	4.57	4.12
25	32.33	37.86	60	15.45	14.34	90	3.73	3.28
30	30.25	34.34						

TABLE II. Showing the Expectation of Life, deduced from Dr. Wigglesworth's Table of Mortality.

Age.	Expectation.	Age.	Expectation.	Age.	Expectation.	Age.	Expectation.
years.	years.	years.	years.	years.	years.	years.	years.
0	28.15	24	32.70	48	22.27	72	9.14
1	36.78	25	32.33	49	21.72	73	8.69
2	38.74	26	31.93	50	21.17	74	8.25
3	40.01	27	31.50	51	20.61	75	7.83
4	40.73	28	31.08	52	20.05	76	7.40
5	40.88	29	30.66	53	19.49	77	6.99
6	40.69	30	30.25	54	18.92	78	6.59
7	40.47	31	29.83	55	18.35	79	6.21
8	40.14	32	29.43	56	17.78	80	5.85
9	39.72	33	29.02	57	17.20	81	5.50
10	39.23	34	28.62	58	16.63	82	5.16
11	38.64	35	28.22	59	16.04	83	4.87
12	38.02	36	27.78	60	15.45	84	4.66
13	37.41	37	27.34	61	14.86	85	4.57
14	36.79	38	26.91	62	14.26	86	4.21
15	36.17	39	26.47	63	13.66	87	3.90
16	35.76	40	26.04	64	13.05	88	3.67
17	35.37	41	25.61	65	12.43	89	3.56
18	34.98	42	25.19	66	11.96	90	3.73
19	34.59	43	24.77	67	11.48	91	3.32
20	34.22	44	24.35	68	11.01	92	3.12
21	33.84	45	23.92	69	10.50	93	2.40
22	33.46	46	23.37	70	10.06	94	1.98
23	33.08	47	22.83	71	9.60	95	1.62

TABLE III. Showing the present Value of a Life-Right in the Income of \$100, at every Age, calculating the Interest at five and at six per cent., according to Dr. Wigglesworth's Table of Mortality.

Age.	Interest, 5 pr. ct.	Interest, 6 pr. ct.	Age.	Interest, 5 pr. ct.	Interest, 6 pr. ct.	Age.	Interest, 5 pr. ct.	Interest, 6 pr. ct.	Age.	Interest, 5 pr. ct.	Interest, 6 pr. ct.
0	49.01	51.50	24	68.08	72.31	48	59.02	64.24	72	31.64	35.95
1	64.39	67.61	25	67.87	72.14	49	58.25	63.50	73	30.32	34.51
2	68.13	71.51	26	67.62	71.92	50	57.44	62.72	74	29.04	33.11
3	70.78	74.30	27	67.30	71.63	51	56.60	61.90	75	27.76	31.70
4	72.55	76.19	28	66.98	71.34	52	55.73	61.05	76	26.42	30.23
5	73.34	77.06	29	66.66	71.06	53	54.83	60.16	77	25.09	28.76
6	73.56	77.32	30	66.35	70.78	54	53.89	59.23	78	23.78	27.30
7	73.73	77.55	31	66.04	70.51	55	52.91	58.25	79	22.52	25.89
8	73.72	77.59	32	65.74	70.25	56	51.88	57.23	80	21.33	24.56
9	73.53	77.44	33	65.45	69.99	57	50.82	56.15	81	20.08	23.16
10	73.23	77.17	34	65.17	69.75	58	49.70	55.03	82	18.88	21.80
11	72.69	76.65	35	64.89	69.52	59	48.53	53.83	83	17.84	20.63
12	72.10	76.07	36	64.51	69.17	60	47.31	52.58	84	17.11	19.81
13	71.48	75.47	37	64.13	68.83	61	46.03	51.25	85	16.90	19.60
14	70.84	74.82	38	63.75	68.50	62	44.68	49.84	86	15.53	18.03
15	70.16	74.14	39	63.37	68.16	63	43.27	48.36	87	14.33	16.66
16	69.88	73.89	40	62.99	67.84	64	41.78	46.78	88	13.48	15.69
17	69.64	73.67	41	62.63	67.52	65	40.21	45.10	89	13.09	15.25
18	69.41	73.46	42	62.26	67.21	66	39.07	43.90	90	14.03	16.39
19	69.18	73.27	43	61.91	66.91	67	37.90	42.66	91	12.41	14.53
20	68.96	73.07	44	61.57	66.63	68	36.70	41.39	92	10.49	12.31
21	68.75	72.89	45	61.19	66.31	69	35.48	40.08	93	8.52	10.10
22	68.51	72.68	46	60.49	65.65	70	34.22	38.74	94	6.75	7.96
23	68.29	72.49	47	59.77	64.96	71	32.95	37.36	95	5.19	6.13

TABLE IV. Showing the Value of a Widow's Dower in the Income of \$100, at every Age, calculating the Interest at five and at six per cent., according to Dr. Wigglesworth's Table of Mortality.

Age.	5 pr. ct.	6 pr. ct.	Age.	5 pr. ct.	6 pr. ct.	Age.	5 pr. ct.	6 pr. ct.	Age.	5 pr. ct.	6 pr. ct.
0	16.34	17.17	24	22.69	24.10	48	19.67	21.41	72	10.55	11.98
1	21.46	22.54	25	22.62	24.05	49	19.42	21.17	73	10.11	11.50
2	22.71	23.81	26	22.54	23.97	50	19.15	20.91	74	9.68	11.04
3	23.59	24.77	27	22.43	23.88	51	18.87	20.63	75	9.25	10.57
4	24.18	25.40	28	22.33	23.78	52	18.58	20.35	76	8.81	10.08
5	24.45	25.69	29	22.22	23.69	53	18.28	20.05	77	8.36	9.59
6	24.52	25.77	30	22.12	23.59	54	17.96	19.74	78	7.93	9.10
7	24.58	25.85	31	22.01	23.50	55	17.64	19.42	79	7.51	8.63
8	24.57	25.86	32	21.91	23.42	56	17.29	19.08	80	7.11	8.19
9	24.51	25.81	33	21.82	23.33	57	16.94	18.72	81	6.69	7.72
10	24.41	25.72	34	21.72	23.25	58	16.57	18.34	82	6.29	7.27
11	24.23	25.55	35	21.63	23.17	59	16.18	17.94	83	5.95	6.88
12	24.03	25.36	36	21.50	23.06	60	15.77	17.53	84	5.70	6.60
13	23.83	25.16	37	21.38	22.94	61	15.34	17.08	85	5.63	6.53
14	23.61	24.94	38	21.25	22.83	62	14.89	16.61	86	5.18	6.01
15	23.39	24.71	39	21.12	22.72	63	14.42	16.12	87	4.78	5.55
16	23.29	24.63	40	21.00	22.61	64	13.93	15.59	88	4.49	5.23
17	23.21	24.56	41	20.88	22.51	65	13.40	15.03	89	4.36	5.08
18	23.14	24.49	42	20.75	22.40	66	13.02	14.63	90	4.68	5.46
19	23.06	24.42	43	20.64	22.30	67	12.63	14.22	91	4.14	4.84
20	22.99	24.36	44	20.52	22.21	68	12.23	13.80	92	3.50	4.10
21	22.92	24.30	45	20.40	22.10	69	11.83	13.36	93	2.86	3.37
22	22.84	24.23	46	20.16	21.88	70	11.41	12.91	94	2.25	2.65
23	22.76	24.16	47	19.92	21.65	71	10.98	12.45	95	1.73	2.04

TABLE V. *Showing the Value of an Annuity on a Single Life at every Age, deduced from the Tables by Dr. Wigglesworth.*

Age.	5 pr. ct.	6 pr. ct.	Age.	5 pr. ct.	6 pr. ct.	Age.	5 pr. ct.	6 pr. ct.	Age.	5 pr. ct.	6 pr. ct.
0	9.802	8.584	25	13.574	12.024	50	11.487	10.453	75	5.551	5.284
1	12.877	11.268	26	13.523	11.987	51	11.320	10.317	76	5.284	5.038
2	13.625	11.919	27	13.459	11.938	52	11.146	10.175	77	5.018	4.793
3	14.155	12.384	28	13.395	11.890	53	10.965	10.027	78	4.756	4.550
4	14.509	12.698	29	13.332	11.843	54	10.777	9.872	79	4.503	4.315
5	14.668	12.843	30	13.270	11.797	55	10.581	9.709	80	4.265	4.093
6	14.711	12.887	31	13.208	11.752	56	10.376	9.539	81	4.016	3.860
7	14.745	12.925	32	13.148	11.708	57	10.163	9.359	82	3.775	3.633
8	14.743	12.931	33	13.090	11.665	58	9.939	9.171	83	3.568	3.439
9	14.706	12.906	34	13.033	11.625	59	9.706	8.972	84	3.421	3.301
10	14.646	12.862	35	12.978	11.587	60	9.462	8.763	85	3.380	3.266
11	14.538	12.775	36	12.901	11.529	61	9.205	8.541	86	3.105	3.005
12	14.420	12.679	37	12.825	11.472	62	8.936	8.307	87	2.866	2.777
13	14.296	12.578	38	12.749	11.416	63	8.654	8.060	88	2.696	2.615
14	14.167	12.470	39	12.673	11.360	64	8.356	7.797	89	2.617	2.542
15	14.031	12.357	40	12.598	11.306	65	8.042	7.517	90	2.805	2.731
16	13.976	12.315	41	12.525	11.253	66	7.813	7.317	91	2.481	2.422
17	13.928	12.279	42	12.452	11.201	67	7.579	7.110	92	2.097	2.052
18	13.881	12.244	43	12.382	11.152	68	7.340	6.898	93	1.716	1.683
19	13.835	12.211	44	12.313	11.105	69	7.095	6.680	94	1.350	1.327
20	13.791	12.178	45	12.238	11.052	70	6.844	6.456	95	1.038	1.022
21	13.749	12.148	46	12.098	10.942	71	6.589	6.226	96	0.744	0.734
22	13.702	12.114	47	11.954	10.827	72	6.328	5.991	97	0.562	0.555
23	13.658	12.082	48	11.804	10.707	73	6.064	5.751	98	0.476	0.472
24	13.615	12.052	49	11.649	10.583	74	5.807	5.518	99	0.000	0.000



## V.

*Occultations and Eclipses, observed at Dorchester, Massachusetts,*

BY W. CRANCH BOND.

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IN making the selection of the following observations from a large number, those were taken which were thought to be the most accurate, or which presented some curious phenomena. All of them, excepting those of the years 1820, 1821, 1824, were made at my present residence in Dorchester, in the latitude  $42^{\circ} 19' 20''$  North; longitude  $0^{\circ} 3' 15''$  East of Harvard Hall in Cambridge, or  $71^{\circ} 4' 15''$  West from Greenwich Observatory nearly.

The times of observation are given in mean solar time, civil account, for the meridian of the place of observation. They were determined by an Equatorial instrument, of thirty inches' focal length, fixed on a granite pier; the foundation of which is four feet and six inches below the surface of the ground, in a dry gravelly soil. The results of these observations were frequently compared with those deduced from altitudes, taken with a Borda's Circle, and a Sextant by Ramsden; the mean of several observations rarely differing a second from the Transit by the Equatorial. Two excellent Transit Clocks, with mercurial pendulums, the one by Holmden, the other by Parkinson and Frodsham, were relied on for the intervals. The Telescope used was a Gregorian reflector, of thirty inches, excepting for the interesting phenomenon, the occultation of Jupiter, November 14, 1820; and for the Solar Eclipse of August 27, 1821; at which times an Achromatic Telescope of forty inches was employed.

Year.	Month and Day.	Observations.	Imm. or Em.	Time.	General Remarks.
1820.	Nov. 14.	Occult. of Jupiter and Satellites. 4th Satellite, . . . . . Contact of $\mu$ 's W. L. and $\nu$ 's E. L. . . . . Total Immersion of $\mu$ 3d Satellite, First saw $\mu$ 's West Limb, Total emersion of Jupiter,	Imm.    Em.	h. m. s. 7 9 35 P. M. 7 10 42 7 12 15 7 15 29 8 20 52 8 22 6	The evening was beautifully clear and calm, the moon near the meridian, and the immersions, taking place on the dark limb, were each apparently exact, Jupiter changing from the first contact as distinctly as a Solar Eclipse. The emersions of the Satellites could not be well observed. Place of observ. 1" in time E. of my present residence. Lon. $71^{\circ} 4'$ . Lat. $42^{\circ} 19' 20''$ .
1821.	Aug. 27.	Solar Eclipse, End, . .		10 30 13 A. M.	At the commencement the Sun was obscured by clouds. The observation was made at a place 1" in time East of my present residence. Lon. $71^{\circ} 4'$ . Lat. $42^{\circ} 19' 20''$ .
1823.	July 22.	Total Lunar Eclipse Beginning, . . . . . Beginning of Total obsc.		8 51 30 P. M. 9 58 30	
1824.	June 26.	Solar Eclipse. Beginning, . . . . .		7 27 59 P. M.	This Eclipse was observed a few minutes before Sunset from Jones's hill in Dorchester, in Lon. $71^{\circ} 4'$ ; Lat. $42^{\circ} 19'$ nearly. Time marked by a pocket Chronometer, Barraud's, No. 275.
1825.	Aug. 8.	Occult. of Aldebaran, .	Imm. Em.	3 25 49 A. M. 4 39 53	
1826.	March 15.	Occult. of Saturn. Emersion of centre, .	Em.	10 49 57 P. M.	
1827.	Feb. 10.	Occult. of $2 \alpha$ Cancri.	Imm.	7 19 54 P. M.	
1827.	Nov. 16.	Occult. of Spica Virginis.	Imm.	0 17 24 P. M.	Although so near noon, the star was distinct, its color appearing very similar to that of the moon; it lingered between one and two seconds, like a mountain projected from the moon's limb.
1828.	Jan. 31.	Occult. of $1 \alpha$ Cancri, .	Imm.	6 40 39.4 P. M.	
1829.	Aug. 21. " 22.	Occult. of Aldebaran, . Emersion, . . . . .	Imm. Em.	11 58 54.5 P. M. 0 51 37.5 A. M.	Tremulous, two or three seconds, on the moon's enlightened limb.
1829.	Sept. 13.	Lunar Eclipse. Beginning, . . . . . Contact of Shade and E. L. of Tycho, . . . . . Centre of Tycho, . . . . . Total Immersion of Tycho,		0 32 15 A. M. 0 50 30 0 51 45 0 52 45	$6^{\circ} 4'$ on $\nu$ 's South limb; names as given by Riccioli.

Year.	Month and Day.	Observations.	Imm. or Em.	Time.	General Rem rks
1829.	Sept 1.	Occult of Aldebaran. Immersion, . . . . .	Imm. Em.	h. m. s. 9 19 33.6 A. M. 10 19 49	☽'s limb not visible at the Emerision; which rendered the observation doubtful.
1829.	Sept 24.	Occult of $\alpha$ Leonis,	Imm. Em.	4 19 57.8 A. M. 4 56 36.8	The star appeared several seconds trembling on the moon's enlightened limb. disappeared, then reappeared for nearly a second, and finally immersed as given. Emerision instantaneous.
1829.	Nov. 12.	Occult of Aldebaran,	Imm. Em.	5 6 35.5 A. M. 5 46 57.5	
1830.	Jan. 5.	Occult of Aldebaran,	Imm. Em.	10 14 51 P. M. 11 12 50	Emerision dubious for several seconds.
1830.	March 25.	Occult of Aldebaran,	Imm. Em.	5 6 1 P. M. 6 19 51	The <i>Emerision</i> was particularly fine: the moon's limb quiet, the star appeared instantly like a brilliant ruby <i>projected on the disk</i> , during nearly a second, and separated by a steady motion. It took place a few minutes after sunset. Alt of the star 51° at the Emerision.
1830.	July. 16.	Occult of Aldebaran.	Imm.	5 33 37 A. M.	
1830.	Sept. 2.	Total Lunar Eclipse. Aristarchus emerged, . . Tycho, . . . . . Mannius, . . . . . End of the Eclipse, . .	Em.	6 55 30 P. M. 7 7 0 7 20 15 7 44 15	The shade was discernible by the unassisted eye, two minutes after the Telescope ceased to give a vestige of it. Moon rose totally eclipsed.
1831.	Jan 21	Occult of $\mu$ Ceti, . .	Imm.	5 54 54.6 P. M.	
1831.	Feb. 5.	Occult of $\gamma$ Libra, . .	Imm. Em.	5 3 <sup>m</sup> 5.9 A. M. 7 3 13	At the time of the Emerision, the moon's limb not visible, star faint.
1831.	Feb. 12.	Solar Eclipse. Beginning, . . . . . Meridian Observations during the Eclipse. Northern intersecting Point of the ☉ and ☽'s Limbs on the middle wire, . . . . . ☽'s E. L. first wire, . . . . . " " mid. wire, . . . . . " " third wire, . . . . . ☉'s centre reduced to middle wire from the passage of his E. L., Southern intersection on the middle wire. By one observation on first wire . . . . .		11 50 12.3 A. M.   0 13 34.2 P. M. 0 12 41.2 0 14 15.2 0 15 49.7  0 14 39.2  0 14 12	The sun obscured by clouds at the termination of the Eclipse.  Deviation of the instrument to the Westward 5" The cusps were well defined, and the sun's limb quiet.

Year.	Month and Day.	Observations.	Imm. or Em.	Time.	General Remarks.
1831.	Feb. 13.	Occult. of Planet Venus. Immersion of the Centre, Total Immersion, . . .	Imm.	h. m. s. 1 43 56 P. M. 1 44 19	The moon was not discernible. A gradual diminution, till at last it threw out some scintillations and disappeared instantly.
1831.	Feb. 19.	Occult. 1 $\epsilon$ Tauri, . . .	Imm. Em.	7 31 16 P. M. 8 44 4.6	Emersion appeared good, but quite clear of the moon's limb.
1831.	Feb. 19.	Occult. 2 $\epsilon$ Tauri, . . .	Imm. Em.	7 40 45 P. M. 8 36 11	
1831.	Feb. 19.	Occult. of Aldebaran, .	Imm.	11 43 37 P. M.	
1831.	Feb. 28.	Occult. 1 $\gamma$ Virginis, .	Em.	8 31 0.2 P. M.	Star rose eclipsed.

Intending to make some experiments on the change of temperature, during the Solar Eclipse of February 12, 1831, I obtained one of Professor Leslie's Differential Thermometers; the scale affixed was graduated from zero to  $90^{\circ}$ , and adjusted to stand at  $45^{\circ}$ , when both bulbs were of an equal temperature, in order that it might show, by exposing each bulb alternately to the solar rays, a greater range of the colored fluid. The southern opening in the room for the Transit instrument afforded a convenient situation. A Fahrenheit's Thermometer was so placed that its bulb might be nearly in contact with that bulb of the Differential Thermometer which was in the shade.

The hour previous to the commencement of the Eclipse, the atmosphere being clear, a Thermometer placed in a north exposure, stood at  $+29^{\circ}$ . The Differential Thermometer indicated 28 divisions of its scale in the reversed positions (that being the mean of six observations, the extremes differing three divisions from the mean) as the effect produced by the solar rays; and the attached Thermometer stood at  $+30^{\circ}$ .

From 1 h. 10 m. to 1 h. 30 m., about the time of greatest obscuration, the northern Thermometer stood at  $+24^{\circ}$ , the attached at  $+28^{\circ}$ , and the differential indicated one division as the



effect produced by the sun's rays ; that being the mean of seven observations. The extreme difference from the mean was two divisions. A lens produced a lively motion in this Thermometer at 1 h. 40 m. ; although when the same lens was applied to a common mercurial one, the effect was not perceptible. At 2 h. 30 m. the Thermometer on the north side rose to + 30°. Clouds prevented further observation.

## VI.

### *Observations on the Comparative Rates of Marine Chronometers.*

BY W. CRANCH BOND.

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THE following series of observations was arranged, in consequence of an opinion being expressed by some navigators, that Chronometers, when removed from the shore to the ship, have an accelerated rate of going. This was attempted to be accounted for, on the supposition that the influence of iron would tend to produce such an effect. A paper on this subject by George Fisher Esq., read before the Royal Society, June 8, 1820, contained an account of some very extraordinary discrepancies; and if such were common, they would render these instruments of little or no value, as a means of determining the longitude. But, upon examination of the rates of the several Chronometers as therein given, it appears, that the rates of these particular instruments were, even on shore, so unsteady as to make it probable that they were not in such a state as to be worthy of much confidence. For example, the Chronometer by Baird, from the 8th to the 12th of August, was losing 3".4 daily when on board; but on its removal to the observatory on shore, its rate of losing was observed to be 18".2. Upon again removing it on board, it was found to be losing 6".5 daily. Here we see a difference of 3".1 in the *ship-board* rates. Another Chronometer, made

by Arnold, lost about 9'' by removal from the vessel to the shore, and another by Pennington still more. The *variation* in the *shore* rates is also remarkable, that of the first appearing to have been 8'', of the second 6''.14, of the third 7''.2, and of the fourth 8''. All these errors were noted during the short period of seventeen days.

It is evident, that either the instruments used in these experiments were not well adjusted, or that some extraordinary cause operated to produce the effect described. Mr. Fisher was of opinion that this acceleration arose entirely from the magnetic action exerted by the iron in the ship on the inner rim of the balance of the Chronometer, which is made of steel; that the iron in the ship forms "altogether one large magnet, having its south pole, on deck, nearly amidships, and its north pole below;" and all his subsequent experiments were made on the supposition that the magnetism was fixed. It is, however, well known, that a bar of iron, in the state in which it commonly occurs, will affect the magnetic needle very differently when placed in different positions as it regards the magnetic equator. Hence if the balance is to be considered as a nicely suspended magnet, it would follow that every different inclination of the vessel would produce a corresponding change of rate.

It is better in the first place to ascertain from direct experiment whether Chronometers have or have not any systematic variation, dependent on their being placed on ship-board. The tables of the change of rates of Chronometers furnished by Mr. George Coleman, which accompany Mr. Fisher's communication, go a great way toward reducing the excessive errors which were thought to exist; but these are generally defective in not giving the subsequent shore rates, as there are many

excellent Chronometers, that have a tendency gradually to gain or lose in their rates, particularly new instruments; and the mean rate, corrected for this acceleration or retardation, as it shall have been ascertained by actual observation on shore, may usually be relied upon with great confidence for several months. Without using this precaution we might fall into dangerous errors.

The subjoined Table contains two hundred and twenty-six cases, and embraces almost every possible variety in regard to the size of the vessel, the cargo, the duration of the voyage, the change of temperature, and the different makers. The first or the last shore rate was determined by myself in every instance, and generally both. No particular selection has been made in regard to the Chronometers used; those only being rejected which were notoriously imperfect. In arranging the Table, the *mean* of the previous and subsequent *shore* rates was compared with the rate on ship-board, and the comparative gain or loss is placed in the column marked, "Excess of gain or loss on ship-board"; except in those instances where the one or the other shore rate was not obtained, in which case the first difference is carried out. A summary is appended to the Table. From an inspection of this Table, the inference appears irresistible, that Chronometers do not gain in their rates in consequence of being removed to the vessel; and if there is an error arising from such removal, which I would not be thought utterly to deny, it is so minute, as to be within the limits of error to which Chronometers, in their present state, are liable on shore, and is such as will require nice and careful observation to detect it.



Makers' names and numbers.	No.	Year.	Previous shore rate + or -	Rate on ship-board + or -	Subsequent shore rate + or -	Excess of gain or loss on ship-board.	Number of days on ship-board.	General remarks.
Charles Young,	10	1825	"	"	"	"	40	Assorted cargo.
"	"	"	3.3	4.	3.5	0.6	30	"
"	"	1827	3.3	3.5	3.5	0.1	272	"
"	"	"	3.5	3.5	3.4	0.0	96	"
Parkinson & Frodsham,	875	1826	8.4	8.3	7.3	0.4	53	"
"	762	"	"	4.5	3.5	1.	96	"
"	873	"	"	— 0.5	— 0.3	— 0.2	56	"
"	928	"	— 1.	— 0.6	— 0.1	0.0	156	"
"	427	1825	— 1.7	— 3.9	— 2.5	— 1.8	167	"
"	"	1826	— 2.5	— 3.0	— 2.2	— 0.6	153	"
"	920	1826	8.4	8.1	7.1	0.2	40	"
"	"	1827	7.1	9.1	8.1	1.5	46	"
"	966	1827	0.6	2.0	4.	— 0.3	53	"
"	873	"	— 0.3	0.1	— 1.1	0.8	55	"
Barraud,	457	"	— 2.5	— 2.4	2.0	— 2.2	55	"
J. M. French,	1990	"	— 1.0	— 0.7	2.3	— 1.6	55	"
Parkinson & Frodsham,	981	"	— 0.6	— 0.2	— 0.7	0.4	55	"
Richard Hornby,	119	1826	— 4.0	— 5.9	— 4.0	— 1.9	229	"
John Wood,	155	1827	— 3.4	— 6.5	— 7.7	— 1.0	200	40 tons of iron.
Penlington,	2918	"	4.6	2.8	3.8	— 1.4	64	Assorted cargo.
Parkinson & Frodsham,	1030	"	— 0.4	0.2	2.3	— 0.7	64	"
"	920	"	8.1	8.8	8.2	0.7	157	"
"	534	"	— 0.4	— 1.6	— 2.7	— 0.1	63	"
Robert Roskell	229	"	2.5	0.4	2.4	— 2.0	44	"
Parkinson & Frodsham,	811	"	— 1.1	— 1.1	0.1	— 0.6	34	"
John Wood,	70	"	3.	— 3.9	— 2.3	— 4.2	51	"
"	3148	"	— 8.5	— 8.5	— 7.0	— 0.8	"	"
Parkinson & Frodsham,	871	"	— 5.9	— 6.5	— 7.5	0.2	186	"
"	919	"	5.5	5.5	6.5	— 0.5	"	"
"	684	"	5.4	5.7	"	0.3	"	"
"	889	"	5.7	7.0	8.1	0.1	"	"
J. Moncas,	2896	"	2.5	3.1	3.5	0.1	36	"
Parkinson & Frodsham,	1056	"	1.5	3.2	5.7	— 0.4	52	"
J. Moncas,	5564	"	4.5	9.7	13.5	0.7	98	"
Parkinson & Frodsham,	698	1826	4.3	3.2	4.2	— 1.0	41	"
Robert Roskell,	168	1827	"	5.0	4.6	0.4	89	"
John Wood,	553	"	— 12.5	— 13.1	— 9.5	— 2.1	177	"
Hatton & Harris,	498	"	— 22.5	— 26.9	— 29.3	— 1.0	170	"
Parkinson & Frodsham,	669	1826	— 3.6	— 3.6	— 2.7	— 0.5	294	"
Finer & Nowland,	"	1827	3.3	3.1	0.7	1.1	37	"
Parkinson & Frodsham,	704	"	3.8	4.3	4.2	0.3	62	"
"	832	"	10.8	11.9	11.5	0.7	59	"
"	873	"	— 0.4	— 1.8	— 0.7	— 1.3	50	"
"	1091	"	— 1.0	0.1	— 0.1	0.6	50	"
"	1079	"	— 0.9	1.3	5.2	— 0.8	50	"
"	594	"	— 2.8	— 2.2	0.4	— 1.0	36	"
Hedge & Bannister,	6844	1824	— 3.0	— 6.5	— 5.7	— 2.2	75	"
Parkinson & Frodsham,	891	1827	1.0	1.0	1.7	— 0.3	161	Sugar, &c.
"	"	"	"	1.7	— 1.7	3.4	32	150 tons of iron.
"	933	"	4.0	10.	10.6	2.7	53	Assorted cargo.
"	866	"	5.5	7.2	7.0	1.0	60	"
"	928	1826	0.1	0.8	"	0.7	65	"
"	"	1827	0.1	1.7	4.8	— 0.7	90	Sugar, &c.
"	"	"	"	2.4	4.8	— 2.4	"	30 tons of iron.
John Wood,	550	1826	1.6	3.2	"	1.6	173	Assorted cargo.
"	"	1827	— 3.2	— 4.7	— 4.1	— 1.1	60	"
John Moncas,	2575	"	3.0	5.0	6.4	0.3	43	"
Parkinson & Frodsham,	887	"	18.2	19.5	18.5	1.2	56	"
John Wood,	146	"	5.0	5.	2.5	1.2	20	Salt, grindstones.
"	"	"	5.0	3.8	2.5	0.0	133	Sugar and coffee.
"	"	"	5.0	2.2	2.5	— 1.5	107	350 tons of iron.
John Penlington,	2918	"	2.0	1.3	— 2.1	1.3	31	Transport.
Parkinson & Frodsham,	752	"	2.8	3.7	3.2	0.7	59	30 tons of iron.
Wideham,	941	"	7.3	9.8	7.3	2.5	49	Fruit.

Makers' names and numbers.	Year.	Previous shore rate + or -	Rate on ship-board + or -	Subse- quent shore rate + or -	Excess of gain or loss on ship-board.	Number of days on ship- board.	General remarks.	
	No.	"	"	"	"	"		
Widenham,	941	1827	7.3	10.1	9.2	1.9	51	Fruit.
Parkinson & Frodsham,	549	1826	- 2.4	- 1.5	- 0.5	- 0.1	388	"
J. M. French,	367	"	8.0	8.	0.	0.		"
J. R. Arnold,	1678	1827	- 1.5	- 8.2	-10.8	- 2.1	72	Corn.
Roskell,	168	"	5.0	5.1		0.1	76	Assorted cargo.
Parkinson & Frodsham,	871	"	- 7.5	- 8.6	-11.3	0.8	72	"
Brockbank,	711	"	- 4.0	- 5.2	- 1.4	- 2.5	119	"
Thompson,	661	"	3.0	- 5.3	- 3.0	- 5.3	94	"
John Wood,	148	"	- 0.8	0.9		1.7		"
Parkinson & Frodsham,	1035	"	0.	0.7	0.5	0.2	116	"
"	920	"	8.1	8.4	7.0	0.9		"
"	"	"	7.0	8.8	7.8	1.4	54	"
Arnold,	388	"	- 2.0	- 6.1	- 8.4	- 0.9	79	"
Parkinson & Frodsham,	799	"		8.7	8.3	0.4	101	Sugar, coffee, &c.
"	"	"		8.6	8.3	0.3	50	300 tons of iron.
John Wood,	30	1821	0.8	- 3.0	- 3.0	- 1.9	232	Assorted cargo.
"	31	1824	- 2.2	- 2.5	- 2.2	- 0.3	88	"
"	"	1825	- 2.2	- 2.8	- 3.1	- 0.2	484	"
Parkinson & Frodsham,	905	1826	- 1.8	- 2.6	- 2.2	- 0.6	54	"
John Gibson,	"	"	- 6.9	- 8.1	- 5.	- 2.2	72	"
Parkinson & Frodsham,	887	"	2.7	9.5	12.2	2.1	63	"
Duncan,	53	"	- 3.7	- 2.6	- 4.1	1.3		To China and
John Wood,	1315	"	5.4	4.4	4.0	- 0.3	55	home.
Parkinson & Frodsham,	835	1827	5.7	9.2	7.5	2.6	165	Assorted cargo.
"	871	1826	- 4.1	- 6.4	- 5.9	- 1.4	120	"
"	"	1827	- 5.9	- 7.1	- 7.5	- 0.4	200	"
"	1061	"	- 1.6	- 2.2	- 0.8	- 1.0	61	"
Ham,	373	"	- 4.5	- 5.3	- 5.8	- 0.2	210	"
John Wood,	151	"	9.5	7.4	- 0.1	2.6	144	"
Parkinson & Frodsham,	1090	"	1.0	0.2	- 0.8	0.1	109	"
J. M. French,	366	"	-14.5	-15.5	-16.1	- 0.2	79	"
Parkinson & Frodsham,	901	"		20.5	19.0	1.5		India.
"	919	1826	- 0.2	- 0.9	- 1.9	0.1	47	"
G. Hornby & Son,	85	1822	5.0	5.0	5.5	- 0.2	35	"
Robert Roskell,	140	1823	1.0	- 1.6	- 4.3	0.0	241	"
Hatton & Harris,	591	"	- 2.4	- 2.7	- 4.0	0.5	203	"
S. J. Tobias,	3359	1825	2.5	0.1	- 0.2	- 1.0	112	"
Parkinson & Frodsham,	234	1824	- 1.3	- 3.2	- 0.3	- 2.4	387	India and home.
Robert Roskell,	307	1826	-13.7	-14.4		- 0.7	100	"
Parkinson & Frodsham,	427	1824	2.1	0.3		- 1.8	37	"
J. M. French,	3837	"	2.5	- 5.7	2.0	- 7.9	49	Assorted cargo.
Duncan,	641	"	- 3.5	- 2.6	- 6.1	2.2	49	"
John Wood,	146	"	- 2.5	1.3	3.7	0.7	54	"
Parkinson & Frodsham,	981	1827	- 0.6	1.8	3.6	0.3	113	"
"	125	1825	- 7.6	- 8.0	- 8.0	- 0.2		Pacific ocean.
"	"	1826	- 8.0	- 7.5	- 6.9	0.0		"
John Wood,	156	1827	- 0.5	- 1.1	- 3.7	1.0	67	"
J. Johnson,	36	1825		- 4.4	- 3.9	- 0.5		China.
Parkinson & Frodsham,	727	1827	8.0	6.3	8.0	- 1.7	169	Assorted cargo.
"	"	1828	8.0	6.6	4.4	0.4	28	"
"	1030	1827	3.0	1.9	2.2	- 0.7	57	"
"	549	1826	- 4.2	- 3.9	- 2.4	- 0.6	169	"
"	669	1824	- 0.8	0.1	0.5	0.2	45	"
"	"	"	1.0	- 4.9	- 5.6	- 2.6	107	"
"	"	1825	- 5.6	- 5.5	- 4.1	- 0.7	187	"
"	"	"	- 4.1	- 4.1	- 3.6	- 0.3	338	"
"	"	1826	- 3.6	- 3.6	- 2.7	- 0.5	294	"
"	"	1827	- 2.7	- 3.6	- 2.5	- 1.0	143	"
"	1052	"	1.0	5.9	5.2	2.8	197	"
"	1138	"	1.6	0.6		- 1.0	66	"
John Wood,	3148	1828	- 8.0	- 9.0	- 9.0	- 0.5	33	"
Duncan,	641	1827	2.0	3.0	2.0	1.0	103	"
Parkinson & Frodsham,	811	"	0.2	0.2	- 0.9	0.5	136	"

Makers' names and numbers.	Year.	Previous shore rate + or -	Rate on ship board + or -	Subsequent shore rate + or -	Excess of gain or loss on ship-board.	Number of days on ship-board.	General remarks.
J. Johnson, No. 46	1828	1.0	- 2.0	- 2.0	- 1.5	35	Assorted cargo.
Robert Roskell, 168	1827	10.0	7.5	11.0	- 3.0	75	" "
Parkinson & Frodsham, 534	1828	- 3.7	- 4.8	- 4.7	- 0.6	26	" "
" " 1144	"	- 0.7	0.9	1.6	0.5	44	" "
" " 1100	"	0.6	0.9	0.3	0.5	48	" "
John Wood, 163	1827	- 4.8	- 4.6	- 5.0	0.3	113	" "
Widenham, 955	"	3.2	3.6	3.9	0.1	206	" "
" " 1828	"	3.9	4.8	4.9	0.4	122	" "
Parkinson & Frodsham, 871	"	-11.4	-10.3	-11.8	1.3	69	" "
" " 832	"	11.0	10.8	10.0	0.3	66	" "
J. Johnson, 57	"	4.5	3.9	5.7	- 1.2	252	" "
Thompson, 661	"	- 3.0	- 4.2	0.	- 2.7	98	" "
Parkinson & Frodsham, 1047	1827	8.1	9.5	11.5	- 0.3	231	" "
Richard Hornby, 266	"	1.0	1.4	2.0	- 0.1	85	" "
" " "	"	2.0	5.1	6.1	1.1	105	" "
Parkinson & Frodsham, 1142	1828	- 0.2	0.3	0.1	0.3	58	" "
Moncas, 2575	"	8.5	7.7	9.0	- 1.0	42	" "
John Wood, 30	1827	- 6.8	- 5.2	- 3.5	- 0.1	179	" "
Parkinson & Frodsham, 1184	1828	- 1.0	0.4	2.0	- 0.1	29	" "
" " 430	1821	1.4	5.5	6.5	1.5	240	{ Homeward cargo, 150 tons of iron.
" " "	1822	6.5	7.2	10.8	- 1.4	281	" "
" " 1007	1828	- 1.2	- 3.3	- 3.3	- 1.1	32	" "
" " 981	"	4.2	2.7	2.3	- 0.5	95	" "
James Murray 577	"	5.3	2.3	5.3	- 3.	96	300 tons of iron.
Parkinson & Frodsham, 1170	"	2.8	3.0	3.0	0.1	36	" "
" " 1006	"	- 1.5	- 2.9	- 2.2	- 1.0	37	" "
" " 704	"		3.6	3.5	0.1	72	" "
Duncan, 53	1827	- 3.2	- 3.5	- 6.8	1.5		India.
Parkinson & Frodsham, 613	"	- 7.0	- 7.9	- 7.9	- 0.5	176	" "
" " 430	1825	11.0	11.2	15.5	- 2.0	137	{ Homeward cargo, 150 tons of iron.
" " "	1826	15.5	15.5	13.1	1.2	175	Fruit.
" " "	"	13.1	15.	17.2	- 0.1	142	{ Homeward cargo, 150 tons of iron.
" " "	1827	- 2.5	- 1.4	- 1.0	0.3	313	Assorted cargo.
John Wood, 151	1828	5.5	6.5	5.7	0.9	30	" "
Robert Roskell, 268	"	- 1.0	- 4.0	- 7.4	0.2	317	" "
Parkinson & Frodsham, 811	"	- 0.9	0.2		0.2	86	" "
Duncan, 641	"	2.0	3.7	- 5.2	0.1	91	" "
Parkinson & Frodsham, 871	"	-12.0	- 9.6	- 8.6	0.7	89	" "
" " 439	"	7.0	7.5	10.2	- 1.1	127	" "
" " 866	"	7.1	6.8	7.3	- 0.4	101	" "
" " 698	"	12.2	9.9	12.0	- 2.2	175	" "
John Wood, 155	1827	- 7.5	- 6.5	- 7.1	0.8		" "
Parkinson & Frodsham, 832	1828	10.0	14.	17.	0.5	114	" "
" " 1122	"	2.0	2.6	5.0	- 0.9	95	" "
" " "	"	5.0	7.1	9.3	0.0	53	" "
Arnold, 388	"	- 5.5	- 5.1	- 4.0	- 0.4	154	" "
Parkinson & Frodsham, 609	1827	- 3.5	- 3.3	- 3.6	0.3	220	" "
" " 966	1828	6.2	8.6	11.6	- 0.3	120	" "
" " 1091	"	2.6	4.8	8.2	- 0.6	77	" "
" " 873	"	1.5	1.5	1.5	0.0	27	" "
" " "	"	1.5	= 0.0	1.6	- 1.5	45	" "
Roskell, 102	"	10.0	14.0	13.3	2.4	136	" "
Parkinson & Frodsham, 1030	"	2.3	3.4	4.1	0.2	177	" "
John Wood, 3148	"	-12.8	-12.3	-12.0	0.1	27	" "
" " "	"	-12.0	-13.1	-15.6	0.7	56	" "
Parkinson & Frodsham, 1146	"	2.3	2.6	3.8	- 0.4	47	" "
Charles Young, 10	"	3.8	4.2	5.8	- 0.6	408	India.
Parkinson & Frodsham, 933	"	11.5	15.4	25.7	- 3.2	282	" "
John Arnold, 10	"	2.8	6.4	5.4	2.3	241	" "
Parkinson & Frodsham, 1056	"	10.0	12.8	18.6	- 1.5	346	" "

Makers' names and numbers.	No.	Year.	Previous shore rate + or -	Rate on ship-board + or -	Subsequent shore rate + or -	Excess of gain or loss on ship-board.	Number of days on ship-board.	General remarks.
Parkinson & Frodsham,	1174	1828	- 4.0	- 9.0	11.0	- 1.5	55	Assorted cargo.
" "	1179	"	- 2.0	0.9	3.7	0.0	55	" "
" "	1100	"	3.0	4.3	5.5	0.0	55	" "
" "	900	"	9.9	14.8	16.9	1.4	56	" "
" "	599	"	6.0	6.2	8.1	- 0.8	56	" "
Barraud,	2-551	"	- 5.5	- 3.0	- 7.4	3.4	192	" "
Parkinson & Frodsham,	508	1826-8	8.5	10.5	12.3	0.1	677	" "
Robert Roskell,	458	1828	2.5	3.3	3.2	0.5	64	" "
Barraud,	413	"	3.5	0.5	3.1	- 2.8	56	" "
Parkinson & Frodsham,	1028	"	1.3	0.4	1.9	- 1.2	41	" "
" "	940	"	"	2.0	1.9	0.1	"	" "
" "	669	"	- 2.0	- 3.4	"	- 1.4	199	" "
" "	981	"	3.5	3.4	3.0	0.2	146	" "
" "	1210	"	- 1.5	0.4	- 2.5	2.4	58	" "
" "	521	"	- 1.2	- 1.1	- 1.6	0.3	74	" "
" "	752	"	3.4	6.4	7.3	1.1	209	" "
" "	947	"	4.7	6.3	10.0	- 1.0	254	" "
Thompson,	661	"	- 2.0	- 6.0	- 1.2	- 4.4	200	" "
Parkinson & Frodsham,	430	"	- 0.5	0.6	- 1.7	1.7	167	" "
" "	832	"	17.0	15.7	16.7	- 1.1	83	" "
" "	599	"	8.1	7.9	7.5	0.1	84	" "
" "	873	"	1.6	0.6	- 0.4	0.0	95	" "
Richard Hornby	309	"	- 2.7	- 4.4	- 5.7	- 0.2	42	" "
Widenham,	934	"	5.3	1.0	- 5.0	0.9	80	" "
Parkinson & Frodsham,	937	"	6.0	4.1	8.5	3.1	57	" "
John Wood,	39	"	- 3.5	- 2.2	- 4.1	1.6	214	" "
Parkinson & Frodsham,	1053	"	- 1.8	- 1.8	- 1.8	0.0	61	" "
" "	1246	"	2.0	4.0	5.4	0.3	61	" "
" "	966	"	- 1.0	- 1.9	- 1.5	- 0.6	112	" "
" "	1184	"	4.1	4.2	3.9	0.2	68	" "
" "	1088	"	4.5	- 2.2	- 0.3	0.2	60	" "
" "	901	"	- 0.2	- 0.7	- 1.2	0.0	50	" "
Brockbank,	412	"	- 3.8	- 7.4	- 11.8	0.4	99	" "
Parkinson & Frodsham,	1210	1829	- 1.7	- 1.5	- 2.0	0.3	47	" "
" "	1242	"	- 1.0	- 2.6	- 2.8	- 0.7	47	" "
" "	635	1828	- 1.5	- 2.3	- 2.4	0.3	102	" "
" "	"	1829	- 2.6	- 5.5	- 5.3	- 1.5	41	" "
" "	1100	"	2.3	2.1	2.3	- 0.2	57	" "
" "	1215	"	- 2.1	0.2	1.1	0.7	57	" "
" "	1030	"	4.1	4.2	4.9	- 0.3	202	70 tons of iron.

## SUMMARY.

Whole number of Cases . . . . .	226
Number in which there appears to have been an <i>acceleration</i> on the <i>mean</i> of the first and last shore rates . . . . .	105
Number wherein there appears to have been a <i>loss</i> on the mean of the first and subsequent shore rates . . . . .	108
Difference . . . . .	3
Number wherein the error did not exceed a second . . . . .	149
Number wherein the error did not exceed two seconds . . . . .	194
Number wherein the error did not exceed one tenth of a second . . . . .	32



## VII.

### *Remarks and Inquiries concerning the Birds of Massachusetts.*

BY THOMAS NUTTALL.

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As, in the diversified pursuits of Natural History, many questions arise, and doubts occur, of difficult solution without the aid of extensive observations, I have thought that it might prove useful to offer, in the Transactions of the Academy, suggestions and inquiries concerning the birds which are met with, in the New England States; soliciting, in this way, additional information, by bringing the subject before the public, and calling the attention of individuals to facts which are probably familiar to them, and which, if better known, through this medium, would tend much to enlarge our knowledge concerning the objects of nature, as well as their use and economy. I therefore propose, in the order of their usual classification, the following remarks.

And first, among the rapacious tribe of the Hawks and Eagles, and deservedly at the head of the list, stands the Washington Eagle, of the celebrated Audubon.\* The author first observed this majestic bird soaring over the banks of the Mississippi; and, on the borders of Green River

\* There is now a copy of this magnificent publication, on the Birds of the United States, in the Boston Athenæum.

in Kentucky, near to its junction with the Ohio, he discovered its eyry in some rocky cliffs. Its food, like that of the Bald Eagle, consists principally of fish. According to the magnificent plate of Audubon, it appears to be wholly of an almost uniform dark brown. If this be the color of the adult bird, it is unquestionably a new species, and an additional piscatory kind to those already known. A specimen from the vicinity of Egg-Harbor in new Jersey, is now in Brannau's Museum, in Market Street, Philadelphia; but in this there are some white spots, indicating the incomplete character of the plumage. The Sea Eagle, of which the Erne, or *White-tailed* Eagle, is only the adult, has long been included in the catalogue of North American birds, but never actually produced as any other animal than the *young* Washington Eagle. Wilson's Sea Eagle is only the young of the Bald Eagle; and it now remains for inquiry, whether the marine or piscatory species of America, first well defined by Audubon, is, or is not, the Sea Eagle of Europe. According to the measurements given by Temminck,\* our bird is of more than double the cubic volume of the Erne; but the Great Sea Eagle of Brisson and Buffon (*Planche Enluminee*, vol. II. pl. 112.) is of the same size with our bird of Washington, and in plumage almost exactly similar to the young of that species. The American bird, is, therefore, probably also indigenous to northern Europe, but confounded with the ordinary Sea Eagle. As the young Washington Eagle is seen more or less, almost every winter, in the vicinity of Boston, it would settle an interesting point in its history, if some individual would have the laudable curiosity to keep a live specimen for about two or three years, until we

\* Manuel d'Ornithologie, vol. I. p. 49. (Ed. alt.)

might be satisfied from the settled character of the plumage, whether this bird deserves or not the rank of a distinct species?

*Falco islandicus*. TEM. *F. islandicus candicans*. LATH. Ind. Orn. I. p. 32. No. 69. In the course of the present winter in the months of January and February, one of these celebrated White Jerfalcons has been frequently seen in the vicinity of Fresh Pond in Cambridge.

*Falco Harlani*, AUDUBON, or (Black Buzzard.) This species was discovered by the author during his last collecting excursion in the mountains of Pennsylvania. It appears to be of about the size of the Red-tailed Hawk or Buzzard, almost wholly, both above and below, of a fine purplish black, and is readily distinguishable from Wilson's *Black Hawk*, or St. John's Falcon, by the unfeathered tarsus. Has this remarkable species yet been seen in any part of New England?

*Falco Stanleyi*, AUDUBON. pl. This is another Buzzard, bearing some resemblance to the young of the Red-tailed species, (*F. borealis*.) It is, however, perfectly distinct, and approaches nearer to the Buzzard of Pennant's Arctic Zoology, No. 103. vol. I. p. 241., which is certainly not the Buzzard of Europe, hitherto unknown in America. A bird nearly related to this of Audubon, which I have consequently termed *Falco \*buteoides*, is not unfrequent in this vicinity, and known, with several others, by the name of Hen-Hawk. It is wholly dark brown, spotted more or less with white or brownish white, of which latter color, diversified with oblong dark spots, is nearly the whole under side of the body; the femorals are marked with hastate spots. The wings are shorter than the tail, the latter rather obscurely barred (in the male) with nine or ten dusky confluent stripes. The legs

and feet are yellow. Length of the male, twenty inches ; of the female, more than two feet. Any thing respecting the nest or habits of this species, which probably breeds in this vicinity, would be interesting to the naturalist.

*Falco atricapillus*, (Ash-colored Hawk of WILSON.) *F. palumbarius*, or Goshawk of BONAPARTE. *F. regalis* TEMMINCK (Planche Coloriée.)\* This beautiful species, so nearly related to the Goshawk of Europe, turns out to be distinct. It is considerably larger, and the transverse spots on the lower part of the body are much more numerous, with several on the *same* feather. It is curious thus to find, among both the plants and the animals of North America, types of form so nearly identic, that they may almost be presumed to be the same species altered by extraneous circumstances. Information respecting the habits and breeding-places of this bird, are also among the desiderata of natural history, which it would be interesting to supply. It is seen occasionally in this part of Massachusetts, and probably passes the summer in the mountainous districts of New Hampshire, where the Golden Eagle or Ring-Tail is likewise known to have its eyry.

*Falco Sparverius*, (American Sparrow-Hawk,) and *Falco columbarius*, (the Pigeon-Hawk.) Are these species ever seen in any of the northern States beyond Connecticut? I have never met with either in this part of Massachusetts.

*Falco peregrinus*. L. The Falcon. (Great-footed Hawk of WILSON.) Is the American bird truly identic with the European? It is not quoted by Temminck as an American species, nor does he offer any quotation of Wilson's excellent figure. The

\* For this synonym I am indebted to my friend William Cooper Esq. of New York.



spirited group given by Audubon, in the act of plucking and devouring ducks, are not, apparently, in any way distinguishable from the European bird; but are they drawn from the American individuals? It is possible, as in the case of the Goshawk, that the United States may again produce another ambiguous link in the genus.

*Falco hiemalis*, (The Winter Falcon,) and *Falco lineatus*, (The Red-shouldered Hawk.) By Bonaparte the latter is considered as the young of the former, but we do not know for what reason. In the latter the tail has five white bars; in the former, about nine pale brown stripes. Can the *same* species vary so much in the comparative length and markings of the tail?

*Strix scandiaca*, LIN. (Great Black and White Eared Owl, or Scandinavian Eared Owl.) With the plumage entirely white, sprinkled with black spots. Of the size of a Turkey, and in all respects nearly like the Snowy Owl, with the exception of the ears. A very doubtful species taken up by Linnæus, apparently from a painting of Rudbeck's, though seen since by Mr. Tønning of Drontheim. It is enumerated by the late William Bartram in his list of the birds of the United States. A bird very similar to this description has been seen in the vicinity of Cambridge. Any information tending to establish its existence would be very acceptable to naturalists, as well as any remarks concerning its cry or habits.

*Strix cinerea*, (Great Sooty Owl.) Of a dark sooty color, mottled with whitish; the face dark ash-colored, with many narrow black concentric circles; the tail extending beyond the wings, both of which are crossed with bordered bands and scattered with zigzag lines; the bill yellowish; the irids yellow.

This largest and rarest of American owls (probably also a native of arctic Lapland) is better than two feet long. An individual was caught dozing on a wood-pile last February at Marblehead, and is now dead and deposited in the Salem Museum. Has this bird been seen in other parts of the state, and under what circumstances? Its cry and general habits are nearly unknown. It has heretofore been met with in no part of the United States nearer than the shores of Lake Superior.

*Lanius septentrionalis*, (Great American Shrike.) *L. excubitor* of Wilson. This bird is known to mimic the notes of other birds, and to possess also something of a song. To what extent is this mimicry carried, and does it appear really to be used for any sinister purpose of decoying its prey? or is it the effect of mere caprice? They occasionally breed in this part of New England. How, and of what materials, is the nest formed, and at what time of the year? Some of these questions, indeed, appear to be already answered, but all doubt is not removed.

*Garrulus canadensis*, (Canada Jay.) This bird, no doubt, regularly visits, if it does not breed, in Maine or New Hampshire. Any particulars concerning its note, food, nest, or habits, would fill up a blank, and remove a doubt from its history.

*Quiscalus ferrugineus*, (Rusty Blackbird.) This species probably breeds in the most northern States, and in similar places with the common Blackbird. What are its musical powers at the period of incubation? What other particulars can be given concerning its nest and habits, as yet a desideratum in its history?

*Coccyzus americanus*, (American Cuckoo.) Does this bird extend its migrations much beyond the limits of the state of Massachusetts?

*Picus tridactylus*, (Three-toed Yellow-headed Woodpecker.)

Is this northern species often seen in Maine or New Hampshire? Any particulars of its history would be very acceptable to the naturalist.

*Picus major*, (Greater Spotted Woodpecker.) Is this European species really indigenous to any part of America, as stated by Pennant and others, and included in Wilson's Index, but nowhere described by him?

*Sitta carolinensis*, (White-breasted Nuthatch.) According to the information of my friend, Z. Collins, Esq. of Philadelphia, this is the bird known in Pennsylvania by the name of the *Whet-Saw*, from the resemblance its tones sometimes bear to the filing or whetting of a saw. Mr. White, in his amusing Sketches of the Natural History of Selborne (vol. I. p. 174.), remarks, that the Marsh Titmouse (our Chicadee), in the month of February, uttered (at times) two quaint notes like the whetting of a saw. I have never heard any such note from the Marsh Titmouse, and therefore conceive it probable that the author might have mistaken the European Sitta for the Titmouse, as they resemble each other in a great degree; and, from the near affinity of our larger Nuthatches to that of the old continent, they may be supposed capable of uttering very similar tones. This singular note has also been attributed in the United States to some other bird. I therefore would solicit additional information on the subject.

*Troglodytes palustris*, (Marsh Wren.) This species, which probably extends its migrations as far north as Connecticut, is unknown in Massachusetts, and its place and habits are exchanged with the following new species.



Short-Billed Marsh-Wren.

*Troglodytes \*brevirostris.* In this the bill is much shorter than the head, the plumage above a mixture of black, pale brown, and whitish; the wings are also barred with the same colors, and the head likewise striated; beneath, except the white throat and centre of the breast, the color is pale rufous. — This amusing and musical little species inhabits the lowest marshy meadows and swamps, but does not frequent the reeds. It never visits cultivated grounds, and is at all times shy, timid, and suspicious. Its nest is made wholly of dry or partly green sedge-grass, bent mostly from the top of the tussock on which the fabric is situated. With much ingenuity and labor these simple materials are entwined loosely together into the form of a cocoa-nut or sphere, with a small and rather obscure entrance left in the side. No mud is employed in the construction, as with the ordinary Marsh-Wren; and the eggs, instead of dark rufous or chesnut color, are pure white and spotless. It is a singular fact, in the history of this species, that, notwithstanding



its migrations to the tropical parts of the continent in winter (none remaining in the United States through that season), it should be unknown, as yet, in Pennsylvania. It is therefore very desirable to know with certainty the southern limits of the summer migrations of this species, no doubt confounded with the preceding. It is also yet a matter of inquiry whether the Marsh-Wren is found in Maine and New Hampshire, and in Nova Scotia. On comparing our bird with the *Sylvia platensis* (also a *Troglodytes*), figured by Buffon in the Planches Enluminees, it is difficult to point out any specific difference betwixt these inhabitants of two different hemispheres.

*Icterus phœniceus*, (Red-Winged Blackbird.) According to Wilson and Bonaparte, the female of this species is only about half the cubic bulk of the male. Unable to reconcile this singular anomaly with the usual economy of nature, I have been led to investigate the subject with a view to some solution, and I am now nearly convinced of the existence of *two* species in the supposed pair of the Red-Wing. Du Pratz and Latham both suspected the existence of two kinds. "Some," says the latter, "have every feather, even the *red* ones, margined with *white*, many of which I have seen. Some tell me that they are young ones; others, that they are a distinct species, which do not keep company with the others; and not a few, that they are the *females*; but what has been shown to me for a *female*, by an intelligent observer, had no red on the wing, yet was margined with white like the others. The above want investigation; and it is to be hoped that some future curious observer will take some pains to set us right in this matter;"\* since which candid inquiry

\* Latham's Synopsis, vol. II. p. 429. 4to.

the subject has been suffered to rest without any supposition of error in the designation of the species. I have, however, obtained a true female specimen of the Red-winged Blackbird, which only lacks about an inch of the length of the male. The assumed female of Wilson is the consort of a new and *second* species, which I propose to call *Icterus \*maculatus*. In this, both male and female are constantly spotted with black and *white*; the male has also the scarlet shoulder of the common kind, but its feathers, like all the rest, have dark centers. A less perfect male than the one I have examined is also given by Audubon, pl. fig. as an old female of the *I. phæniceus*. The length of the male is  $8\frac{1}{2}$  inches, and that of the female 8. The habits of this species, as I consider it, are undetermined, as well as the nest and eggs. It is less common than the preceding in this part of America, and, from its being familiar to Du Pratz, I conceive it to be rather a southern species. Further information concerning this smaller kind, which may settle its claim to be regarded as distinct, is therefore very desirable.

*Turdus polyglottos*, (The Mocking Bird.) Has this celebrated songster ever been met with, except perhaps as a straggler, in Massachusetts, or been known to breed to the north of Rhode Island?

*Loxia ludoviciana*, (Rose-breasted, or Bloody-breasted Grosbeak.) Is this beautiful songster seen in any of the New England States? Any particulars respecting this interesting bird, yet so little known, will be received as a favor by the naturalist. It appears to be wholly a *north-western* species.

*Loxia enucleator*, (Pine Grosbeak.) Of this rare visitor from the north we are also very ignorant; almost every thing asserted respecting it is either vague, unimportant, or doubtful.

Crossbills, (*Curvirostra* of Wilson, *Loxia* of Bonaparte, &c.) Large flocks of these curious-billed birds pay irregular visits to the northern and middle States. There are two species; and the *C. leucoptera* is distinguished by the white bar on the wing, wanting in the other. Any particulars concerning these transitory visitors (who may possibly breed in the mountains of New Hampshire) would assist to fill up a blank in their history.

*Emberiza leucocephala*, (White-crowned Bunting of Wilson, &c.) This is another straggler from the north, paying us transient and uncertain visits at the approach of winter. Of its manners, place of breeding, &c. *certain* information is wanting. Are any seen in summer in the mountainous districts of New Hampshire?

*Fringilla arborea*, (Tree-Sparrow.) This species bears a great resemblance to the Chipping Sparrow, but it is larger, has something of a song, and the lower mandible of the bill is yellow; it passes the winter in the middle and several of the New England States. Does it ever breed or appear in the summer in New Hampshire or Maine?

*Fringilla hudsonia*, WILSON, (The Blackish Snow-Bird.) Wilson speaks of this species breeding in the mountains of Virginia. Is it known to pass the summer for that purpose in any of the mountainous parts of New England?

*Fringilla ferruginea*, WILSON, &c. (Fox-colored Sparrow.) Is this northern species, seen with us only in winter, known to breed in any part of the United States? Any particulars concerning it will tend to fill up a blank in its history.

*Fringilla linaria*, (Lesser Red-poll.) Does this species breed, or pass the summer, in any part of the United States?

*Fringilla purpurea*, (Purple Finch, called here the Linnet.)

Any particulars respecting the nest and eggs of this fine and beautiful songster, which passes the summer in our vicinity, will be interesting in its history.

*Muscicapa virens*, (The Wood Pewee.) What is the bird which utters the note attributed improperly to this species by Wilson? A new species nearly related to this, *M. Traillii*, is given by Audubon, pl. 45. What are the notes of this?

*Muscicapa \*inornata*, (Olive-sided Pewee.) This large, new species, which at first glance so much resembles the common King-Bird, was obtained in this vicinity; and was received about the same time from the vicinity of Cape May and Egg-Harbor in New Jersey, by my friend, William Cooper, Esq. We have both inadvertently, but fortunately, fixed upon the same characteristic specific name, arising, no doubt, from a comparison of it with the King-Bird, from which it is obviously distinguishable by the *absence* of the reclining brilliant crest. The following specific designation may perhaps be sufficient in order to recognise it.

*Muscicapa \*inornata*. (Acad. Nat. Sc. Philad.; W. Cooper, in information by letter.) — Dusky-brown, head darker and without discolored spot; the sides olive-grey; lateral space beneath the wing white; abdomen and rump yellowish-white; under mandible horn-yellow; the tail wholly dusky, emarginate, and extending but little beyond the closed wings; second primary longest, the first and third equal.

This species appertains properly to the group of Pewees, and has a near affinity even to the wood species, but still differs in several important particulars. The specimens, both females, were obtained about the seventh of June last; and from the state of the ovaries, it was obvious they must breed in the neighbour-



hood. Information respecting their habits, notes, and nest, is wanting to complete the history of the species.

*Regulus cristatus*, (Golden-crested Wren.) Does this species ever pass the summer in any of the northern States, or mountainous districts?

*Regulus Cuvieri*, (Black-banded Ruby-crowned Wren.) This species, first given by Audubon, is readily distinguishable by the vermillion crown being bordered with a band of black. Has this species ever been seen in the northern and middle States?

*Troglodytes europæus*, (Winter Wren.) The nest of this species, and the region in which it breeds, are yet unknown in America. It is supposed to be the common Wren of Europe.

*Sylvia coronata*, (Yellow-rump Warbler, or Myrtle Bird.) As this species appears in this vicinity by the close of August, we might suppose it to breed and pass the summer at no great distance to the north. The nest and manners, in the season of incubation, are unknown.

*Sylvia icterocephala* (Chesnut-sided Yellow-crowned Warbler.) This bird, no doubt, breeds in the mountainous parts of Massachusetts. An occasional pair, I have reason to believe, pass the summer in the vicinity of the Blue Hills of Milton. As yet, however, the nest, eggs, and circumstances of incubation are unknown. Late in the month of May, I have heard this bird singing, in a tone and manner very similar to those of the common summer Yellow-Bird, (*Sylvia æstiva*.)

*Sylvia varia*, (Black and White Creeper.) A nest of this species, on the ground, was shown to me in Roxbury last summer by Mr. Newman of Cold-Spring Place. Is the nest uniformly on the ground, or is it not occasionally in hollow trees? as, like a Woodpecker, the bird passes most of its time on their trunks in quest of insects. What are the color and markings of the eggs?

*Sylvia striata*, (Black-poll Warbler.) This species, until after the middle of May, is often seen familiarly in our orchards, and possesses a strong resemblance to the preceding kind, both in its simple black and white color, and in its feeble notes, which sound merely like a whisper. The nest and eggs of this species, which undoubtedly breeds here, are also unknown. This and some other species feed greedily on the Canker-worm, and leave us for the woods when that insect descends from the trees.

*Sylvia pinus*, (Pine Warbler.) This species breeds in the neighbourhood of this place, commonly in the Red Cedars (*Juniperus virginiana*.) It is an active fly-catcher, hovering and springing on its prey with great celerity; at the same time, also, singing with sprightliness a somewhat monotonous, shrill warble. The *Sylvia autumnalis* is, I am satisfied, merely the young of this species. I have compared them carefully, and cannot discover any specific difference. They only vary in the depth of color, a circumstance which commonly distinguishes the young and old. They do not differ in size, as was believed by Wilson. And, moreover, the species seems to exist only in the autumn! How far to the north of Massachusetts is this species found? I suspect, as far as Nova Scotia, at least; since straggling individuals have been seen in this State even in the depth of winter. It arrives here early in April.

*Sylvia americana*, (Blue Yellow-back Warbler.) A few pairs of this curious species (best distinguished by the bill, of which the lower mandible *alone* is bright yellow as well as the chin,) remain with us during the summer in elevated and rather mountainous woods, but the nest and eggs are yet unknown.

*Parus bicolor*, (Crested Titmouse.) This bird is said to be a native of the United States, penetrating even as far north as

Greenland. I have, however, never met with it in Massachusetts. Is it known in the States to the north of this?

*Hirundo fulva*, (Cliff Swallow.) Any particulars respecting the history of this species, now known as an inhabitant of the northern as well as western States, are desirable.

*Tetrao canadensis*, (Black Grouse of Canada.) This species is not uncommon about Halifax in Nova Scotia. A few pairs also breed probably on the White Mountains of New Hampshire. Any particulars respecting their habits, nest, eggs, time of breeding, call, &c., would prove interesting to the naturalist.

It is only by attentive, careful, and diversified observations, that we can ever expect to arrive at any certain knowledge concerning the animals which live around us. To those severe and heartless economists, who accost every pursuit with inquiring for its *utility*, we may not have perhaps the most ready answer; but if the close contemplation of nature, sublime, innocently amusing, and often instructive, deserve the attention of the rational mind, we shall not fail to derive profit from the pursuit of Natural History. Nor need we doubt the discovery of connexions with our own wants and advantages in this pursuit, as well as others; for the labyrinthine avenues of knowledge, as they are pursued, often lead to useful results, which could not have been anticipated by their discoverers.

It must be allowed, that natural history is but too often a dry detail of the external characters of objects; that, for example, if the plumage of a bird is once settled, so that it can be recognised by others, a principal object is supposed to be attained. The interesting phenomena of life and action, varied and modified with the subject, the ties of sympathy by which

they are drawn into a common interest with ourselves, and which should influence our feelings and instruct our minds, are too generally treated as subordinate objects of study; and hence we find, even in Europe, that the birds which have been generally known for several thousands of years, as having an existence, have not yet been studied with any care, in reference to their manners and habits, as holding any marked place in the general scale of creation.

Cambridge, April, 1831.



## VIII.

*A Meteorological Journal from the Year 1786 to the Year 1829,  
inclusive,*

BY EDWARD A. HOLYOKE, M. D., A. A. S.

*With a Prefatory Memoir*

BY ENOCH HALE, M. D., A. A. S.

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THE meteorological journal of Dr. Holyoke furnishes a series of observations, made with great care, and continued for a longer period of time by the same individual, than any other of which we have knowledge. It begins with the year 1786, and continues with entire regularity, and with only a few occasional omissions of a part of a day, to the end of 1821, a period of thirty-six years. From the fulness and accuracy of the journal from its commencement, it is manifest that the subject had engaged his attention for some time before; but I do not find that he has left any record of previous observations, except a few notices of remarkable phenomena. After 1821, Dr. Holyoke continued his observations in a less regular manner to the time of his death in 1829; but the greater part of them are not sufficiently complete for publication.

The manuscript journal for the thirty-six years has been presented to the Academy by the family of Dr. Holyoke. It is in

thirty-six volumes, all in Dr. Holyoke's hand-writing; and while it exhibits a fine specimen of his characteristic neatness and regularity, it furnishes a striking and interesting proof of his love for scientific investigations, which did not forsake him at so advanced a period of life. The journal contains two observations daily with the barometer; and eight (four within doors, and four abroad) with the thermometer; four observations of the course of the winds, and at least four of the state of the weather, faces of the sky, &c.; and, a great part of the time, four observations with a hygrometer. In addition to these, there are frequent occasional observations of unusual degrees of heat or cold at other hours; and sometimes an additional observation is continued daily for several months, recording either the temperature at sunrise, or the extreme heat of the mid-day sun. There are also interspersed a great variety of miscellaneous notices, of atmospheric phenomena, meteors, halos, aurora borealis, &c., and of the state of the seasons, as indicated by the progress and state of vegetation; and sometimes there is a notice of the prevalence of particular diseases.

In preparing this journal for the press, it was found that only a part of these various observations could be published. To print the whole in detail, would occupy much more room than could be spared for such an object. In making the selection of such parts as seem best adapted to purposes of general utility and interest, regard has been had to the facility of a comparison with other similar observations, as well as to the nature and completeness of the observations themselves. In this point of view the observations with the barometer and thermometer are the most satisfactory, because in the present improved state of those instruments, they furnish a ready comparison with cor-

responding observations made in any part of the world. The state of the weather from day to day for a long period has an important bearing upon the question respecting the supposed melioration of our climate. These are therefore the items selected for publication.

In the manuscript journal, the state of the weather is recorded by characters, which distinguish the several states of the atmosphere with great minuteness; serene, fair, pleasant; slight cloudiness, cloudy, flying clouds; drizzly, shower, rain, much rain; sprinkling of snow, snow, much snow, and many other particulars. All these are in the printed journal reduced to the five general states of the weather, Fair, Cloudy, Rain, Hail, and Snow; each of which is designated by its proper initial letter.

It will be observed, that the hour of observation varies a little in different years. The first, in the morning, was generally made at eight o'clock, but sometimes "from eight to nine." No notice is taken of this variation in the printed journal. The second observation is recorded in the original as made in some years "about noon," in others "at noon"; in others "about twelve," "at one P. M.," "at two P. M.," and "between one and two P. M." The object appears to have been to make it, as nearly as possible, at the hottest part of the day.\* The third observation was, for the first year, 1786, made between three and four P. M., and is omitted in the publication; afterwards it was made at sun-

\* While engaged in full practice, as Dr. Holyoke was during a great part of his life, it must have been impossible for him to make his observations in the middle of the day, always precisely at the same hour. I am persuaded however, from a comparison of the different parts of his journal, that the observation at noon is fully as high, and probably a little higher, than it would have been if any hour had been selected and the observation always made at that time.

set; and the fourth was uniformly at ten in the evening. It is much to be regretted that the observation at sunrise was not continued a sufficient length of time, and with sufficient regularity, to be of much value.

Abstracts of the thermometrical journal for thirty-three years have already been published in the Academy's Memoirs; the first seven years by Dr. Holyoke himself in 1793, vol. II. p. 89., and the next twenty-six years prepared by Mr. Clapp in 1818, vol. IV. p. 361. But an abstract of a journal of this kind can be, only to a very small extent, a substitute for the journal in detail, since the purposes for which different persons consult it are as different as the objects and pursuits of the several individuals; while the abstract can only have reference to the objects and views of the author of the abstract.

As an indication of the mean temperature of our climate, this journal will not perhaps be regarded as very conclusive. Indeed this is true of nearly or quite all the numerous observations which have been made with the thermometer for the same purpose in different parts of the world. Although this instrument has now been carried to such perfection, as to leave little more to desire, in regard to the instrument itself, as a measure of heat within the range to which it is applicable; yet when it is applied to the observation of the temperature of the atmosphere, it is liable to be influenced by so many circumstances, which have not hitherto received their due share of attention, that we cannot yet place entire confidence in the results.

It is not easy to fix upon such hours of observation, as will give a true mean of the heat of the whole day. The surest method would be to take the extremes of cold and heat for each day. But self-registering thermometers, by which alone such



observations can be made, seem never to have been extensively in use ; and they are too liable to derangement, ever to become so.

The principal defect, in this point of view in Dr. Holyoke's journal, consists in there being no observation at the coldest part of the day. In consequence of this omission, the daily range of the thermometer is less than it should be, and the mean temperature is too high. The observation at sunset is so nearly the same with the mean of the whole, that it may be disregarded in the result. The observation at noon was evidently designed by him to embrace the hottest part of the day, and probably it very nearly did so. Eight in the morning, or between eight and nine, gives a very uncertain result, inasmuch as the temperature at that hour, in comparison with that of the whole day, varies very much with the different seasons of the year.

Dr. Holyoke was himself aware of this defect in his observations, and proposed a correction for it. But his correction is insufficient. The results of his first seven years' observations, as given by himself in the second volume of the Academy's Memoirs, make the *mean* temperature for the year,  $47,945^{\circ}$ , and the correction he proposes would reduce it to  $47,50^{\circ}$ .\*

Dr. Holyoke nowhere, that I can find, explains his reasons for fixing upon the number he proposes as a correction, and it is probably a mere conjecture. I do, however, find some data from which we may substitute a more just correction.

For the years 1793, 1794, and 1795, the journal contains a register of the heat at sunrise, which is nearly complete. It was continued partially for several succeeding years, but is in a state too incomplete to enable us to draw any deductions from it after-

\* Vol. II. p. 92.

wards. The mean difference, for these three years, between ten P. M. and sunrise, is  $3,47^{\circ}$ . I find by comparing a considerable number of my own observations, that the mean of the least heat in the twenty-four hours, as compared with that at sunrise, is  $2,72^{\circ}$  less than that; making  $6,19^{\circ}$  as the difference between the mean temperature at ten P. M., and the probable mean of the greatest cold in each day. The true temperature indicated by these journals, corrected by these data, would stand as follows. For the seven years published by Dr. Holyoke himself, the mean temperature at ten P. M. is  $43,7^{\circ}$ ; from which deduct  $6,19^{\circ}$ , and it gives  $37,51^{\circ}$  as the mean of the greatest cold each day. The observation at noon, we have already remarked, is designed to give the greatest heat, the mean of which for the seven years is  $54,15^{\circ}$ . Taking these as the two extremes for each day, it gives  $45,83^{\circ}$  as the mean temperature of the seven years, from 1786 to 1792. For the whole period of thirty-six years, the mean by the four observations a day is  $49,14^{\circ}$ . By the correction it will be as follows. The mean at ten P. M.  $44,17^{\circ}$ , deduct  $6,19^{\circ}$ , leaves  $38,53^{\circ}$ ;  $56,05^{\circ}$  is the mean of the observations at noon; and the mean of the two is  $47,29^{\circ}$ , the estimated temperature by the whole series of observations.

In September, 1818, Dr. Holyoke began a regular observation, called in the journal, "Night Thermometer," which appears to have been kept by a self-registering thermometer, and to give the greatest cold of each day. This is continued in addition to the other observations already mentioned, to the end of 1821, the time when the journal communicated to the Academy terminates. On comparing the results of these observations with those made at ten P. M., I find the difference somewhat greater, than I have supposed it in the preceding calculation; the mean

difference for the two years and four months, between the night thermometer and that at ten P. M., being  $7,53^{\circ}$ . Taking this as the basis of the correction, it will still farther reduce the estimate of the true temperature, making that of the first seven years  $45,16^{\circ}$ , and of the whole period,  $46,62^{\circ}$ .

After the year 1821, Dr. Holyoke discontinued keeping his meteorological journal in the same ample form. But, notwithstanding his advanced age, he did not altogether lay aside the habit of so many years. By the kindness of his grandson, the present E. A. Holyoke, M. D., of Salem, I am enabled to lay before the Academy the journal of two additional years, 1822 and 1823, giving the extremes of heat and cold, and the state of the weather each day. The mean of the two years by these observations, is  $46,23^{\circ}$ ; differing but little from the mean of the whole period, according to the proposed correction.

There ought to be still another correction, however, applied to these results, if we are to regard them as a true expression of the temperature of the climate. No allowance is made for the effect of reflected heat. Although the thermometer hung constantly in the shade, the sun shone upon the buildings on the opposite side of the street, and upon the pavement. For this reason the observation at noon probably indicates a temperature somewhat above the greatest daily heat of the atmosphere generally. We have no data by which to estimate very accurately the amount of the error from this cause; but it can hardly be less than from one to two degrees; which would reduce the mean temperature of Salem, from half a degree to a degree, lower than we have just made it from these observations, and fix it nearly at  $45,5^{\circ}$ .

Another question of equal interest, upon which this journal has a direct bearing, is the progressive melioration of our climate. The opinion has prevailed extensively, that the clearing up of our forests, and the draining of marshes, which have attended the progress of cultivation, have been accompanied by an increase of the temperature of the climate. If this opinion be well founded it may be expected that some decisive evidence of it will be furnished by a journal kept with so much care, in the same situation, and by the same individual, for nearly forty years, of a period when these changes in the face and condition of the country have been extensively made.

That these causes may powerfully affect the healthfulness and the temperature of the climate in the immediate vicinity of the places in which such operations are carried on, no one will doubt. But the question is much more extensive, and refers to the influence of these, or of some other causes, upon the temperature of the climate of the whole country. Dr. Holyoke himself believed this to be the case. In a paper in the second volume of the *Memoirs of the Academy*, on the difference between the temperature of our climate and that of some countries in Europe in the same parallels of latitude, he attributes the great comparative cold of this country to the abundance of forests. And among the papers obligingly furnished me by his grandson, I find the following note, dated July, 1813. "I believe we may be pretty well assured that storms have not been nearly so frequent within the last twelve or fifteen years, as they were before that period; especially those from the northeast. Short storms from the southeast, indeed, have been pretty common, but generally they have been of little importance or duration; a southeast storm seldom continues to blow with violence more



than twelve hours, commonly not so long." And the opinion is extensively adopted, that in some way the severity of our climate has been materially mitigated since the days of our fathers. It remains to be seen how far this opinion is supported by this journal.

From the fact already mentioned that the mean temperature of the whole period of thirty-six years is more than one degree higher than that of the first seven years, it would at first view seem that there is some indication of a progressive change. But when we examine the journal more in detail, the evidence of the change disappears. Of the five periods, of seven years, (the last period, however, containing only five years,) of which the results are published in the fourth volume of the Academy's Memoirs, the mean of the fifth is the lowest, then the first, the fourth, and the second; the third, from 1800 to 1806 being the highest. If we divide the whole into seven periods of five years, the two lowest are the first and the sixth; and the difference between the two periods is only two hundredths of a degree. The mean of the first ten years is  $48,77^{\circ}$ ; that of the last ten years  $47,85^{\circ}$ , nearly a degree lower. The three highest successive years are 1793-1795, the three lowest in succession 1812-1814; the mean of the former being  $50,69^{\circ}$ , that of the latter  $46,88^{\circ}$ . The highest year in the whole series is 1793; the lowest, 1812, nineteen years later.

It thus appears that this journal does not support the opinion that there has been a progressive increase of the temperature of our climate, in regard to the whole year. If we compare the spring months of the different years, we find the results nearly the same, both in respect to the whole spring, and to the months of March and April; thus showing that the opinion is

equally unfounded, which has often been maintained, that the spring advances more rapidly, in proportion to the temperature of the whole year, than it did formerly.

It is impossible to ascertain from the journal with entire accuracy the comparative frequency and duration of the storms in the several years. But on a careful comparison of a considerable number of years in different periods, I do not find that Dr. Holyoke's opinion which I have quoted, of the diminished frequency of long storms, in the later years, receives much support from the daily record of the state of the weather. In looking back upon past years, the severe storms are among the more prominent events which have made the greatest impression upon the memory, while the intermediate species of time are forgotten. Hence probably it is, that the opinion has so extensively prevailed, that our climate has undergone a progressive melioration; although we can find no evidence of the change, in authentic records of events.

In the preceding calculations I have taken no notice of the two additional years 1822 and 1823, because, from the different manner in which the journal was kept, there are no means of comparing them accurately with the others. But after making allowance for the difference of time of the observations, it appears that the last of those years, 1823, was much colder than the mean of the whole period of thirty-eight years. In that year the thermometer fell to the freezing point several times in every month, except the three summer months. In the six months from the middle of October, 1822, to the middle of April, 1823, there were but thirty-three days in which it did not freeze; and in the four months from the first of December to the end of March, there were but four such days.

The following memorandum of a remarkably hot day is contained in the journal for 1786; but it appears, from the handwriting, to have been written several years later.

“The greatest heat known in this country (at least for the last forty years) happened on Sunday, June 18, 1749. The day preceding, namely, the 17th, the spirit in Mr. Hauksbee’s thermometer (the only thermometer then known in this part of America) rose to  $6^{\circ}$  above zero, which is higher than had ever before been observed, but on that day, the 18th, it rose to the height of  $13\frac{1}{2}$  above zero. The thermometer hung in the southwest room of the President’s house in Cambridge, near the meeting-house, and the shutters were closed all the afternoon, till after divine service; when they and the windows were thrown open for the benefit of the air. But the thermometer rose in an hour four or five degrees, and the wind, which was pretty fresh at southwest, blew in almost scorching, so that the family found themselves obliged to sit, as far as they were able, out of the current of air, which was insupportable.”

Hauksbee’s thermometer has been a long time out of use; and little or no mention is made of his scale for the last eighty or one hundred years. He took for his zero the temperature of a hot day in London. It does not appear by what rule he formed the divisions of the scale. *Temperate* was marked  $34^{\circ}$ , and the freezing point of water was generally  $65^{\circ}$ . Neither the zero nor either of these numbers was uniformly fixed, however, but they were varied in different cases to accommodate the instrument to the climate in which it was to be used. At Naples, for example, it was found that water froze at the temperature of  $55^{\circ}$  of a Hauksbee’s thermometer. It is obvious that such a thermometer could be of very little use, for comparing the temperature of

different places. But when this thermometer was adopted by the Royal Society of London, a standard thermometer was kept at the Society's house, by which all others, that were intended to be accurate, were graduated. A great number of instruments thus made and graduated were sent out by the Royal Society for the purpose of ascertaining the temperature of different parts of the world; and it is not improbable that President Holyoke's thermometer was obtained in this manner.

According to Martine, the zero of the standard thermometer of the Royal Society answered to  $89^{\circ}$  of Fahrenheit, and the freezing point of water was  $79^{\circ}$ . It thus appears that the heat observed in President Holyoke's house in 1749 was  $93^{\circ}$  of our present scale. This is not so high as has often been observed since. But it should be remembered, that the observation was made in the house, and at a late hour in the afternoon. In another memorandum, which I have seen, Dr. Holyoke supposes that 10 degrees at least should be added for these reasons, making the real heat of the day as high as  $108^{\circ}$  of Fahrenheit. This however, is, so much above any other heat ever known in this climate, that it must require more direct evidence of its existence, and perhaps a thermometer in which more confidence can be placed, to induce us to give entire credit to it.



JANUARY.										FEBRUARY.										MARCH.									
Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.			
8 A.M.	10 P.M.	8 N.	10	8	N.	4	10	8 A.M.	10 P.M.	8 N.	10	8	N.	4	10	8 A.M.	10 P.M.	8 N.	10	8	N.	4	10						
1	29.90	29.76	8	22	45	C	F	F	F	30.05	30.12	3	22	23	F	C	C	S	29.53	29.50	34	38	30	C	F	S	F		
2	29.71	29.40	16	27	21	C	F	F	F	30.10	29.60	22	23	15	C	S	S	S	29.52	29.15	34	34	34	S	S	R	R		
3	29.10	29.20	32	23	25	S	F	F	S	29.86	29.65	20	32	30	F	C	F	F	29.08	29.05	36	43	36	C	C	C	C		
4	29.35	29.42	26	37	20	S	F	C	F	29.68	29.81	3	35	23	F	F	F	F	29.07		39	41	35	C	C	C	C		
5	29.44		30	34	31	S	F	F	F	29.80	29.55	34	36	30	S	S	R	S	29.50	29.76	34	9	36	S	S	F	F		
6	29.61	29.45	32	39	24	C	F	F	F	29.40	29.50	31	36	28	S	S	F	C	29.75	29.60	34	47	2	C	C	F	F		
7	29.43		21	29	19	C	S	C	F	29.50		32	37	35	C	F	C	S	29.57		35	43	27	F	F	F	F		
8	29.50		14	21	8	F	F	F	F	29.50		36	42	33	F	F	F	F	29.55		11		31	F	F	F	F		
9	29.52	29.55	21		31	F	F	F	F	29.50	29.50	36	46	33	C	F	F	F	29.40	29.50	40	41	33	C	S	F	F		
10	29.65	29.62	24	33	24	C	C	C	F	29.50	29.50	43	47	28	F	F	F	F	29.60	29.74	31	35	15	F	F	F	F		
11	29.61	29.56	25	32	25	F	F	F	F	29.88	29.88	12	47	11	F	F	F	F	29.83	29.76	23	31	2	F	F	F	F		
12	29.53	29.43	20	32	25	F	F	F	F	29.88		12	23	15	F	F	F	F	29.85		31	42	21	F	F	F	F		
13	29.70	29.80	10	20	4	F	F	F	F	29.90	29.75	15	26	19	F	F	F	F	30.10	30.13	37	45	3	F	F	F	F		
14	29.81	29.64	9	25	18	F	C	C	S	29.70	29.50	22	25	22	S	S	S	S	30.15	30.10	39	41	30	F	F	F	F		
15	29.60	29.34	24	31	16	S	S	C	F	29.70	24.93	24	38	26	F	F	F	F	30.08	30.10	24	43	33	F	F	C	F		
16	29.45	29.52	10	23	12	F	F	C	S	29.95	30.00	37	43	30	C	F	F	F	29.90	29.45	36	40	38	R	R	R	R		
17	29.66	29.78	2	10	-1	F	F	F	F	30.03	29.87	35	43	32	F	F	C	C	29.41	29.50	41	51	40	F	F	C	C		
18	29.90	30.00	-8	5	-2	F	F	F	F	29.60	29.49	38	48	39	C	R	R	R	29.58		37	44	24	F	F	F	F		
19	30.15	30.20	-8	7	-4	F	F	F	F	29.92		23	24	20	F	F	C	C			39	45	1	F	F	F	F		
20	30.30	30.20	1	18	15	C	S	F	C	29.95	29.47	26	32	14	S	S	H	R	29.57		34	42	33	F	F	C	C		
21	29.90		33	38	38	C	C	C	C	29.60	30.07	27	34	24	F	F	F	F	29.48		35	38	35	C	C	C	C		
22	29.50		43	44	43	C	C	R	R	30.00	29.73	27	37	28	C	F	F	S	29.11	29.18	47	57	42	F	F	F	F		
23	29.33	28.95	43	42	29	C	F	C	F	29.96	29.78	24	24	22	F	F	F	F	29.13	29.11	47	57	40	F	F	F	F		
24	29.65	30.00	23	31	32	F	F	C	F	29.50	29.73	25	24	12	S	S	S	S	29.16	29.25	39	45	37	C	C	C	C		
25	29.55		38	45	36	C	F	F	F	30.00	29.95	19	31	15	F	F	F	F	29.20	29.30	49	63	3	F	F	F	F		
26	29.62		35	37	25	F	F	C	C	29.87	29.68	31	34	25	F	F	F	F	29.31	29.25	59	74	50	F	F	F	F		
27	30.22		15		15	F	F	F	F	29.61		35	50	34	C	C	F	F	29.29	29.38	38	49	34	R	S	F	F		
28	30.06		22	33	33	F	F	F	C	29.57		31	41	24	F	F	F	F	29.60	29.71	38	49	36	F	F	F	F		
29	29.75	29.75	36	46	30	F	F	F	F										29.66	29.50	45	52	45	C	C	R	F		
30	29.65		36	39	46	C	R	R	R										29.51	29.70	55	65	47	C	C	F	R		
31	29.00	29.80	44	43	16	C	F	F	F										29.53	29.19	41	39	35	R	R	F	R		
Mean			22.30		22							27.34		24								39.46		35					

APRIL.										MAY.										JUNE.									
Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.			
8 A.M.	10 P.M.	8 N.	10	8	N.	4	10	8 A.M.	10 P.M.	8 N.	10	8	N.	4	10	8 A.M.	10 P.M.	8 N.	10	8	N.	4	10						
1	29.90	29.72	31	31	26	C	C	C	S	29.30	29.30	56	60	48	C	C	R	C	29.88	29.83	68	73	58	F	F	F	F		
2	29.25	29.83	31	30	25	S	S	C	F	29.41		59	59	50	F	F	F	F	29.86		71	77	67	F	F	F	C		
3	30.03	29.71	32	41	33	F	F	F	F	29.62	29.59	57	59	50	F	F	F	F	29.68	29.50	79	89	75	F	F	C	R		
4	29.59	29.57	45	52	36	F	F	F	F	29.64	29.73	54	60	45	F	F	F	F	29.50		84	93	64	F	F	R	C		
5	29.56	29.50	43	46	34	C	C	F	F	29.78	29.74	56	61	45	F	F	F	F	29.66	29.53	68	73	58	F	F	C	F		
6	29.50	29.30	41	45	37	F	F	F	F	29.70	29.50	50	48	45	C	R	R	R	29.52	29.40	76	86	70	F	C	F	F		
7	29.40		42	47	35	F	F	F	F	29.30		49	51	45	R	R	R	R	29.40	29.39	80	86	71	C	F	F	F		
8	29.70	29.46	39	45	37	F	F	F	F	29.50	29.70	49	60	47	C	F	F	F	29.40	29.40	80	89	72	F	F	F	F		
9	29.42	29.58	38	38	34	C	F	F	F	29.80	29.88	55	57	47	F	F	C	C	29.53	29.71	66	69	55	C	F	F	F		
10	29.62	29.68	30	49	43	C	C	F	F	29.93	29.79	56	60	47	C	C	F	F	29.71	29.60	68	72	58	F	F	C	C		
11	29.80	29.85	45	50	35	F	F	F	F	29.78	29.67	57	60	45	F	F	F	F	29.54	29.35	69	73	63	C	F	F	F		
12	29.85	29.89	48	56	39	F	F	F	F	29.70	29.67	57	60	49	C	C	R	R	29.33	29.46	75	87	61	F	F	R	F		
13	29.98	29.86	46	49	39	F	F	F	F	29.61	29.69	58	65	53	F	F	F	F	29.53	29.53	70	79	69	F	F	C	R		
14	29.80	29.74	42	57	53	F	F	F	F	29.70	29.67	65	72	60	F	F	F	F	29.62	29.70	66	77	67	F	F	F	F		
15	29.88	29.80	43	47	38	F	F	F	F	29.76	29.84	60	64	51	F	F	C	C	29.80	29.84	70	71	59	C	C	F	F		
16	29.80	29.62	50	63	47	F	F	F	F	29.60	29.48	52	61	46	C	C	C	C	29.90	29.74	65	72	59	F	F	F	F		
17	29.53	29.58	51	63	47	R	R	C	C	29.45	29.50	56	56	45	C	C	C	C	29.68	29.60	72	81	68	F	F	C	R		
18	29.58	29.62	41	42	40	C	R	R	R	29.51	29.55	58	66	51	F	F	C	C	29.58	29.50	76	77	66	F	R	R	R		
19	29.75	29.80	41	41	40	R	R	R	C	29.63	29.78	61	63	49	C	F	F	F	29.52	29.39	71	83	68	F	C	R	R		
20	29.93	29.95	41	42	41	R	R	C	C	29.90	29.88	58	62	51	C	C	F	F	29.48	29.51	71		60	F	F	F	F		
21	29.97	29.86	47	48	40	F	C	C	R	29.91	29.84	59	70	53	C	C	F	F	29.52	29.51	67	76	58	F	F	F	F		
22	29.85		41	43	42	R	C	C	R	29.86	29.85	60	68	55	F	F	F	F	29.56	29.60	72	74	60	F	C	C	R		
23	29.78	29.67	42	46	42	C	C	R	C	29.87	29.84	62	68	51	C	F	F	F	29.60	29.58	71	86	65	F	F	C	C		
24	29.59	29.20	43	45	41	C	C	R	R	29.81		62	69	57	F	F	F	F	29.57	29.49	71	77	67	F	F	F	F		
25	29.10	29.17	46	48	51	C	C	R	R		29.81	66		51	F	F	F	F	29.50	29.48	80	86	72	F	F	F	F		
26	29.33	29.42	56	58	42	C	C	C	F	29.93	29.98	62	69	52	F	F	F	F	29.51	29.56	80	77	67	F	F	F	F		
27	29.50	29.49	49	51	41	F	F	F	F	29.97	29.97	65	64	54	C	R	F	R	29.51	29.53	65	69	64	F	R	C	R		
28	29.42	29.38	52	63	42	F	F	F	F	29.97	29.89	67	63	56	C	C	F	R	29.63	29.64	71	80	61	F	F	C	R		

JULY.											AUGUST.											SEPTEMBER.										
Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.				
8 A.M.	10 P.M.	8 N.	10	8	N.	4	10	8 A.M.	10 P.M.	8 N.	10	8	N.	4	10	8 A.M.	10 P.M.	8 N.	10	8	N.	4	10	8 A.M.	10 P.M.	8 N.	10	8	N.	4	10	
1	29.90	29.79	62	76	65	F	F	F	F	29.89	29.82	71	69	61	F	C	C	C	29.74	29.83	55	69	55	F	F	F	F	F	F	F	F	
2	29.75	29.60	78	91	78	F	F	F	F	29.73	29.64	62	67	61	R	R	R	R	29.82	29.71	64	74	62	F	F	F	F	F	F	F	F	
3	29.65	29.63	75	79	61	F	F	F	F	29.70	29.68	71	80	67	C	C	R	R	29.71	29.53	72	80	72	F	F	F	F	F	F	F	F	
4	29.63	29.52	71	75	58	F	C	C	R	29.73	29.70	75	84	71	F	C	C	C	29.70	29.90	64	73	60	F	F	F	F	F	F	F	F	
5	29.60	29.61	67	74	61	F	F	F	F	29.74	29.70	79	89	71	F	F	F	F	29.81	29.60	63	63	67	C	R	R	R	R	R	R	R	
6	29.65	29.67	65	75	60	F	F	F	F	29.71	29.77	79	88	71	F	F	C	R	29.61	29.67			61	R	R	R	R	R	R	R		
7	29.67	29.67	66		67	C	C	C	F	29.90	29.84	70	79	62	F	F	F	F	29.72	29.98	62	68	49	F	F	F	F	F	F	F	F	
8	29.58		73	83	70	R	C	F	R	29.84	29.75	70	76	66	F	F	F	C	30.06		58	64	52	F	F	F	F	F	F	F	F	
9	29.67	29.62	72	80	62	F	F	F	F	29.71	29.58	68	79	65	C	C	R	R	29.80	29.60	63	70	56	F	F	F	F	F	F	F	F	
10	29.67	29.68	73	85	65	F	F	F	F	29.60	29.63	67	70	59	C	C	C	F	29.32	29.50	59	73	61	F	F	F	F	F	F	F	F	
11	29.68	29.57	76	90	71	F	F	F	F	29.63	29.48	70	82	70	C	F	C	R	29.18	29.35	60	78	61	F	F	F	C	R	R	R	R	
12	29.52	29.60	81	82	61	F	F	F	F	29.33	29.58	70	76	61	R	C	R	F	29.42	29.50	55	58	49	R	R	R	R	R	R	R	R	
13		29.73	68	75	60	F	F	F	F	29.64	29.61	68	74	62	F	F	F	F	29.60	29.75	55	67	50	C	F	F	F	F	F	F	F	
14	29.75	29.60	70	76	70	F	F	F	F	29.60	29.61	62	65	59	R	C	C	R	29.78	29.82	50	62	49	F	F	F	F	F	F	F	F	
15	29.58	29.54	78	85	71	F	F	C	F	29.70	29.70	63	75	61	F	F	F	F	29.82	29.76	56	70	59	F	F	F	F	F	F	F	F	
16	29.59	29.45	79	91	75	F	F	F	F	29.82	29.80	69	77	62	F	F	F	F	29.93	29.94	62	66	54	F	F	F	F	F	F	F	F	
17	29.55	29.71	78	75	57	F	C	F	F	29.79	29.76	68	77	64	C	C	C	C	29.96	29.88	62	69	56	F	F	F	F	C	R	R	R	
18	29.70	29.50	64	60	59	C	C	R	R	29.76	29.80	69	74	63	C	C	C	C	29.88	29.77	63	71	60	C	C	F	R	R	R	R	R	
19	29.49	29.52	69	74	63	C	F	C	F	29.89	29.81	68	76	64	C	C	F	C	29.70	29.45	63	66	61	R	R	R	R	R	R	R	R	
20	29.59		66	76	62	C	R	F	F	29.84	29.75	73	81	71	F	F	F	F	29.40	29.50	65	73	63	F	F	F	F	F	F	F	F	
21	29.65	29.66	65	79	62	C	F	C	C	29.78	29.70	76	87	75	F	F	C	R	29.58	29.76	67	78	62	F	F	F	F	F	F	F	F	
22	29.66	29.59	77	76	69	F	F	F	F	29.61	29.74	79	85	63	F	F	C	R	29.84	29.75	60	59	56	C	C	C	C	C	C	C	C	
23	29.55	29.54	78	83	67	F	R	R	R	29.71	29.57	64	73	70	R	C	R	R	29.70	29.67	58	62	55	C	C	C	C	C	C	C	C	
24	29.56	29.60	71	74	62	F	F	F	F	29.73	29.85	63	73	54	F	F	F	F	29.80	29.84	52	59	42	F	F	F	F	F	F	F	F	
25	29.70	29.69	65	75	64	C	F	F	F	29.90	29.80	50	71	58	F	F	F	F	29.83	29.62	48	63	59	F	F	F	F	F	F	F	F	
26	29.68	29.60	74	83	68	F	F	F	C	29.73	29.60	73	68	65	R	C	C	R	29.62	29.64	62	68	54	F	F	F	F	F	F	F	F	
27	29.57	29.60	78	87	64	F	C	R	F	29.60	29.88	70	71	52	C	F	F	F	29.75	29.72	62	71	61	F	F	F	F	F	F	F	F	
28	29.70	29.70	64	71	55	C	F	F	F	30.01	29.96	56	66	58	F	F	F	F	29.70	29.68	66	79	68	F	F	F	F	F	F	F	F	
29	29.70	29.77	64	72	59	F	F	F	F	29.73	29.68	63	67	66	R	R	R	R	29.76	29.78	63	73	62	F	F	F	F	F	F	F	F	
30	29.83		76	79	62	F	F	F	C	29.82	29.83	57	65	49	C	C	C	F	29.78	29.76	61	79	65	F	F	F	F	F	F	F	F	
31	29.93	29.90	68	75	63	C	F	F	C	29.83	29.79	56	62	54	C	C	R	R														
Mean			71	78	64							69	75	63									61	69								

OCTOBER.											NOVEMBER.											DECEMBER.										
Barometer.			Therm.			Weath.					Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.				
8 A.M.	10 P.M.	8 N.	10	8	N.	4	10	8 A.M.	10 P.M.	8 N.	10	8	N.	4	10	8 A.M.	10 P.M.	8 N.	10	8	N.	4	10	8 A.M.	10 P.M.	8 N.	10	8	N.	4	10	
1	29.80	29.72	67	83	67	F	F	F	F	29.63	29.79	32	40	27	F	F	F	F	29.50	29.48	30	37	25	F	F	F	F	F	F	F	F	
2	29.74	29.67	71	80	63	F	F	F	F	30.00	29.94	27	40	31	F	F	F	F	29.73	29.68	27	38	30	F	F	F	F	F	F	F	F	
3	29.80	29.82	62	67	59	C	C	C	C	29.70	29.34	41	50	43	R	R	F	F	29.68	30.14	32	29	16	F	F	F	F	F	F	F	F	
4	29.83	29.69	63		61	C	F	C	C	29.44	29.55	42	50	37	F	F	F	F	30.29	29.80	13	23	26	C	C	C	C	C	C	C	C	
5	29.63	29.34	68	77	63	F	C	R	C	29.59	29.37	45	51	43	C	F	F	F	29.28	29.61	17	18	14	S	S	C	F	F	F	F	F	
6	29.13	29.04	65	62	57	R	R	R	F	29.69	29.67	45	47	41	F	F	F	F	29.86	29.84	14	24	16	F	F	F	F	F	F	F	F	
7	29.26	29.45	52	61	50	F	F	F	F	29.64		48	59	46	F	F	F	F	29.80	29.75	25	33	27	C	F	F	F	F	F	F	F	
8	29.50		53	62	52	F	F	F	F			50	49	43	F	F	F	C	29.83	29.88	31	33	22	C	F	F	F	F	F	F	F	
9	29.40		58	73	48	F	F	C	F		29.32	43	45	45	C	C	R	R	29.83		23	23	19	S	S	S	S	S	S	S	S	
10	29.59	29.59		61	47	F	F	F	F	29.29	29.19	51		43	C	C	C	R	28.85	29.63	13	17	10	S	S	S	S	S	S	S	S	
11	29.63	29.55	54	68	55	F	F	F	F	29.44	29.70	40	47	31	F	F	F	F	30.02	30.34	6	13	1	F	F	F	F	F	F	F	F	
12	29.47	29.38	63	79	67	F	F	F	F	29.73	29.50	43	52	48	F	F	C	R			-5	20	18	F	F	C	C	C	C	C	C	
13	29.60	29.64	56	69	49	F	F	F	F	29.60	29.80	41	45	31	F	F	F	F	30.05	29.90	25	34	36	C	F	F	F	F	F	F	F	
14	29.77	29.70	52		52	F	F	C	R	29.82	29.65	38	48	41	C	C	F	F	29.35	29.52	38	42	33	F	F	F	F	F	F	F	F	
15	29.64	29.63	62	75	61	F	F	F	F	29.51	29.45	41	47	38	F	R	F	F	29.65	29.66	30	39	24	F	F	F	F	F	F	F	F	
16	29.66	29.50	65	78	61	F	F	F	F	29.74	29.93	36	42	30	F	F	F	F	29.77	29.74	22	35	35	C	C	C	C	C	C	C	C	
17	29.35	29.50	64	60	45	F	C	R	R	29.80	29.49	35	35	34	C	S	S	S	29.65		37	39	34	C	C	C	C	C	C	C	C	
18	29.70	29.90	42	48	35	F	F	F	F	29.88	29.72	24	27	16	C	F	F	F	29.55	29.68	34	37	23	F	F	F	F	F	F	F	F	
19	30.07	30.00	40	54	41	F	F	F	F	29.81	29.76	18	24	20	C	C	C	F	29.70	29.49	29	30	26	C	C	F	F	F	F	F	F	
20	29.96	29.78	51	63	51	C	C	F	C	29.68	29.22	27	37	38	S	R	R	R	29.54	29.76	25	33	22	C	F	F	F	F	F	F	F	
21	29.76	29.59	55	57	45	C	C	R	R	29.60	29.77	30		27	F	F	F	F	29.81	29.67	28	38	2	F	F	F	F	F	F	F	F	
22	29.45	29.40	42	45	37	C	C	C	C	29.86	29.57	31	37	31	C	C	F	F	29.72	29.62	34	43	3	F	F	C	F	R	R	R	R	
23	2																															



JANUARY.										FEBRUARY.										MARCH.											
Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.					
S.A.M.	10P.M.		8	1	St.	10	8	1	St.	10	S.A.M.	10P.M.	8	1	St.	10	8	1	St.	10	S.A.M.	10P.M.	8	1	St.	10	8	1	St.	10	
1	29,77	29,79	38	47	45	43	C	C	C	F	30,11	30,01	15	23	17	15	S	S	S	S	S	29,18	29,30	37	42	37	32	C	F	F	C
2	30,11	29,85	39	44	39	36	F	F	C	C	30,06	29,90	10	28	19	17	C	C	C	C	C	29,59	29,50	32	37	35	28	F	F	F	F
3	29,57	29,25	39	48	42	46	C	C	C	F	29,67	29,26	22	30	26	12	C	S	F	F	F	29,85	29,25	29	38	30	28	S	S	S	S
4	29,45	29,19	40	42	37	37	F	C	C	R	29,37	30,04	15	15	9	0	F	C	F	F	F	29,54	29,62	27	26	21	18	S	S	S	S
5	29,08	29,66	36	26	22	18	S	S	S	S	30,18	29,71	0	15	16	24	C	C	C	C	C	29,57	29,29	25	40	32	25	S	S	S	S
6	29,98	30,10	8	17	14	10	F	F	C	C	29,97	29,97	13	20	15	13	F	F	F	F	F	29,25	29,25	30	41	33	27	F	F	F	F
7	30,26	29,56	6	19	20	32	F	F	C	C	30,09	30,00	16	26	22	15	C	C	C	C	C	29,50	29,58	21	35	29	24	F	C	S	F
8	29,73	29,51	29	32	27	23	F	F	F	C	29,74	29,24	29	34	29	21	C	S	S	S	S	30,06	30,13	25	35	28	16	F	F	F	F
9	29,73	29,58	25	28	26	28	S	S	S	C	29,30	29,55	24	30	24	17	F	C	F	F	F	30,05	29,30	31	32	33	33	S	R	R	R
10	29,40	29,47	12	17	15	13	S	S	S	C	30,16	30,20	5	13	9	3	F	C	F	F	F	29,08	29,48	39	50	39	34	F	F	F	F
11	29,45	29,36	19	27	21	10	S	S	S	S	30,08	29,38	12	22	25	37	C	S	C	R		29,76	29,95	34	45	36	31	F	F	F	F
12	29,35	29,60	24	32	22	12	C	C	F	F	29,58	29,87	41	43	40	29	F	C	F	F	F	29,98	29,70	37	44	39	41	F	F	C	C
13	29,81	29,99	9	18	14	9	F	F	F	F	30,05	30,29	27	31	35	15	F	F	F	F	F	29,43	29,44	47	48	46	43	C	R	F	F
14	29,75	29,72	18	35	29	25	F	F	F	F	30,38	29,67	16	32	30	34	F	C	S	R		29,87	30,06	34	45	40	34	F	F	F	F
15	29,36	29,34	35	43	41	36	C	C	C	C	29,38	29,50	40	45	31	F	F	F	F	F	F	30,18	30,00	35	41	36	35	F	C	R	R
16	29,59	29,17	23	34	33	31	F	C	C	C	29,95	29,83	15	24	25	25	F	F	F	F	F	29,91	30,10	38	47	35	32	C	F	C	C
17	29,34	29,18	24	35	29	25	F	C	F	F	29,70	29,90	34	43	40	30	C	C	F	F	F	30,19	30,09	37	42	34	33	F	C	F	F
18	29,50	29,77	24	32	30	6	F	C	C	C	30,14	29,90	21	28	26	26	F	F	F	F	F	29,99	29,61	35	43	45	43	R	C	C	C
19	30,14	30,18	-5	4	4	4	F	F	C	C	29,82	29,56	34	45	42	35	C	C	C	C	C	29,39	29,44	52	62	57	48	R	C	C	F
20	29,90	29,74	22	24	10	18	S	S	S	S	29,30	29,41	36	40	27	16	C	R	R	F	F	29,54	29,11	45	51	41	33	F	F	F	F
21	29,71	29,82	25	30	28	29	C	H	S	C	29,55	29,55	11	19	16	11	F	F	F	F	F	29,53	29,40	37	47	38	34	F	F	F	F
22	29,95	30,29	30	35	30	21	C	S	S	S	29,64	29,72	3	16	14	11	F	F	F	F	F	29,55	29,53	37	50	41	40	C	F	F	C
23	30,35	29,77	11	14	12	13	C	S	H	H	29,85	29,89	10	23	23	22	F	F	F	F	F	29,18	29,21	43	46	40	30	R	F	F	F
24	29,74	29,77	32	40	37	35	C	C	C	C	29,98	29,84	27	38	32	30	C	C	C	C	C	29,32	29,62	19	30	25	22	F	F	C	C
25	30,08	30,07	15	24	22	19	F	F	F	F	29,83	29,72	32	37	33	32	C	C	F	F	F	29,70	29,80	30	36	34	32	F	F	F	F
26	29,54	29,50	33	38	35	36	C	F	F	F	29,76	29,63	30	38	35	32	F	F	F	C		29,95	29,90	34	40	34	33	F	F	F	F
27	29,68	29,83	34	36	30	23	C	F	F	F	29,34	29,12	34	39	32	30	S	H	R	R		29,87	29,80	34	45	37	33	F	F	F	F
28	30,10	30,10	13	19	15	12	F	F	F	F	29,12	29,10	31	44	36	35	F	C	S	R		29,71	29,43	34	45	39	37	F	F	C	C
29	29,94	29,33	17	33	29	29	F	F	C	S												29,43	29,59	39	37	30	C	C	C	F	F
30	29,35	29,47	29	39	32	25	C	F	F	F												29,53	29,59	37	41	34	28	F	F	F	F
31	29,70	30,03	26	36	29	19	F	F	F	F												29,53	29,74	35	49	39	32	F	F	F	F
Mean			24	31	27	24							21	30	26	22									34	42	37	31			

APRIL.										MAY.										JUNE.											
Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.					
S.A.M.	10P.M.		8	1	St.	10	8	1	St.	10	S.A.M.	10P.M.	8	1	St.	10	8	1	St.	10	S.A.M.	10P.M.	8	1	St.	10	8	1	St.	10	
1	29,88	29,57	32	42	38	32	F	F	F	F	29,26	29,46	56	54	42	42	R	R	R	R	R	29,26	29,30	62	69	57	52	F	C	R	R
2	29,46	29,77	36	44	32	24	C	F	F	F	29,62	29,73	46	54	48	42	F	F	F	F	F	29,32	29,28	51	63	55	58	F	F	F	F
3	29,91	29,65	28	48	44	38	F	F	F	F	29,81	29,77	18	60	56	48	F	F	F	F	F	29,25	29,03	56	50	44	45	C	C	R	R
4	29,55	29,36	42	75	67	62	F	F	F	F	29,75	29,57	55	70	58	54	F	F	F	F	F	29,10	29,15	52	60	54	54	R	R	F	F
5	29,48	29,84	61	56	43	34	F	F	F	F	29,45	29,31	61	71	58	54	F	F	F	F	F	29,27	29,37	61	64	56	52	C	R	C	R
6	29,98	29,85	41	48	40	35	F	F	F	F	29,50		67	78	59	56	F	F	F	F	F	29,36	29,25	55	51	50	50	C	R	C	R
7	29,91	29,80	42	58	49	44	F	F	F	C	29,32	29,43	59	62	59	55	F	F	C	R		29,20	29,20	59	65	52	50	C	R	C	R
8	29,75	29,47	46	62	48	46	C	C	F	R	29,52	29,61	59	67	58	49	F	F	F	F	F	29,22	29,30	60	67	62	57	C	F	C	F
9	29,29	29,33	56	63	53	44	C	H	R	F	29,74	29,73	51	62	45	C	C	C	C	C	29,40	29,41	64	73	62	62	F	F	F	R	
10	29,48	29,64	43	55	53	48	F	F	F	F	29,66	29,59	55	50	47	48	C	C	R	R		29,50	29,50	71	82	75	68	F	F	F	F
11	29,72	29,78	49	59	52	40	F	F	F	F	29,68	29,74	48	49	46	46	R	R	R	R		29,56	29,55	74	75	69	63	F	F	C	F
12	29,95	29,80	46	42	38	38	C	R	R	C	29,85	29,88	47	49	46	45	R	R	R	R		29,55	29,74	64	72	64	59	R	C	F	F
13	29,68	29,32	42	52	52	56	C	C	C	C	29,83	29,84	45	46	46	46	R	R	R	R		29,00	29,70	71	78	69	64	F	F	F	F
14	29,32	29,50	58	65	60	42	C	C	F	F	29,86	29,75	16	49	47	46	C	R	R		29,58	29,35	78	91	70	70	F	F	R	R	
15	29,58	29,62	42	50	46	35	F	F	F	F	29,73	29,68	49	54	45	42	F	F	F	F		29,35		75	81	72		F	F	F	F
16	29,74	29,76	41	52	53	39	F	F	F	F	29,68	29,63	51	61	50	44	C	F	F	F		29,49		65	75	68	64	F	F	F	F
17		29,72	51	61	53	51	F	F	C		29,59	29,41	55	57	50	49	C	F	F	F		29,57	29,30	65	65	57	54	C	C	R	R
18	29,73	29,88	45	48	42	33	F	F	F	F	29,32	29,21	64	74	65	62	F	F	C	R		29,24	29,30	58	73	56	53	C	C	R	R
19	29,84	29,58	33	43	39	29	F	F	F	F	29,27	29,26	65	73	66	59	F	C	C			29,43	29,60	65	80	64	59	C	F	F	F
20	29,58	29,55	33	46	33	29	F	F	F	F	29,28	29,27	72	74	58	51	C	F	R	R											

JULY.												AUGUST.												SEPTEMBER.											
Barometer.			Therm.			Weather.			Barometer.			Therm.			Weather.			Barometer.			Therm.			Weather.											
8 A.M.	10 P.M.		8	1	St.	10	8	1	St.	10	8 A.M.	10 P.M.		8	1	St.	10	8	1	St.	10	8 A.M.	10 P.M.		8	1	St.	10							
1	29.74	29.68	69	74	61	59	F	C	C		29.82	29.75	61	65	62	53	C	C	F	F		29.86	29.65	66	72	65	61	F	F	C					
2	29.65	29.65	58	73	66	64	C	C	F		29.75	29.70	70	77	65	61	C	C	F	F		29.52	29.54	66	75		57	C	R	F					
3	29.58	29.49	72	83	76	73	C	C	F	F	29.72	29.69	73	78	69	66	F	F	F	F		29.60	29.72	61	75	65	57	F	F	F					
4	29.56	29.57	74	84	73	70	F	F	F	F	29.75	29.70	75	85	75	71	F	F	F	F		29.87	29.86	62	69	62	60	F	F	F					
5	29.60	29.59	80	83	74	69	F	F	F	F	29.70	29.69	77	86	75	74	F	F	F	F		29.83	29.56	66		61	C	R	F						
6	29.62	29.69	80	84	76	66	F	F	F	F	29.66	29.67	82	86	75	70	C	C	C	C		29.50	29.75	69	76	67	54	F	F	F					
7	29.70	29.60	77	79	72	67	F	F	F	F	29.67	29.70	77	81	72	68	F	C	R	C		29.90	30.05	56	66	55	51	F	F	C					
8	29.61	29.68	80	91	76	71	F	F	C		29.74	29.63	72	87	71	68	C	C	F	F		30.14	30.01	59	70	61	59	F	F	C					
9	29.73	29.72	75	81	67	64	C	C	C		29.60	29.44	80	89	78	73	C	C	F	F		29.98	29.73	69	82	76	68	F	F	F					
10	29.73	29.75	72	74	65	61	R	C	R		29.25		73	75	69	66	R	R	R	R		29.69	29.54	72	87	77	72	C	C	R					
11	29.75	29.61	74	77	67	67	F	F	F		29.45	29.51	74	76	70	66	F	F	C	F		29.50	29.74	78	72	63	60	C	C	C					
12	29.56	29.56	75	80	74	65	F	F	F		29.55	29.58	74	82	72	70	F	F	F	F		29.67	29.75	61	59	55	54	C	C	C					
13	29.56	29.61	70	80	64	57	F	F	R		29.65	29.75	72	86	74	68	F	F	F	F		29.79	29.84	62	72	68	58	C	C	F					
14	29.58	29.68	61	75	64	59	F	F	F		29.82		75	84	75	68	F	F	F	F		29.79	29.30	60	61	59	58	C	R	R					
15	29.68	29.60	70	80	69	64	F	F	F		29.67		82	77	72	70	F	C	R	R		29.47	29.70	56	62	53	44	F	F	F					
16	29.50	29.35	66	74	63	62	R	R	H		29.70	29.90	64	72	67	57	F	F	F	F		29.80	29.96	47	61	53	47	F	F	F					
17	29.45	29.56	66	70		55	F	F	F		29.98	29.68	67	72		64	F	F	R	C		30.02	29.88	52	62	51	45	F	F	F					
18	29.56	29.63	61	72	65	56	F	F	F		29.44	29.51	71	76	66	60	R	C	C	C		29.86	29.70	51	60	54	52	F	F	C					
19	29.69	29.74	66	77	65	61	F	F	F		29.58	29.59	67	79	74	69	F	F	F	F		29.57	29.26	58	55	55	55	C	C	R					
20	29.80	29.80	68	74	64	60	F	F	F		29.61	29.49	73	81	68	64	C	R	R	C		29.21	29.37	58	65	58	56	F	F	C					
21	29.76	29.62	65	82	62	60	C	F	F		29.33	29.30	66	76	71	67	R	F	C	C		29.48	29.60	62	70	61	53	F	F	C					
22	29.67	29.66	74	85	70	68	C	C	F		29.33	29.40	67	72	67	67	C	C	R	F		29.69	29.72	58	63	56	53	F	F	C					
23	29.62	29.60	74	80	72	68	F	F	C		29.50	29.61	71	80	76	68	F	F	F	F		29.77	29.66	58	62	56	49	F	C	C					
24	29.61	29.56	79	81	67	63	C	F	R		29.68	29.62	70	80	72	72	F	F	F	F		29.60	29.54	56	69		56	C	C	R					
25	29.56	29.26	66	68	62	62	C	C	R		29.57	29.47	78	86	79	76	F	C	C	C		29.60		59	69	59	53	F	F	C					
26	29.28	29.34	75	75	69	63	C	C	F		29.61	29.78	68	73	65	56	F	C	F	F		29.45	29.60	57	69	61	52	F	F	F					
27	29.32	29.46	65	72	62	59	R	F	F		29.87	29.98	61	70	64	54	C	C	F	F		29.66	29.53	59	68	64	58	F	F	R					
28	29.56	29.66	65	70	62	59	C	C	C		29.66	29.83	62	71	55	53	F	C	R	R		29.70	29.65	55	62	53	52	C	F	F					
29	29.63	29.77	65	68	60	58	F	C	R		29.74	29.61	60	62	62	61	R	C	R	R		29.54	29.59	52	53		46	R	R	F					
30	29.87	29.99	62	68	61	58	C	C	C		29.63	29.78	65	73		56	F	F	F	F		29.86	30.06	51	62	54	45	F	F	F					
31	29.97	29.86	59	57	56	56	C	R	R		29.86	29.88	63	75	65	56	F	F	F	F															
Mean			70	76	67	63							70	78	69	63										60	67	55	60						

OCTOBER.												NOVEMBER.												DECEMBER.											
Barometer.			Therm.			Weather.			Barometer.			Therm.			Weather.			Barometer.			Therm.			Weather.											
8 A.M.	10 P.M.		8	1	St.	10	8	1	St.	10	8 A.M.	10 P.M.		8	1	St.	10	8	1	St.	10	8 A.M.	10 P.M.		8	1	St.	10							
1	30.15	30.02	53	66	60	51	F	F	F		29.56	29.81	37	42	37	30	F	F	F	F		29.34	29.27	35	43	37	32	F	C	F					
2	30.01	29.77	56	68	62	54	F	F	F		30.01	30.21	25	37	34	26	F	F	F	F		29.22		37	45	41	41	C	F	F					
3	29.53	29.60	62	70	58	46	F	F	F		30.32	30.22	28	47	44	35	F	C	F	C		29.40	29.59	36	46	40	31	F	F	F					
4	29.71	29.80	45	52	45	38	F	F	F		30.15	29.99	41	54	48	41	F	F	F	F		29.57	29.36	33	36	35	33	F	F	C					
5	29.88	29.85	49	60	52	52	C	F	C		29.95	29.90	49	51	48	41	C	F	F	F		29.37	29.52	37	48	42	33	F	F	F					
6	29.85	29.87	55	60	55	47	F	F	C		30.00	30.00	43	45	41	30	F	F	F	F		29.60	29.64	31	42	36	32	F	F	F					
7	30.04	30.08	42	47	43	34	F	F	F		29.96	29.78	31	47	41	31	F	F	F	F		29.57	29.50	36	36	33	31	C	R	S					
8	30.19	30.02	40	52		42	F	F	F		29.68	29.54	34	49	44	39	C	C	F	F		29.61	29.56	33	40	34		F	F	F					
9	29.98	29.78	46	58	54	53	C	C	F		29.53	29.53	40	53	47	38	F	F	F	F		29.61	29.63	29	36	33	25	F	F	F					
10	29.88	30.00	54	64	57	50	F	F	F		29.56	29.37	42	54	47	46	F	F	F	F		29.54	29.40	27	36	31	26	F	F	F					
11	30.16	30.20	52	61	50	41	F	F	F		29.51	29.84	38	50	41	31	F	F	F	F		29.37	29.36	29	35	30	27	F	F	F					
12	30.20	29.92	50	57	50	49	F	F	F		29.96	29.77	33	37	37	38	C	H	R			29.46	29.54	25	35	30	24	F	F	F					
13	29.74	29.79	53	58	51	42	C	C	F		29.80		38	43	41	41	C	F	F	F		29.64	29.67	24	32	27	20	F	F	F					
14	29.90	29.82	44	55	50	44	F	F	F		29.70	29.68	45	56	46	41	C	F	F	F		29.67	29.58	19	33	31	25	F	F	C					
15	29.71	29.53	49	63	53	40	F	F	C		29.62	29.64	54	65	63	57	F	C	R	R		29.60	29.78	26	25	21	15	F	F	F					
16	29.49		36	46	38	36	F	C	C		29.64	29.50	55	48	48	47	R	R	R			29.88	29.88	12	27	20	19	F	F	C					
17	29.66	29.67	41	49	42	39	F	F	F		29.60	29.99	43	50	45	35	F	F	F	F		29.89	29.89	22	31	26	21	F	F	F					
18	29.81	29.93	37	47	40	32	F	F	F		30.12	30.18	37	44	40	32	F	F	F	F		29.93	29.93	18	30	26	18	F	F	F					
19	30.00	29.92	34	47	41	34	F	F	F		30.20	30.10	33	46	42	38	F	F	F	F		29.88	29.60	26	32	30	30	F	F	S					
20	29.98	29.94	39	48	43	43	C	C	F		30.03	29.75	45	53	48	47	C	C	C	C		29.53	29.42	31	36	32	27	S	S	S					
21	29.94	29.85	45	45	43	42	C	C	R		29.60	29.39	52	55	52	49	C	C	R	R		29.35	29.50	25	32	25	21	C	S	F					
22	29.87	29.88	43	54	47	42	F	F	F		29.45	29.68	40	49	44	44	F	F	F	F		29.69	29.76	24	35	30	32	F	F	F					
23	29.92	29.91	46	63	55	51	F	F	F		2																								



JANUARY.											FEBRUARY.											MARCH.										
Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.				
S.A.M.	10P.M.		8	1	St.	10	8	1	St.	10	S.A.M.	10P.M.		8	1	St.	10	8	1	St.	10	S.A.M.	10P.M.		8	1	St.	10	8	1	St.	10
1	29,77	29,54	16	29	27	31	F	F	C	S	29,82	29,91	18	31	25	17	F	F	F	F		29,41	29,36	8	2	16	9	F	F	F	F	
2	29,51	29,34	18	28	22	18	F	F	F	F	30,00	29,79	18	33	29	30	F	F	F	C		29,32	29,36	8	16	14	13	F	F	F	F	
3	29,51	29,57	15	23	18	18	F	F	F	S	29,69	29,19	37	44	40	41	F	F	C	R		29,56	29,46	12	29	26	19	F	F	F	F	
4	29,37	29,64	21	28	20	12	F	F	F	F	23,93	29,19	37	36	33	27	C	F	F	F		29,33	29,09	18	29	23	16	F	F	F	F	
5	29,67	29,69	6	17	11	-1	F	F	F	F	29,48	29,88	1	2	-2	-2	F	F	F	F		29,05	29,09	22	25	24	20	F	F	F	F	
6	29,71	29,90	1	17	16	13	F	F	F	F	30,21	29,98	0	11	8	11	F	F	F	C		29,12	29,09	26	37	20	29	F	F	F	C	
7	30,14	30,17	11	27	22	12	F	F	F	F	29,91	29,99	12	22	17	12	F	F	F	F		29,03	29,05	33	3	32	29	F	F	F	C	
8	30,03	29,24	14	33	38	40	C	S	S	R	30,17	29,70	12	22	17	18	F	F	F	C		29,14	29,20	31	39	35	32	F	F	F	F	
9	29,27	29,66	30	31	25	17	S	C	F	F	29,82	29,94	19	25	22	15	F	F	F	F		29,20	29,49	37	39	34	34	S	F	F	F	
10	29,50	29,89	10	17	17	13	F	F	F	C	30,18	29,66	18	29	27	29	F	F	C	C		29,52	29,64	37	39	36	35	S	F	S	S	
11	29,98	30,03	8	15	11	6	F	F	F	F	29,33		39	42	42	40	C	R	F	F		29,73	29,89	37	41	32	27	F	F	F	F	
12	30,08	29,75	3	14	10	6	F	F	F	F	29,59	29,45	37	43	40	34	F	F	F	R		29,98	29,73	35	18	44	41	F	F	F	C	
13	29,55	29,60	15	25	20	10	F	F	C	C	29,84	29,62	19	23	23	26	F	F	C	C		29,78	29,67	47	50	38	38	F	F	F	C	
14	29,98	30,14	-1	9	9	3	F	F	F	F	29,30	29,80	24	26	12	5	F	S	S	S		29,60	29,38	48	51	45	40	F	F	F	F	
15	30,18	29,85	11	21	23	25	C	C	C	C	30,04	29,82	14	22	18	19	F	F	C	C		29,55		38	45	39	31	F	F	F	F	
16	29,76	29,00	29	37	43	47	S	R	R	R	29,47	29,68	27	32	26	21	S	R	R	R		29,66	29,84	35	38	32	26	F	F	F	F	
17	29,24	29,79	36	35	29	23	F	F	F	F	29,10	29,20	26	35	23	23	F	F	F	F		33,00	29,99	28	38	32	28	F	F	F	C	
18	30,08	30,09	20	30	28	25	F	F	F	F	29,33	29,44	16	19	14	12	F	F	F	F		29,98	29,77	37	51	40	37	F	F	C	R	
19	30,12	29,68	29	33	32	35	C	R	R	R	29,49		14	28	23	18	F	F	F	F		29,41	29,09	40	46	44	37	R	C	R	R	
20	29,13	29,47	35	38	30	18	C	R	C	F	29,53	29,54	24	26	24	17	F	F	F	F		29,05	29,25	40	41	33	F	F	F	F		
21	29,68	29,71	19	32	29	20	F	F	F	F	29,63	29,61	19	35	23	18	F	F	F	C		29,57	29,91	31	40	37	30	F	F	F	F	
22	29,72	29,40	28	36	34	32	C	S	S	S	29,58	29,56	23	25	29	31	C	S	C	C		29,99	29,78	40	50	42	40	F	F	C	C	
23	29,35	29,79	32	38	28	18	S	F	F	F	29,62	29,69	32	36	33	30	C	C	F	F		29,68	29,08	46	46	42	42	R	R	R	R	
24	30,12	29,69	16	30	24	25	F	F	C	C	29,78	29,74	26	35	28	20	F	F	F	F		29,06	29,17	37	36	27	27	F	F	S	S	
25	29,02	29,37	37	30	25	17	S	C	C	C	29,75	29,54	19	40	32	29	F	F	F	F		29,30	29,52	25	40	35	29	F	F	F	F	
26	29,71	29,80	15	26	20	13	F	F	F	F	29,50	29,47	28	38	31	23	F	F	F	F		29,48	29,59	37	39	34	28	F	F	F	F	
27	29,72	29,56	19	27	23	21	C	C	C	S	29,35	29,36	15	22	16	9	F	F	F	C		29,76	29,90	29	36	34	27	F	F	F	F	
28	29,73	29,60	21	31	26	25	F	F	F	F	29,38	29,52	10	20	16	8	C	F	F	F		29,87	29,17	34	48	42	41	F	F	C	C	
29	29,69	29,23	34	40	38	33	R	F	F	F	29,54	29,41	6	17	13	7	F	F	F	F		29,43	29,74	36	38	34	28	F	F	F	F	
30	29,36	29,39	35	39	35	19	F	F	C	F												29,91	30,01	37	37	37	31	F	F	F	F	
31	29,75	29,75	16	23	18	12	F	F	F	F												30,09	29,80	42	58	45	43	F	F	C	C	
Mean			19	28	24	19					20	23	24	20								33	39	24	33							

APRIL.											MAY.											JUNE.										
Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.				
S.A.M.	10P.M.		8	1	St.	10	8	1	St.	10	S.A.M.	10P.M.		8	1	St.	10	8	1	St.	10	S.A.M.	10P.M.		8	1	St.	10	8	1	St.	10
1	29,65	29,63	53	63	53	49	F	F	F	C	29,75	29,61	57	72	56	52	F	F	C	C		29,44	29,50	61	68	59	55	F	F	F	F	
2	29,50	30,00	37	44	35	32	F	F	F	F	29,50	29,49	52	58	49	44	R	C	C	R		29,70	29,83	59	62	60	52	F	F	F	F	
3	30,11	30,01	40	45	37	36	F	F	C	R	29,55	29,55	49	57	47	45	R	F	C	C		29,88	30,02	59	67	57	53	F	F	F	F	
4	29,94	29,97	39	41	37	36	R	R	R	R	29,24	29,19	45	60	47	47	R	R	C	C		30,10	29,88	64	73	59	58	F	F	C	R	
5	30,07	29,94	39	42	40	40	C	R	R	R	29,24	29,35	61	72	63	56	F	F	R	R		29,79		69	79	78	72	F	F	F	F	
6	29,83	29,89	47	60	57	52	C	C	C	C	29,48	29,34	60	67	60	55	F	F	F	F			29,60	76	79	76	75	F	F	F	F	
7	30,11	30,07	42	45	39	37	F	F	F	F	29,45	29,69	57	66	60	50	F	F	F	F		29,49	29,69	83	89	73	66	F	F	F	F	
8	30,07	29,67	44	48	38	38	C	R	R	R	29,77	29,75	51	64	53	53	F	F	F	C		29,88		61	61	52	52	F	F	F	F	
9	29,49	29,61	43	64	56	45	F	F	F	F	29,75	29,71	49	46	41	40	C	R	R	R		29,73	29,52	56	63	62	57	F	R	C	R	
10	29,67	29,55	46	55	45	43	F	F	C	R	29,76	29,73	42	42	41	41	R	R	R	R		29,58	29,54	76	83	68	61	F	F	R	C	
11	29,77	30,03	44	52			38	F	F	F	29,72	29,64	41	43	42	42	R	R	R	R		29,69	29,74	67	73	67	61	F	F	F	F	
12	30,05	29,74	46	53	43	41	F	C	R	C	29,62	29,68	55	61	56	54	F	R	R	R		29,80	29,67	67	81	69	62	F	F	F	F	
13	29,66	29,68	50	60	50	48	C	F	F	F	29,69	29,79	58	61	58	54	F	F	F	F		29,66	29,61	66	72	63	54	F	F	F	F	
14	29,80	29,55	46	52	42	41	F	C	R	R	29,96	29,99	53	58	51	46	F	F	F	F		29,69	29,79	55	62	56	53	F	F	F	F	
15	29,48	29,55	42	42	41	41	R	R	R	C	30,00	29,90	57	64	57	51	F	F	F	F		29,86	29,86	61	66	56	51	F	F	F	F	
16	29,70	30,18	49	40	38	F	R	R	R	R	29,84	29,69	59	76	62	60	F	F	C	C		29,87	29,77	56	65	55	55	C	C	F	F	
17	30,26	30,10	46	47	41	40	F	F	C	C	29,64	29,59	61	65	59	56	R	R	R	R		29,77	29,65	63	64	57	57	C	C	F	C	
18	29,76	29,50	47	62	59	56	R	C	C	C	29,66	29,74	47	47	45	45	R	R	R	R		29,57	29,30	57	64	65	61	C	C	C	R	
19	29,33	29,15	58	67			55	F	F	C	29,75	29,74	48	51	49	48	C	R	R	C		29,25	29,25	61	60	60	57	C	C	C	C	
20	29,05	29,42	57	60	45	37	F	C	C	F	29,76	29,59	55	61	54	53	C	C	R	R		29,28	29,37	67	71	67	65	F	R	F	F	
21	29,59	29,90	35	42	39	32	F	F	F	F	29,48	29,39	67	76	70	62	F	F	F	F		29,46	29,61	68	73							

JULY.										AUGUST.										SEPTEMBER.												
Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.						
8 A.M.	10 P.M.		8	1	St.	10	8	1	St.	10	8 A.M.	10 P.M.		8	1	St.	10	8	1	St.	10	8 A.M.	10 P.M.		8	1	St.	10	8	1	St.	10
1	29.64	29.67	61	70		56	F	F	F	C	29.92	29.79	71	83	69	65	F	F	F	F	29.87	29.50	62	70	62	61	F	F	C	R		
2	29.64	29.60	64	74	65	61	F	F	F	F	29.79	29.74	77	85	72	67	F	F	F	F	29.40	29.50	65	75	67	60	F	F	F	F		
3	29.59	29.56	74	83	73	68	F	F	F	F	29.77	29.75	77	82	70	66	F	F	F	F	29.54	29.68	64	73	66	58	F	F	F	F		
4	29.57	29.49	73	78	67	65	F	R	C	R	29.73	29.64	75	77	73	72	F	F	F	F	29.78	29.66	62		66	61	F	F	F	F		
5	29.39	29.48	68	81	71	67	R	C	F	F	29.50	29.61	78	87	68	65	F	R	F	F	29.62	29.60	70	85	77	71	F	F	F	F		
6	29.51	29.56	76	81	74	70	R	F	F	F	29.65	29.62	74	79	69	64	F	F	F	F	29.80	29.86	62	67	60	55	F	F	F	C		
7	29.60	29.70	78	83	74	70	F	F	F	F	29.63	29.66	68	76	68	64	F	F	F	F	29.89	29.78	57	57	54	53	C	R	C	C		
8	29.69	29.64	80	89	78	73	F	F	F	F	29.67	29.61	66	74	65	58	F	F	F	F	29.79	29.74	61	63	59	59	C	C	C	C		
9	29.59	29.37	80	75	71	70	R	R	F	F	29.55	29.60	66	72	64	57	F	F	F	F	29.71	29.69	66		65	55	F	F	F	F		
10	29.34	29.53	74	76	73	62	F	R	F	F	29.61	29.69	61	75	66	57	F	F	F	F	29.97	29.91	57	68	59	54	F	F	F	F		
11	29.67	29.58	68	72	69	66	F	F	F	F	29.71	29.70	64	73	64	58	F	F	F	F	29.91	29.80	61	68	64	57	F	F	F	F		
12	29.58	29.63	80	93	80	74	F	F	R	R	29.73	29.79	66	74	65	61	F	F	F	F	29.77	29.72	64	72	69	62	F	F	F	F		
13	29.64	29.70	79	86	73	71	F	C	R	R	29.81	29.85	67	73	67	59	F	F	F	F	29.79	29.89	65	71	64	61	F	F	F	F		
14	29.74	29.71	68	76	67	67	F	C	F	F	29.90	29.95	67	76	66	62	F	F	F	F	29.99	29.94	64	69	66	55	F	F	F	F		
15	29.71	29.80	69	81	76	67	R	C	E	F	29.97	29.98	70	78	68	59	F	C	R	F	29.88	29.62	60	74	65	62	F	C	R	R		
16	29.85	29.73	71	75	67	63	F	F	F	F	29.90	29.82	68	77	66	65	C	C	R	R	29.55	29.46	72	76	68	65	C	C	R	R		
17	29.67	29.53	72	82		70	F	F	R	F	29.67	29.85	65	62	61	59	R	C	C	C	29.57	29.80	63	69		56	F	F	F	F		
18	29.41	29.41	78	88	82	74	F	F	R	F	29.90	29.80	67	72	64	64	C	C	R	C	29.89	29.80	61	68	62	61	F	F	F	F		
19	29.70	29.89	67	75	66	63	F	F	F	F	29.70	29.60	73	72	72	69	C	R	C	F	29.71	29.72	69	77	69	63	F	F	F	F		
20	30.03	30.10	68	72	65	66	F	F	F	F	29.61	29.59	74	81	71	67	F	F	F	F	29.86	29.89	55	55	50	42	F	F	F	F		
21	30.12	30.01	68	76	66	64	F	F	F	F	29.70	29.84	65	75	67	60	F	F	F	F	29.89	29.88	49	62	54	45	F	F	F	F		
22	30.01	29.93	63	73	64	62	R	R	C	R	29.88	29.79	65	77	72	65	F	F	F	F	29.83		50	57	55	51	C	F	C	C		
23	29.97	29.98	74	74	67	68	C	R	R	F	29.57	29.52	75	70	77	72	F	R	R	F	29.66	29.85	52	68	62	50	F	F	F	F		
24	29.98	29.90	69	77	70	68	C	R	R	F	29.65	29.76	67	70	66	55	F	F	F	F	29.99		52	66	58	54	F	F	F	F		
25	29.89	29.88	78	84	75	73	F	F	F	F	29.78	29.69	62	71	61	62	F	C	R	R	29.90	29.70	58	70	66	61	F	F	F	F		
26	29.88	29.77	79	84	75	71	F	F	F	F	29.55	29.55	73	82	74	64	C	F	F	F	29.54	29.62	64	79	73	61	F	F	F	F		
27	29.72	29.68	76	86	73	72	R	R	C	R											29.80	29.84	56	65	57	52	F	F	F	F		
28	29.64	29.59	74	77	69	66	C	R	F	F	29.76	29.70	68	81	75	69	F	F	F	F	29.84	29.76	57	67	62	56	F	F	F	F		
29	29.61		75	71	67	60	C	R	F	F	29.65	29.58	74	88	82	76	F	F	F	F	29.63	29.60	61	77	68	62	F	F	F	F		
30		30.08	64	69	63	57	F	F	F	F	29.65		74	70	64	63	R	F	F	F	29.60	29.89	48	53	49	47	F	F	C	R		
31	30.09	29.96	68	73	64	60	F	F	F	F			63	66	61	54	R	F	F	F												
Mean			72	82	70	67							69	78	68	66							70	72	63	55						

OCTOBER.										NOVEMBER.										DECEMBER.												
Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.						
8 A.M.	10 P.M.		8	1	St.	10	8	1	St.	10	8 A.M.	10 P.M.		8	1	St.	10	8	1	St.	10	8 A.M.	10 P.M.		8	1	St.	10	8	1	St.	10
1	30.02	29.99	44	48	44	42	F	F	F	F	30.18	29.94	29	44	44	44	F	C	R		29.38	29.00	36	42	2	43	S	R	C	C		
2	29.99	29.98	46	53	47	49	F	F	F	F	30.06	29.94	44	57	53	42	F	F	F	F	29.26	29.36	30	29	22	2	F	F	C	C		
3	30.04	29.95	43	57	50	50	F	F	F	F	29.79	29.75	51	71	65	55	F	F	F	F	29.32	29.30	14	15	14	1	F	F	F	F		
4	29.78	29.52	56	61	61	57	C	R	C		29.86	29.69	54	54	52	50	F	F	F	F	29.36	29.50	25	35	32	2	F	F	F	F		
5	29.79	29.97	55	54	50	42	F	F	F	F	29.60		58	77	64	60	F	F	F	F	29.50	29.59	31	34	32	2	F	S	S	F		
6	30.02	29.90	44	63	54	49	F	F	F	F		29.70	56	70	72	49	F	F	F	F	29.73	29.75	28	39	35	32	F	F	F	F		
7	29.91	29.70	47	60	52	50	C	R	C		29.57	29.23	51	68	62	57	F	F	C	R	29.73	29.60	37	48	44	45	C	C	C	C		
8	29.57	29.64	51	54	53	50	R	C	F		29.30	29.60	48	52	40	32	F	F	C	R	29.75	29.91	41	40	39	37	R	R	R	R		
9	29.70	29.65	51	63	55	51	F	C	F		29.78	30.10	32	41	37	28	F	F	F	F	29.57	29.18	41	44	40	36	R	R	R	R		
10	29.65	29.60	51	63	55	53	F	F	F		30.20	30.05	30	43	41	43	F	F	F	F	29.18	29.57	39	40	35	28	R	F	F	F		
11	29.54	29.73	52	52	51	51	R	C	C		29.75	29.50	50	53	54	43	C	R	F	F	29.80	29.96	25	33	27	22	F	F	F	F		
12	29.49	29.78	57	68	52	45	F	F	F		29.60	29.83	40	47	41	36	F	F	F	F	29.93	29.63	30	42	41	39	F	F	F	F		
13	29.85	29.70	39	48	41	41	F	F	F		29.89	29.79	40	54	47	43	F	F	F	F	29.75	29.83	32	42	36	34	F	F	F	F		
14	29.55	29.48	42	55	40	39	R	C	F		29.67	29.84	51	50	46	36	C	R	F	F	29.77	29.55	34	44	43	40	F	F	F	F		
15	29.33	29.51	46	51	48	39	F	R	F		30.01	30.05	33	47	36	29	F	F	F	F	29.37	29.50	44	52	44	33	F	F	F	F		
16	29.56		46	53	50	42	F	F	F		30.01	29.71	33	45	43	39	F	F	F	F	29.48	29.42	28	39	36	31	F	F	F	F		
17		29.39	49	61	56	57	F	F	F		29.88	29.91	34	37	34	33	F	F	F	F	29.52	29.50	19	20	19	14	S	S	S	S		
18	29.59	29.40	52		50	48	C	R	C		29.89	29.70	37	40	38	39	C	C	R	C	29.52	29.56	5	15	11	4	F	F	F	F		
19	29.57	29.83	39	46	43	34	F	F	F		29.82	30.03	39	43	39	33	C	F	F	F	29.47	29.25	7	19	17	11	S	C	C	C		
20	29.92	29.50	35	51	47	49	F	C	R		30.00	29.79	43	47	48	52	C	C	C	C	29.25	29.28	10	24	19	10	F	F	F	F		
21	28.98	29.34	57	50	56	53	R	R	R		29.85	29.73	44	50	45	44	F	C	R	R	29.29	29.70	9	16	12	5	F	F	F	F		
22	29.08	29.30	47	47	43	43	F	F	F		29.73	30.10	50	58	50	39	F	F	F	F	30.00	29.83	3	15	11	15	F	F				



Table with columns for JANUARY, FEBRUARY, and MARCH. Each month has sub-columns for Barometer, Therm., and Weather. Data is presented in a grid format with numerical values and weather codes.

Table with columns for APRIL, MAY, and JUNE. Each month has sub-columns for Barometer, Therm., and Weather. Data is presented in a grid format with numerical values and weather codes.

St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.

JULY.														AUGUST.														SEPTEMBER.													
Barometer.			Therm.			Weather.			Barometer.			Therm.			Weather.			Barometer.			Therm.			Weather.																	
8 A.M.	10 P.M.		8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.		8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.		8	2	St.	10													
1	29.68	29.76	83	92	76	72	F	F	F	F	29.60	29.65	62	72	66	64	C	C	C	C	29.73	29.60	54	65	60	52	F	C	C	R											
2	29.68	29.62	82	89	76	74	F	F	F	F	29.70	29.76	67	68	68	62	R	R	C	C	29.40	29.28	64	74	68	65	R	R	C	R											
3	29.89	29.85	84	90	71	65	C	C	F	F	29.80	29.73	62	66	61	61	C	C	C	R	29.37	29.55	62	67	60	51	R	C	F	F											
4	29.89	29.88	57	60	58	58	R	C	R	R	29.70	29.68	61	72	65	63	C	C	C	C	29.58	29.56	54	63	59	52	F	F	F	C											
5	29.81	29.81	63	69	62	66	R	R	R	R	29.68	29.71	76	83	76	69	C	C	C	R	29.59	29.66	53	60	61	51	F	F	F	C											
6	29.80	29.81	69	81	65	63	R	C	C	F	29.71	29.76	73	81	77	72	F	F	F	F	29.72	29.71	56	68	61	55	F	F	F	C											
7	29.84	29.75	68	76	67	64	C	C	F	F	29.80	29.80	76	87	77	75	F	F	F	F	30.02	30.10	57	65	58	51	F	F	F	F											
8	29.72	29.60	76	84	78	71	F	F	F	F	29.80	29.72	82	88	77	73	F	F	C	F	30.15	30.10	57	69	61	56	F	F	F	F											
9	29.58	29.51	80	90	81	75	F	F	C	C	29.72	29.69	80	87	80	75	F	F	C	C	30.10	29.96	60	72	61	54	C	C	F	F											
10	29.50	29.65	76	83	74	67	F	F	F	F	29.65	29.60	81	89	84	78	F	F	F	F	29.89	29.68	58	72	67	64	F	F	F	C											
11	29.70	29.69	68	76	67	63	F	F	F	F	29.60	29.50	82	91	83	79	C	C	C	F	29.67	29.70	65	76	72	60	F	F	F	F											
12	29.60	29.38	72	70	70	70	C	R	C	C	29.54	29.52	81	89	81	79	C	C	F	F	29.68	29.60	63	75	70	67	C	F	C	R											
13	29.29	29.31	79	82	75	71	R	F	C	C	29.54	29.61	76	85	78	71	F	F	F	F	29.57	29.67	68	79	68	59	R	C	F	R											
14	29.37	29.06	70	75	63	59	F	F	F	F	29.73	29.61	75	77	69	68	F	F	R	C	29.74	29.75	58	71	62	57	F	F	F	F											
15	29.68	29.72	68	75	60	60	F	F	C	F	29.58	29.56	74	75	68	67	C	R	C	R	29.65	29.51	63	66	64	62	C	R	R	R											
16	29.72	29.85	68	74	66	63	F	F	C	C	29.52	29.23	70	74	72	73	C	R	F	C	29.73	29.80	56	65	65	56	F	F	C	C											
17	29.84	29.85	71	77	68	63	F	F	F	F	29.30	29.65	64	76	69	62	C	C	C	F	29.85	29.83	55	58	53	51	C	C	C	C											
18	29.83	29.70	71	75	64	61	F	F	F	F	29.71	29.85	65	74	67	63	F	F	F	F	29.88	29.79	55	64	56	54	C	C	F	F											
19	29.68	29.60	66	75	66	67	F	F	F	F	29.95	29.90	68	74	67	64	C	C	C	C	30.00	30.02	50	61	54	46	F	F	F	F											
20	29.60	29.70	73	80	71	67	C	F	F	F	29.94	30.00	69	78	73	62	F	F	F	F	30.02	29.74	50	71	65	56	F	F	F	F											
21	29.78	29.87	73	81	72	67	F	F	F	F	30.07	30.07	60	68	59	54	F	F	F	F	29.69	29.68	68	85	78	70	F	F	F	F											
22	29.90	29.93	78	89	74	69	C	F	F	F	30.10	30.04	63	74	65	57	F	F	F	F	29.80	29.89	69	71	55	57	F	F	F	F											
23	29.95	29.81	77	93	80	74	F	F	F	F	30.01	30.00	64	74	65	58	F	F	F	F	29.87	29.80	60	74	68	59	F	F	F	F											
24	29.92	29.66	80	92	86	78	F	F	C	C	29.98	29.86	64	71	65	58	F	F	F	F	29.84	29.83	64	76	65	59	F	F	F	C											
25	29.79	29.79	68	74	65	58	F	C	C	F	29.80	29.69	64	71	70	68	C	C	C	R	29.85	29.76	62	68	64	62	F	C	C	R											
26	29.79	29.76	68	77	66	61	F	F	F	F	29.69	29.64	71	78	69	69	C	R	C	R	29.70	29.70	64	75	67	64	C	C	R	R											
27	29.76	29.77	70	77	67	61	F	C	F	F	29.65	29.60	75	83	75	72	R	F	F	F	29.83	29.70	63	58	54	55	C	C	R	R											
28	29.79	29.80	71	78	66	61	C	C	F	F	29.63	29.60	75	81	73	66	F	F	F	F	29.56	29.68	58	73	67	61	C	R	R	F											
29	29.81	29.80	69	77	68	64	F	F	F	F	29.53	29.37	65	59	60	60	C	R	R	R	29.67		56	55	54	54	C	R	C	F											
30	29.96	29.93	68	75	66	64	F	F	C	R	29.38	29.60	65	74	58	50	F	F	F	F			56	66	58	48	F	F	F	F											
31	29.70	29.60	67	65	64	76	R	R	R	29.66	29.72	50	62	57	47	F	F	F	F																						
Mean			72	79	70	66							70	77	70	66										59	69	63	57												

OCTOBER.														NOVEMBER.														DECEMBER.													
Barometer.			Therm.			Weather.			Barometer.			Therm.			Weather.			Barometer.			Therm.			Weather.																	
8 A.M.	10 P.M.		8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.		8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.		8	2	St.	10													
1	29.63	29.16	49	61	51	43	F	F	F	F	29.75	29.89	32	36	33	F	F	F	F	29.83	29.06	39	40	37	C	F	F	F													
2	29.66	29.88	43	54	47	39	F	F	F	F	29.84	29.67	34	48	43	36	F	F	F	F	29.17	29.3	35	45	37	2	S	C	F	F											
3	29.95	29.89	41	56	49	48	F	F	C	C	29.55	29.07	43	45	44	44	C	R	H		29.40	29.53	36	35	32	1	S	C	F	F											
4	29.84	29.60	55	58	53	51	C	R	R	R	29.35	29.52	28	31	26	20	F	C	F	C	29.70	29.90	28	38	29	2	F	C	F	C											
5	29.52	29.56	53	61	53	47	C	C	R	C	29.73	29.98	26	35	31	30	F	C	C	C	30.00	29.93	28	40	36	33	C	F	C	C											
6	29.45	29.34	56	48	41	42	C	R	R	C	30.06	30.06	35	45	42	38	C	C	C	C	29.86	29.70	40	41	39	38	R	C	C	C											
7	29.38	29.58	45	57	51	43	C	F	F	F	30.05	29.84	44	58	53	53	C	C	F	C	29.51	29.42	46	56	51	46	C	C	C	R											
8	29.60	29.62	46	63	54	48	F	F	F	F	29.94	30.10	51	49	42	35	C	C	F	C	29.60	29.80	35	43	36	28	F	F	F	F											
9	29.73	29.80	42	48	45	38	F	C	C	C	30.03	29.78	46	50	46	45	C	C	C	C	29.89	30.06	32	43	34	30	F	F	F	F											
10	29.76	29.46	38	53	47	40	F	F	F	F	29.60	29.60	52	55	54	50	C	C	F	C	30.09	29.92	32	47	43	37	F	F	F	F											
11	29.46	29.50	47	55	50	42	F	C	R	C	29.81	29.81	45	51	45	43	F	F	F	F	29.86	29.10	35	44	41	45	F	C	R	R											
12	29.51	29.59	45	46	42	37	C	R	F	F	29.84		46	46	46	45	R	R	C	C	29.86	29.57	32	28	26	20	S	H	F	F											
13	29.67	29.58	37	54	50	45	F	F	C	R	29.89	29.57	45	48	47	47	C	C	R	R	29.70	29.96	19	16	14	14	F	F	F	F											
14	29.59	29.62	40	49	49	51	R	R	R	R	29.50	29.75	52	58	50	40	C	F	F	F	30.08	30.07	13	25	23	16	F	F	F	F											
15	29.52	29.20	54	57	56	54	H	R	C	C	29.90	29.71	35	47	44	43	F	C	C	C	30.15	29.98	18	33	33	36	H	C	S	C											
16	29.35	29.54	53	60	53	45	F	F	F	F	29.64	29.55	52	58	56	52	C	C	C	C	29.91	29.88	40	44	41	41	R	C	C	C											
17	29.64	29.62	45	58	53	43	F	F	F	F	29.73	30.15	40	43	35	27	C	F	F	C	29.90	29.83	41	43	40	39	C	C	C	C											
18	29.78	29.68	42	55	50	50	F	C	R	R	30.34	30.37	24	31	25	20	F	F	F	F	29.77	29.66	38	43	41	34	C	C	F	F											
19	29.64	29.70	48	57	50	43	C	F	F	F	30.27	30.01	28	39	36	34	C	F	C	F	29.67	29.65	25	21	16	14	F	F	F	F											
20	29.70	29.61	44	61	54	49	F	F	F	F	30.05	29.83	32	41	36	36	F	F	C	C	29.65	29.73	20	32	28	29	F	F	F	C											
21	29.61	29.53	41	44	41	36	R	F	F	F	29.70	29.30	39	48	45	48	C	C	R	R	29.88	30.05	33	31	32	32	S	S	S	S											
22	29.58	29.90	39	46	37	30	F	C	C	F	29.20	28.93	52	54	52	45	R	C	F	F	30.14																				



JANUARY.										FEBRUARY.										MARCH.										
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					
8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	
1	29,61	29,82	37	39	35	30	F	F	F	30,16	29,75	33	35	34	32	C	S	R	R	30,20	29,96	19	31	27	26	F	F	C	S	
2	30,12	30,41	32	40	36	29	F	F	F		30,21	26	25	24	14	C	F	C	F	29,60	29,60	36	42	36	33	S	C	C	C	
3	30,29	30,07	35	51	44	42	F	F	F	20,28	30,16	10	25	22	16	F	F	F	F	29,18	29,56	35	40	31	19	R	C	F	F	
4	30,07	30,13	43	46	44	34	F	C	C	29,97		21	33	34	37	C	S	R	R	29,81	30,12	14	19	15	13	F	F	F	F	
5	30,18	30,39	18	22	20	9	C	F	F	29,36	29,63	29	28	21	10	F	F	F	F	30,28	29,85	15	30	31	31	F	C	C	S	
6	30,46	30,07	6	19	18	22	F	F	C	29,95	30,28	6	12	10	6	F	F	F	F	29,51	29,34	39	46	35	33	R	C	R	C	
7	29,47	29,54	34	41	36	31	F	F	C	30,30	29,60	12	26	25	28	F	C	S	S	29,30	29,59	37	42	32	25	C	C	F	F	
8	29,54	29,59	31	36	31	23	F	F	F	29,26	30,13	25	20	13	4	F	F	F	F	29,62	29,19	21	24	20	16	S	F	F	C	
9	29,49	29,57	30	37	32	25	F	F	F	30,20	30,06	0	6	1	-3	F	F	F	F	30,20	30,37	3	15	13	9	F	F	F	F	
10	29,69	30,09	20	24	18	15	F	F	F	30,09	30,10	-3	12	9	3	F	F	F	F	30,32	30,40	15	27	23	22	F	C	C	C	
11	30,18	29,65	17	26		33	F	C	S	30,10	30,32	8	18	10	3	F	F	F	F	30,21	29,68	29	35	31	25	S	R	R	R	
12	29,70	30,31	26	28	24	20	F	F	F	30,40	30,40	2	16	13	6	F	F	F	F	29,98	30,24	28	37	33	25	F	F	F	F	
13	30,42	29,82	13	19	31	34	F	C	S	30,48	30,40	8	23	20	12	F	F	F	F	30,24	29,85	34	38	38	36	C	C	C	F	
14	29,95	30,19	37	40	35	28	C	F	F	30,33	29,92	17	28	25	25	F	S	S	F	30,00	30,00	42	42	37	35	F	C	C	C	
15	30,36	30,31	25	25	23	27	C	C	C	29,90	29,80	33	46	36	33	C	C	C	C	30,14	30,42	33	36	32	23	F	F	F	F	
16	29,90	29,80	33	30	30	31	R	C	C	29,72	29,72	35	36	35	33	C	C	C	C	30,51	30,27	30	35	30	30	F	C	S	S	
17	29,89	30,07	32	36	30	22	C	F	F	29,76	29,89	34	34	32	31	S	C	C	C	29,72	29,55	37	44	46	44	R	R	C	F	
18	30,10	29,69	20	38	36	36	F	F	F	29,90	29,65	36	42	34	32	C	F	C	F	29,72	29,97	39	40	34	27	C	C	F	F	
19	29,58	29,34	39	41	38	34	R	R	C	29,19	29,69	36	42	37	33	F	F	F	F	30,22	30,49	18	27	25	19	F	F	F	F	
20	29,57	29,76	16	21	18	17	F	F	F	29,78	29,76	34	35	33	29	F	C	S	S	30,62	30,40	24	34	29	29	F	C	C	C	
21	29,94	30,07	18	22	18	14	F	F	F	29,99	30,06	33	38	34	27	S	C	C	F	30,10	30,08	43	56	49	44	C	F	F	F	
22	29,88	29,90	21	36	30	23	F	F	F	30,08		35	38	34	32	C	S	S	C	30,07	29,81	40	38	34	32	C	C	S	C	
23	29,89	29,86	27	30	26	24	F	C	C		30,03	35	38	34	33	C	C	C	C	29,90	30,20	35	41	32	32	S	C	C	C	
24	29,78	29,74	21	24	25	23	C	C	S	29,62	29,16	35	37	34	33	R	R	R	C	30,13		34	36	34	33	S	S	R	R	
25	29,87	30,09	18	22	23	23	S	C	C	29,22	29,67	40	48	35	32	F	S	F	F		30,02	39	46	41	34	F	F	F	F	
26	30,19	29,98	25	35	32	34	C	C	S	29,88	29,80	31	39	36	34	F	F	F	F	30,13	29,86	38	40	37	37	C	R	R	R	
27	29,79	29,73	38	37	31	31	R	R	S	29,71	29,74	35	38	33	26	S	C	F	F	29,70	29,57	38	46	49	50	C	R	C	F	
28	29,76	29,79	26	34	29	26	F	F	F	29,78	30,00	26	37	32	22	C	S	F	F	29,89	30,13	43	50	42	36	F	F	F	F	
29	29,88	29,88	30	33	31	27	F	F	F											30,26	30,16	38	42	34	31	F	F	F	F	
30	29,88	30,04	30	41	34	30	C	F	F											30,15	30,24	38	44	37	30	S	C	F	F	
31	30,25	30,29	21	30	25	23	F	F	F											30,32	30,31	33	40	35	29	F	F	F	F	
Mean			26	32	29	26						24	30	26	22											31	37	33	29	

APRIL.										MAY.										JUNE.									
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.				
8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10
1	30,31	30,10	38	48	42	37	F	F	F	30,18	30,02	51	62	50	47	F	F	F	F	29,80		59	62	54	54	C	C	C	C
2	30,00	29,69	43	54	49	49	C	R	R	30,03	29,92	60	63	56	53	F	F	F	C	30,08	30,10	56	60	54	51	F	F	F	F
3	29,41	29,80	50	57	48	41	F	F	F	29,69	29,70	55	66	65	57	F	F	F	F	30,10	30,05	65	80	65	58	F	F	F	F
4	29,66	29,71	44	69	59	48	C	C	F	29,85	30,28	61	65	56	47	F	F	F	F	30,09	30,00	61	70	63	61	F	F	F	C
5	29,64	29,85	43	54	43	39	C	C	F	30,33	30,12	46	43	41	39	C	R	R	R	29,88	29,82	63	79	63	66	C	F	F	F
6	29,87	29,55	44	43	39	35	C	R	R	30,07	30,02	40	45	42	42	R	R	R	R	29,90	29,88	72	81	66	62	F	F	F	F
7	29,52	29,81	32	31	27	24	S	C	R	30,17	30,39	48	56	47	42	F	F	F	F	29,84	29,78	65	73	64	64	R	R	R	R
8	29,84		30	46	42	35	F	C	F	30,49	30,40	50	62	54	47	F	F	F	F	29,80	29,97	71	79	73	64	F	F	F	F
9			41	49	40	39	F	F	F	30,46	30,37	51	64	54	51	C	F	F	F	30,10	30,20	61	70	62	54	F	F	F	F
10		29,51	41	47	38	36	R	R	C	30,31	30,26	60	81	68	50	C	F	F	F	30,21	30,09	62	70	59	53	C	F	F	F
11	29,49	29,46	39	39	38	36	R	R	C	30,31	30,17	51	53	48	48	F	F	F	F	30,10	30,07	64	79	66	61	F	F	F	F
12	29,58	29,93	45	51		39	F	R	C	30,10	30,10	54	58	47	45	C	C	C	C		29,87	71	62	53	53	C	R	R	R
13	30,02	30,01	44		43	40	F	F	C	30,00	29,95	51	58	52	45	C	F	F	F	29,82	29,80	54	59	55	54	C	R	R	C
14	29,99	29,93	43	48	40	36	F	F	F	29,87	29,70	49	59	53	48	F	F	F	F	29,83	29,90	64	79	73	67	F	F	F	F
15	30,00	30,18	39	45	39	34	C	C	F	29,61	29,72	54	59	51	48	F	F	R	C	30,01	30,09	70	78	64	60	F	F	F	F
16	30,18	30,20	29	47	39	34	F	F	F		29,64	53	62		49	F	C	R	C	30,19	29,99	64	71	67	65	F	F	F	F
17	30,18	30,16	43	40	37	33	F	F	C	29,81	29,94	44	56	54	45	R	C	F	F	29,89	29,93	76	89	81	74	F	F	F	F
18	30,01	29,67	39	39	37	36	C	R	R	30,01	30,04	53	61	54	49	F	F	F	F	30,08		57	65	55	54	C	C	R	R
19	29,58	29,72	42	45	40	39	C	R	R	30,02	29,78	59	73	66	57	F	F	F	F		29,85	63	74	64	55	C	C	F	F
20	29,90	29,68	40	42	39	38	C	C	R	29,80	29,62	60	67	53	50	C	C	R	R	29,95	30,01	64	76	63	59	F	F	F	F
21	29,40	29,48	44	60	54	43	R	C	F	29,33	29,49	60	61	52	52	C	F	C	C	30,16	30,15	67	72	62	60	F	F	F	F
22	29,37	29,41	48	54	43	42	F	C	F	29,53	29,46	61	69	58	51	F	F	F	F	30,13	30,02	71	84		67	F	C	F	F
23	29,51	29,62	47	60	43	43	C	C	F	29,47	29,65	60	67	60	48	F	F	F	F	30,06	30,12	65	68	62	57	R	F	F	F
24	29,60	29,75	52	59	50	46	F	C	C	29,65	29,71	56	71	64															

JULY.											AUGUST.											SEPTEMBER.										
Barometer.			Therm.			Weather.					Barom. ter.			Therm.			Weather.					Barometer.			Therm.			Weather.				
8 A.M.	10 P.M.		8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.		8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.		8	2	St.	10	8	2	St.	10
1	29.84	29.82	67	76	65	59	C	F	F	F	30.02	30.11	65	73	64	57	F	F	F	F	30.11	29.94	60	72	67	64	C	C	C	C		
2	29.92	29.78	65	79	69	64	F	F	F	F	30.15	30.15	63	73	66	64	F	F	F	C	29.85	29.71	71	82	76	73	C	F	F	C		
3	29.79	29.70	72	74	67	59	F	C	F	F	30.10	30.01	63	66	59	57	C	R	C	F	29.85	30.07	66	71	63	55	F	F	F	F		
4	29.75	29.68	68	75	67	67	F	C	C	F	29.99	29.94	65	73	71	65	F	F	F	F	30.12	29.83	57	68	64	62	F	F	C	R		
5	29.65	29.70	74	87	78	75	R	C	C	C	29.95	29.91	75	85	76	70	C	F	R	C	29.61	29.69	67	75	68	60	F	F	F	F		
6	29.69	29.63	74	89	65	65	F	C	R	C	29.92	29.97	76	82	72	69	C	F	R	R	29.70	29.94	61	72	59	58	F	F	C	R		
7	29.63	29.60	60	69	61	59	C	C	R	C	30.08	30.11	73	79	68	67	C	C	C	C	30.03	30.19	61	67	60	57	F	F	F	F		
8	29.65	29.79	68	78	69	60	C	F	C	F	30.18	30.10	73	77	70	67	C	F	C	F	30.16	30.21	62	71	67	61	C	F	C	F		
9	29.88	30.07	65	74	68	60	F	F	F	F	30.08	29.95	68	72	68	67	R	C	R	R	30.32	30.26	61	69	61	60	F	C	C	F		
10	30.14	30.12	70	80	80	82	F	F	F	F	29.95	30.09	70	64	63	60	R	C	C	F	30.17	30.10	66	83	76	72	C	C	F	F		
11	30.12	30.11	69	75	67	63	F	F	C	R	30.15	30.09	66	72	68	68	C	C	F	F	30.20	30.30	69	71	65	62	F	F	C	C		
12	30.11	30.11	69	77	66	63	C	F	R	R	30.09	30.08	76	85	81	76	C	F	F	F	30.42		61	65	58	57	C	F	F	C		
13	30.14	30.12	67	73	67	62	C	F	F	F	30.13	30.02	78	82	73	73	F	F	F	F	30.40	30.20	61	68	60	57	C	F	F	C		
14	30.16	30.11	72	81	71	68	F	F	F	F	29.97	29.86	81	93	85	75	F	F	F	F	30.00	29.94	61	74	66	56	C	C	R	R		
15	30.08	29.93	74	82	70	67	F	F	F	C	30.00	29.94	72	75	67	65	F	F	F	F	29.98	30.01	56	64	58	55	C	F	C	C		
16	29.84	29.79	76	78	70	66	F	F	C	R	29.90	29.85	75	85	78	74	F	F	C	C	30.06		54	65	58	50	F	F	F	F		
17	29.78	29.90	67	70	62	60	R	C	R	R	29.94	29.96	72	76	68	66	F	F	R	R		30.04	51	67	61	54	F	F	F	F		
18	29.94	29.90	63	67	62	58	F	F	F	F	29.78	29.75	67	61	58	56	R	R	R	R	30.11	30.33	57	65	58	50	F	F	F	F		
19	29.84	29.76	64	63	59	57	C	R	C	R	29.86	30.05	53	59	58	54	R	R	R	F	30.37	30.29	49	61	55	48	F	F	F	F		
20	29.77	29.75	61	71	61	58	C	C	C	F	30.20	30.24	59	65	59	54	F	F	F	F		30.12	52	62	57	50	C	F	F	F		
21		29.80	70	82	75	69	F	F	F	F	30.27	30.21	61	69	61	55	F	F	F	F	30.10	29.98	55	67	62	58	C	F	F	F		
22	29.85	29.89	75	88	77	74	F	F	F	F	30.17	30.12	63	68	60	56	F	F	F	F	29.89	29.87	63	77	68	60	C	C	R	R		
23	29.87	29.80	78	83	77	74	F	F	F	F	30.12	30.07	60	68	62	55	F	F	F	F	29.95	30.16	52	61	54	44	R	F	F	F		
24	29.77	29.66	78	87	74	73	F	F	F	F	30.00	29.85	60	67	61	60	C	F	F	C	30.25	30.29	46	63	60	52	F	F	F	F		
25	29.58	29.60	80	86	69	63	F	F	C	R	29.78	29.72	66	79	70	67	C	C	C	R	30.23	30.22	55	71	61	54	F	F	F	F		
26	29.69	29.90	67	77	71	63	F	F	F	F	29.77	29.92	69	75	64	59	C	R	F	F	30.26	30.20	55	72	64	58	F	F	F	F		
27	29.97	29.86	71	82	71	67	F	F	C	R	30.08	29.82	64	67	58	56	F	C	R	R	30.17	30.01	61	65	63	60	F	R	R	C		
28	29.82	29.87	70	83	76	67	C	F	F	F	29.73	29.90	60	72	64	59	C	R	F	F	30.08	30.19	49	50	49	49	R	R	C	C		
29	30.12	30.03	70	77	69	65	F	F	F	F	29.89	29.90	67	72	62	62	F	F	R	C	30.27	30.10	45	55	50	49	C	F	C	C		
30	30.00	29.81	72	82	69	65	F	F	C	F	30.00	30.11	59	65	60	53	F	F	F	F	29.98	29.95	53	50	56	53	R	R	C	R		
31	29.74	29.91		86	72	69	F	R	R	C	30.22	30.20	50	65	58	56	F	F	F	F												
Mean			70	78	70	65																				58	67	61	57			

OCTOBER.											NOVEMBER.											DECEMBER.										
Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.				
8 A.M.	10 P.M.		8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.		8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.		8	2	St.	10	8	2	St.	10
1	30.09	30.15		57	53	53	F	C	C	C	30.16	29.79	41	56	52	50	F	F	F	F	30.28		16	35	27	19	F	F	F	F		
2	30.20	30.15	54	63	54	46	C	F	F	C	29.80	29.92	50	56	51	41	F	F	F	F	30.09	29.80	20	36	30	29	F	F	F	C		
3	30.05	29.69	55	60	59	59	C	C	C	C	29.96	29.73	43	50	49	48	F	F	C	R	29.33	29.25	37	31	26	27	R	S	S	C		
4	29.49	29.59	63	73	65	55	C	C	F	F	29.39		54	57	49	43	F	F	F	F	29.28	29.09	21	29	26	26	F	F	C	S		
5	29.69	29.54	52	59	54	50	F	F	F	F		29.63	43	51	46	38	F	F	F	F	29.21	29.53	20	22	17	15	C	F	F	F		
6	29.83	29.70	59	71	57	48	F	F	C	29.70	29.63	36	40	38	35	F	C	C	C	29.66	29.56	11	21	19	19	F	F	F	F			
7	29.82	30.07	42	54	49	40	F	F	F	F	29.57	29.69	31	39	35	28	F	C	C	C	29.81	30.29	13	10	8	3	F	F	F	F		
8	30.08	29.87	48	56	55	53	C	C	R	29.76	29.82	29	44	40	35	F	F	F	F	30.44	30.60	2	9	7	1	F	F	F	F			
9	29.70	29.88	51	51	50	44	R	R	R	29.86	29.98	34	40	34	26	F	F	F	F	30.67	30.57	5	20	18	18	C	C	C	C			
10	29.96	29.97	42	43	41	38	R	C	C	29.89	29.76	34	44	36	32	C	C	F	F	30.42	30.18	30	37	36	34	C	C	C	C			
11	30.10	30.34	38	53	47	39	F	F	F	F	30.09	30.16	26	35	29	26	F	F	F	F	30.16	30.11	35	39	36	35	R	R	R	R		
12	30.42	30.32	39	52	47	45	F	F	C	30.06	29.87	26	41	38	32	F	F	F	F		29.74	38	31	31	27	R	R	S	F			
13	30.28	30.06	49	60	55	52	F	F	C	29.95	30.00	35	47	39	36	F	F	F	F	29.83	29.70	27	37	34	32	F	F	F	F			
14	29.74	29.66	54	52	51	50	R	R	R	30.00	29.65	41	46	44	43	F	F	C	R	29.73	29.89	31	36	33	30	F	F	F	F			
15	29.60	29.49	51	60	45	45	C	F	R	F		29.89	45	58	53	49	F	F	C	C	30.08	30.22	15	22	19	13	F	F	F	F		
16	29.50	29.70	45	59	54	46	F	F	F	F		30.00	46	47	46	46	C	R	R	R	30.10	29.66	15	16	15	15	S	S	S	C		
17	29.79	29.77	49	60	55	49	F	F	F	F	29.99	29.99	42	41	40	38	R	R	R	R	29.71	29.73	14	24	17	6	F	F	F	F		
18	29.91	30.10	44	57	50	41	F	F	F	F	29.91	29.80	38	39	38	38	R	R	R	R	29.70	30.02	4	13	6	5	F	F	F	F		
19	30.12	30.12	40	52	45	37	F	F	F	F	29.63	29.70	37	40	39	40	R	R	R	R	30.21	30.00	8	7	20	F	F	C	S			
20	30.14	30.06	41	54	48	42	F	F	F	C	29.83	29.99	39	44	43	40	C	R	C	R	29.92	30.00	20	33	24	24	C	F	F	C		
21	30.00	29.91	47	49	48	41	C	R	F	29.99	29.90	37	40	39	33	C	F	F	F	30.00	29.68	24	26	20	17	S	S	S	S			
22	29.59	29.89	40	52	46	39	F	F	F	F	29.90		31	44	40	31	F	F	F	F	29.76	30.04	7	14	11	11	F	F				



Table with columns for JANUARY, FEBRUARY, and MARCH. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for time of day (8 A.M., 10 P.M., 8, 2, 10) and weather codes (S, C, F, R, H, S).

Table with columns for APRIL, MAY, and JUNE. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for time of day (8 A.M., 10 P.M., 8, 2, 10) and weather codes (S, C, F, R, H, S).

St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.

JULY.										AUGUST.										SEPTEMBER.										
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				
8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	
1	29,80		65	65	56	F	F	F	F	29,90	29,78	72	78	68	62	C	R	C	F	29,90	29,60	60	70	63	60	C	C	R	C	
2		30,30	61	67	60	53	F	F	F	29,92	30,09	64	80	71	61	F	F	F	F	29,81	30,09	61	74	68	58	R	F	F	F	
3	30,32	30,32	65	73	63	59	F	F	F	30,12	30,09	70	77	68	62	F	F	F	F	30,18	30,15	60	70	63	57	F	F	F	C	
4	30,32	30,31	69	77	63	58	F	F	F	30,07	29,98	70	74	71	64	F	F	F	F	30,10	29,99		72	63	62	F	F	C	C	
5	30,30	30,12	67	74	65	62	F	F	C	29,95	29,80	71	73	67	66	C	C	R	R	29,98		65	70	63	62	C	C	R	R	
6	30,06	29,97	74	86	76	70	F	C	F	29,78	29,86	67	76	67	65	R	C	C	C	29,88	29,93	64	60	57	57	R	C	R	R	
7	29,97	29,71	79	91	80	77	F	C	F	29,95	30,10	72	81	74	70	C	R	F	F	29,99	30,09	60	67	63	61	C	C	C	C	
8	29,80	29,98	68	79	69	59	F	F	R	30,20	30,20	75	84	73	69	F	F	F	F	30,11	30,19	66	70	63	61	C	C	C	C	
9	30,03	30,02	68	76	71	63	F	C	F	30,20	30,06	75	72	69	70	C	R	R	C	30,18	30,10	64	67	61	61	C	C	C	C	
10	30,04	29,97	74	83	80	75	F	F	F	30,03	30,10	76	84	79	71	R	C	F	F	30,05	29,91	63	64	60	60	C	C	R	C	
11	29,98	30,00	81	96	86	79	F	F	F	30,15	30,03	78	74	61	63	C	C	R	R	29,80	29,86	66	72	66	64	C	C	R	C	
12	30,05	30,06	85	85	76	73	F	F	R	29,99	29,99	67	78	68	62	C	C	F	F	29,70	29,81	68	74	69	57	R	C	F	F	
13	30,08	30,09	80	94	82	74	F	F	C	29,98	29,99	67	80	75	68	F	F	F	F	29,89	29,89	59	69	64	60	F	F	F	C	
14	30,08	30,04	83	95	73	72	F	R	C	30,01	30,00	72	80	72	68	F	F	F	F	29,88	29,83		75	68	62	F	F	F	C	
15	30,01	29,85	79	90		73	C	F	C		29,91	71	85	74	67	F	F	F	F	29,86	29,67	61	60	54	52	C	R	R	F	
16	29,79	29,76	77	90	73	70	R	R	R	29,89	29,91	74	86	70	69	F	C	R	R	29,88	30,10	53	60	55	48	F	F	F	F	
17	29,79	29,92	73	79	62	61	C	C	R	29,92	30,00	70	76	69	64	F	F	F	F	30,09	30,11	56	69	63	60	F	F	F	F	
18	29,97	30,02	61	69	65	59	R	C	F	30,08	30,18	68	75	68	66	F	F	C	C	30,12	30,01	55	68	59	53	F	F	F	F	
19	30,07	30,08	65	71	62	57	R	C	F	30,20	30,25	65	66	63	60	R	C	C	C	29,93	29,78	59	72	64	60	F	F	F	F	
20	30,02	29,90	64	69	60	59	F	C	R	30,27	30,35	62	70	64	56	F	F	F	F	29,76	29,86	65	78	69	66	F	F	F	F	
21	29,90	29,90	62	70	66	65	R	C	R	30,38	30,38	64	73	65	58	F	F	F	F	30,12	30,26	60	70	64	56	F	F	F	F	
22	29,97	29,95	78	72	68	65	F	C	R	30,39	30,32	63	74	66	58	F	F	F	F	30,38	30,29	58	65	58	55	C	C	F	C	
23	29,99	29,91	74	80	77	69	F	F	F	30,27	30,18	65	80	75	68	C	F	F	F	30,21	30,61	63	69	64	63	C	C	C	C	
24	29,90	29,78	79	86	76	66	F	R	F	30,18	30,06	74	79	71	67	F	F	F	F	29,99	30,07	71	80	58	55	C	C	R	R	
25	29,79	29,84	69	78	67	61	F	F	F	30,03	29,96	75	88	72	72	C	R	R	R	30,00	30,09	54	53	50	48	R	C	R	R	
26	29,89	29,91	66	81	67	67	F	F	F	29,97	29,94	75	85	79	72	C	R	C	F	30,14	30,10	50	62	54	51	F	F	F	C	
27	29,95	30,00	70	78	69	64	F	F	F	29,97	30,01	75	84	79	70	F	F	F	F	29,89		55	69	59	53	C	F	R	F	
28	30,04	30,13	73	81	71	67	F	F	F	30,06	29,86		83	78	73	F	F	F	F	29,78	30,05	56	59	53	44	F	R	R	F	
29	30,17	30,11	78	85	74	68	F	F	F	29,89	29,99	80	88	77	66	F	F	F	F	30,17	30,12	45	59	54	52	F	F	C	F	
30	30,06	29,79	70	82	73	71	F	F	F	29,99	29,87	68	72	66	66	C	F	C	C	30,10	30,02	56	71	63	58	F	F	C	F	
31	29,74	29,88	79	91	80	75	F	F	F	29,79	29,86	65	62	59	58	C	C	C	C											
Mean			72	81	70	66							70	78	70	66								60	68	61	57			

OCTOBER.										NOVEMBER.										DECEMBER.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10
1	29,97	29,80	62	77	67	64	F	R	F	29,74		43	52	46	36	F	F	F	F	30,09	29,70	40	44	44	49	C	C	R	C
2	29,77	29,80	71	80	70	66	F	R	C	30,28	33	43	37	30	F	F	F	F	29,62	29,98	54	48	43	33	C	C	F	F	
3	29,60	29,85	57	54	51	42	R	C	F	30,18	29,83	33	33	30	25	C	S	S	S	30,22	30	41	31	38	25	F	F	F	F
4	30,09	30,14	41	53	47	38	F	F	F	29,69	29,89	25	32	26	17	S	C	F	F	30,41	30,23	28	40	35	34	F	F	C	C
5	30,10		44	54	47	46	C	C	F	29,97	29,83	23	41	37	39	F	F	F	F	30,11	29,84	33	40	38	34	F	F	C	C
6	29,82	30,00	50	62	55	46	F	F	F	29,90	30,03	38	50	45	36	F	F	F	F	29,70	29,67	32	33	31	28	C	C	C	C
7		29,85	48	62	58	54	F	F	F	30,09	30,08	40	52	48	43	F	F	F	F	29,60	29,43	25	31	28	26	C	F	C	C
8	29,67	29,84	55	60	53	47	F	C	F	30,09	30,09	45	63	54	47	F	F	F	F	29,48	29,40	23	28	24	20	F	F	F	C
9	29,97	29,77	43	54	56	58	F	C	R	30,12	29,78	42	43	45	46	C	C	R	R	29,40	29,52	20	28	23	19	F	F	F	F
10	30,10	30,23	46	51	43	34	F	F	F	29,73	29,58	46	50	47	46	C	C	C	C	29,70	29,87	17	30	26	21	F	F	F	F
11	30,27	30	16	35	53	47	43	F	F	29,38	29,59	46	49	41	34	C	F	F	F	30,00	30,00	30	43	38	40	F	F	C	C
12	30,00	29,94	50	55	51	43	C	R	F		29,72	32	40		31	F	F	F	F	29,89	29,24	38	38	38	38	R	R	R	R
13	30,17	30,41	35	41	36	28	F	F	F	29,75	29,71	35	43	40	39	C	C	C	C	28,73	28,95	38	33	30	27	C	C	F	F
14	30,46	30,91	32	47	46	52	F	F	F	29,68	29,50	46	62	55	51	F	F	F	C	29,09		25	25	21		F	F	F	F
15	29,79	30,09	54	60	50	40	R	C	F	29,20	29,34	54	60	53	46	F	F	C	R			23	35			F	F	F	F
16	30,14	29,82	36	48	43	39	F	F	F	29,70	30,13	30	38	33	26	F	F	F	F	29,60	32	35	36	36	36	F	S	C	F
17	29,76	30,10	43	41	35	33	F	F	F	30,35	30,15	25	34		25	F	F	F	F	29,94	30,15	30		34	29	F	F	F	F
18	30,17	30,20	32	40	35	34	C	F	F	29,92		28	33	33	25	C	C	C	F	30,02	29,82	35	38	35	33	R	R	R	R
19	30,30	30,32	34	43	30	31	C	F	F	29,68	30,03	28	42	37	30	F	F	F	F	29,86	30,04	34	36	35	32	R	C	C	C
20	30,28	30,05	37	44	44	45	C	C	C	30,29	30,38	20	30	27	25	F	F	F	F	30,10	29,90	27	25	24	24	C	C	C	C
21	29,99	29,87	44	48	47	48	R	C	R	30,30	29,83	36	42		48	C	C	R	R	30,07	30,03	21	31	27	32	C	C	S	S
22	29,77	29,58	45	52	45	34	R	R	S	29,92	29,96	44	44	39	31	R	C	C	F	29,67	29,82	38	30	24	18	S	S	F	F



JANUARY.										FEBRUARY.										MARCH.										
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				
8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	
1	30.31	30.07	33	35	32	33	F	C	S	C	29.49	29.63	31	36	29	24	F	F	F	F	30.13	29.96	31	41	36	31	F	F	F	F
2	29.90	29.68	35	33	32	32	R	C	C	R	29.74		21	32	18	F	F	C	F	29.75	29.60	41	19	12	40	F	F	C	R	
3	29.61	29.68	35	44	41	35	R	F	F	F	30.09	29.89	17	29	25	21	F	F	F	F	29.61	29.70	42	52	44	39	F	F	C	R
4	29.79	30.10	35	38	34	26	F	F	F	F	29.86		31	44	37	35	C	F	C	C	29.80	29.94	37	45	35	30	F	C	F	F
5	30.12	29.53	20	32	29	31	F	F	C	S	29.61	29.73	34	43	38	34	F	F	F	F	29.80	29.40	33	34	35	30	S	R	C	F
6	29.44	29.83	26	23	17	9	F	F	F	F	30.00	30.19	32	34	36	19	F	F	F	F	29.54	29.85	33	38	34	28	F	F	F	F
7	29.96	29.95	5	14	12	10	F	F	F	F	30.21	29.91	17	26	23	23	F	F	C	C	29.96	29.04	30	36	31	32	F	F	F	F
8	29.92	29.75	9	23	21	18	F	F	F	F	29.75	29.76	22	25	20	16	S	C	F	F	29.01	29.90	35	41	36	35	S	S	C	C
9	29.89	30.07	14	19	10	8	F	F	F	F	29.63	29.75	24	38	24	20	S	F	F	F	29.91	30.01	33	35	34	33	S	C	C	C
10	30.12	30.13	2	15	12	5	F	F	F	F	29.84	30.08	18	27	20	10	F	F	F	F	29.87	28.99	33	36	37	41	C	C	R	R
11	30.17	30.11	4	15	14	10	F	F	F	F	30.18	30.15	8	24	17	19	F	F	C	F	30.00	29.20	37	48	39	37	R	F	F	F
12	30.07	29.66	8	19	17	27	F	F	C	C	30.15	30.19	21	24	22	22	S	C	C	C	29.23	29.31	39	46	39	31	F	F	F	F
13	29.13	29.22	34	28	23	20	S	R	C	C	30.28	30.12	13	21	19	14	F	F	F	F	29.39	29.52	33	41	37	31	F	F	F	C
14	29.36	29.50	17	25	23	17	F	F	F	F	30.13	30.02	20	28	22	12	C	C	F	F	29.62	29.83	34	44	37	34	F	F	C	C
15	29.60	29.79	21	32	27	20	F	F	F	F	29.97	29.86	20	36	32	30	C	F	C	C	29.99	29.92	34	42	36	36	F	F	C	C
16	29.81	29.89	17	28	22	14	F	F	F	F	29.78	29.71	33	36	33	29	C	C	C	C	29.79	29.77	33	35	33	33	S	C	S	C
17	29.92	29.93	12	25	20	11	F	F	F	F	29.61	29.49	29	35	35	29	C	C	C	F	29.83	30.02	36	48	42	35	F	F	C	R
18	29.96	29.58	9	23	18	17	F	F	C	S	29.40		22	31	21	19	F	F	F	F	30.04	29.85	36	49	40	38	F	F	C	R
19	29.03	29.24	21	18	15	12	S	S	S	F	29.30	29.41	18	32	25	21	F	F	F	C	29.58	29.50	40	52	43	40	C	F	F	F
20	29.37	29.29	16	26	23	19	F	F	F	F	29.53	29.49	20	26	23	19	F	F	F	C	29.56	29.78	42	51	44	38	C	F	F	F
21	29.51	29.71	10	18	15	8	F	F	F	F	29.40	29.53	18	30	25	25	F	F	C	F	29.89	30.14	39	45	36	29	C	F	F	F
22	29.73	29.82	4	10	4	-4	C	F	F	F	29.59	29.96	28	38	35	32	F	F	C	F	30.25	30.35	32	46	38	32	F	F	F	F
23	29.96	29.94	-11	1	-1	-4	F	F	F	F	30.00	29.92	32	38	33	29	F	C	F	C	30.39	30.05	38	44	40	16	F	C	R	R
24	29.85	29.80	7	17	14	9	F	F	F	F	29.92	29.66	30	37	30	26	F	F	F	F	30.05	30.16	48	45	40	38	R	R	C	F
25	29.84	30.02	6	22	19	10	F	F	F	F	29.98	29.96	30	34	31	23	F	S	F	F	30.28	30.30	38	42	36	30	F	F	F	F
26	30.03	30.00	7	20	15	11	F	F	F	F	30.00	29.50	24	32	32	33	F	F	C	R	30.33	30.20	34	43	38	36	C	F	F	F
27	30.04	30.10	6	16	14	6	F	F	F	F	28.92	29.61	35	37	29	24	R	C	F	F	29.99	29.82	40	51	43	40	C	C	C	C
28	30.18	30.19	14	28	23	22	C	F	C	S	29.89	30.01	23	36	29	24	F	C	F	F	29.63	29.51	48	62	56	54	C	F	C	C
29	30.22	30.28	25	30	22	11	C	F	F	F	30.18	30.09	23	36	29	28	F	F	C	C	29.50	29.62	54	62	53	48	C	F	F	F
30	30.36	30.32	13	27	25	26	F	F	C	C											29.72	29.95	45	55	44	35	F	F	F	F
31	29.90	29.30	27	38	35	35	S	R	C	F											29.98	30.00	10	52	43	35	F	F	F	F
Mean			16	24	20	16							24	33	28	23							38	45	39	36				

APRIL.										MAY.										JUNE.											
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.					
8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10		
1	30.09	30.08	44	62	55	46	F	F	F	F	30.16	30.04	53	64	57	49	F	F	F	F	30.21	30.19	67	64	55	51	C	F	F	F	
2	30.08	30.12	56	74	65	56	F	F	F	F	30.04	29.97	56	58	50	49	F	F	F	C	30.04	29.81	53	56	58	56	R	F	C	F	
3	30.21	30.37	55	67	50	44	F	F	F	F	29.90	29.80	46	45	42	41	C	R	R	R	29.91	30.20	63	56	53	6	F	C	F	F	
4	30.46	30.45	48	60	55	51	F	F	F	F	29.70	29.76	44	48	43	42	R	C	C	C	30.28	30.16	62	67	55	55	F	F	R	R	
5	30.38	30.22	51	63	57	53	C	R	C	F	29.79	29.83	50	56	47	47	C	F	C	R	29.96	29.98	63	82	61	61	C	F	R	C	
6	30.26	29.97	52	57	58	55	C	R	F	F	29.89	29.90	55	58	49	46	C	R	F	F	29.90	29.90	69	63	56	55	C	R	C	C	
7	29.89	30.39	57	55	50	38	R	F	F	F	29.92	30.00	56	66	55	50	F	R	F	F	29.82	29.92	54	52	47	49	R	R	R	C	
8	30.50	30.31	41	50	42	38	F	F	F	F	30.01	30.04	56	61	49	49	F	F	F	F	29.99	30.06	54	56	53	48	C	C	F	F	
9	30.19	29.83	15	57	58	54	R	F	C	C	30.05	29.93	57	64	54	54	F	F	F	F	30.11	30.12	57	63	52	48	F	F	F	F	
10	29.85	30.19	58	63	54	55	C	F	F	F	29.89	30.01	67	76	66	58	C	F	F	F	30.12	30.08	58	66	55	50	F	F	F	F	
11	30.28	29.97	56	46	41	40	C	R	R	R	30.01	29.78	61	66	66	60	F	F	F	F	30.08	30.17	62	64	55	49	F	F	F	F	
12	30.06	30.16	42	49	41	37	C	F	F	F	29.80	29.80	71	82	59	55	C	R	C	R	30.18	30.21	60	61	52	49	F	F	C	C	
13	30.16	29.90	42	46	41	40	C	C	R		29.75	29.75	56	66	66	62	C	R	F	C	30.21	30.11	52	62	53	50	C	F	C	F	
14	29.67	29.67	10	18	15	37	C	C	F		29.89	30.12	59	68	61	54	F	F	F	F	30.09	30.01	61	73	66	60	F	F	F	F	
15	29.75	29.80	35	45	40	34	F	F	F	F	30.13	29.95	62	76	68	63	F	F	F	F	30.05		68	74	68	64	F	F	F	F	
16	29.84	30.02	40	47	42	37	F	F	F	F	29.98	29.72	51	44	39	39	R	F	R	F	30.04	29.99	67	78	70	63	F	F	F	F	
17	29.90	30.70	42	45	42	41	R	C	C	R			29.93	47	56	47	45	C	C	C		29.99	30.01	77	86	74	69	F	F	F	F
18	29.78		38	46	40	37	C	C	F	F	29.99	30.14	54	63	49	42	C	C	F	F	30.14		69	73	63		F	F	F	F	
19		30.02	12	53	45	40	F	F	F	F	30.22	30.20	50	67	54	53	F	F	F	F	30.11	29.96	74	83	73	72	F	F	F	F	
20	30.02	30.02	16	54	43	40	F	C	F	C	30.17	30.01	57	65	57	55	C	F	R	F	29.79	29.86	77	93	66	59	R	F	R	F	
21	30.07	30.00	45	51			40	F	C	C	30.00	30.17	57	61	54	48	F	F	F	F	29.85	29.70	68	74	61	62	C	F	F	F	
22	29.92	29.86	14	51	43	35	C	F	F	F	30.21	30.14	63	74	61	55	F	F	F	F	29.69	29.61	72	82	76	73	F	F			

JULY.												AUGUST.												SEPTEMBER.											
Barometer.				Therm.				Weather.				Barometer.				Therm.				Weather.				Barometer.				Therm.				Weather.			
8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10		
1	29.83	29.76	82	90	76	73	C	F	F	F	29.62	29.80	77	86	77	70	C	F	C	C	30.09	30.00	56	75	66	61	F	F	F	F	F				
2	29.66	29.92	83	85	71	60	F	F	F	29.99	30.12	69	72	64	68	C	F	F	F	30.00	30.03	70	78	68	61	F	F	F	F	F					
3	29.96	29.87	67	78	71	64	F	F	F	30.17	30.11	65	68	64	54	F	F	F	F	30.09	30.15	63	64	58	55	F	F	F	F	F					
4	29.82	30.01	72	81	68	59	C	F	F	30.10	30.10	62	72	62	57	F	F	F	F	30.22	30.35	58	65	56	50	F	F	F	F	F					
5	30.10	30.18	66	76	65	62	C	F	F	30.16	30.09	62	72	62	59	F	F	F	F	30.42	30.40	61	69	59	53	F	F	F	F	F					
6	30.21	30.25	70	74	65	60	F	F	F	30.03	29.82	65	62	61	61	C	R	R	R	30.36	30.21	58	70	63	60	F	F	F	F	F					
7	30.22	30.09	72	75	66	60	F	F	F	29.94	30.00	72	86	79	72	F	F	F	F	30.19	30.03	81	75	67	67	F	F	F	F	F					
8	29.99	29.88	70	82	73	66	F	F	F	30.03	30.02	80	88	82	75	F	F	F	F	30.00	30.04	73	86	75	69	F	F	F	F	F					
9	29.80	29.78	64	75	74	72	R	C	F	29.99	29.80	80	91	83	78	F	F	F	F	30.08	30.02	58	56	49	49	C	C	C	R	R					
10	29.85	30.05	76	67	62	67	R	C	F	29.86	29.79	78	87	74	65	F	F	F	F	30.12	30.19	50	58	54	51	C	C	C	F	F					
11	30.14	30.10	67	74	66	63	C	F	F	29.78	29.57	72	79	76	77	F	F	F	F	30.22	30.20	53	61	55	50	F	F	F	F	F					
12	30.02	30.00	72	82	69	65	F	F	F	29.65	29.84	69	75	67	65	R	F	C	C	30.20	30.04	58	70	59	54	F	F	F	F	F					
13	29.99	29.94	70	86	71	70	C	F	F	29.93	29.98	70	77	67	63	R	F	C	C	30.08	30.10	59	63	56	50	F	F	F	F	F					
14	29.95	30.10	77	86	77	71	F	F	F	29.88	29.65	69	73	67	67	C	R	R	R	29.99	29.78	69	63	58	58	F	F	F	C	C					
15	30.13	75	77	68	67	F	F	F	29.62	29.69	65	72	64	59	F	F	F	F	29.70	29.96	66	71	62	53	C	F	F	F	F						
16	30.00	29.91	73	81	75	71	R	C	C	29.79	29.93	64	74	68	66	C	F	F	F	30.05	29.88	60	65	59	57	F	R	R	R	R					
17	29.86	29.86	64	71	65	64	R	C	R	29.93	29.90	61	85	76	71	F	F	F	F	29.87	29.93	58	56	57	58	R	R	R	R	R					
18	29.88	29.90	73	82	75	69	F	F	F	29.90	29.83	75	90	81	73	F	F	F	F	30.01	30.00	58	64	59	51	C	F	F	F	F					
19	29.86	29.70	72	87	74	68	F	F	F	29.80	29.80	80	95	84	76	F	F	F	F	30.00	29.88	53	60	58	56	F	C	F	F	F					
20	29.60	29.76	77	83	75	65	F	F	F	29.80	30.05	73	86	66	58	F	F	F	F	29.87	30.00	49	54	49	42	C	F	C	F	F					
21	29.82	29.91	71	71	68	61	R	C	F	30.11	30.12	62	72	63	59	F	F	F	F	30.03	30.03	47	60	54	48	F	F	F	F	F					
22	30.02	30.09	67	79	69	65	F	F	F	30.14	30.12	64	71	63	59	F	F	F	F	30.04	30.05	50	65	56	50	F	F	F	F	F					
23	30.09	30.10	72	80	64	64	F	C	F	30.11	30.00	62	71	63	57	F	F	F	F	30.00	30.05	58	74	64	57	F	F	F	F	F					
24	30.09	29.89	61	59	56	56	R	R	R	29.88	29.70	66	79	71	66	F	F	C	R	29.97	29.74	62	75	68	62	F	F	C	F	F					
25	29.91	64	76	69	59	F	F	F	29.58	29.65	69	75	61	62	R	F	R	F	29.82	29.86	64	74	68	60	F	F	F	F	F						
26	30.10	71	81	72	69	F	F	F	29.85	60	69	64	54	F	F	F	F	29.81	29.94	63	69	61	52	F	R	R	R	R							
27	30.07	30.08	76	89	82	75	F	F	F	30.18	30.02	58	73	66	62	F	F	F	F	30.02	30.09	44	41	37	37	F	R	R	R	R					
28	30.16	30.12	69	74	64	60	F	F	C	29.89	29.82	65	75	71	65	R	F	F	F	30.09	30.23	42	54	50	39	F	F	F	F	F					
29	30.14	30.09	70	76	65	60	C	R	C	29.80	29.70	72	84	76	67	F	F	F	F	30.36	30.11	45	61	54	47	F	F	F	F	F					
30	30.07	29.90	68	66	64	58	C	R	C	29.70	29.72	69	61	61	55	F	F	R	F	29.92	29.62	58	75	66	63	F	F	F	F	F					
31	29.89	29.70	70	84	77	69	F	F	F	29.80	30.00	59	66	58	50	F	F	F	F																
Mean			71.78	70.65								69.77	70.64																						

OCTOBER.												NOVEMBER.												DECEMBER.											
Barometer.				Therm.				Weather.				Barometer.				Therm.				Weather.				Barometer.				Therm.				Weather.			
8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10
1	29.70	29.80	56	51	50	46	R	R	C	30.01	29.75	50	51	51	49	R	C	C	C	29.74	29.70	35	38	33	28	F	F	F	F	F					
2	29.90	29.90	44	46	44	43	C	C	C	29.75	29.68	51	65	59	52	F	C	R	R	29.73	30.00	35	28	23	16	S	C	F	F	F					
3	29.89	29.80	41	66	51	44	F	F	F	29.92	30.01	45	49	45	38	C	F	F	F	30.14	30.18	25	26	24	28	F	C	F	F	C					
4	29.80	29.92	52	61	50	51	C	C	C	30.05	29.98	40	57	54	46	F	F	F	F	30.00	29.93	33	44	42	40	C	C	C	R	F					
5	30.11	30.16	46	56	40	40	F	F	F	29.97	29.95	45	66	57	46	F	F	F	F	29.96	30.02	42	48	40	36	F	C	F	F	F					
6	30.27	30.28	43	54	47	41	F	F	F	30.02	30.10	41	57	50	43	F	F	F	F	30.03	29.90	43	45	42	34	F	F	C	F	S					
7	30.28	40	57	51	46	F	F	F	30.14	30.13	40	52	49	47	F	C	C	C	30.02	29.81	35	24	22	19	F	F	F	F	F						
8	42	58	51	44	F	C	F	30.13	30.02	45	53	48	47	C	C	C	C	29.72	29.55	28	34	29	30	F	F	F	C	F							
9	29.71	47	56	52	48	F	F	F	29.80	29.47	50	52	53	51	C	R	R	C	29.43	29.68	30	39	23	23	C	F	C	F	C						
10	29.68	29.70	57	70	64	53	F	F	F	29.45	29.59	51	55	45	45	C	F	F	F	29.79	29.83	25	19	17	10	F	F	F	F	F					
11	29.78	29.80	54	69	57	50	F	F	F	29.70	29.80	47	56	51	43	F	F	F	F	29.83	29.94	19	28	24	15	F	F	F	F	F					
12	29.80	29.82	53	57	55	56	C	F	R	29.74	29.60	45	45	43	36	R	C	R	C	29.98	29.82	21	30	27	22	F	F	F	F	F					
13	29.36	29.67	56	58	56	52	R	C	F	29.61	29.65	37	46	42	36	C	F	F	F	29.73	29.62	29	38	36	23	C	F	F	F	F					
14	29.83	29.84	56	65	62	54	F	R	F	29.65	29.88	38	46	33	31	F	F	F	F	29.52	29.38	31	33	30	26	C	S	S	S	S					
15	29.78	29.57	59	63	64	58	C	R	F	29.97	29.92	30	42	37	28	F	F	F	F	29.31	29.40	37	31	29	24	F	F	F	F	F					
16	29.69	29.93	55	62	54	47	F	F	F	42	50	45	41	C	R	R	F	29.54	29.58	30	24	20	11	F	F	F	F	F							
17	30.00	50	60	54	49	F	F	F	29.99	38	44	40	31	F	F	F	F	29.60	29.72	21	20	16	7	F	F	F	F	F							
18	29.87	29.70	53	58	58	44	R	C	F	29.92	29.63	38	53	51	53	F	C	C	C	29.79	29.58	17	19	18	7	F	F	S	S	F					
19	30.02	44	56	44	43	F	F	F	29.74	29.40	54	62	51	45	C	F	R	R	29.40	29.59	29	29	24	24	C	C	C	C	F						
20	30.12	29.90	50	58	49	49	C	F	R	29.30	29.55	40	41	39	31	R	C	F	F	29.70	29.72	28	29	26	24	C	C	C	C	F					
21	29.56	29.70	50	61	59	44	R	C	F	30.11	30.26	27	30	26	22	F	F	F	F	29.49	29.72	25	25	24	22	F	F	F	F	F					
22	29.96	30.27	38	45	39	32	F	F	F	30.26	30.17	25	33	31	26	F	F	F	F	29.36</															



JANUARY.										FEBRUARY.										MARCH.										
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					
8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	
1	30,02	30,35	7	14	10	6	F	F	F	30,51	30,32	1	20	13	23	F	F	F	C	30,58	30,48	15	33	30	27	F	F	C	C	
2	30,11	30,23	11	20	17	19	S	C	C	30,12	29,72	27	41	35	35	C	C	R	R	30,45	30,30	31	43	36	36	F	F	F	C	
3	30,43	30,20	8	22	21	21	C	F	C	30,11	30,34	17	15	11	3	F	F	F	F	30,08	30,10	44	57	52	42	R	F	F	F	
4	29,81	29,61	31	33	35	30	R	C	S	30,33	30,10	15	27	29	24	F	C	S	C	30,11	29,89	40	54	42	40	C	C	C	C	
5	29,93	27,36	29	20	20	S	C	F	F	29,77	29,83	35	45	40	33	C	F	F	F	29,42	29,52	41	48	40	34	R	C	R	C	
6	30,01	29,75	29	31	29	29	F	F	C	29,80	29,47	35	44	39	40	C	F	R	R	30,12	30,20	31	42	37	31	F	F	F	F	
7	29,79	29,81	31	42	37	29	F	F	F	29,78	30,09	26	29	24	17	C	C	F	F	30,04	29,79	40	55	50	44	C	F	C	C	
8	29,82	29,68	26	39	32	33	F	F	C	30,09	29,67	23	36	34	35	C	F	C	R	29,61	29,22	42	38	36	31	R	R	C	C	
9	29,54	29,31	36	36	35	34	R	R	R	29,51	29,83	39	47	38	29	C	F	F	F	29,05	30,25	22	21	20	18	S	F	F	F	
10	29,47	29,53	36	40	39	31	R	C	F	29,83	30,21	36	34	34	17	F	F	F	F	30,48	30,41	22	32	32	28	F	F	F	F	
11	29,41	29,52	32	42	39	33	C	F	F	30,40	30,38	9	19	16	17	F	F	F	C	30,11	29,43	35	44	45	45	R	F	C	C	
12	29,70	29,84	27	27	24	19	F	F	F	30,33	29,45	27	27	28	27	S	S	S	S	29,56		37	45	37	30	F	C	C	F	
13	29,86	30,07	15	22	20	14	F	F	F	29,28	29,01	27	25	25	23	C	S	S	C	29,75	30,05	31	27	25	19	S	C	F	F	
14	30,15	30,01	12	27	25	28	F	F	S	29,14	29,60	26	34	30	27	C	S	C	C	30,30	30,30	27	34	28	25	F	F	F	F	
15	29,90	29,70	33	41	36	35	C	C	C	29,85	30,15	18	28	22	14	F	F	F	F	30,29	30,09	34	46	42	39	F	F	F	F	
16	29,67	29,38	36	42	38	38	C	R	R	30,28	30,27	14	35	28	31	F	C	C	C	30,00	29,99	45	65	54	50	F	F	F	F	
17	29,15	29,69	35	38	36	32	R	F	F	30,10	29,50	36	38	38	40	R	R	R	R	29,92	29,35	52	73	57	59	F	F	C	F	
18	29,86	29,72	28	40	35	33	F	F	F	29,79	30,15	39	45	38	31	F	F	F	F	30,15	30,00	43	38	36	37	R	C	R	R	
19	29,70	29,85	35	43	38	31	F	F	F	30,23	29,75	32	41	37	36	F	C	R	F	29,66	30,10	41	54	47	35	R	C	F	F	
20	29,92	29,65	31	41	36	37	C	C	C	29,32	29,68	46	48	47	35	R	C	F	F	30,21	30,11	38	44	37	35	F	F	F	F	
21	29,52	29,40	37	38	37	35	R	C	C	29,79	29,80	35	40	35	30	F	S	C	F	29,93	29,59	39	36	33	33	C	S	S	S	
22	29,31	29,42	35	37	31	25	S	C	C	29,97	30,32	22	21	16	10	F	F	F	F	29,67	29,85	30	34	32	29	C	F	F	F	
23	29,50	29,66	18	36	24	18	F	F	F	30,45		14	29	34	28	C	C	C	C	29,87	29,80	31	41	35	33	F	F	F	F	
24	29,77	29,90	15	25	22	18	F	F	F	29,65	29,39	41	51	51	35	R	R	R	F	29,94	30,20	31	42	33	26	C	F	F	F	
25	29,97	29,80	16	24	21	19	F	F	F	30,32	30,42	22	28	25	27	F	C	C	C	30,26		37	51	44	38	F	F	F	F	
26	29,90	29,97	10	16	15	10	F	F	F	30,11	29,50	33	39	33	41	R	C	C	C	30,20	29,67	45	51	45	46	C	C	R	F	
27	29,98	29,87	15	23	30	29	F	F	C	29,58	29,76	40	40	36	35	C	C	R	C	29,65	29,90	48	56	45	32	F	F	F	F	
28	29,53	29,62	38	41	37	35	C	C	F	30,08	30,49	14	17	16	12	F	F	F	F	30,01	30,20	28	38	34	29	F	F	F	F	
29	29,65	30,20	29	32	27	19	F	F	F											30,20	30,13	39	53	44	40	F	F	C	C	
30	30,20	29,50	17	24	26	25	F	C	S											30,27	30,27	40	41	36	33	C	F	C	F	
31	29,45	30,40	24	22	12	2	S	F	F											30,23	30,12	38	46	46	40	F	F	F	F	
Mean			25	32	29	25						27	34	30	27															

APRIL.										MAY.										JUNE.									
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.				
8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10
1	30,17	30,30	48	56	45	40	F	F	F	30,40	30,31	58	70	57	51	F	F	F	F	29,71	29,78	57	63	53	52	C	C	R	C
2	30,21	29,98	47	61	58	56	F	C	R	30,29	30,15	65	78	64	59	F	F	F	F	29,81	29,92	52	60	51	49	R	R	C	C
3	30,11	30,29	58	61		41	F	F	F	30,03	29,79	63	73	64	59	C	C	R	R	29,99	30,04	54	63	53	49	R	R	C	C
4	30,29	30,19	48	56	53	48	F	F	F	29,80	30,03	66	78	55	50	C	F	R	C	30,09		61	71	54	56	F	C	C	C
5	30,19	30,10	52	56	54	49	C	C	C	30,23	30,38	46	53	45	41	R	F	F	F	30,06	30,02	60	62	55	51	R	C	F	C
6	30,01	29,70	58	63	55	55	C	R	R	30,41	30,41	49	54	46	44	F	F	F	F	30,08	29,80	62	67	55	55	C	C	R	R
7	29,59	29,90	48	58	53		R	C	F	30,46	30,37	51	59	55	55	F	F	F	F	29,69	29,90	75	83	73	66	F	F	F	F
8	30,08	30,02	54	70	57	46	F	F	F	30,32	30,21	70	81	67	60	F	F	F	F	29,99	29,88	77	85	72	67	F	F	F	F
9	29,98	29,81	59	69	58	49	F	F	F	30,16	30,23	73	84	70	64	F	C	C	C	29,84		77	88	79	72	C	R	F	F
10	29,60	29,98	57	63	47	39	R	F	F	30,40	30,45	62	65	53	49	F	F	F	F	29,81	29,76	82	95	85	82	F	F	F	F
11	30,09	30,00	43	57	53	43	F	F	F	30,46	30,21	59	63	58	51	F	C	C	F	29,82	29,82	87	95	81	78	F	F	F	F
12	29,92	29,59	50	51	50	47	R	R	F	30,01	29,73	67	85	74	63	C	C	F	F	29,80	29,80	86	94	85	79	F	F	F	F
13	29,61	29,82	46	54	49	40	F	F	F	29,90	29,88	65	70	58	53	F	F	F	F	29,80	29,70	86	92	74	71	F	F	C	F
14	29,83	29,60	42	59	47	45	C	R	C	29,81	29,82	67	83	69	63	F	F	F	F	29,79	29,98	72	84	68	66	F	F	F	F
15	29,59	29,75	45	57	45	40	C	F	F	30,10	30,39	53	61	51	45	C	F	F	F	30,10	30,13	75	80	73	67	F	F	F	F
16	29,81	29,94	46	53	46	39	F	F	F	30,49	30,36	54	62	54	48	F	F	F	F	30,30	30,09	79	85	72	65	F	F		

JULY.										AUGUST.										SEPTEMBER.									
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.				
8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10
1	29,91	29,73	55	85	3	69	F	R	R	29,97	30,01	65	71	65	58	F	F	F	F	29,96	29,71	74	87	77	73	F	F	F	C
2	29,69	29,89	76	76	67	62	C	C	F	30,03	30,03	70	79	64	F	F	F	F	F	29,65	29,83	80	82	70	60	F	F	F	F
3	29,98	30,02	72	74	67	63	F	F	F	30,02	30,00	74	84	73	62	F	F	F	F	29,92	29,98	59	69	61	54	F	F	F	F
4	30,03	29,84	74	80	81	71	C	F	F	30,00	29,97	69	81	76	73	R	C	F	F	30,08	30,11	60	76	65	58	F	F	F	F
5	29,80	29,90	83	96	85	76	F	F	F	29,98	30,07	80	94	80	72	F	F	R	R	30,12	29,99	66	82	73	68	F	F	C	R
6	29,93	29,90	81	82	67	67	F	R	C	30,01	30,03	68	80	77	68	R	C	R	F	29,85	29,88	74	86	78	70	F	F	C	C
7	29,99	30,09	71	78	67	67	C	C	F	30,08		72	74	67	63	F	F	F	F	30,00	29,01	62	68	62	54	F	F	C	F
8	30,09	29,98	77	77	67	65	C	F	F	30,03	30,03	73	76	65	63	F	F	F	F	30,10	30,06	58	74	64	62	F	F	C	C
9	29,97	29,76	70	79	72	66	C	R	R	29,94		70	78	75	69	C	R	R	C	30,08	30,07	63	64	61	59	C	R	R	R
10	29,80	29,91	72	82	76	69	F	F	F	29,82	29,97	76	84	75	68	C	F	C	F	30,11	30,15	67	68	60	58	C	R	R	R
11			75	68	65		R	C	F	30,01	30,00	72	82	78	71	C	C	C	F	30,03	29,77	55	54	53	53	C	R	R	R
12	29,12	30,00	70	78			F	F	F	29,97	29,96	79	87	81	74	F	F	F	F	29,72	29,74	56	65	62	57	R	C	C	C
13		30,00	73	76	65	60	F	F	F	30,00	30,00	79	84	73	68	F	F	F	F	29,79	29,94	60	71	65	62	C	C	C	C
14	30,00	29,98	65	73	66	62	F	F	F	30,01	29,97	75	90	77	76	F	F	C	F	29,99	30,01	64	76	60	60	F	F	C	F
15	29,97	29,84	70	74	68	67	F	F	C	30,04	30,10	73	76	68	67	C	C	C	C	30,00	29,89	65	80	72	66	C	E	C	F
16	29,73	29,59	69	74	67	65	R	C	R	30,10	30,06	71	77	70	64	F	F	F	F	29,78	29,61	68	82	74	69	C	F	C	F
17	29,59	29,75	73	82	72	66	F	F	F	30,02	29,88	72	89	77	71	F	F	F	F	29,61	30,04	65	63	54	47	C	C	F	F
18	29,84	29,92	75	85	78	73	F	F	C	29,98	29,82	82	89	81	68	C	C	R		30,23	30,35	48	60	54	43	F	F	F	F
19	29,84	29,92	73	81	72	68	R	C	C	30,09	30,04	68	75	66	61	F	F	F	F	30,33	30,26	55	70	62	53	F	F	F	F
20	29,96		75	82	72	65	F	F	F	30,07	30,10	67	79	70	68	F	F	F	F	30,24	30,10	56	68	63	58	F	F	F	F
21	30,10	30,02	72	83	71	66	F	F	F	30,20	30,26	69	75	67	64	F	F	F	F	30,02	29,92	61	64	59	59	C	C	C	C
22	29,97	29,82	77	90	80	73	F	F	F	30,27	30,22	72	85	76	69	F	F	F	F	29,96	30,05	60	73	63	59	C	C	F	F
23	29,81	29,84	82	90	84	78	F	F	F	30,21	30,12	76	88	75	68	F	F	F	F	30,14	30,22	64	73	63	56	F	F	F	F
24	29,90	29,92	78	87	77	70	R	C	F	30,05	30,13	73	79	75	69	R	C	C	C	30,30	30,27	63	65	59	58	C	C	C	C
25	29,98	30,12	72	79	72	64	F	F	F	30,27	30,30	65	66	61	60	C	C	C	C	30,18	29,90	59	64	57	53	C	C	C	C
26	30,18	30,14	73	80	70	66	F	F	F	30,29		66	72	64	55	F	F	F	F	29,75	29,55	57	60	58	58	C	R	R	R
27	30,14	30,12	76	84	72	65	F	C	F	30,23	30,22	60	72	63	52	F	F	F	F	29,50	29,74	65	79	67	61	F	F	F	F
28	30,11	30,16	69	76	70	68	R	C	C	30,21	30,14	65	77	67	64	C	F	F	F		30,02	62	71	60	53	F	F	F	F
29	30,18	30,16	74	75	67	67	C	C	C	30,11	30,20	72	77	66	64	C	F	F	C	30,33	30,33	57	66	61		F	F	F	F
30	30,07	29,89	79	84	74	71	C	C	C	30,15	30,00	68	75	67	66	R	C	R	C	30,30	30,09	62	73	65	61	F	F	F	F
31	29,75	29,90	76	89	72	66	R	C	R	29,93	29,91	74	86	78	67	R	C	F	F										
Mean			74	81	72	67						71	80	72	66							62	71	64	57				

OCTOBER.										NOVEMBER.										DECEMBER.									
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.				
8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10
1	30,01	29,82	64	72	65	67	C	C	R	30,25	30,26	41	40	35	33	C	C	C	C	29,75	29,79	32	38	36	30	F	C	F	F
2	29,83	30,15	67	63	56	49	F	F	F	30,28	30,18	29	41	36	32	F	F	F	C	29,79	29,78	32	41	37	32	F	F	C	F
3	30,18	29,82	54	68	61	58	F	F	C	30,09	29,82	41	46	47	49	C	C	C	C	29,76	29,65	28	33	29	26	F	C	F	F
4	29,60	29,70	61	65	61	57	R	C	R	29,74	30,19	55	45	41	40	C	C	R	C	29,28	29,42	32	28			29	S	C	F
5	29,90	30,11	48	54	48	42	F	F	F	30,30	30,29	41	46	45	45	R	C	C	C	29,58	29,79	23	34	29	24	F	F	F	F
6	30,22	30,33	44	59	51	45	F	F	F	30,13	29,65	49	53	56	61	R	C	R		29,79	29,81	27	38	36	35	C	R	R	C
7	30,30	30,53	46	56	49	38	F	F	F	29,78	29,69	49	60	52	48	F	F	C	C	29,81	29,34	38	40	40	40	R	R	R	R
8	30,55	30,41	46	61	54	47	F	F	F	29,69	29,84	43	57	48	40	F	F	F	F	29,83	29,11	37	43	41	37	R	C	F	F
9	30,34	30,20	54	71	65	56	F	F	F	29,93	30,00	41	51	46	37	F	C	F	C	29,30	29,65	33	34	39	30	C	C	F	C
10	30,14	29,99	59	77	68	58	F	F	F	29,99	29,70	49	56	54	55	C	C	F	F	29,78	29,77	31	37	32	25	S	C	F	F
11	29,89	29,67	59	72	67	57	F	F	F	29,68	30,06	55	56	47	38	F	F	F	F	29,70	29,61	27	36	31	24	F	F	F	F
12	29,54	29,52	61	64	60	50	R	C	C	30,22	30,20	35	46	41	35	F	F	F	C	29,60	29,61	23	35	30	27	F	F	F	F
13	29,58	29,72	47	58	53	46	F	F	F	30,10	29,87	39	35	35	35	C	S	R	C	29,73	29,74	27	37	32	24	F	F	F	F
14	29,93	29,73	53	72	64	58	F	F	F	29,85	29,88	35	37	35	28	C	C	F	F		29,82	29,37	33	25	S	C	F	F	
15	29,61	29,90	59	75	43	F	C	R		29,08		27	38	34	29	F	F	F	F	29,01	30,02	24	35	31	23	F	F	F	F
16	30,01	29,96	40	45	45	41	C	C	C	29,02	29,97	35	47		39	F	F	F	F	30,01	29,50	27		37	30	C	C	R	F
17	30,02	30,01	41	55	50	40	F	F	F	29,99	29,75	40	48	44	44	R	F	R	R	29,40		36	43	37	30	F	F	F	F
18	30,06	30,08	44	58	50	49	F	C	C	29,05	29,70	44	40	36	30	R	C	C	F		28,84	33	39	36	41	C	C	R	R
19	30,10	29,69	53	52	51	52	C	C	R	30,06	30,30	26	33	30	23	F	F	F	F	29,26	29,62	34	40	33	29	F	F	F	F
20	29,72	29,81	44		50	39	F	F	F	30,38	30,21	23	37	32	25	F	F	F	F	29,60	29,51	28	39	37	30	F	C	C	F
21	29,82	29,70	40	56	50	48	F	F	F	30,09	29,80	39	39	40	35	C	C	C	C	29,57	29,88	26	34	27	15	F	F	F	F
22	29,56	29,50	48	59	55	49	R	F	C	29,69	29,98	35	48	40	31	C	C	F	F	29,90	29,77	11	31	22	20	C	C	C	C
23	29,55	29,94	44	51	46	37	F	F	F	30,00	29,83	30	40	42	45	F	C	C	C	29,79	29,73	22	37	35	33	C	C	C	C
24	30,20																												



	JANUARY.										FEBRUARY.										MARCH.									
	Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.				
	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8	2	St.	10	8	2	St.	10	8	2	St.	10	8	2	St.	10	8	2	St.	10
1	29,68		22	20	15	12	F	F	F	F	29,80	29,98	18	25	23	19	F	F	F	F	29,82	30,00	33	45	39	30	C	C	C	
2			20	38	33	30	F	C	F	F	30,08	29,90	20	31	25	18	F	F	F	F	29,99	29,50	31	41	35	33	S	C	R	
3			35	49	40	35	F	F	C	C	29,86	29,80	26	40	35	30	F	F	F	C	29,32	29,29	35	36	34	32	R	R	R	
4			38	50	42	39	R	C	F	F	29,80	29,79	33	36	33	31	C	C	C	C	29,75	30,40	12	15	10	4	F	F	F	
5			38	43	39	31	F	F	F	F	30,00	30,35	15	16	12	5	F	F	F	F	30,55	30,60	4	19	14	8	F	C	C	
6			27	32	28	19	F	F	F	F	30,48	30,30	6	28	21	2	F	F	C	C	30,44	29,51	15	35	35	34	C	S	R	
7			11	18	15	7	F	F	F	F	30,04	29,81	32	36	34	30	C	S	R	S	29,60	29,49	34	36	33	34	R	C	C	
8			12	32	30	25	F	F	F	F	30,14	30,29	29	37	32	23	F	F	F	F	29,64	29,74	30	39	33	29	F	C	C	
9			32	51	42	40	F	F	C	C	30,25	30,09	26	40	33	31	F	F	C	C	29,84	30,00	31	40	35	31	F	F	F	
10			48	53	50	43	R	C	C	29,80	29,83	36	39	34	34	C	S	C	R	30,17	30,19	33	43	35	33	F	F	F		
11			40	38	38	36	C	C	R	R	29,83	29,75	36	41	37	31	C	C	C	F	30,19	30,05	36	49	41	35	F	F	F	
12			12	14	10	7	F	F	F	F	29,80	29,69	36	41	36	32	F	F	F	C	29,99	30,22	44	60	45	37	F	F	F	
13			11	35	35	39	C	R	C	29,71	29,75	32	38	32	25	F	F	F	F	30,39	30,49	31	33	29	26	F	C	C		
14			32	32	26	18	F	S	F	29,75	29,50	26	38	34	34	F	F	S	C	30,40	30,14	35	42	41	42	C	C	C		
15			18	27	25	24	F	F	C	29,55	29,65	31	31	23	15	F	F	F	F	30,11	29,97	45	58	51	47	R	C	C		
16			19	29	24	18	F	F	F	29,84	29,70	7	19	15	10	F	F	F	F	29,80	29,80	49	36	49	48	C	C	C		
17			19	36	33	29	F	F	F	29,72	29,70	12	24	20	15	F	F	F	F	29,91	30,00	45	55	48	40	F	F	F		
18			27	37	32	25	F	F	F	29,87	29,98	18	33		21	F	F	F	F	30,18	30,39	44	54	47	36	F	F	F		
19			26	44	40	33	F	F	F	29,98	29,88	26	30	29	29	C	C	C	S	30,43	30,29	41	55	47	40	F	F	F		
20			35	43	39	32	C	F	C	29,75	29,20	33	37	33	29	R	C	R	R	30,21	30,20	50	69	63	47	F	F	F		
21			33	38	36	38	C	R	C	29,03	29,60	32	28	22	15	C	C	C	F	30,35	30,31	40	42	39	38	C	C	R		
22			42	46	43	43	R	R	R	29,76	30,11	22	29	26	21	F	F	F	F	30,21	30,02	38	50	42	32	R	C	C		
23			42	42	43	34	R	R	R	30,13	29,38	22	34	31	35	C	C	S	R	29,94	29,73	51	69	56	52	C	C	C		
24			23	21	15	9	C	C	C	29,20	29,20	32	39	35	28	F	F	F	F	29,74	29,67	52	63	56	45	F	F	F		
25			7	15	12	5	F	F	F	29,34	29,75	21	28	25	18	F	F	F	F	29,61		49	54	48	39	F	F	F		
26			6	15	12	9	F	F	F	29,91	30,02	16	28	23	13	F	F	F	F	29,89	30,12	43	43	36	29	F	F	F		
27			6	14	12	11	F	F	F	30,06	29,82	18	33	29	27	F	C	S	F	30,20	30,20	35	44	39	35	F	F	F		
28			29,66	19	27	26	23	F	C	29,86	29,89	25	38	27	24	F	F	F	F	30,18	30,07	12	50	40	35	F	F	F		
29	29,77	29,46	20	30	26	23	F	C	C											29,99	29,74	13	41	39	34	C	C	R		
30	29,10	29,47	16	21	18	15	S	C	S											29,75	29,89	43	55	43	36	C	F	R		
31	29,58	29,69	16	26	22	19	F	F	F											29,85	29,34	41	39	38	27	C	F	R		
Mean			24	33	29	25						24	33	28	24								37	46	40	35				

St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.

JULY.										AUGUST.										SEPTEMBER.										
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				
8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	
1	30,04	30,14	84	74	72	66	C	C	R	R	30,00	29,80	72	86	76	71	C	C	C	C	30,20	30,00	74	88	76	73	C	R	C	C
2	30,22	30,05	73	72	66	70	R	R	C	C	29,73	29,83	81	87	66	62	F	C	R	C	30,07	30,06	68	68	63	C	C	R	R	
3	29,95		76	86	76	73	F	F	F	F	29,95	29,95	64	75	66	65	C	C	C	C	30,07	29,94	68	77	69	70	C	C	R	F
4	29,78		79	88	76	69	C	C	C	C	29,83	29,80	75	91	83	76	C	C	C	F	29,90	29,72	80	78	73	73	C	R	R	F
5	30,05	30,10	68	71	63	58	C	C	F	C	29,80	29,68	82	87	80	75	F	F	R	R	29,83	30,11	69	75	68	57	F	F	F	F
6	30,13	30,24	72	79	68	62	F	F	F	F	29,90	30,11	68	76	68	61	F	F	F	F	30,22	30,15	61	71	63	61	F	F	F	C
7	30,34	30,30	65	71	61	55	F	F	F	F	30,16	30,20	65	77	69	62	F	F	F	F	30,00		65	66	65	60	C	R	F	F
8	30,29	30,12	68	70		59	F	F	F	F	30,23	30,21	69	76	70	65	F	F	F	F		30,15	65	66	58	64	F	F	F	F
9	30,09	30,10	70	70	65	60	F	F	F	F	30,19	30,05	70	76	68	67	F	C	R	C	30,29	30,28	61	75	64	59	F	F	F	F
10			30,28	73	80	69	66	F	F	F	30,00	29,95	72	81	73	71	R	C	C	R	30,28	30,22	64	79	71	59	F	F	F	F
11	30,33	30,30	73	78		65	F	F	F	F	29,86	30,00	74	87	77	65	R	R	F	F	30,21	30,20	65	80	68	59	F	F	F	F
12	30,19	29,91	65	68	68	66	R	C	C	C	30,03	30,10	65	72	66	61	F	F	F	F	30,23	30,23	64	74	67	61	F	F	F	F
13	29,87	29,95	73	83	74	70	F	C	C	C	30,13	30,20	64	73	61	57	F	F	F	F	30,23	30,15	63	75	68	63	F	F	F	F
14	29,88	29,89	77	85	74	71	R	C	F	C	30,21	30,21	66	71	65	59	F	F	F	F	30,14	30,10	70	84	70	66	F	F	F	F
15	29,96	30,11	81	88	79	75	F	F	F	F	30,18	30,07	67	72	66	65	F	F	F	F	30,10	29,99	71	85	76	66	F	F	F	F
16	30,19	30,16	78	81	75	71	F	F	F	F	30,01		75	86	76	73	F	F	C		29,92	29,74	70	80	70	67	C	C	R	F
17	30,12	30,01	78	85	77	73	F	F	F	C	29,86	29,80	75	84	75	71	R	C	C	C	29,68	29,67	69	75		58	F	C	F	F
18	30,00	29,99	81	93	84	78	F	F	F	F	29,90	30,02	75	83		75	F	F	F	F	29,79	29,84	65	76	69	61	F	F	F	F
19	29,98	29,84	84	93	76	74	F	F	C	C	30,12	30,21	73	76	62	63	F	F	F	F	29,97	29,99	65	79	70	62	F	F	F	F
20	29,79	29,89	77	76	68	66	R	R	R	C	30,21	30,10	69	74	64	64	C	C	C	R	29,80	29,65	64	76	62	61	R	C	C	F
21	29,91	30,01	67	77	67	61	C	F	F	F	29,97	30,02	65	76	70	67	R	C	C	R	29,79	30,01	63	65	57	47	F	F	F	F
22	30,09	30,05	73	83	72	68	F	F	F	F	30,21	30,11	69	75	66	65	C	C	C	C	30,00	29,80	59	60	55	51	F	F	F	F
23	30,08	30,06	77	87	75	71	F	F	F	F	30,18	30,15	69	75	70	67	C	C	F	F	29,77	29,86	55	59	53	15	F	F	F	F
24	30,09	30,02	79	87	76	72	F	F	F	F	30,11		75	82	72	69	C	F	R	C	29,93	29,92	56	61	60	50	F	F	F	F
25			80	88	77	75	F	F	F	F	29,96	30,02	76	85	75	71	F	F	F	F	29,89	29,82	53	63		57	F	C	F	F
26	29,98	29,91	82	86	70	70	C	R	C	C	30,01		77	88	75	72	C	R	C	F	29,90	30,00	63	63	57	47	F	C	F	F
27	30,00	30,05	77	86	73	71	C	C	C	C	29,92	30,02	73	84	75	70	F	F	F	C	29,97	29,90	55	57	55	49	F	C	F	F
28	30,05	30,10	77	90	81	65	F	F	F	F	30,06		72	79	64	66	F	F	F	F	29,95	30,02	53	70	59	54	F	C	F	F
29	30,06	30,08	67	79	71	65	F	F	F	F		30,29	67	72	65	70	R	F	F	F	30,00	29,69	63	65	63	65	R	C	F	F
30	30,10	30,18	64	71	63	61	F	F	F	F	30,34		69	74	66	63	F	F	F	F	29,69	30,42	75	60	47	39	C	F	F	F
31	30,29	30,09	65	70	61	61	F	F	F	F	30,17	30,20	70	83	76	71	F	F	F	F										
Mean			74	81	72	64							71	79	70	67														

OCTOBER.										NOVEMBER.										DECEMBER.										
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				
8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	8 A.M.	10 P.M.	8	2	St.	10	8	2	St.	10	
1	30,52	30,40	45	52	48	46	F	C	C	29,97	30,05	55	59	60	54	R	C	R	C	29,88	29,23	41	43	44	50	R	C	C	F	
2		30,10	48	57	50	45	C	C	C	30,20	30,25	48	59	51	45	F	F	F	F	29,60		40	50	45	41	F	F	F	F	
3	30,00	29,97	47	62	55	45	F	F	F	30,20	29,93	47	52	51	52	C	C	C	C			37	47	48	38	R	R	F	F	
4	30,00	30,18	46	55	47	37	F	F	F	29,75	29,80	59	69	58	45	R	C	C	C			31	41	45		F	F	F	F	
5	30,21	30,32	40	53	47	38	F	F	F	29,80	29,79	43	53		41	F	F	F	F			28	39	35	32	F	F	F	F	
6	30,39	30,37	40	54	45	36	F	F	F	29,78	29,90	39	48	42	36	F	F	F	F			33	50	46	38	F	F	F	F	
7	30,39	30,22	41	54	48	43	F	F	F	29,95	29,80	35	48	42	44	F	F	R				39	54		45	F	F	C	F	
8	30,13	29,97	45	53	52	51	C	R	C	29,63	29,70	49	60	54	53	C	R	R	C			48	52	49	31	R	F	F	F	
9	29,95	29,80	49	50	46	43	R	R	F	29,94	30,17	40	44	38	30	F	C	F	C			29	41	37	37	F	F	F	F	
10	29,77	30,00	46	59	52	43	F	F	F	30,21	30,04	31	43	38	37	F	F	C				35	41	33	29	F	F	F	F	
11	30,05	29,90	46	61	56	48	F	F	F	29,70	29,77	45	53	48	39	R	C	C	F	30,30	30,12	27	40	38	37	F	F	F	F	
12	29,84	29,81	52	69	62	53	F	F	F	29,77	29,69	35	48	41	36	F	C	C	F	30,02	30,11	37	54	48	36	F	F	F	F	
13	29,82	29,80	53	66	60	51	F	C	C	29,80	30,12	27	32		21	F	F	F	F	30,17	30,10	31	45	39	36	F	F	F	F	
14	29,85	29,97	57	66	57	43	F	F	F	30,09	29,65	22	32	27	23	C	S	S		30,29	30,26	28	36	32	27	F	F	F	F	
15	30,09	30,05	41	57	50	40	F	F	F	29,59	29,50	35	31	32	32	R	S	C		30,18	30,10	30	46	40	36	F	F	F	F	
16	30,95	30,27	45	57	46	32	F	F	F	29,56	29,69	32	39	35	30	C	C	F	F	30,04	29,94	49	62	53	53	C	C	C	C	
17	30,43	30,42	33	49	43	37	F	F	F	29,84	30,09	23	39	34	26	F	F	F	F	29,94	30,13	55	62	56	47	C	C	F	F	
18	30,36	30,20	46	68	60	53	F	F	F	30,22	30,19	24	45	41	35	F	F	F	F	30,20	30,09	45	45	44	42	C	C	C	C	
19	30,09	30,30	55	69	54	40	F	F	F	30,24	30,13	36	51	45	42	F	F	F	F	29,98	29,80	46	49	48	46	R	R	R	R	
20	30,32	29,73	40	56	52	59	F	C	R	29,97	29,51	48	59	57	52	C	C	C	C	29,63		46	48	48	50	R	R	R	R	
21	29,76	30,00	59	59	50	40	C	F	F	29,65	30,35	37	35	29	23	R	F	F	F			29,67	47	50	45	39	R	F	F	F
22	30,10	29,94	36	49	43	38	F	F	F	30,50	30,31	20	34	31	32	F	F	F	F	29,64	30,01	37	44	39	30	R	F	F	F	
23	29,80	29,97	40	55	48	36	F	F	C	30,20	30,06	22	34	28	29	F	F	F	F	30,12	30,20	32	45	41	36	F	F	F	F	



Table with columns for JANUARY, FEBRUARY, and MARCH. Each month has sub-columns for Barometer, Therm., and Weather. Data rows include dates and corresponding values.

Table with columns for APRIL, MAY, and JUNE. Each month has sub-columns for Barometer, Therm., and Weather. Data rows include dates and corresponding values.

N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.

JULY.										AUGUST.										SEPTEMBER.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	29.98	30.01	75	76	67	63	F	F	F	C	30.19	30.17	68	78	69	63	C	C	C	29.83	29.88	76	82	74	70	R	C	R	C
2	30.02	30.03	73	71	64	58	C	F	F	F	30.15	30.10	81	91	81	75	C	C	C	29.80	29.71	59	59	57	56	R	R	R	R
3	30.07	30.09	67	75	67	63	F	F	F	F	30.09	29.76	77	72	70	70	C	R	R	29.75	29.97	68	76	69	61	F	F	F	F
4	30.10	30.11	69	75	68	62	F	F	F	F	29.64	29.79	72	78	74	74	R	C	C	30.10	30.22	62	75	70	61	F	F	F	F
5	30.10	29.93	69	75	66	62	C	F	F	F	29.89	29.96	80	92	85	79	F	F	F	30.27	30.27	65	80	73	65	F	F	F	F
6	29.81	29.60	70	83	74	68	F	F	R	C	29.98	29.98	83	92	84	80	F	F	F	30.28	30.19	71	82	71	65	F	F	F	F
7	29.76	30.00	63	71	67	62	F	F	F	F	29.92	29.96	84	95	84	79	F	F	F	30.14		66	69	67	67	C	R	R	C
8	30.13	30.15	73	80	69	65	F	F	F	C	30.02	30.00	74	81	71	70	F	F	F	30.00		69	69	71	70	R	C	R	C
9	30.12	29.91	75	89	77	71	F	F	F	F	29.93	29.80	76	84	79	75	C	C	F	30.00	30.05	74	83	69	69	F	F	F	F
10	29.90	30.02	81	90	79	70	F	F	F	F	29.83	29.86	82	91	75	75	C	F	R	30.11	30.03	73	83	74	69	F	F	F	F
11	30.15	30.05	75	79	71	70	F	F	F	F	29.96	30.02	78	90	81	77	C	C	C	29.95	30.10	70	87	59	59	F	F	F	F
12	30.08	30.11	74	75	67	65	R	F	C	C	30.01	29.97	71	75	72	70	R	R	R	30.24	30.25	60	66	60	55	F	F	F	F
13	30.06	29.72	68	76	70	69	C	R	C	29.89	29.94	67	70	67	64	R	R	C	30.23	30.05	60	71	63	61	C	R	F	C	
14	29.84	30.05	70	77	69	62	F	F	F	F	29.82	30.08	68	74	66	60	C	C	F	30.01	29.97	71	84	79	72	F	F	F	F
15	30.12	30.13	75	82	70	66	F	F	F	F	30.16	30.29	65	71	65	60	F	F	F	30.00	30.00	77	90	85	78	F	F	F	F
16	30.16	30.15	73	80	68	64	F	F	F	F	30.29		66	84	74	69	F	F	F	30.01	30.14	78	86	63	60	F	F	C	R
17	30.11	30.00	75	85		70	F	F	F	F	30.02	29.94	75	81	73	71	F	F	F	30.09	29.93	60	64	61	61	C	R	C	R
18	29.97	29.89	73	86	77	70	C	F	C	F	29.92	29.81	75	90	83	77	F	F	F	29.79	29.53	72	81	71	68	C	F	F	F
19	29.81	29.85	79	90	82	74	F	F	F	F	29.78	29.74	77	91	82	75	F	F	F	29.55	29.70	66	65	58	50	C	F	F	F
20	29.90	29.84	81	88	74	69	F	C	R	R	29.78	30.12	79	58	58	57	C	R	F	29.80	29.68	52	78	64	55	F	F	R	F
21	29.91	29.86	66	77	71	64	R	C	F	F			58	70	60	54	C	F	F	29.69	29.80	55	59	50	46	F	F	C	R
22	29.80	29.67	74	67	63	R	C	F	F	30.28	30.16	60	70	63	58	F	F	F	29.91	30.10	45	56	49	40	F	F	C	F	
23	29.70	29.79	69	81	69	67	F	F	F	F	30.11	30.05	63	74	66	64	F	F	F	30.14	30.29	50	61	52	48	F	C	F	F
24	29.82	29.85	74	80	66	C	C	C	30.00	29.87	69	76	71	69	F	F	C	C	30.29	30.20	57	69	61	56	C	F	C	F	
25	29.89	30.03	67	75	67	62	R	C	F	F	29.87	29.95	69	85	76	70	F	F	F	30.11	30.11	61	76	69	57	F	F	F	F
26	30.08	30.06	70	77	67	66	C	C	F	30.03	30.12	77	76	68	66	F	F	F	30.20	30.22	59	65	58	57	F	F	F	F	
27	30.00		71	74	68	65	C	C	R	30.11	30.08	73	85	77	71	F	F	F	30.19	29.96	60	62	59	61	C	C	R	R	
28	29.77	29.98	71	85	76	66	R	F	F	30.09		76	87	77	71	F	F	F	29.86	29.89	66	72	69	64	R	F	F	F	
29	30.09	30.12	71	80	71	67	F	F	F			77	89	83	77	F	F	F	29.80	30.09	68	72	61	48	C	F	F	F	
30	30.18	30.14	75	71	64	63	F	C	R	R			79	92	84	77	F	F	F	30.22	30.33	48	58	44	F	F	F	F	
31	30.19	30.18	67	69	68	66	R	R	R	30.11		77	85	76	72	C	F	C											
Mean			72	79	70	6							73	82	74	70						64	73	65	60				

OCTOBER.										NOVEMBER.										DECEMBER.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	30.37	30.47	47	65	57	51	F	F	F	F	29.44	29.58	36	40	34	32	S	C	C	29.74	29.53	36	51	43	41	F	F	F	C
2	30.60	30.60	52	57	49	41	C	F	F	F	29.74	29.92	30	43	37	34	F	F	C	29.24	29.45	45	45	41	34	R	C	F	F
3	30.54	30.42	43	59		50	F	F	F	30.04	29.25	32	43	37	35	F	F	F	29.59	29.65	31	40		31	F	F	F	C	C
4	30.26	30.19	62	78	66	62	C	F	F	30.34		31	51	44	40	F	F	C	29.68		29	41	38	32	F	F	F	F	
5	30.08	29.76	65	71	65	64	C	C	R		30.33	44	58	51	40	F	F	C	29.60	29.72	28	49	35	31	F	F	F	F	
6	29.63	29.84	63	68	59	51	R	C	F	30.48	30.25	37	59	47	44	F	F	C	29.90	30.16	25	37	33	26	F	F	F	F	
7	29.90	29.89	58	64	59	56	R	C	R	30.12	29.94	50	71	64	55	F	F	F	30.27	30.11	21	37	33	38	F	F	C	C	
8	29.87	29.91	55	54	52	52	R	R	R	29.75	29.60	57	72	65	59	F	F	F	29.67	29.08	44	46	45	42	R	R	R	R	
9	30.02	30.09	54	65	54	45	F	C	C	29.40	29.42	61	63	55	48	R	R	R	29.39	29.69	38	45	41	33	C	F	F	F	
10	30.12	30.08	46	60	55	55	F	C	C	29.68	29.98	39	47	42	35	F	F	F	29.62	29.64	37	42	38	C	C	R	R		
11	29.90	29.60	57	59	63	60	R	C	C	30.07	30.13	39	54	50	47	F	F	C	29.85	30.09	35	42	37	29	F	F	F	F	
12	29.80	30.05	54	65	64	51	F	F	F	30.37	30.40	34	45	40	35	F	F	C	30.11	29.90	42	39	37	F	F	C	R		
13	30.10	30.02	53	70	64	56	F	F	F	30.49	30.53	32	35	31	28	F	F	F	29.54	29.44	44	47	44	36	C	R	R	F	
14	29.90	29.81	58	74	67	57	F	F	F	30.50	30.59	28	41	37	29	F	F	F	29.35	29.39	36	31	32	25	S	C	C	C	
15	29.79	29.17	52	57	64	64	R	R	R	30.49	30.12	28	44	39	33	F	F	F	29.53	29.52	23	34		25	F	F	F	F	
16	29.47	29.67	52	63	53	47	F	F	F	29.99	29.77	31	47	41	39	F	F	C	29.49	29.64	29	32	29	24	F	F	F	F	
17	29.45	29.45	55	60	55	44	F	F	F	29.79	30.00	38	41	39	32</														



JANUARY.										FEBRUARY.										MARCH.										
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	
1	29.84	30.28	40	43	37	F	F	F	F	30.19	29.94	15	20	22	22	C	C	C	C	30.01	30.10	36	42	36	31	C	C	C	C	
2	30.40	30.16	26	35	36	35	F	F	C	C	29.88	29.88	25	33	26	25	C	C	C	C	30.20		33	35	32	30	C	C	C	C
3	29.94	29.46	36	49	49	48	R	C	R	F	29.79	29.84	31	36	32	24	S	S	S	S	30.00	29.91	31	37	31	30	S	S	C	C
4	29.75	29.84	40	47	41	31	F	F	F	F	29.97	30.10	24	21	24	14	C	F	F	F	29.99	30.18	36	40	43	26	C	F	F	F
5	29.89	29.79	27	43	35	33	F	F	F	C	30.12	30.00	8	29	19	5	F	F	F	F	30.30		30	40	34	31	F	F	F	F
6	29.80	29.56	36	40	38	33	C	R	R	S	29.89	29.88	19	33	28	25	S	C	C	C	29.91	29.83	38	48	40	35	F	F	F	F
7	29.03	29.61	33	39	35	29	S	C	F	F	29.96	30.09	29	36	31	29	C	C	C	C	29.75	30.03	39	37	28	20	C	C	C	C
8	29.70	29.93	27	35	25	22	F	F	F	F	30.12	30.13	20	35	29	19	F	F	F	F	30.22	30.16	16	19	15	10	C	C	C	F
9	30.00	30.00	19	36	30	25	F	F	F	F	30.21	30.32	17	34	28	14	F	F	F	F	30.18	30.09	15	31	28	26	F	F	F	C
10		30.10	23	39	32	27	F	F	F	C	30.28		14	35	31		F	C	S	R	29.99	29.72	36	43	37	32	C	F	C	F
11	30.19	29.64	22	30	25	32	F	C	C	S	29.13	29.01	42	45	41	36	R	C	F	F	29.79	29.95	34	42	33	27	F	F	F	F
12	29.33	29.78	35	44	42	35	C	F	F	F	29.12	29.54	36	42	34	25	C	C	F	F	29.89	29.91	36	48	43	39	F	F	F	F
13	30.15	30.33	29	36	30	25	F	F	F	F	29.69	29.67	21	33	28	29	C	F	F	C	29.96	29.70	41	60	52	41	F	F	F	F
14	30.28	29.78	33	34	34	36	S	R	R	R	29.56	29.47	33	43	35	32	F	F	S	C	30.00	29.98	42	39	35	34	F	F	F	C
15	29.77	29.88	28	36	34	32	C	C	F	F	29.50	29.90	23	28	25	18	F	F	F	F	29.70	29.49	36	44	38	36	R	C	C	C
16	29.74	29.53	31	37	35	33	C	C	R	S	29.91	29.99	17	28	25	19	F	F	F	F	29.09	28.57	36	38	30	30	R	R	R	R
17	29.78	29.54	31	33	31	31	C	C	S	S	29.99	29.89	21	30	28	26	C	C	C	C	28.92	29.50	23	27	20	21	C	C	F	F
18	29.66	29.93	25	35	29	27	F	F	F	F		29.70	26	35	30	29	C	C	C	S	29.62	29.69	23	33	26	23	C	C	S	S
19	30.12	30.32	26	32	24	21	C	C	C	C	29.79	30.00	23	33	28	20	F	F	F	F	29.94	30.14	21	32	28	20	F	F	F	F
20	30.12	29.67	26	29	27	14	S	S	S	S	30.03	29.87	16	28	23	17	F	F	F	F	30.23	30.39	29	40	33	27	F	F	F	F
21	29.69	30.00	13	24	19	10	S	F	F	F	29.71	29.62	15	30	26	20	C	C	F	F	30.48	30.52	35	42	35	34	F	F	C	C
22	29.88	30.04	5	21	15	16	C	S	C	C	29.63	29.62	28	34	31		C	C	S	S	30.52		38	48	41	27	C	C	C	C
23	30.12	29.74	19	34	34	35	C	C	F	F	29.80	29.91	21	34	23	16	F	F	F	F	30.16	29.83	45	55	43	37	C	F	F	C
24	29.80	30.21	37	50	35	25	C	C	F	F	29.97	29.70	18	37	27	18	F	C	C	F	29.74	29.80	38	49	40	34	R	C	C	C
25	30.10	29.83	29	23	16	14	C	S	C	C	29.90	29.98	27	37	29	25	F	F	F	F	29.80	29.92	28	35	32	24	C	F	F	F
26	29.60	30.13	21		27	14	C	C	F	F	29.99	29.76	34	40	35	34	C	C	C	C	30.04	30.02	30	38	35	30	F	F	F	F
27	30.20	30.09	14	24	20	13	C	C	F	F	29.74	29.70	35	38	37	37	C	R	C	F	30.03	30.06	37	33	35	32	F	F	F	F
28	29.99	29.92	20	36	25	15	C	S	C	F	29.82	30.00	38	48	42	32	F	F	F	F	30.00	29.80	36	44	39	34	F	C	C	R
29	29.98	30.10	13	23	17	8	F	F	F	F	30.02	29.79	37	38	36	35	R	C	R	R	29.90	29.94	39	54	47	38	F	C	C	S
30	30.20	30.29	4	16	11	2	F	F	F	F											30.02	29.82	34	34	33	29	C	C	S	S
31			18	11	5	F	F	F	F												29.90	29.68	36	43	36	36	C	C	C	C
Mean			26	34	29	24							25	35	29	24							33	40	35	31				

APRIL.										MAY.										JUNE.										
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	
1	29.67	29.65	42	63	52	40	F	F	F	F	29.70	29.78	53	62	54	39	F	F	F	F	29.91	29.92	65	76	64	61	F	C	C	F
2	29.52	29.82	45	46	41	37	C	R	C	29.85	30.07	48	58	42	42	F	F	F	F	29.97	30.00	62	69	64	55	F	F	C	F	
3	30.05	29.98	42	50	40	35	F	F	F	30.20	30.25	46	58	46	46	C	C	F	F		29.96	63	73	66	59	F	F	F	F	
4	29.81	29.81	39	54	56	43	F	F	F	30.31		56	63	33	45	C	F	F	F	29.86	29.90	66	78	59	56	F	F	F	F	
5	30.07	30.12	31	41	37	26	F	F	F		30.11	55	65	48	48	F	F	F	F	29.90	29.94	62	69	57	55	F	C	F	C	
6	30.12	29.85	40	52	49	40	F	F	F	30.08	30.01	54	59	54	48	F	F	F	F	30.00	30.10	64	66	60	53	C	F	F	F	
7	29.83	29.61	49	65	58	56	F	F	F	30.02	29.94	50	59	48	46	C	C	R	R	30.13	30.18	63	70	60	53	F	F	F	F	
8	29.53	29.64	63	80	69	61	F	F	F	29.80	29.50	44	46	47	46	R	R	R	R	30.20	30.17	66	71	67	61	F	F	F	F	
9	29.53		45	39	35	34	C	C	C	29.60	29.79	48	56	49	41	R	C	F	F	30.11	30.00	72	81	69	65	F	F	F	F	
10			32	38	35	35	C	R	C	29.75	29.73	49	55	47	42	C	F	F	F	29.98	29.94	68	79	69	63	R	C	C	C	
11			40	51	45	39	F	F	F	29.75	29.63	53	58	57	53	F	R	R	R	29.97	30.07	57	55	53	52	R	C	R	C	
12		29.82	46	65	44	41	F	F	F	29.60	29.70	57	62	52	49	R	F	F	F	30.01	29.94	51	55	54	54	R	C	R	C	
13		30.13	47	56	46	43	F	F	F	29.75	29.81	55	71	59	54	F	F	F	C	29.99	30.05	66	80	63	63	F	F	F	F	
14	30.11	29.80	43	40	38	C	R	R	R	29.87		61	63	57	54	F	C	C	C	30.15	30.21	66	71	58	57	C	R	C	R	
15	29.85	30.03	39	47	42	41	C	C	C	29.64	29.62	69	76	63	63	C	C	C	C	30.23	30.20	65	68	58	58	C	C	C	C	
16	30.12	30.14	41	40	35	C	F	F	F	29.77	29.91	67	73	66	57	F	F	F	F	30.19	29.95	62	63	57	56	R	C	C	C	
17	30.11	30.09	44	65	52	45	F	F	F	30.00	29.82	62	65	57	55	F	F	C	R	29.80	29.81	68	80	66	66	C	F	F	F	
18	30.12	30.10	57	72	57	50	F	F	F	29.70	29.37	54	52	49	48	R	C	R	C	29.80	29.85	76	90	80	74	F	F	F	F	
19	30.11	30.01	58	77	60	51	F	F	F	29.47	29.55	61	57	53	50	F	R	R	R	29.91	30.01	78	90	73	68	F	F	F	F	
20	29.92	29.87	60	78	61	52	F	F	F	29.63	29.80	54	56	53	44	F	R	F	F	30.09	30.15	70	82	71	66	F	C	F	F	
21	29.95	30.02	62	67	56	48	F	F	F	29.87	29.91	55	68	59	55	F	R	C	C	30.20	30.19	73	80	68	65	F	F	F	F	
22	30.00	30.00	57	74	62	56	F	F	F	29.94	29.66	65	75	61	58	C	C	C	C	30.17	30.16	73	83	69	66	F	R	C	C	
23	30.22	30.07	48	63	56	45	F	F	F	29.63	29.88	68	72	64	62	C	C	R												

JULY.											AUGUST.											SEPTEMBER.												
Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.						
5 A.M.	10 P.M.		8	N.	St.	10	8	N.	St.	10	5 A.M.	10 P.M.		8	N.	St.	10	8	N.	St.	10	5 A.M.	10 P.M.		8	N.	St.	10	8	N.	St.	10		
1	29,74	29,85	69	83	74	67	F	F	F		29,80	29,82	79	91	77	71	F	F	R	F		30,19	30,18	65	80		59	F	F	F				
2	29,99	30,00	74	82	68	65	F	F	F		29,93	29,90	75	81	68	68	F	F	F	F		30,08	29,91	65	72	66	67	C	C	R	R			
3	30,02	30,03	72	77	69	65	C	C	C		30,00	30,10	70	75	68	60	F	F	F	F		29,84	29,85	69	72	68	65	R	R	R	R			
4	30,00	30,01	66	81	72	63	R	C	F	F	30,18	30,20	63	74	66	57	F	F	F	F		29,92	30,03	69	72	63	61	C	F	F	F			
5	30,00	29,91	75	85	79	71	F	F	F		30,21	30,19	69	76	68	62	F	F	F	F		30,04	30,19	57	67	60	53	C	F	F	F			
6	29,98	30,01	78	82	73	70	F	F	F		30,12	30,10	69	85		62	F	F	F	F		30,25	30,30	57	67	60	50	F	F	F	F			
7	30,00	29,84	76	90	80	77	F	F	F		30,05	30,02	72	78		63	F	F	F	F		30,32	30,32	59	73	63	55	F	F	F	F			
8	29,89	29,83	82	81	72	68	F	F	C		30,06	30,11	77	79		63	F	C	C	F		30,30	30,20	63	76	63	58	F	F	F	F			
9	29,83	29,98	76	88		66	F	F	F		30,11	30,14	72	82	70	65	F	F	F	F		30,09		64	72	65	60	C	C	R	F			
10		30,14	69	81	70	65	F	F	F		30,19	30,16	72	83	70	66	F	F	F	F		30,04	30,06	64	78	70	65	F	F	F	F			
11	30,12	29,83	73	69	68	72	C	R	R	C	30,13	30,02	74	86	80	75	F	F	F	F		30,05	30,02	70	83	75	68	F	F	F	F			
12	29,79	29,83	78	89	78	75	C	C	F	F	29,98	29,90	77	92	80	73	F	F	F	F		29,90	29,77	68	81	63	61	C	C	R	R			
13	29,96	30,01	75	79	70	71	C	C	C		29,88	29,90	77	90	82	74	C	F	F	F		29,86	29,89	66	80	69	66	F	R	C	R			
14	30,12	30,14	74	83		70	C	C	C		29,94	30,11	76	84	70	62	F	F	F	F		29,83	29,81	66	79	70	69	R	C	R	C			
15	30,17	30,13	70	78	69	67	R	C	R	R	30,16	30,29	66	79	63	56	F	F	F	F		29,80	29,87	74	84	76	64	C	C	F	F			
16	30,04	30,00	73	85	75	70	R	C	C		30,36	30,44	64	72	64	56	F	F	F	F		29,87	29,84	63	72	66	57	F	F	F	F			
17	30,00	29,98	77	87	79	73	C	F	F		30,44	30,34	63	72	63	58	F	F	F	F		29,73	29,40	69	70	65	58	F	C	C	R			
18	29,96	29,90	77	88	77	72	F	F	F		30,32	30,22	65	83	71	64	F	F	F	F		29,35	29,45	55	55	51	47	F	C	C	F			
19	29,83	29,91	75	85	70	68	R	F	F	F	30,19	30,10	69	87	73	68	F	F	F	F		29,50	29,69	50	59	55	48	F	F	F	F			
20	29,98	29,93	73	80	63	63	F	R	C		30,09	30,10	73	84		70	F	F	F	F		29,74	30,00	54	68	59	51	F	F	F	F			
21	29,93	30,11	70	76	68	63	C	F	F		30,14	30,19	77	88	77	73	F	F	F	F		30,10	30,05	55	65	59	54	F	F	F	F			
22	30,21	30,29	69	75		60	F	F	F		30,27	30,30	76	83	74	67	F	F	F	F		30,00		40	63	56	47	C	C	R	F			
23	30,28	30,16		76	67	62	F	C	C		30,30	30,25	72	79		66	C	F	F	F		30,13		48	61	55	48	F	F	F	F			
24	30,14	30,11	68	84	71	65	F	F	F		30,23	30,14	75	80	71		C	F	F	F			29,86		54	70	63	62	F	F	F	F		
25	30,11	30,01	74	81	68	64	C	F	C		30,13	30,19	77	87	73	69	F	F	C	R		29,72	29,70	57	78	68	60	F	F	F	F			
26	29,99	29,92	72	69	65	64	R	C	C		30,28	30,31	64	67	66	61	C	C	C	F		29,88	30,08	50	58	52	45	F	F	F	F			
27	29,92	29,89	69	75	70	65	R	C	F	F	30,29	30,13	67	78	74	69	C	C	F	F		30,06	29,80	50	68	59	54	F	F	F	F			
28	29,93	29,90	73	84	78	73	F	F	F		30,11	30,01	76	93	79	73	F	F	F	F		29,67	29,43	60	65	63	63	R	R	R	R			
29	29,88	29,89	76	81		68	R	F	F		29,93	29,93	80	93	84	72	F	F	F	F		29,49	29,80	64	72	65	52	R	C	R	F			
30	29,83	29,69	70	75		65	C	R	R		29,92	30,19	73	73	62	54	F	F	F	F		29,99	30,22	52	65	58	49	F	F	F	F			
31	29,83		71	79		70	66	F	F		30,30	30,21	54	71	66	58	F	F	F	F														
Mean			73	81	72	67																				61	71	63	57					

OCTOBER.											NOVEMBER.											DECEMBER.										
Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.				
5 A.M.	10 P.M.		8	N.	St.	10	8	N.	St.	10	5 A.M.	10 P.M.		8	N.	St.	10	8	N.	St.	10	5 A.M.	10 P.M.		8	N.	St.	10	8	N.	St.	10
1	30,22	30,21	50	62	53	48	F	C	C	C	29,83	29,85	34	42	37	31	S	F	F	F		29,56	29,39	15	26	23	18	C	F	F	F	
2	30,22		53	59	51	17	C	F	C	C	29,74	29,50	33	46	41	36	F	F	F	F		29,40	29,52	12	23	20	14	F	F	F	F	
3	30,15	29,94	53	52	48	48	C	R	R	R	29,47	29,54	34	50	43	36	F	F	F	F		29,53	29,49	15	31	27	24	F	F	F	F	
4	29,59	29,65	48	56	56	51	R	C	C	F	29,63	29,63	39	52	49	46	F	F	C	F		29,46	29,46	22	35	31	28	F	F	F	F	
5	29,71	29,52	52	57	52	51	C	C	C	R	29,60	29,70	46	54	46	42	F	F	F	F		29,53	29,71	33	42	37	27	F	F	F	F	
6	29,73		55	60		46	C	C	F		29,67	29,60	35	47	43	37	C	R	R	F		29,70	29,07	32	41	40	41	C	C	C	R	
7			57	49	40		F	F	F		29,92	30,19	31	38	33	27	F	F	F	F		28,90	29,30	37	30	29	26	S	S	S	C	
8	30,32	30,45	41	54	44	38	F	F	F		30,22	30,10	30	47	41	45	F	F	C	R		29,52	29,67	22	26	24	20	F	F	F	F	
9	30,57	30,59	41	47	42	33	F	F	F		30,03	29,93	47	54	48	45	R	C	C	C		29,70	29,80	21	31	28	20	F	F	F	F	
10	30,60	30,57	36	52	46	36	F	C	F	F	30,06	30,25	41	54	45	43	C	C	F	F		29,81	29,84	24	30	28	23	C	C	C	C	
11	30,52	30,41	34	56	49	40	F	F	F		30,20	30,14	48	49	47	44	C	C	C	C		29,89	29,71	18	30	27	28	C	F	C	C	
12	30,39	30,32	47	58	51	49	F	F	F		30,22	30,51	36	45	40	32	F	F	F	F		29,70		19	35	30	25	F	F	F	F	
13	30,32	30,23	51	71	63	54	F	F	F		30,50	30,39	29	48	41	38	F	F	F	F		29,72		26	40	34	34	F	F	C	S	
14	30,30		60	71	58	52	F	F	F		30,39	30,35	36	48	42	40	C	F	F	C		29,56	29,55	34	35	27	C	R	S	C		
15	30,47	30,34	56	61	56	54	F	F	C		30,20	29,70	44	49	52	53	C	C	R	R			29,98		33	29	21	F	F	F	F	
16	30,11	29,62	55	68	60	60	C	R	R		29,80	30,21	43	36	28	22	F	F	F	F		30,04	29,54	22	35	32	34	F	C	C	S	
17	29,80	30,31	52	51	45	36	C	F	F		30,28	30,01	19	35	32	37	F	F	C	R		29,86	30,25	28	31	25	16	C	C	F	F	
18	30,43	30,40	37	48	41	38	F	F	F		29,81	29,82	41	52	43	42	C	C	C	F		30,20	29,66	22	35	25	33	S	S	S	S	
19	30,39	30,32	37	55	50	49	F	C	C		30,91	30,01	35	55	49	40	F	F	F	F		29,35	29,33	27	26	26	26	S	R	C	S	
20	30,38	30,11	47	50	48	46	R	R	R		30,04	29,86	38	49	48	50	F	C	R	R		29,52	29,63	20	26	21	15	F	F	F	F	
21	30,48	30,46	50	52	49	49</																										



Table with columns for JANUARY, FEBRUARY, and MARCH. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for 8 A.M., 10 P.M., 8 N., and 10 St. 10.

Table with columns for APRIL, MAY, and JUNE. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for 8 A.M., 10 P.M., 8 N., and 10 St. 10.

N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.

JULY.										AUGUST.										SEPTEMBER.										
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	
1	30,00	29,88	79	90	74	69	F	F	F	30,07	30,06	75	80	70	66	C	R	R	30,05	29,83	72	85	76	71	F	F	F	F	F	
2	29,81	29,78	76	88	74	69	F	F	F	30,08	30,14	67	73	68	68	C	C	C	29,70	29,81	77	89	76	68	F	F	F	F	F	
3	29,82	29,83	79	87	78	74	F	F	F	30,18	30,22	72	77	68	67	C	C	R	29,84	29,88	70	80	68	60	F	F	F	F	F	
4		29,92	76	82	71	65	F	F	F	30,21		75	77	69	67	C	F	F	29,92	30,02	63	72	64	53	F	F	F	F	F	
5	29,98	30,01	71	84	77	73	F	F	F	29,97	29,82	66	71	68	67	R	C	R	29,99	30,03	65	78	66	67	F	F	F	F	F	
6	30,02	30,02	72	92	81	75	F	F	F	29,89	29,99	74	76	72	71	R	R	R	30,10	30,19	56	63	56	51	R	C	F	F	F	
7	30,04	30,01	82	90	73	69	F	F	C	30,03		73	85	71	R	R	R	30,18	30,13	55	59	55	55	R	C	C	C	C		
8	29,98	29,81	74	78	69	66	C	F	R	29,98	29,70	76	74	71	71	R	R	R	30,07	30,10	59	68	60	53	F	F	F	F	F	
9	29,76	29,79	77	73	69	66	C	R	C	29,72	29,94	73	83	75	67	F	F	C	30,14	30,22	59	65	60	51	F	F	F	F	F	
10	29,87	29,90	74	78	70	68	C	C	C	30,05	30,19	67	78	72	63	F	F	F	30,23	30,20	59	69	59	52	F	F	F	F	F	
11	29,97	29,95	76	81	73	70	C	C	F	30,25		67	79	71	66	F	F	F	30,13	30,01	60	67	60	55	F	F	F	F	F	
12	29,99	30,02	75	79	71	66	F	F	C		30,01	74	77	70	67	F	C	C	29,97	29,94	54	64	60	52	R	C	C	F	F	
13	30,08	30,09	70	82	71	66	F	F	F	29,79	29,72	68	80	74	68	R	C	C		29,90	58	77	67	54	F	F	F	F	F	
14	30,08	30,03	77	85	70	67	F	R	F	29,72		68	76	66	55	F	F	F	29,90	29,85	64	76	70	65	F	F	F	F	F	
15	29,99	29,82	73	85	72	71	C	C	C	29,99	30,08	59	75	66	58	F	F	F	29,83	29,81	68	77	62	61	R	C	R	R	F	
16	29,86	29,83	72	85	72	69	F	F	F	30,15	30,15	67	81	70	63	F	F	F	29,82	29,80	63	75	67	60	F	F	F	F	F	
17	29,90	30,00	73	83	74	69	F	F	F	30,19	30,08	69	84	73	67	F	F	F	29,81	29,86	58	70	63	55	F	F	F	F	F	
18	30,02	30,02	74	85	74	71	F	F	F	29,97	29,78	71	87	72	66	R	C	F	29,88	29,63	59	69	63	62	F	F	F	C	F	
19	30,00		78	88	78	75	F	F	F	29,70	29,68	69	77	68	66	R	C	C	29,45	29,85	62	69	58	51	R	F	F	F	F	
20			81	87	75	72	F	F	F	29,71		72	72	66	65	R	R	R	29,96	30,00	52	65	58	50	F	F	F	F	F	
21		30,06	82	97	83	77	F	F	F	29,84	29,93	65	74	67	64	C	C	C	30,02	30,06	53	69	60	54	F	F	F	F	F	
22	30,06	29,99	83	97	83	79	F	F	F	29,95		66	72	66		R	C	C	30,08	30,00	54	68	60	54	F	F	F	F	F	
23	29,97	29,93	76	84	73	69	R	C	F	29,94	29,89	70	70	63	58	R	C	F	29,94	29,89	57	71	66	54	F	F	F	F	F	
24	29,88	29,72	76	80	74	70	C	F	F	29,86	29,95	65	82	70	65	R	F	F	29,83	29,70	55	71	63	58	F	F	F	F	F	
25	29,67	29,68	77	82	69	69	F	C	R	30,08	30,13	65	73	64	63	F	F	C	29,65	29,94	63	61	57	48	F	C	C	F	F	
26	29,78	29,98	74	77	71	70	C	F	F	30,11	29,96	67	73	66	65	C	R	C	29,92		51	47	44	43	C	R	R	R	F	
27	30,02	30,09	78	90	75	72	F	R	C	29,86	29,82	68	76	68	65	R	C	C		30,04	47	60	56	49	F	F	F	F	F	
28	30,07	30,02	73	74	70	65	R	C	R	29,80	29,89	67	76	69	60	F	F	F	30,08	30,02	52	72	66	56	F	F	F	F	F	
29	30,01	30,04	68	75	69	65	C	F	F		30,03	64	76	68	57	F	F	F	30,06	30,19	58	77	56	56	F	F	F	F	F	
30	30,08	30,10	74	83	72	67	F	F	F	30,09	30,11	61	71	66	56	R	C	F	30,38	30,38	57	61	53	49	C	F	C	F	F	
31	30,11	30,07	71	77	70	65	F	F	F	30,13		65	73	66	63	F	C	R												
Mean			76	84	73	70						69	77	69	64						59	70	62	56						

OCTOBER.										NOVEMBER.										DECEMBER.									
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.				
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	30,26	29,98	49	59	57	54	C	R	R	30,01	30,13	38	57	51	40	F	F	F	29,84	29,98	22	34	28	23	F	F	F	F	F
2	29,80	29,60	56	76	70	64	F	F	F	30,31	30,29	39	47	43	F	F	F	30,00		22	32	29	24	F	C	C	F	F	
3	29,40	29,12	62	67	51	44	R	R	R	30,18	30,05	45	68	60	51	F	F	F	30,00	29,74	20	35	32	33	F	C	C	C	F
4	29,48	29,78	64	77	67		F	F	F	30,01		50	70	60	60	C	F	R	29,18	29,57	39	36	30	22	R	C	F	F	F
5	29,76	29,87	45	59	54	46	F	F	F	29,47	29,17	65	63	65	64	R	R	R	29,80	29,84	12	20	17	16	F	F	F	F	F
6	29,95	29,85	49	66	59	55	F	F	C	29,50	29,78	41	48	42	35	F	F	F	29,93	30,00	16	28	25	19	F	F	F	F	F
7	29,95	29,99	56	65			S	F	R	29,80		36	43	38	31	S	F	F	29,95	29,70	24	39	37	35	F	C	C	C	F
8	29,90	29,40	57	62	58	53	F	R	R		30,05	29	43	40	40	F	F	F	29,64	29,64	30	42	34	33	F	C	C	C	F
9	29,43		53	61	54	47	F	C	F	29,78	30,11	52	60	47	36	C	F	F	29,59	29,67	32	35	31	20	S	S	S	S	S
10		29,99	47	50	46	44	R	R	R	30,32	30,49	29	39	32	30	F	F	F	29,85	30,11	27	30	27	22	F	F	F	F	F
11	30,06	30,19	44	52	46	42	C	C	C	30,51	30,41	38	37	38	42	C	S	R	30,17	30,03	19	32	27	25	F	F	F	F	F
12	30,28	30,34	40	51	46	35	F	C	F	30,21	29,72	49	53	53	54	R	F	R	29,84	29,90	30	41	38	36	F	C	C	C	C
13	30,42	30,37	35	51	46	42	F	F	F	29,81	29,79	50	59	54	41	F	F	F	30,03	29,87	35	44	39	33	F	C	F	C	F
14	30,28	30,09	47	56	52	52	F	C	C	29,61	29,76	44	55	49	34	F	F	C	29,70	29,94	43	60	53	37	F	C	R		
15	30,00	29,95	54	60	52	41	C	C	F	29,88	29,83	30	34	31	29	C	F	C	29,98	29,55	32	32	31	25	S	S	S	S	S
16	29,85	29,85	39	52	48	42	C	C	F	29,85	29,76	23	30	27	21	F	F	F	29,67	30,13	21	23	20	15	C	F	F	F	F
17																													



Table with columns for JANUARY, FEBRUARY, and MARCH. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for 8 A.M., 10 P.M., 8 N., and 10 St. Data points are listed for each day from 1 to 31.

Table with columns for APRIL, MAY, and JUNE. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for 8 A.M., 10 P.M., 8 N., and 10 St. Data points are listed for each day from 1 to 31.

N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.

JULY.										AUGUST.										SEPTEMBER.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	29.95	29.84	79	97	82	78	F	F	F	30.06	30.11	73	77	75	60	F	C	C	F	30.13	30.20	65	73	65	59	F	F	F	F
2	29.90	29.84	84	99	88	81	F	F	F	30.11	30.13	71	82	78	71	F	F	F	F	30.26	30.21	61	74	65	57	F	F	F	F
3	29.81	29.70	86	99	83	76	F	F	R	30.20	30.22	78	88	78	72	F	F	F	F	30.21	30.11	63	69	64	62	F	F	F	C
4	29.82	29.84	77	76	68	63	F	F	F	30.23	30.11	78	92	77	75	F	F	F	C	30.07	29.97	67	72	64	61	R	C	C	F
5	29.81	29.73	71	73	68	67	F	F	C	29.98		73	88	78	73	R	R	R	F	29.77	29.74	65	79	69	62	C	R	F	F
6	29.78	30.02	72	89	72	63	F	F	F	29.86	29.99	80	91	81	69	F	F	F	F	29.82	29.89	70	75	67	64	F	C	F	F
7	30.11	30.04	70	78	70	64	F	F	F	30.01	30.00	75	89	79	71	F	F	F	F	29.99	29.98	65	65	65	65	R	C	C	R
8	29.95	29.65	73	80	63	64	C	F	R	30.00	29.85	75	89	85	81	F	F	F	F	29.94	29.82	69	77	68	63	C	C	F	F
9	29.74	29.94	70	78	71	63	F	F	F		29.75	83	99	89	83	F	F	F	F	29.88	29.93	64	78	68	61	F	F	F	F
10	29.97	29.97	71	86	75	69	F	F	F	29.74	29.71	84	98	88	78	F	F	F	F	29.96	29.92	63	80	73	63	F	F	F	F
11	29.93	29.82	70	69	67	64	R	R	C	29.73	29.90	83	94	81	76	F	F	F	F	30.01		67	69	62	57	F	F	F	F
12	29.87	29.82	69	82	75	66	C	F	R	29.96	30.09	82	76	70	67	R	R	R	F	30.34	30.26	58	67	60	56	F	F	F	F
13	29.96	29.86	64	75	63	59	F	F	F		30.19	75	76	69	65	F	F	F	F	30.20	30.09	60	69	67	59	C	F	F	F
14	29.84	29.59	63	80	64	60	F	F	F	30.18	30.16	70	80	68	66	C	C	C	F	30.07	30.03	65	82	73	65	F	F	F	F
15	29.99		64	75	63	59	F	F	F	30.12	30.12	69	81	76	74	R	C	F	F	30.01	30.01	73	89	81	63	C	F	F	F
16	30.06	30.05	72	80		62	F	C	C	30.14	30.06	78	81	71	68	F	F	F	F	30.01		74	88	80	62	F	F	F	F
17	29.89	29.87	71	75	69	66	R	C	F	30.02		80	94	80	76	F	F	F	F	30.00	30.11	72	84	72	62	F	F	F	F
18	29.95	29.83	67	63	62	60	R	R	C	29.99	29.99	78	85	74	68	F	F	F	F	30.10	30.16	66	69	63	63	F	F	C	C
19	29.82	29.89	66	74	60	57	R	R	C	30.11	30.18	71	76	68	65	F	F	F	F	30.13	30.12	65	68	67	66	R	F	C	C
20	29.87	30.12	64	79	70	60	F	F	F	30.18	30.05	68	76	71	70	C	C	C	C	30.17	30.09	67	75	66	64	C	F	C	C
21	30.18	30.12	70	81	70	66	F	F	F	29.98	29.95	79	92	80	74	C	C	R		29.84	29.67	77	69	67	R	F	R	C	C
22	30.13	30.00	74	86	73	69	F	F	F	29.90	30.17	76	81	72	66	F	F	C	C	29.94	29.96	62	74	64	58	F	F	F	F
23	29.96	29.99	75	88	80	70	F	F	F	30.28	30.21	65	73	64	61	F	F	F	F	29.94	29.91	59	72	64	59	F	F	F	F
24	30.00	30.08	77	90	76	70	F	F	F	30.12	29.82	71	74	73	69	R	C	F	F	29.93	29.89	59	70	60	60	F	F	F	C
25	30.10	30.10	66	75	66	62	R	C	F	29.84	29.96	77	89	79	67	F	F	F	F	29.70	29.58	55	52	51	50	R	R	R	R
26	30.07	30.08	72	77	72	64	C	C	F	29.92	29.72	70	74	66	68	R	C	F	F	29.91	29.91	52	64	57	49	F	F	F	F
27	30.10	29.89	73	88	82	77	C	C	F	29.90	29.96	77	84	71	66	F	F	F	F	29.91	29.80	56	69	65	64	F	F	C	C
28	29.91	29.88	83	98	84	77	F	F	F	29.98	29.79	71	79	71	68	R	C	C	C	29.87	29.73	60	62	60	50	C	C	C	C
29	29.87	29.88	86	95	82	80	F	F	F	29.79	29.92	69	78	60	60	F	F	F	F	29.89	30.07	43	48	42	36	F	F	F	F
30	29.87	29.88	81	92	74	70	F	F	R	29.92	29.84	67	81	71	65	F	F	F	F	30.03	30.05	46	65	59	49	F	F	F	F
31	29.90	29.99	74	83	71	67	F	C	R	29.89	30.06	70	82	71	61	F	F	F	F										
Mean			73	83	72	67						75	84	75	69														

OCTOBER.										NOVEMBER.										DECEMBER.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	30.18		52	64	59	53	F	F	F	29.86	29.76	30	44	39	34	F	C	S	F	29.75	29.99	33	46	41	34	F	C	F	C
2	30.37	30.29	55	73	62	56	F	F	F	29.64	29.73	35	42	37	33	S	C	F	F	29.95	29.39	25	25	32	24	S	S	S	S
3	30.29	30.19	57	65	59	53	F	F	F	29.72	29.70	35	44	41	39	F	F	R	F	29.47	29.31	23	37	35	35	F	F	F	C
4	30.19	30.10	56	62	53	52	R	F	C	29.81	29.83	35	45	41	38	F	F	F	C	29.23	29.42	31	41	34	23	F	C	S	C
5	30.08	30.02	53	56	53	54	C	R	C	29.79	29.96	33	46	36	31	F	S	F	F	29.78	30.03	8	17	15	11	F	F	F	F
6	29.82	29.90	56	54	53	54	R	R	R	30.05		32	47	33	30	F	C	F	F	30.06	29.77	12	24	25	23	C	S	S	F
7	29.79	29.63	52	53	53	52	R	R	R	30.34	30.35	34	43	40	40	F	F	C	F	29.98	30.11	19	36	29	20	F	F	F	F
8	29.63	29.64	57	63	58	56	C	C	R	30.30	30.08	45	51	46	47	C	F	C	R	30.01	29.94	22	28	23	19	C	C	S	S
9	29.83	30.08	58	68	63	53	F	F	F	29.96	30.00	39	52	45	42	F	F	F	F	29.99	29.75	20	16	17	8	S	S	S	S
10	30.11	30.13	54	68	57	52	F	F	F	30.17	30.34	32	38	32	25	F	F	F	F	29.60		12	21	17	7	C	F	F	F
11	30.26	30.32	53	58	54	52	F	C	C	30.39	30.10	26	45	41	42	F	F	F	F	29.91	29.11	18	14	6	C	S	S	F	F
12	30.42	30.49	52	59	51	45	C	F	F	29.89	30.33	49	50	43	31	C	F	F	F	30.07	30.10	2	19	15	13	F	F	F	F
13	30.49	30.49	48	57	51	47	C	C	C	30.32	30.08	25	44	39	36	F	F	C	F	30.08	29.70	17	30	23	34	C	C	C	R
14	30.43	30.31	49	56	51	42	C	C	F	30.13	30.05	34	46	39	40	F	F	F	F	29.41	29.60	29	42	34	28	F	F	F	F
15	30.27	30.17	43	63	53	43	F	F	F	29.70	29.50	48	58	53	49	C	C	C	C	29.60	29.49	21	25	21	14	F	F	F	F
16	30.16	30.13	45	68	56	46	F	F	F	29.53	29.98	46	53	42	30	F	F	F	F	29.50	29.59	14	23	21	18	F	F	F	F
17	30.10	30.10	48	64	56	50	F	F	F	30.11	30.05	25	38	36	31	F	C	R	R	29.58		16	20	25	23	F	F	F	F
18	30.14	30.29	50	59	55	52	F	F	F	29.84	30.00	40	33	34	34	R	R	R	R	29.80	29.90	19	28	24	16	F	F	F	F
19	30.29	30.26	49	50	49	48	C	C	C	29.98	29.75	40	33	32	29	S	S	S	S	29.79	29.69	20	25	24	20	S	S	C	C
20	30.18	30.00	49	51	50	50	R	C	C	29.60	29.14	30	30	29		S	S	S	S	29.73	29.73	12	24	20	14	F	F	F	F
21	29.80	29.87	52	56	57	57	R	C	C	29.10	29.50	34	35	31	24	C	S	S	F	29.94	30.06	14	25	21	15	F	F	F	F
22	29.70	29.69	52	67	60	52	F	F	F	29.65	29.73	21	32	28	21	F	F	F	F	30.13	29.00	14	25	23	23	C	F	C	C
23	29.87	29.39	57	67	60	56	C	F	R	29.65	29.73	23	31	30	25	C	C	C	C		29.50	19	24	25	25	C	C	C	C
24	29.45	29.72	46	55	51																								



JANUARY.										FEBRUARY.										MARCH.									
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.				
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	30,19	29,98	18	22	19	19	C	S	S	29,63	29,53	29	46	39	36	F	F	F	30,18	30,21	21	30	25	20	F	F	C		
2	30,12	30,33	20	23	16	15	C	F	F	29,65	29,63	32	35	34	33	C	C	S	30,22	30,02	20	29	23	20	C	C	C		
3	30,35	30,24	17	23	18	9	S	S	S	29,59	30,09	27	26	19	13	F	F	F	29,78	29,62	22	35	29	24	C	C	F		
4	30,20	30,29	6	22	15	6	F	F	F	30,09	30,00	15	37	26	19	F	F	F	29,62	29,94	28	26	14	4	C	F	C		
5	30,51	30,60	-8	0	-2	-6	F	F	F	30,09	30,15	16	28	18	13	F	F	F	30,10	30,11	-4	15	10	3	F	F	F		
6	30,53	30,32	3	13	10	1	S	C	F	30,20	30,49	10	19	17	13	F	F	F	30,03	29,70	14	31	27	24	F	F	F		
7	30,30	30,38	4	22	16	5	F	F	F	30,58	30,52	10	31	25	19	F	F	F	29,59	29,98	28	35	26	13	S	C	F		
8	30,40		11	29	25		C	C	C	30,35	29,91	22	40	36	39	C	C	R	30,04	29,84	11	31	28	26	F	F	F		
9			27	31		21	S	C	F	29,51	29,44	48	50	46	41	R	C	F	29,82	29,32	31	41	36	35	C	C	R		
10		30,19	19	35	30	34	F	F	F	29,78	30,08	29	32	27	25	F	F	F	29,40	29,52	38	45	36	34	F	F	C		
11	30,08	30,03	35	45	42	39	C	F	F	30,03	29,79	28	42	36	31	F	F	F	29,34	29,51	29	33	25	18	F	F	F		
12	30,03	30,35	40	55	44	37	F	F	C	29,67	29,93	31	43	33	18	C	F	F	29,68	30,29	11	15	10	5	F	F	F		
13	30,64	30,39	29	30	29	30	C	S	S	29,88		24	35	33	27	C	C	R	30,45	30,41	7	21	18	15	F	C	C		
14	30,07	29,89	30	39	34	34	R	C	C		29,60	29	35	22		F	C	S	30,13	30,29	24	41	34	27	S	F	C		
15	29,88	29,70	31	48	38	37	F	F	F	29,53	30,02	31	34	25	12	S	C	F	30,29	29,38	34	40	31	34	F	S	S		
16	29,95	30,22	30	40	34	29	F	F	F	30,21	30,20	9	22	18	11	F	F	F	29,29	29,37	36	43	36	33	C	F	C		
17	30,23	30,06	26	29	26	19	C	F	F	29,99	29,48	23	34	33	27	S	S	S	29,65	29,93	24	35	27	21	F	F	C		
18	30,06	30,11	23	35	32	25	F	F	F	29,62	29,89	27	32		12	C	C	F	29,89	29,70	26	25	23	24	S	S	S		
19	30,14	30,06	25	32	30	29	C	S	C	29,98	30,09	12	39	27	14	F	F	C	29,82	30,15	22	39	34	26	F	F	F		
20	29,96	29,72	29	37	32	33	C	C	C	30,12	30,22	23	28	24	21	S	F	C	30,21	30,10	34	41	36	37	C	C	R		
21	29,58	29,78	32	35	35	26	S	C	F	30,17	29,89	26	34	31	24	C	C	C	29,99	29,78	38	48	43	40	C	R	R		
22	29,86	29,83	24	38	33	23	C	F	F	29,44		35	38	33	20	R	C	F	29,86	29,86	41	46	38	35	C	C	C		
23	29,93	30,20	28	42	35	23	C	F	F	29,87	29,91	6	17	12	8	F	F	F	29,83	30,02	36	41	36	30	S	F	F		
24	30,24	30,15	15	26	22	22	C	C	C	29,80	29,87	13	33	22	12	F	F	F	30,15	30,10	31	41	37	33	F	F	F		
25	30,10	30,16	22	36	28	25	F	F	F	30,08	30,03	5	20	15	10	F	F	F	30,09	30,00	40	49	41	37	F	F	F		
26	30,13	29,85	31	37	34	36	R	R	R	30,10	30,12	9	24	19	14	F	F	F	30,02	30,01	39	52	42	36	F	F	F		
27	29,59	29,69	35	40	35	34	R	C	C	29,75	29,70	25	35	32	25	S	S	S	29,72		41	41	38	36	R	R	R		
28	29,83	30,12	23	28	21	9	F	F	F	29,90	30,08	26	38	32	23	F	F	F	29,61	34	34	29	28	S	C	F	F		
29	30,06	29,74	11	27	25	25	C	S	R										29,68	29,58	29	44	39	33	C	F	C		
30	29,65	29,34	26	39	34	32	F	C	S										29,78	29,56	24	36	29	30	C	C	C		
31	29,57	29,80	29	33	29	21	C	F	F										29,39	29,55	35	42	36	35	C	C	C		
Mean			22	32	27	23						22	33	27	21						27	36	30	26					

APRIL.										MAY.										JUNE.									
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.				
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	29,60	29,80	36	43	38	33	C	F	F	29,98	29,62	49	53	46	43	R	C	R	29,58	29,45	46	47	44	44	R	R	R		
2	29,81	29,20	39	40	36	36	C	R	R	29,50	29,94	54	62	55	47	F	C	F	29,60		50	63	54	53	C	C	C		
3	29,11	29,12	29	35	28	29	C	S	C	30,07	30,01	50	46	41	39	F	R	R	30,01	30,07	58	65	56	52	F	F	F		
4	29,21	29,69	34	40	32	29	C	F	F	30,10	30,22	43	51	44	39	F	F	F	30,11	30,11	62	70	58	53	F	F	F		
5	29,75	29,91	38	50	45	37	F	F	F	30,25	30,16	46	55	48	42	F	C	F	30,11	30,11	65	68	62	55	F	F	F		
6	29,96	29,74	42	50	41	38	F	F	F	30,12	29,93	51	58	54	51	F	C	R	30,10		63	72	63	61	F	C	C		
7	29,71	29,66	40	51	42	38	F	F	F	29,77	29,71	54	63	47	43	C	R	C	29,99	29,80	59	60	59	59	R	C	C		
8	29,60	29,52	46	66	54	44	C	F	F	29,69		41	56			R	F	F	29,64	29,11	60	56	55	59	R	R	R		
9	29,37	29,53	49	45	32	29	F	R	R	29,91	29,74	49	63	56	47	F	F	F	29,13	29,80	60	73	65	55	R	F	F		
10	29,54	29,70	25	37	31	28	C	F	F	29,50		60	74	60	46	R	F	F	29,83	30,18	66	70	61	55	R	F	F		
11	29,72	29,80	34	47	43	33	F	F	F	29,70	29,76	50	64	52	44	F	F	C	30,29	30,25	66	79	64	61	F	F	F		
12	29,87	30,07	40	53	45	34	F	F	F	29,73	29,93	37	52	49	44	R	C	F	30,16	29,80	62	64	66	63	R	C	F		
13	30,12	30,23	41	53	46	35	F	F	F	29,99	29,99	54	69	59	53	F	F	F	29,70	29,52	76	82	64	59	F	R	C		
14	30,22	30,11	43	58	42	35	F	F	F	29,96	29,72	62	79	60	65	F	F	F	29,47	29,50	73	84	63	62	R	C	C		
15	30,02	29,92	45	59	47	40	F	F	F	29,63	29,62	72	88	71	67	F	F	F	29,68	30,00	62	66	57	52	R	C	F		
16	29,91	29,86	53	67	52	46	F	F	F	29,64	29,74	55	60	49	48	R	C	R	30,12	29,99	61	70	63	59	C	F	F		
17	29,79	29,68	56	64	54	49	C	F	F	29,81	29,80	51	53	48	48	C	R	C	29,89	29,77	74	90	81	75	F	F	F		
18	29,60	29,72	54	74	61	48	R	C	F	29,78	29,98	53	60	53	48	C	C	F	29,77	29,81	83	92	77	72	F	F	C		
19	29,70	29,64	55	61	49	41	F	F	F	30,07	30,22	55	59	50	48	F	F	F	29,89	30,22	74	81	70	62	F	F	F		
20	29,69	29,77	43	41	37	31	F	F	F	30,30	30,30	58	63	56	49	F	F	C	30,32	30,25	65	71	62	59	F	F	C		
21	29,78	29,85	35	47	40	32	F	F	F	30,31	30,17	57	62	54	50	F	F	C	30,18	30,18	66	81	70	67	R	C	F		
22	29,83	29,80	34	49	43	37	F	F	F	30,02	29,84	59	68	59	58	C	R	R	30,20		74	87	71	67	C	F	F		
23	29,80	29,73	45	51	41	40	F	C	R	29,58		60	76	72	64	R	C	F	30,10	30,00	80	93	78	75	F	F	F		
24	29,70	29,82	35	35	35	32	C	C	F	29,68	29,62	72	80	60	57	F	F	F	30,02	30,21	78	83	70	64	F	F	F		
25	29,87	30,02	39	58	50	41	F	F	F	29,59	29,60	66	80	69	67	R	F	F	30,23	30,09	72	75	64	65	F	F	C		

JULY.										AUGUST.										SEPTEMBER.										
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	
1	30.02	29.83	80	92	79	73	F	C	C	F	29.85	29.82	79	93	80	74	F	F	F	F	30.17	29.90	63	65	67	R	R	R	C	
2	29.84	30.10	78	85	76	67	C	F	F	F	29.90	29.90	80	86	71	70	F	R	R	C	29.87	29.90	71	82	77	65	F	F	F	F
3	30.19	30.22	72	72	63	58	F	F	F	F	29.90	29.88	71	69	67	R	R	C	C	29.98	30.07	63	70	63	60	F	F	F	C	
4	30.24	30.16	67	78	68	67	F	F	F	F	29.86	29.91	70	79	71	69	C	F	F	F	30.14	30.18	64	70	61	59	R	C	C	R
5	30.08	29.90	77	94	77	75	F	R	C	29.99	30.00	78	86	75	70	C	F	F	F	30.15	30.10	61	66	58	59	R	C	R	R	
6	29.90	29.88	77	77	67	62	F	F	F	30.01	30.05	76	88	76	72	F	F	F	F	30.08	30.18	62	61	59	57	R	R	R	R	
7	29.84	29.81	72	83	74	67	F	F	F	30.01	29.91	78	91	78	75	F	F	C	R	30.19	30.10	62	66	62	60	R	C	C	R	
8		29.81	71	76	70		F	F	C	R	29.89	29.92	77	85	78	70	F	F	F	F	30.09	30.21	60	66	59	58	C	C	C	C
9	29.82	29.91	62	72	63	59	R	C	F	29.93	29.91	74	86	71	71	F	F	F	F	30.22	30.22	62	68	62	60	C	C	C	C	
10	30.00	30.12	68	73	66	61	F	F	F	29.89	29.80	76	87	75	71	F	F	F	F	30.19	30.12	60	59	60	59	R	C	C	R	
11	30.19	30.10	66	74	64	61	F	F	F	29.72	29.78	74	84	74	71	R	F	F	F	30.12	30.00	62	76	65	63	F	F	F	F	
12	30.02	29.80	71	81	70	68	C	R	R	29.80	29.89	75	86	79	70	F	F	F	F	29.90	29.81	66	82	76	70	C	F	F	F	
13	29.78	29.69	71	88	79	74	R	C	F	29.92	29.92	75	90	80	71	F	F	F	F	29.87	29.94	74	77	71	67	C	F	F	F	
14	29.67	29.72	76	89	73	70	F	F	F	29.87	29.72	78	84	76	68	F	F	F	F	29.98	29.89	68	70	69	67	C	C	C	R	
15	29.70	29.73	75	73	68	64	F	R	C	29.65	29.69	78	86	76	71	F	F	R	F	29.89	29.97	71	82	74	64	F	F	F	F	
16	29.80	29.89	71	80	69	67	R	F	F	29.75	29.88	74	83	66	66	F	F	F	F	30.02	30.09	66	78	70	59	F	F	F	F	
17	29.92	29.99	73	81	74	69	F	F	F	29.87	29.90	67	73	65	63	C	C	R	R	30.12	30.20	61	69	63	56	F	F	F	F	
18	30.00	29.99	77	86	70	71	F	F	R	29.98	30.11	63	72	65	61	R	C	C	C	30.22	30.17	60	67	61	56	C	F	C	C	
19	30.01	30.09	73	80	70	67	C	F	F	30.18	30.21	65	73	61	58	R	C	C	C	30.09	30.15	62	68	63	60	C	C	C	C	
20	30.14	30.12	62	69	66	64	C	C	C	30.31	30.33	66	72	60	58	F	C	C	C	30.18	30.20	61	70	61	54	F	F	F	F	
21	30.16	30.12	71	76	66	64	F	F	F	30.32	30.32	63	75	63	58	F	F	F	F	30.20	30.15	56	70	63	59	F	C	C	F	
22	30.13		71	82	74	65	F	F	F	30.29	30.20	66	86	76	67	F	F	F	F	30.03	29.93	61	65	57	50	C	R	F	F	
23	30.08	30.01	73	87	76	70	F	F	F	30.21	30.13	69	88	78	70	F	F	F	F	29.93	29.87	50	63	54	45	F	F	F	F	
24	30.01	30.03	75	88	75	70	F	F	F	30.15	30.02	71	89	79	75	F	F	F	F	29.80	29.79	49	60	54	51	F	F	F	F	
25	30.00	29.89	75	81	76	68	C	F	C	29.95	29.79	81	91	82	75	F	F	F	F	29.82	29.85	54	65	59	56	F	F	C	C	
26	29.83	29.83	74	78	72	70	C	R	F	29.72	29.90	78	88	70	62	F	F	F	F	29.89	30.02	57	59	55	48	C	F	C	C	
27	29.82	29.83	73	69	61	61	C	C	R	30.19	61	71	63	54	F	F	F	F	30.07	30.15	57	60	55	53	F	F	C	C		
28	29.86	29.94	68	74	69	63	R	R	R	30.20	30.14	61	70	65	60	F	F	F	F	30.20	29.99	57	65	58	52	C	F	F	F	
29	30.00	30.01	69	76	70	66	R	C	F	30.10	29.89	68	76	65	65	F	C	R	F	29.69	29.94	59	62	53	45	R	F	F	F	
30	30.05	29.98	78	84	77	73	C	F	F	29.93	30.08	67	76	68	65	F	F	F	F	29.90	29.93	57	57	53	44	F	F	F	F	
31	29.87	29.85	80	92	79	77	C	F	R	30.17	30.20	63	71	62	60	F	F	F	F											
Mean			72	80	71	67						72	82	72	67															

OCTOBER.										NOVEMBER.										DECEMBER.									
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.				
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	29.92	29.97	46	59	48	40	F	F	F	29.94	29.98	38	44	37	29	F	S	F	F	29.90	29.87	19	31	28	31	F	F	F	C
2	29.90	30.01	41	59	53	45	F	F	F	30.13	30.04	35	53	48	42	F	F	F	F	29.78	29.67	34	39	34	30	S	F	F	F
3	30.09	30.22	53	63	57	49	C	C	F	30.11	30.00	34	39	34	26	C	C	F	F	29.76	29.43	30	38	36	34	F	C	R	R
4	30.28	30.19	52	62	55	54	C	C	F		29.98	32	53	48	45	F	F	F	F	29.62	30.10	30	35	31	21	F	F	F	F
5	30.08	29.85	59	70	64	63	R	C	F	30.03	30.10	40	60	52	43	F	F	F	F	30.11	29.84	20	26	25	30	C	S	S	S
6	29.99	30.21	54	61	54	42	F	F	F	30.02		47	62	57	52	C	F	F	F	29.69	29.81	34	34	34	33	R	C	C	C
7	30.30	30.21	44	57	51	51	F	C	C	29.66	30.01	51	55	47	34	F	F	F	F	29.77	29.50	34	36	35	33	R	R	R	F
8	30.08	30.04	56	58	59	54	C	R	R	30.03	29.63	30	46	45	46	F	C	R	R	29.49	29.85	35	40	35	25	C	F	F	F
9		30.11	49	59	57	51	F	F	F	29.39	29.63	43	48	47	45	C	C	F	F	29.10	29.30	14	18	15	10	F	F	F	F
10	29.94	29.74	58	53	50	47	R	R	R	29.87	29.74	37	56	51	49	F	F	F	F	29.29	29.00	9	29	26	26	F	F	C	S
11	29.86	30.13	44	46	46	47	C	C	C	29.79	29.76	45	55	48	49	F	F	F	F	29.52	29.78	32	41	40	29	C	C	F	F
12	30.28	30.33	46	52	50	47	C	C	F	29.42	29.19	49	52	53	45	C	R	R	C	29.93	29.79	21	31	27	24	F	F	F	C
13	30.33		49	60	53	49	R	F	F	29.36		36	45	39	34	F	F	F	F	29.83	30.02	26	35	28	22	C	C	C	F
14	30.09	29.87	52	59	57	56	C	C	R	29.36	29.89	33	40	39	37	C	C	C	C	30.22	30.19	18	33	30	31	F	F	F	C
15	29.82	30.04	58	65	54	42	C	F	F	29.96	30.11	32	46	41	42	C	F	F	F	30.16	30.22	26	39	34	26	F	F	F	F
16	29.94	29.51	41	60	54	49	F	F	R	30.23	30.32	32	49	41	37	F	F	F	F	30.20	29.91	24	31	26	23	C	C	S	S
17	29.67	29.88	38	47	41	34	F	F	F	30.28	30.03	46	53	50	48	C	F	C	C	29.80	30.12	18	22	19	10	S	F	F	F
18	30.10		32	48	42	33	F	F	F	29.82	29.57	49	65	59	51	C	F	R	C	30.20		6	24	19	16	C	F	F	C
19		30.10	34	57	52	46	F	F	F	29.68	29.98	36	43	37	32	F	F	F	F	29.81	29.51	25	30	32	28	S	R	C	F
20	30.01	29.72	54	64	60	59	C	C	C	30.17		23	36	32	25	F	F	F	F	29.82	30.07	23	35	29	20	F	F	F	F
21	29.78	29.59	53	66	59	56	F	F	C			21	44	37	28	F	F	F	F	29.98	29.60	2	32	29	21	C	S	S	F
22	29.61	29.81	45	58	49	42	F	F	C		29.80	36	47	44	39	F	C	C	C	29.71	29.90	20	34	29	25	F	F	F	F
23	30.02	30.26	37	47	38	31	F	F	F	29.85	29.88	34	48	42	36	F	F	F	F	29.89	29.60	25	35	32	28	C	C	C	C
24	30.41	30.41	31	46	41																								



JANUARY.										FEBRUARY.										MARCH.									
Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.			
8 A.M.	10 P.M.	°	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10
1	29,82	29,94	24	31	26	20	F	F	F	29,84	29,66	31	35	31	27	S	S	C	29,25	29,39	23	28	25	27	S	S	C	F	
2	29,97		20	32	28	21	F	F	F	29,88	30,33	28	37	32	25	F	F	F	29,65	29,85	22	40	32	22	F	F	F	F	
3	29,66	29,48	19	29	28	22	C	C	F	30,29	30,02	17	41	35	34	C	C	C	29,85	29,77	26	45	35	22	C	F	F	F	
4	29,50	29,60	26	36	32	22	C	C	F	29,57	29,34	35	38	35	33	R	R	C	29,81		22	40	34	20	F	F	F	F	
5	29,66	29,73	19	32	26	20	F	F	F	29,50	29,59	36	44	38	35	C	F	C	29,93	29,96	20	31	26	17	F	F	F	F	
6	29,79	29,81	11	20	17	9	F	F	F	29,60	29,86	35	39	37	34	C	F	C	30,01	30,16	17	25	16	9	F	F	F	F	
7	29,89	29,89	10	18	15	9	C	C	F	30,01	30,25	27	34	28	20	S	C	F	30,23	30,40	9	25	21	14	F	F	F	F	
8	29,91	29,98	12	29	27	23	F	F	F	30,26	30,32	16	29	24	23	F	F	C	30,50	30,37	16	34	27	21	F	F	F	F	
9	29,93	29,78	16	30	27	21	F	F	F	30,20	30,11	24	20	17	13	S	S	C	30,20	29,84	27	35	27	26	S	S	S	S	
10	29,78	29,66	21	33	30	22	F	F	F	30,12	29,94	14	25	21	14	F	F	F	29,89	29,89	24	42	33	27	F	F	F	F	
11	29,52	29,40	23	34	33	32	C	C	C	29,80	29,71	17	35	30	28	F	F	C	29,71	29,39	34	35	31	28	C	R	C	F	
12	29,47	29,67	30	40	35	33	C	F	F	29,69	29,79	23	23	15	10	S	F	F	29,58	29,60	31	39	35	28	F	F	F	F	
13	29,78	29,67	27	34	32	31	C	S	C	29,85	30,10	8	27	25	16	F	F	F	29,30	29,72	37	50	42	32	C	F	F	F	
14	29,55	29,88	33	41	34	32	F	F	C	30,13	29,50	19	30	31	34	C	S	S	29,91	30,02	30	39	35	27	F	F	F	F	
15	29,98	29,67	27	41	36	34	F	F	F	29,33	29,47	32	39	30	23	C	F	F	30,06	29,78	29	38	35	35	F	C	F	C	
16	29,64	29,61	38	50	42	35	F	F	C	29,62	29,72	19	29	23	18	F	F	F	29,67	29,79	36	51	44	38	C	F	C	C	
17	29,62	29,20	36	39	38	36	C	C	R	29,83	29,90	15	32	26	18	F	F	F	29,89	29,93	37	47	37	37	F	F	C	C	
18	28,69	29,06	42	44	33	28	C	C	F	29,92	29,88	15	32	28	19	F	F	F	29,91	29,60	34	38	37	37	C	R	C	R	
19	29,21	29,43	28	34	29	25	F	S	F	29,90	29,83	22	31	28	18	F	F	F	29,38	29,57	43	49	42	38	C	F	F	F	
20	29,63	29,53	24	37	39	34	F	F	C	29,80	29,79	24	39	31	25	F	F	F	29,68	29,82	39	47	41	36	C	F	F	C	
21	29,59	29,62	26	33	29	27	F	F	C	29,80	29,89	31	43	36	30	F	C	C	29,83	29,68	36	46	44	32	F	F	C	S	
22	29,65	29,78	27	34	27	20	F	F	C	30,05	30,02	25	37	35	29	F	F	F	29,57	29,50	32	32	32	32	S	S	S	S	
23	29,88	29,85	18	32	28	20	F	F	F	29,78	29,59	34	45	38	33	C	F	C	29,57	29,72	32	39	36	35	S	C	C	C	
24	29,73	29,62	33	39	37	33	C	C	C	29,43	29,25	40	51	44	41	C	F	F	29,72	29,80	36	43	37	35	F	S	C	C	
25	29,45	29,35	33	35	26	19	S	S	S	29,29	29,53	31	33	26	21	F	F	F	29,81	29,84	35	48	40	33	F	F	F	F	
26	29,63		9	19	17	15	F	F	F	29,58	29,80	20	26	23	19	F	F	F	29,90	29,98	39	49	42	34	F	F	F	F	
27		30,18	28	38	30	28	S	F	C	29,90	29,96	22	37	32	24	F	F	F	29,98	29,87	41	62	53	45	F	F	F	F	
28	30,21	30,21	20	30	14	5	S	S	F	29,94	29,55	24	34	33	33	F	C	C	29,84	29,78	44	58	45	36	F	F	F	F	
29	30,30	30,38	-2	12	8	-1	F	F	F										29,78	29,52	40	46	39	35	C	F	R	R	
30	30,48	30,34	-2	21	17	8	F	F	F										29,25	29,31	33	47	39	33	R	C	F	F	
31	30,32	30,19	10	32	27	28	F	F	C										29,23	29,60	45	48	39	33	F	F	F	F	
Mean			22	32	28	23				24	34	30	25								31	42	36	30					

APRIL.										MAY.										JUNE.									
Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.			
8 A.M.	10 P.M.	°	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10
1	29,72	29,99	35	48	44	37	F	F	F	29,94	29,87	47	58	47	47	C	F	F	30,05	30,05	72	85	71	67	C	C	C	C	
2	30,01	29,81	42	58	48	48	F	C	F	29,69	29,71	53	53	50	51	R	R	R	29,94	29,76	64	80	67	67	R	F	F	F	
3	30,00	30,18	51	58	46	43	F	F	F	29,77	29,90	59	71	62	59	F	F	F	29,69	29,65	73	85	72	65	F	F	F	F	
4	30,25	30,20	42	42	38	39	R	C	R	30,10	30,21	47	58	47		F	F	F	29,69	29,80	70	80	69	60	F	F	F	F	
5	29,95	29,70	43	48	46	42	R	R	R	30,30	30,17	51	59	52	46	F	F	F	29,90	29,90	57	67	58	53	F	F	F	F	
6	29,52	29,54	44	55	43	40	R	F	F	30,11	30,08	54	69	54		F	F	F	29,88	29,63	60	76	65	59	F	F	F	F	
7	29,64	29,73	49	63	54	48	R	F	F	30,21		42	44	42	44	R	R	R	29,48	29,60	66	78	67	61	R	C	F	F	
8	29,62	29,87	54	65	50	46	F	F	F	29,68	29,94	47	54	51	44	R	C	F	29,70	29,92	66	78	65	58	F	F	F	F	
9	29,90	29,92	43	55	49	40	F	F	F	30,11	30,20	49	54	46	40	F	F	F	30,02	30,02	68	81	74	65	F	F	F	F	
10	29,72	29,72	49	63	51	45	C	F	C	30,21	30,15	51	58	49	43	F	F	F	30,05	29,95	76	89	77	70	F	F	F	F	
11	29,82	29,94	45	54	45	38	C	F	F	30,05	29,82	51	60	52	46	C	C	F	29,88	29,70	78	90	73	71	F	F	F	F	
12	29,90	29,63	46	60	48	45	F	C	R	29,79	29,73	57	71	57	58	F	C	C	29,67	29,62	79	92	76	71	C	F	R	F	
13	29,48	29,42	50	58	53	49	R	C	C	29,73	29,80	55	59	56	50	C	C	C	29,69	29,79	76	75	65	59	C	F	F	F	
14	29,40	29,65	45	52	44	37	C	C	F	29,84	29,70	59	65	60	56	C	R	R	29,80	29,66	67	75	66	60	F	F	F	F	
15	29,79	29,92	43	52	43	40	C	C	C	29,57	29,66	61	68	60	56	F	R	F	29,78	29,81	64	74	65	56	F	F	F	F	
16	29,90	30,00	47	61	52	46	F	F	F	29,93	29,96	56	62	57	52	F	F	F	29,83	29,81	61	78	64	56	F	F	F	F	
17	30,16	30,19	52	65	54	44	F	F	F	29,98	29,91	57	68	55	54	F	F	F	29,84	29,93	66	81	63	58	F	F	F	F	
18	30,20		58	78	62																								

JULY.											AUGUST.											SEPTEMBER.										
Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.				
8 A.M.	10 P.M.		8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.		8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.		8	N.	St.	10	8	N.	St.	10
1	30.12	30.23	69	82	67	60	F	F	F	F	30.07	30.09	68	68	64	62	C	R	C	R	29.70	29.62	68	72	66	62	F	C	C	F	F	
2	30.33	30.35	66	76	63	55	F	F	F	F	30.10	30.12	66	73	68	65	C	C	C	C	29.70	29.62	68	72	64	64	R	C	C	F	F	
3	30.36	30.35	64	75	64	58	F	F	F	F	30.09	29.90	67	79	70	67	C	C	C	R	29.68	29.83	68	77	71	61	F	F	F	F	F	
4	30.38	30.35	71	82	74	71	F	F	F	F	29.71	29.82	67	81	60	60	R	F	F	F	29.83	29.91	64	75	66	56	F	F	R	F	F	
5	30.38	30.25	78	93	84	77	F	F	F	F	29.96	30.10	63	71	74	56	F	F	F	F	30.07	30.10	57	69	61	53	F	F	F	F	F	
6	30.20	30.05	82	96	88	83	F	F	F	F	30.13	30.12	66	81	72	64	F	F	F	F	30.08	30.03	61	71	61	56	F	F	F	F	F	
7	30.06	30.18	84	76	67	65	F	F	C	C	30.08	29.98	71	85	71	68	F	F	F	F	30.05	30.18	62	70	62	61	F	F	F	F	C	
8	30.10	29.92	70	81	72	72	F	C	R	C	29.85	29.81	73	92	82	73	R	F	F	F	30.29	30.34	62	71	60	51	C	F	F	F	C	
9	29.89	29.80	78	93	82	76	F	F	F	F	29.86	29.86	76	72	72	69	C	R	R	R	30.40	30.41	58	71	59	51	F	F	F	F	F	
10	29.80	29.71	82	95	86	79	F	F	F	F	29.89	29.88	70	76	69	64	C	F	F	F	30.40	30.40	56	68	61	55	F	F	F	F	F	
11	29.65	29.75	85	92	78	72	F	F	F	F	29.89	29.76	72	84	75	70	F	F	F	F	30.12	29.99	63	80	71	65	F	F	F	F	F	
12	29.80	29.93	74	77	70	67	F	C	C	F	29.75	29.93	71	79	66	59	R	F	F	F	23.00	29.95	73	91	82	74	F	F	C	F	F	
13	30.03	30.15	69	80	68	64	F	C	C	F	30.00	30.00	63	74	60	60	F	F	F	F	29.92	29.96	66	70	67	68	C	R	C	F	F	
14	30.22	30.20	73	77	67	65	F	C	C	C	30.00	30.05	63	85	68	68	F	F	F	F	30.20	30.20	61	68	59	50	F	F	F	F	F	
15	30.24	30.20	77	73	64	61	F	C	F	F	30.13	30.11	68	75	66	60	F	F	F	F	29.98	29.98	56	63	50	57	F	F	C	F	R	
16	30.24	30.16	66	73	62	57	F	F	F	F	30.05	30.05	70	71	66	63	C	R	C	C	29.75	30.03	56	76	69	60	R	F	F	F	F	
17	30.11	30.03	60	85	68	63	F	F	F	F	30.07	29.98	70	78	67	63	C	C	F	F	30.24	30.30	62	71	64	60	F	F	F	F	F	
18	29.99	29.93	78	92	81	75	F	F	F	F	29.88	30.17	74	78	66	58	F	F	F	F	30.30	30.31	67	82	75	64	F	F	F	F	F	
19	29.89	29.89	82	95	84	75	F	F	F	F	30.25	30.22	58	73	65	58	F	F	F	F	30.28	30.10	69	81	71	69	F	F	F	C	R	
20	29.91	30.01	85	70	61	60	F	R	R	R	30.09	30.09	65	83	75	69	F	F	F	F	29.99	30.05	69	79	74	68	R	R	F	F	F	
21	30.12	30.22	67	73	64	59	C	F	F	F	30.03	29.99	76	92	83	79	F	F	F	F	30.11	30.11	51	56	53	50	R	R	F	F	F	
22	30.26	30.13	67	76	64	60	F	F	F	F	30.08	30.14	77	85	68	63	F	F	F	F	30.05	30.00	52	58	56	55	R	C	R	C	F	
23	30.07	29.95	67	78	69	65	F	F	F	F	30.23	30.28	67	76	67	62	F	F	F	F	30.17	30.39	55	58	51	48	C	F	F	C	C	
24	29.91	29.90	65	88	79	74	F	F	F	F	30.29	30.14	67	75	69	64	F	F	F	F	30.40	30.28	56	62	54	55	C	F	C	C	C	
25	29.84	29.84	81	98	81	79	F	R	C	C	30.10	29.99	71	88	80	74	F	F	F	F	30.07	30.04	58	59	58	58	R	C	C	R	C	
26	29.90	29.95	81	87	75	73	F	F	F	F	29.98	29.92	78	89	75	71	F	R	R	C	30.12	30.12	59	64	59	57	R	R	C	R	C	
27	30.03	30.08	78	86	74	72	F	F	F	F	29.98	29.94	77	86	73	69	F	F	C	C	29.87	29.79	58	66	60	54	R	C	R	C	C	
28	30.11	30.12	78	80	71	67	C	F	F	F	29.93	29.93	72	77	67	62	C	F	F	F	29.82	29.84	60	70	54	54	F	F	F	F	F	
29	30.13	30.17	74	81	72	69	F	F	F	F	29.91	29.83	69	81	70	66	F	F	F	F	29.73	29.78	58	72	63	58	F	F	F	F	F	
30	30.12	30.00	76	92	80	79	F	F	F	F	29.52	29.74	61	63	62	59	R	F	F	C												
31	29.95	29.97	85	100	76	75	F	R	C	C	69	79	70	65																		
Mean			75	84	73	69																										

OCTOBER.											NOVEMBER.											DECEMBER.										
Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.				
8 A.M.	10 P.M.		8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.		8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.		8	N.	St.	10	8	N.	St.	10
1	29.90	29.90	50	62	57	49	F	F	F	F	30.19	30.08	47	53	48	47	C	C	C	C	30.00	30.19	24	30	27	19	C	F	F	F	F	
2	29.82	29.72	56	72	64	61	F	C	C	C	29.92	29.91	48	50	49	39	R	R	R	R	30.09	29.89	19	34	32	24	F	F	F	F	F	
3	29.82	30.14	54	58	44	4	F	F	F	F	30.08	30.10	37	50	44	38	F	F	F	F	29.83	29.81	29	43	38	31	F	F	F	F	F	
4	30.23	30.17	45	59	52	43	F	F	F	F	30.00	29.73	34	58	49	44	F	F	F	F	29.79	29.90	33	43	39	38	F	C	C	F	F	
5	30.06	29.74	45	61	53	53	F	C	C	C	29.73	29.73	42	52	48	46	C	F	C	C	30.00	29.73	38	33	33		S	S	S	S	C	
6	29.42	29.69	57	70	57	46	R	F	F	F	29.75	29.90	43	52	47	41	C	C	R	F	29.58	29.50		33			S	S	S	S	C	
7	29.80	30.01	44	59	52	44	F	F	F	F	30.03	30.11	33	44	41		F	F	F	F	29.61	29.76	23	31	27	22	F	F	F	F	F	
8	30.15	30.13	45	63	54	48	F	F	F	F	29.94	29.60	43	59	54	50	C	C	C	C			24	36	24	26	F	F	F	C	C	
9	30.13	29.90	48	67	59	59	F	F	F	F	29.68	29.58	42	50	46	40	F	F	F	F			30.25	22	32	20	F	F	F	F	F	
10	29.81	30.00	65	75	63	64	F	F	F	F	29.58	29.71	34	48	40	32	F	F	F	F	30.40	30.40	17	29	25	21	F	F	F	C	C	
11	30.21	30.30	46	55	49	41	F	F	F	F			29.81	28	38	35	33	F	F	C		30.32	30.10	27	37	39	C	F	F	C	C	
12	30.30	30.17	40	59	55	53	F	F	C	C	29.60	29.52	37	46	43	S	C	C	C	29.72	29.08	44	47	47	37	R	R	R	R	R		
13	30.02	30.09	60	61	58	54	R	R	R	R	29.24	29.27	45	38	39	38	R	R	R	C	29.29	29.54	32	39	35	32	C	F	C	F	F	
14	30.32	30.51	44	52	47	47	F	F	F	F	29.48	29.65	32	42	38	30	F	C	C	F	29.70	29.88	27	35	30	23	F	F	F	F	F	
15	30.53	30.34	39	53	48	47	C	C	C	C	29.82	30.06	26	37	34	29	F	F	F	F	29.97	29.99	21	32	29	23	F	F	F	F	F	
16	30.20	30.18	58	58	58	54	R	R	R	R	30.20	30.07	31	44	38	31	F	C	C	C	30.01		20	32	22	22	F	F	F	F	F	
17	30.23	30.27	49	60	53	52	F	C	C	C	30.11	29.80	36	41	44	R	R	C	C	30.08	30.06	19	36	32	26	F	F	F	F	F		
18	30.08	29.42	54	57	58	60	R	R	R	R	29.48	29.63	54	45	42	34	R	R	R	R	30.10	30.17	23	36	33	33	F	F	F	F	F	
19	29.27	29.24	60	68	61	53	R	F	C	C	29.75	30.11	30	43	33	27	F	F	F	F	30.21	30.21	28	39	38	36	C	F	C	C	C	
20	29.62	29.92	43	52	49	49	F	F	F	F	30.25	30.23	28	35	33	28	C	C	C	C	30.11	29.79	41	48	47	46	C	C	C	R	R	



JANUARY.										FEBRUARY.										MARCH.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8 N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	
1	30,17	30,03	18	34	28	26	F	C	S	29,93	30,01	25	33	30	21	F	F	F	30,30	30,19	35	55	38	35	C	F	F	F	
2	30,01		23	27	22	16	F	C	F	30,00	29,62	19	35	30	27	F	F	F	29,90	29,76	38	50	40	40	R	R	C	F	F
3	30,40	30,59	0	11	9	7	F	F	F	29,53	29,44	33	43	40	34	S	C	F	30,00	30,15	38	51	42	37	F	F	F	F	
4	30,51	29,99	9	16	18	20	S	S	S	29,71	29,94	28	36	32	29	F	F	F	30,37	30,41	24	32	29	24	F	F	F	F	
5	29,37	29,80	27	32	30	24	S	C	F	29,76	29,68	31	39	32	33	S	C	C	30,49	30,30	23	33	28	26	F	F	F	F	
6	30,02	30,16	19	30	24	24	F	F	F	30,00	30,11	25	34	30	23	F	F	F	30,20		30	39	34	34	C	F	S	S	S
7	30,10	29,69	33	38	36	41	C	C	R	29,82	29,51	33	38	37	32	R	C	F	29,74	29,65	37	38	35	32	S	C	C	C	
8	29,52	29,70	34	41	39	31	R	R	F	29,78	30,04	25	31	26	20	F	F	F	29,74	29,65	35	39	36	31	S	C	C	C	
9	30,02	29,36	25	32	28	20	F	F	F	29,78	29,89	25	31	17	13	S	C	C	29,67	29,40	31	42	37	31	F	F	F	F	
10	30,27	29,80	17	39	37	37	C	F	R	30,06	29,98	13	27	21	19	F	C	C	29,60	29,60	35	43	38	38	F	F	C	R	
11	29,85	29,57	34	42	36	34	F	F	C	29,90	29,65	14	18	14	14	S	S	S	29,42	29,35	42	42	40	37	R	R	R	F	
12	29,50	29,69	30	39	34	27	F	F	F	29,67	29,82	12	24	17	6	F	F	F	29,46	29,58	39	47	41	36	R	R	C	F	
13	29,75	29,76	26	36	33	31	F	C	C	29,92	29,63	5	27	20	22	F	C	S	29,64	29,74	39	43	41	39	R	R	C	R	
14	29,96	30,00	29	40	35	35	F	C	C	29,12	29,49	21	32	18	9	S	F	F	29,79	29,70	43	47	43	41	C	C	C	C	
15	29,60	29,31	38	48	47	40	R	R	R	29,59	29,93	12	19	14	7	F	F	F	29,72	29,87	40	44	41	41	C	C	C	C	
16	29,51	29,73	34	36	34	29	F	F	F	30,15	30,29	9	26	21	14	F	F	F	29,99		46	52	45	39	F	F	C	C	
17	29,87	29,89	25	31	29	24	F	F	F	30,27	30,03	18	37	34	36	F	C	R	30,12	30,08	45	50	41	37	F	C	C	C	
18	30,10	30,29	13	21	19	15	F	F	F	30,09	29,81	37	37	34	33	R	R	R	30,01	29,80	39	42	39	39	F	C	C	C	
19	30,30	29,52	21	33	35	40	S	C	R	30,00	30,07	36	44	35	32	C	F	F	29,58	29,58	41	41	39	38	R	R	R	R	
20	29,24	29,34	32	31			S	S	S	30,10	30,00	32	43	32	25	C	F	F	29,48	29,46	38	38	38	38	R	R	R	R	
21	29,43	29,50	17	28	23	21	F	F	F	29,59	30,12	30	26	21	14	F	F	F	29,62	29,63	38	39	39	39	R	R	R	R	
22	29,61	29,98	13	11	8	1	F	F	F	30,35	30,43	13	30	25	17	F	F	F	29,60	29,49	39	42	42	42	R	C	C	R	
23	30,08	29,99	0	16	11	9	F	F	F	30,41	30,12	16	37	32	32	F	F	F	29,33	29,31	46	52	45	44	C	C	C	C	
24	29,77	29,88	13	22	18	11	F	F	F	30,21	30,10	36	45	39	36	C	F	F	29,63	29,83	37	39	36	34	S	S	C	C	
25	29,51	29,87	9	24	19	20	F	F	F	30,04	29,91	40	60	49	45	F	F	F	29,94	30,16	33	36	32	26	C	S	F	F	
26	29,59	29,73	22	34	27	16	C	F	F	29,93	30,10	48	60	52	39	C	F	F	30,21	30,26	29	39	32	28	F	F	F	F	
27	29,81	29,87	12	32	26	27	F	F	F	30,27	30,34	35	40	36	29	F	F	F	30,27	30,15	32	46	38	30	F	F	C	R	
28	30,00	29,94	18	32	28	31	F	F	C	30,06	29,70	40	43	40	40	C	R	R	29,49	29,44	40	41	39	39	R	C	C	R	
29	29,60	29,20	33	38	37	31	R	F	F	29,47	29,65	41	50	45	39	R	C	C											
30	29,21	29,40	32	44	36	32	F	F	F																				
31	29,61	29,79	28	32	29	25	F	F	F																				
Mean			22	31	28	25						25	36	30	25														

APRIL.										MAY.										JUNE.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8 N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	
1	29,72	29,82	44	57	41	F	F	F	29,99	29,81	61	74	61	56	F	F	F	29,89	29,87	71	84	65	F	F	R	R			
2	29,82		45	62	48	42	F	F	F	29,61	29,59	58	79	70	64	R	F	C	30,04	30,17	57	62	51	52	C	F	F	F	
3	30,02	30,07	46	56	47	43	F	F	F	29,52	29,61	55	54	48	47	R	R	R	30,19	30,03	60	71	62	53	F	C	R	R	
4	30,19	30,28	47	57	40		F	F	C	29,88	30,07	52	60	45	R	C	F	F	29,83	29,67	65	82	68	64	F	C	R	R	
5	30,31	30,32	40	44	40	40	C	C	R	30,06	29,83	51	64	49	C	C	F	F	29,87	29,80	58	51	49	49	R	R	R	F	
6	30,30	30,22	42	47	37		C	C	C	29,77	29,53	52	62	51	52	R	C	R	29,98	30,14	51	62	54	46	F	F	F	F	
7	30,20	30,10	39	46	39		C	C	C	29,53	29,69	53	68	57	56	C	F	F	30,18	30,16	57	71	75	53	F	F	F	F	
8	30,05	29,89	42	49	40	39	C	C	R	29,77	29,65	53	59	50	51	C	R	R	30,11	30,14	61	74	54	51	F	C	F	F	
9	29,77	29,59	39	46	39	38	R	C	R	29,63	29,63	51	60	53	51	F	F	F	30,18	30,09	51	63	53	50	C	F	F	F	
10	29,29	29,25	37	38	36	35	S	R	R	29,70	29,83	56	64	51	49	C	C	C	29,99	29,92	63	81	68	60	F	F	F	F	
11	29,45	29,7	38	49	41	33	C	F	F	29,83	29,87	58	68	62	58	F	F	F	30,07	30,07	69	84	67	60	F	F	F	F	
12	29,89	29,97	40	52	45	37	F	F	F	30,01	30,11	55	61	53	49	C	C	R	30,08	30,02	68	85	69	59	F	F	F	F	
13	30,03	30,02	46	48	37		F	F	C	30,12	30,09	49	60	50	47	C	C	C	29,95	29,90	70	74	61	56	F	F	F	F	
14	29,98	29,94	42	47	42	39	F	F	C	30,02	30,02	55	62	55	54	C	F	R	29,92	29,92	61	66	56	55	F	F	F	F	
15	30,00	30,12	48	60	50	40	F	F	F	30,00	29,93	58	68	58	56	F	F	F	29,90	29,89	65	70	65	63	R	F	R		
16	30,17	30,04	50	57	48	52	F	F	C	29,84	29,78	60	68	55	52	F	R	R	29,91	29,96	70	70	60	57	C	F	R	R	
17	29,97	30,03	46	51	45	44	R	F	F	29,71	29,69	60	67	57	54	F	F	F	29,85	29,74	60	73	61	59	R	F	F	F	
18	30,11	30,12	41	53	45	40	F	F	F	29,72	29,89	59	65	57															

JULY.										AUGUST.										SEPTEMBER.										
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	
1	30,08	29,90	77	94	76	F	F	F		29,91	29,82	86	71	69	C	F	R	F		29,91	29,92	70	83	76	72	C	F	F	C	
2	29,84	29,74	84	96	81	75	F	F	C	29,96	30,10	74	71	59	52	F	C	R	F		29,93	30,07	75	76	66	62	C	F	F	C
3	29,68	29,68	82	96	76	75	F	F	C	30,20	30,11	60	70	62	57	F	F	F	F		30,10	29,94	68	81	77	75	C	F	F	C
4	29,71	29,80	78	81	68	62	F	F	F	30,07	30,08	66	76	70	66	F	F	F	F		20,97	30,00	75	82	72	65	R	C	C	C
5	29,87	30,11	67	79	70	65	R	F	F	30,10	30,10	63	73	65	60	R	C	C	F		30,13	30,15	67	68	61	57	F	F	F	F
6	30,11	30,08	72	85	76	69	F	F	F	30,09	30,10	70	79	70	64	F	F	F	F		30,11	30,10	62	87	71	66	F	F	C	F
7	30,09	30,02	76	88	75	72	F	F	F	30,08	30,11	88	72	68	F	F	F	C		30,09	29,96	72	86	78	C	F	F	F	F	
8	30,02	30,10	76	93	82	75	F	F	R	30,15	30,11	73	83	76	69	F	F	F	F		29,96	29,90	82	94	80	72	F	F	F	F
9	30,14		75	81	70	65	F	F	F	30,07	29,97	73	85	74	71	F	C	R	R		29,87		82	86	70	F	F	C	C	
10	30,28	30,11	76	87	66	6	F	F	F	29,92		72	75	67	67	C	C	R	R		29,89		73	91	68	68	C	C	R	F
11	30,01	29,95	78	90	75	72	F	F	C	29,84	29,83	72	75	71	69	C	C	F	F		29,92	30,17	63	68	51	F	F	F	F	
12	29,93	29,92	79	89	78	70	F	F	F	29,83	29,81	74	72	72	69	F	F	R	F		30,17	30,17	56	71	76	56	F	F	F	F
13	29,80	29,84	76	80	69	6	F	R	R	29,83	29,82	72	73	66	41	C	F	R	R		30,23	30,33	60	65	58	55	F	F	F	F
14	29,86	29,92	75	78	74	68	C	F	F	29,83	29,84	64	79	70	61	F	F	F	F		30,40	30,40	63	66	60	55	F	F	F	F
15	29,98	29,87	78	85	73	72	F	F	C	29,83	29,80	69	9	69	65	F	F	F	F		30,36	30,35	62	65	61	56	C	C	C	C
16	29,72	29,59	79	92	73	72	F	R	F	29,79	29,84	70	71	67	66	C	R	C	R		30,35	30,32	59	73	63	C	C	F	C	C
17	29,54	29,99	75	73	61	57	C	F	F	30,00	30,03	73	82	73	66	F	F	F	F		30,31	30,18	60	70	63	58	C	F	F	F
18	30,05	30,11	64	75	68	61	F	F	F	30,05	29,90	75	89	82	76	F	F	F	F		30,16	30,05	66	82	69	64	F	F	F	F
19	30,12	30,11	65	71	64	64	R	R	R	29,89	29,75	80	96	88	81	F	F	F	F		30,00	30,00	68	84	77	68	F	F	F	F
20	30,12	30,20	67	79	64	61	R	R	R	29,79	29,83	83	91	81	76	F	F	C	F		30,13	30,14	68	71	65	60	F	F	F	F
21	30,22	30,20	69	77	63	63	C	C	C	29,90	29,79	78	81	72	67	F	F	F	F		30,09	30,02	68	85	79	72	C	F	F	F
22	30,12	29,87	66	69	63	64	R	C	R	29,82	29,73	73	85	76	73	F	F	C	F		30,02	30,04	74	85	75	71	F	F	F	F
23	29,84		75	81	69	67	C	R	F	29,69	29,67	75	81	75	72	R	C	F	R		30,04	30,20	71	75	70	64	C	F	F	F
24		29,87	73	76	69	65	F	F	F	29,78	29,80	66	77	69		F	F	F	F		30,30	30,33	63	69	62	53	F	F	F	F
25	29,80	29,72	72	77	66	65	R	C	R	29,45	29,72	68	88	74	60	R	C	F	F		30,31	30,10	53	70	62	57	F	F	F	F
26	29,62	29,77	70	75	67	64	R	R	R	29,84		64	76	69	60	F	F	F	F		29,94	30,17	64	55	51	46	F	R	R	C
27	29,82		67	75	64	63	F	F	F	29,96	30,10	65	83	70	62	F	F	F	F		30,27	30,16	15	53	47	43	F	R	F	F
28	29,98		68	81	70	64	F	F	F	30,16	30,07	68	80	72	67	F	F	F	F		30,09	30,03	18	64	50	F	F	F	F	F
29	30,22	30,28	72	78	72	67	F	F	F	29,97	29,93	73	77	64	C	C	R	R	F		30,14	30,21	52	60	54	44	F	F	F	F
30	30,28	30,19	74	80	71	65	F	F	F	30,03	30,04	65	78	60	F	F	F	F		30,30	30,33	46	62	55	50	F	F	F	F	
31	30,13	29,97	71	67	66	C	C	C		30,04	29,92	65	70	64	62	C	F	R	C											
Mean			73	82	70	67						70	80	71	65															

OCTOBER.										NOVEMBER.										DECEMBER.										
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	
1	30,31	30,30	54	63	58	57	F	F	F	30,05	29,89	44	56	51	46	F	C	C	C		30,11	30,05	19	29	25	19	F	F	F	F
2	30,20	30,00	58	69	63	61	C	F	F	29,77	30,03	46	55	48	35	C	F	F	F		29,97	29,80	20	33	30	30	C	C	C	S
3	29,82	29,64	64	71	66	61	C	C	R	30,10	30,33	30	44	36	28	F	F	F	F		29,66	29,51	37	44	35	34	R	R	R	R
4	29,79	30,07	55	66	57	49	F	F	F	30,45	30,37	28	46	39	34	F	F	F	F		29,54	29,66	36	39	39	38	C	C	C	C
5	30,08	30,08	54	70	63	54	F	F	F	30,21	30,00	45	63	57	57	F	C	C	C		29,73	29,72	35	40	39	35	C	C	C	C
6	30,02	29,90	61	71	65	59	F	F	F	29,71	29,92	59	46	44	32	R	C	F	F		29,52	29,40	35	39	36	31	R	C	R	F
7	29,84	30,11	62	73	66	51	C	F	F	30,02	30,11	30	44	39	34	F	F	F	F		29,58	29,58	12	20	18	21	F	F	F	F
8	30,36	30,50	42	43	47	36	F	F	F	30,27	30,34	31	46	39	31	F	F	F	F		29,42		29	44	36	29	F	F	F	F
9	30,46	30,25	43	60	52	16	F	F	F	30,39	30,40	27	49	42	37	F	F	F	F		29,81	29,81	31	44	39	41	F	F	F	R
10	30,19	30,18	50	66	56	48	F	F	F	30,40	30,30	31	50	43	43	F	F	F	F		29,46	29,24	46	51	57	39	R	R	R	R
11	30,16	30,02	50	72	60	57	F	F	F	30,12	29,61	45	41	40	38	R	R	R	R		29,59	29,79	35	37	31	22	F	F	F	F
12	29,99	30,00	57	71	54	54	C	C	C	29,48	29,73	37	42	46	37	R	C	C	C		29,99	30,00	18	31	27	20	F	F	F	F
13	30,07	30,08	55	61	56	56	C	C	C	29,95	30,22	33	42	37	29	C	C	F	F		30,03	29,90	19	30	30	35	F	C	C	C
14	29,92	29,57	57	59	63	64	R	C	F	30,38	30,35	27	45	39	34	F	F	F	F		29,90	29,79	34	39	38	36	C	C	C	C
15	29,62	29,77	57	62	56	50	F	F	F	30,32	30,21	30	50	48	45	F	C	R			29,92	30,08	26	33	27	20	F	F	F	F
16	29,85	29,92	53	69	56	50	F	F	F	30,14	30,07	49	58	55	52	R	C	C	C		30,02	29,85	15	22	20	15	F	F	F	F
17	29,90	29,66	54	63	58	56	F	R	R	29,99	29,78	52	63	58	59	F	F	R			29,67	29,48	17	31	29	26	F	F	F	F
18	29,71	29,77	47	55	48	41	F	F	F	29,65	29,38	56	54	52	49	R	R	R	R		29,48	29,45	28	39	34	29	F	F	F	F
19	29,81	29,98	44	48	43	35	F	F	F	29,52	29,69	38	43	36	28	F	F	F	F		29,52	29,60	25	34	31	20	F	F	F	F
20	30,04	30,04	35	55	51	46	F	F	F	29,76	29,83	24	31	25	23	F	F	F	F		29,63	29,70	16	33	29	23	F	F	F	F
21	29,93	29,89	51	72	62	54	F	F	F	29,95	30,00	19	35	30	29	F	F	F	F		29,77	29,87	22	33	29	18	C	F	F	F
22	29,84	30,22	56	63	53	43	F	F	F	30,00	30,02	30	32	31	27	C	C	C	C		29,88	29,74	14	35	32	30	F	F	F	C
23	30,33	30,28	40	52	44	32	F	F	F																					



Table with columns for JANUARY, FEBRUARY, and MARCH. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for 8 A.M., 10 P.M., 8 N., 10 S., and 10. Data rows include dates and numerical values.

Table with columns for APRIL, MAY, and JUNE. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for 8 A.M., 10 P.M., 8 N., 10 S., and 10. Data rows include dates and numerical values.

N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hall. S. Snow.

JULY.										AUGUST.										SEPTEMBER.											
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.						
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8	A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8	A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	30.08	30.02	71	88	71	67	F	F	C	R	29.96	30.00	80	94	78	74	F	F	F	F	29.90	29.90	77	87	80	73	F	F	F	F	
2	29.98	29.89	76	91	75	71	F	F	F	F	30.04	29.95	75	79	68	66	C	R	R	R	29.96	30.09	68	72	55	55	F	F	F	F	
3	29.79	29.78	82	92	73	73	F	F	R	R	29.96	30.05	68	74	68	61	R	C	F	F	30.10	29.82	58	72	64	61	F	F	C	R	
4	30.06	30.19	70	75	63	60	F	F	F	F	30.05	30.03	70	80	69	64	F	F	F	F	29.65	29.70	70	78	66	57	C	F	F	F	
5	30.24	30.08	68	73	65	63	F	F	C	R	29.99	29.99	70	77	69	64	F	F	F	F	29.73	29.83	55	67	57	50	F	F	F	F	
6	29.97	29.97	60	68	61	59	R	C	C	R	30.03	30.18	73	77	70	68	C	F	C	C	29.89	29.89	56	65	59	51	F	F	C	F	
7	30.00	29.99	62	69	62	58	C	C	F	F	30.22	30.20	71	77	72	71	R	F	C	C	29.84	29.74	58	70	61	59	F	F	C	C	
8	29.99	29.78	65	71	65	63	C	C	F	F	30.22	30.22	76	86	75	71	F	F	F	F	29.68	29.62	61	69	63	57	C	F	F	F	
9	29.62	29.79	71	88	68	61	C	C	F	F	30.23	30.12	75	84	72	71	F	F	C	F	29.63	29.60	59	71	61	59	C	F	C	F	
10	29.88		61	74	67	58	F	F	F	F	30.12	30.02	77	90	79	73	F	F	F	F	29.70	29.77	57	69	63	58	R	C	R	F	
11	29.90	29.95	69	82	64	62	C	R	F	R	30.00	29.88	78	86	75	71	F	F	F	F	29.84	29.94	64	80	68	62	F	F	C	F	
12	30.01	30.13	65	76	65	58	F	F	F	F	29.78	29.77	77	80	73	70	F	R	C	R	30.00	30.02	72	80	70	65	F	F	F	F	
13	30.19	30.15	68	73	64	62	F	C	F	F	29.80	30.01	69	75	67	64	R	C	C	C	30.02	29.92	70	87	80	71	F	F	F	F	
14	30.18	30.20	72	89	76	69	F	F	F	F	30.12	30.27	68	74	67	61	C	F	F	F	29.89	29.87	77	78	71	68	F	F	R	R	
15	30.20	30.16	76	90	75	69	F	F	F	F	30.31	30.21	69	69	67	66	C	R	R	R	29.83	29.92	73	84	75	70	F	F	F	F	
16	30.11	30.05	75	92	80	72	F	F	F	F	30.19	30.14	71	80	68	68	C	C	F	F	29.98	30.02	70	74	62	61	F	C	C	C	
17	30.11	30.11	63	73	64	63	C	F	C	C	30.03	30.01	73	80	73	70	C	F	F	R	30.02	29.92	63	71	66	68	C	F	F	F	
18	30.08	30.04	73	82	74	69	C	R	F	F	30.13	30.22	72	79	65	65	C	F	C	C	29.99	30.15	74	81	74	63	C	F	F	F	
19	30.07	30.11	78	76	67	67	C	R	R	C	30.27	30.24	65	68	63	61	R	C	C	C	30.22	30.22	64	77	68	60	C	F	F	F	
20	30.18	30.16	75	79	71	67	C	F	F	F	30.18	30.07	71	70	64	62	F	F	C	R	30.17	30.02	63	73	70	66	C	F	F	F	
21	30.11	30.04	77	83	71	67	F	F	F	F	29.99	30.01	64	80	72	65	C	F	F	F	29.88	29.79	71	82	73	72	C	F	F	F	
22	30.02	29.87	77	83	77	78	F	F	F	F	30.08	30.05	71	85	78		F	F	F	F	29.75	29.89	72	80	73	69	R	C	C	C	
23	29.87	29.91	85	93	83	81	C	C	F	F	30.03	29.98	75	90	81	76	F	F	C	R	29.89	29.90	72	81	73	69	R	C	C	R	
24	29.98	30.01	80	75	71	71	C	R	R	C	29.93	29.80	78	87	76	76	F	F	F	F	29.82	29.87	73	63	63	58	R	C	R	F	
25	30.11	30.10	74	87	76	72	R	F	F	F	29.88		71	76	69	68	F	C	C	R	30.10	30.20	52	62	56	51	F	F	F	F	
26	30.04	29.98	80	83	71	69	F	F	F	F	30.00	30.00	72	83	74	72	C	F	F	F	30.28	30.19	51	59	53	47	F	C	C	F	
27	29.96	29.88	74	82	76	73	C	F	F	F	30.00	29.95	75	83	75	73	C	F	C	F	30.12	30.09	56	71	63	53	C	F	F	F	
28	29.89	29.88	77	81	71	70	C	F	F	F	29.95	30.11	78	67	65	62	C	C	C	R	30.18	30.13	53	61	52	45	F	F	F	F	
29	29.88	29.87	74	83		72	C	F	F	F	30.08	29.98	63	65	64	65	R	C	C	F	30.17	30.21	48	64	54	49	F	F	F	F	
30	29.85	29.80	71	79	70	69	C	C	C	C	30.00	30.06	68	75	69	63	C	F	F	F	30.33	30.30	52	59	44	44	F	F	F	F	
31	29.79	29.89	72	83	74	73	F	C	F	F	30.12	30.06	72	79	71	68															
Mean			72	81	70	67																									

OCTOBER.										NOVEMBER.										DECEMBER.												
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.							
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8	A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8	A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	
1	30.37	30.37	48	61	54	50	F	F	F	F	29.20	29.61	56	61	41	34	R	C	F	R	29.68	29.50	40	52	50	49	R	R				
2	30.38	30.43	53		47	F	F	F	F	29.95		33	46	39	35	F	F	C	F	29.79	30.08	39	53	43	35	F	F	F	F			
3	30.41	30.33	51	67	56	49	F	F	F	30.11	30.08	36	36	35	31	S	R	R	R	30.20	30.34	30	37	31	F	F	F	F				
4	30.29		58	71	61	53	F	F	F	30.17	30.22	30	46		29	F	F	F	F	30.43	30.43	28	47	40	37	F	F	F	F			
5	30.17		55	70	62	53	F	F	F	30.28	30.10	32	46	42	37	F	F	F	F	30.30	30.21	43	45	43	45	C	F	C	R	R		
6	30.09	30.13	59	72	62	52	F	F	F	30.05	30.09	45	54	46	F	F	F	F	F	29.67		42	47	49	30	F	F	F	F			
7	30.19	30.20	59	73	64	60	F	F	F	30.23	30.29	41	43	40	33	C	F	F	F	29.86	29.83	23	37	30	26	F	F	C	C	C		
8	30.20	30.23	60	81		64	F	F	F	29.97	33	54	49	45	F	F	F	F	F	29.88	29.73	25	36	31	31	F	F	C	C			
9	30.26	30.08	67	81	72	66	F	F	F	29.97	29.93	42	54	47	39	F	F	F	F	29.63	29.80	24	31	27	22	S	F	F	F			
10	29.89	29.82	69	81	74	67	F	F	F	29.99	29.75	38	59	52	43	F	F	F	F	29.94	30.08	22	38	29	21	F	F	F	F			
11	29.95	30.29	59	64	53	44	F	F	F	29.78	29.77	40	56	51	38	F	F	F	F	29.98	29.85	30	35	32	28	C	S	S	C			
12	30.40	30.22	41	59	54	53	F	F	F	29.86	29.95	31	50	43	34	F	F	F	F	29.89	29.90	26	41	33	26	C	F	F	F			
13	30.02	29.81	61	74	69	66	F	F	F	29.98	29.95	41	51	47	45	C	F	F	C	30.10	30.11	18	33	27	25	F	F	F	F			
14	30.01	30.02	61	53	53	50	R	F	K	29.93	30.00	42	50	45	36	C	F	F	F	30.06		29	36	36	37	C	C	R	F			
15	30.08	30.09	50	58	56	57	C	C																								



JANUARY.										FEBRUARY.										MARCH.										
Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.				
8 A.M.	10 P.M.		8 N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	
1	30,21	30,03	22	36	32	29	F	F	F	29,80	30,03	13	23	19	22	F	F	F	F	29,19	29,51	34	36	37	9	S	C	C	F	
2	29,97	29,90	30	42	36	34	F	F	F	29,80	29,38	36	43	42	C	C	R	R	29,80	29,99	6	17	16	17	F	F	F	F	F	
3	29,87	30,19	14	8	7	5	S	S	F	29,31	29,38	43	48	44	35	R	R	F	29,83	30,11	27	41	35	29	F	F	F	F	F	
4	30,28	30,19	4	27	31	30	F	F	C	29,94	30,35	12	18	14	8	F	F	F	30,08	29,76	34	47	42	38	F	F	C	C	F	
5	30,12	29,65	33	43	39	42	F	F	F	30,57	30,23	9	22	22	20	F	F	C	29,90	29,97	27	29	25	19	F	F	F	F	F	
6	29,30	29,63	51	55	51	33	R	R	R	29,99	29,71	35	45	46	47	R	R	R	30,08	30,20	17	26	22	17	F	F	F	F	F	
7	29,87	29,98	26	32	27	20	F	F	F	29,91	29,80	43	53	49	41	F	F	F	30,31	30,24	19	34	29	28	F	F	C	S	S	
8	29,80	30,00	25	31	26	18	F	C	R	29,80	29,98	43	52	47	37	F	F	F	30,13	30,20	30	38	34	30	F	F	F	F	F	
9	30,14	30,12	12	24	15	11	F	F	F	30,01	30,09	32	42	35	31	F	F	C	30,23	30,25	26	33	28	21	C	C	F	F	F	
10	29,98	29,83	23	41	46	34	F	F	C	30,22	30,45	21	27	24	18	F	F	F	30,30	30,23	26	44	37	30	F	F	F	F	F	
11	29,92	29,80	35	43	40	39	C	C	C	30,50	30,42	21	39	34	29	F	F	F	30,25	30,13	36	55	42	38	F	F	F	C	F	
12	29,76	29,81	44	50	50	45	C	F	C	30,41	30,22	32	50	41	41	F	F	F	30,13	30,38	42	64	46	38	F	F	F	F	F	
13	29,70	30,17	47	53	44	34	C	C	C	30,08	29,87	47	56	50	52	F	C	C	30,51	30,51	36	41	35	C	C	C	C	C	F	
14	30,13	29,35	34	39	38	40	F	F	R	30,09	30,15	28	27	25	19	C	S	S	30,43	30,34	37	43	39	38	C	C	C	C	F	
15	29,49	29,60	38	48	31	F	F	F	F	30,33	15	22	18	14	C	C	F	F	30,30	30,01	41	61	54	51	C	F	F	F	F	
16	29,59	29,58	30	41	32	24	F	F	C	30,32	15	30	28	30	C	C	C	C	29,92	29,90	55	73	56	48	C	F	F	R	C	
17	29,70	29,70	18	26	21	15	F	F	F	30,02	29,82	28	31	30	R	S	F	F	29,97	29,74	40	41	39	39	R	R	R	R	R	
18	29,68	29,62	10	18	12	6	F	F	C	29,86	29,72	32	39	33	C	C	C	C	29,70	29,80	37	53	48	43	C	F	F	F	F	
19	29,59	29,68	6	18	16	13	F	F	F	29,75	29,93	34	49	42	36	F	F	F	30,00	30,09	44	53	44	38	F	F	F	F	F	
20	29,77	29,67	10	31	28	32	F	F	C	30,03	30,10	35	35	31	25	S	C	C	30,01	29,75	42	52	41	F	F	F	C	R	R	
21	29,51	29,51	30	32	25	21	F	C	F	30,18	30,03	23	38	35	32	F	F	F	29,55	29,64	48	60	43	38	F	F	C	R	R	
22	29,50	29,49	16	28	26	25	C	F	F	29,92	37	49	42	39	F	F	F	F	29,72	30,06	32	31	36	28	F	F	F	F	F	
23	29,47	29,27	26	39	34	32	F	F	C	29,78	30,04	41	54	48	39	C	C	C	30,10	29,58	35	37	32	32	C	C	S	S	F	
24	29,42	29,81	19	16	12	10	F	F	F	30,04	30,14	32	32	31	29	S	S	S	29,52	29,61	45	36	35	F	F	F	F	F		
25	29,86	29,45	13	34	32	35	F	C	S	30,28	30,24	23	26	21	12	S	C	C	29,76	30,12	37	40	26	F	F	F	F	F		
26	29,54	29,63	31	38	30	F	F	C	F	30,20	30,00	15	32	25	15	F	F	F	30,11	29,70	32	38	40	40	F	F	C	R	R	
27	29,47	29,34	33	35	33	24	S	F	F	29,85	29,83	23	33	33	29	F	F	F	29,72	30,00	41	40	33	25	F	F	F	F	F	
28	29,54	29,72	14	24	18	10	F	F	F	29,80	29,63	30	47	38	37	F	C	R	30,05	30,08	24	36	32	28	F	F	F	F	F	
29	29,93	30,06	7	19	15	10	F	F	F	30,10	30,18	37	50	43	37	F	F	F	30,10	30,18	37	50	43	37	F	F	F	F	F	
30	29,90	29,33	26	34	35	35	C	S	S	30,31	30,45	40	50	43	37	F	F	F	30,31	30,45	40	50	43	37	F	F	F	F	F	
31	29,50	29,88	29	30	23	17	C	F	F	30,50	30,51	40	48	39	37	C	F	F	30,50	30,51	40	48	39	37	C	F	F	F	F	
Mean			24	34	29	25						29	38	34	30							34	44	38	33					

APRIL.										MAY.										JUNE.									
Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.			
8 A.M.	10 P.M.		8 N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	29,48	30,30	45	46	41	40	C	F	F	29,93	63	73	61	60	C	C	R	R	29,69	29,71	69	81	73	67	C	F	R	F	
2	30,20	30,02	45	65	56	52	C	F	F	29,71	29,98	71	66	50	40	C	F	F	29,92	30,01	54	62	54	51	F	F	F	F	
3	30,02	29,80	53	58	59	50	C	F	F	30,17	30,23	45	52	44	41	F	F	F	30,00	29,89	59	70	60	57	F	F	C	C	
4	29,68	29,84	56	74	58	53	F	C	C	30,28	30,18	50	54	47	43	F	F	F	29,81	29,66	56	58	60	61	R	R	R	C	
5	30,03	30,11	44	43	41	40	C	C	C	30,10	29,58	52	53	45	46	F	C	R	29,61	29,81	68	79	63	59	C	R	R	C	
6	30,09	29,94	43	50	41	40	C	C	F	29,59	29,74	50	58	50	41	C	R	F	30,04	30,27	55	67	62	54	F	F	F	F	
7	30,02	30,10	45	52	45	36	F	F	F	29,92	30,09	38	38	46	42	F	F	F	30,40	30,36	66	72	55	50	F	F	F	F	
8	30,10	29,79	43	46	42	43	F	C	R	30,03	30,10	42	34	35	33	C	R	S	30,30	30,02	65	71	61	58	F	F	C	F	
9	29,83	30,12	45	47	42	34	F	F	F	30,28	30,48	41	52	46	37	F	F	F	29,91	29,98	71	78	72	66	C	C	F	F	
10	30,20	30,02	38	48	45	38	F	F	F	30,55	30,48	49	56	46	43	F	F	F	30,02	30,06	66	78	65	65	F	F	F	F	
11	29,84	29,77	46	72	63	56	C	F	F	30,30	30,07	55	63	51	53	F	F	C	30,09	30,09	70	73	63	62	F	F	C	R	
12	29,97	30,06	56	59	50	47	F	F	F	30,21	30,23	55	57	48	43	F	F	F	29,99	29,87	69	76	66	63	F	F	F	F	
13	30,02	29,86	52	62	53	43	C	C	F	30,10	29,83	46	57	50	44	R	C	F	29,90	29,96	71	68	60	59	C	F	C	C	
14	30,01	30,00	55	58	48	45	F	F	C	30,02	30,12	49	56	48	41	F	F	F	29,92		64	70	60	58	C	C	C	C	
15	29,91	29,97	43	39	34	32	C	R	S	30,14	29,94	50	49	51	45	F	C	C	30,09	30,02	61	67	56	54	C	C	C	C	
16	29,78	29,67	30	34	30	30	C	H	R	29,90	29,79	54	67	56	50	F	F	F	29,97		58	65	62	61	C	R	C	C	
17	29,68																												

JULY.										AUGUST.										SEPTEMBER.									
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.				
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	29.82	29.72	79	88	80	75	F	F	F	29.84	29.82	73	8	79	74	R	R	R	F	30.16	30.03	65	74	66	67	F	F	C	C
2	29.84	29.90	62	59	56	57	C	R	R	29.88	29.87	79	92	84	78	F	F	F	F	29.90	29.78	66	70	65	64	C	C	F	C
3	29.90	29.97	60	69	60	55	F	F	F	29.82	29.73	79	92	83	79	F	F	F	F	29.78	29.97	68	77	72	62	F	F	F	F
4	29.99	30.07	67	77	65	64	F	F	F	29.73		80	89	81	75	F	F	C	R	30.05	30.09	60	72	65	59	F	F	F	F
5	30.10	30.16	72	78	67	61	F	F	F		30.03	76	81	73	70	F	F	C	C	30.01	29.73	60	76	74	6	F	F	F	F
6	30.18	30.20	67	77	70	63	F	F	F	30.03	29.93	72	70	68	66	R	R	C	C	29.60	29.79	70	64	57	51	C	R	F	F
7	30.21	30.26	76	87	75	67	F	F	F	29.91	29.88	72	84	74	70	C	F	F	F	29.83	29.90	52	64	57	49	F	F	F	F
8	30.26	30.20	75	87	77	73	F	F	F	29.86	29.88	75	78	71	66	C	C	F	F	29.83	30.00	53	68	61	52	F	F	F	F
9	30.19	30.08	82	97	85	78	F	F	F	29.90	29.97	74	73	69	68	C	C	C	C	30.09	30.13	56	70	61	54	F	F	F	F
10	30.01	30.05	86	57	77	71	F	R	F	29.95	29.90	72	80	76	73	C	C	C	C	30.17	30.18	61	73	64	59	F	F	F	F
11	30.20	30.13	67	77	68	65	F	F	F	29.90	30.01	76	87	79	71	F	F	R	F	30.21	30.25	60	71	56	F	F	F	F	F
12	30.03	29.90	67	67	63	62	R	R	R	30.08	30.04	72	73	70	F	F	F	F	30.21	30.10	58	67	62	54	F	F	F	F	
13	29.92	29.82	71	77	65	65	C	R	R	30.02	29.83	76	89	76	70	F	F	F	F	30.04	29.98	57	69	63	55	F	F	F	F
14	29.92	29.90	69	69	64	64	C	C	C	29.72	29.99	78	83	72	63	F	C	F	F	29.98	29.95	60	71	64	58	F	F	F	F
15	29.87	29.86	65	68	64	64	R	R	C	30.08	30.13	66	75	66	62	F	F	F	F	29.90	29.80	63	79	69	66	F	F	C	C
16	29.84	29.77	69	78	72	68	C	F	F	30.18	30.10	68	77	69	66	C	C	C	C	29.88	29.98	62	72	61	52	R	C	F	F
17	29.74	29.74	76	84	70	69	C	R	F	30.00	29.90	75	85	73	69	C	F	F	F	29.98	29.90	55	70	59	56	F	F	F	F
18	29.82	29.95	73	79	73	66	F	F	F	29.82	29.77	77	83	71	69	C	R	F	F	29.90	30.10	60	74	62	50	C	F	F	F
19	30.00	30.03	71	81	71	66	F	F	F	29.88	30.06	70	77	66	59	F	F	F	F	30.23	30.22	50	64	58	53	F	F	F	F
20	30.03		71	76	69	65	F	F	F	30.22	30.01	64	74	67	64	F	F	C	C	30.19	29.90	59	68	64	65	F	C	R	C
21	30.14	30.07	69	78	71	67	C	C	C	29.93	29.98	70	80	72	66	C	R	C	C	29.71	30.00	68	73	67	56	C	F	F	F
22	30.02	29.93	68	73	68	66	R	C	C	30.12	30.20	63	72	68	59	F	F	F	F	30.02		58	75	56	F	F	F	F	F
23	29.90		72	81	76	69	R	C	C	30.30	30.34	61	71	63	58	F	F	F	F	30	30	30	54	65	58	52	F	F	F
24	29.88	29.86	76	85	72	71	C	R	R	30.41	30.39	63	71	58	F	F	F	F	30.30	30.22	54	74	69	60	F	F	F	F	
25	29.68	29.89	75	85	75	72	R	C	F	30.22	30.20	66	85	72	66	F	F	F	F	30.20	30.10	63	81	72	63	F	F	F	C
26	29.99	30.13	78	85	75	73	C	R	C	30.23	30.19	69	78	69	59	F	F	F	F	30.00	29.90	66	74	62	57	C	R	R	F
27	30.21	30.22	74	78	72	71	R	R	R	30.10	29.82	70	81	74	70	F	F	F	F		29.99	55	63	56	49	F	F	F	F
28	30.16	29.97	69	71	71	68	R	R	R	29.78	29.70	77	94	79	76	F	F	F	F	30.02	30.05	54	72	64	56	F	F	F	F
29	29.92	29.97	70	78	70	67	C	C	C	29.72	29.90	76	84	73	63	F	F	F	F	30.04	30.23	61	71	63	52	F	F	F	F
30	29.97	30.00	71	83	71	68	F	C	F	29.93	30.07	68	79	71	62	F	F	F	F	30.38	30.40	50	64	56	45	F	F	F	F
31	29.98	29.99	76	91	80	76	F	F	F	30.13	30.16	64	75	68	63	F	F	F	F										
Mean			72	79	71	67						72	81	73	67														

OCTOBER.										NOVEMBER.										DECEMBER.									
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.				
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	30.34	30.22	49	74	64	53	F	F	F	29.96	30.00	42	57	54	48	F	F	F	F	29.51	29.27	49	54	49	29	R	R	F	F
2	30.21		55	77	66	58	F	F	F	30.10	30.12	47	59	51	41	F	F	F	F	29.47	30.0	41	40	32	21	C	F	F	F
3	30.10	29.90	54	73		58	F	F	F	30.17	30.12	40	60	49	40	F	F	F	F	30.20	30.46	20	30	27	23	F	C	F	F
4	29.63	29.29	62	64	59	56	C	R	R	30.11	30.05	40	58	50	50	F	F	F	C	30.50	30.50	41	44	41	36	F	F	F	F
5	29.38	29.52	60	64	56	53	F	F	C	30.04	29.92	51	56	52	51	C	C	C	C	30.50	30.43	41	54	48	43	C	F	F	F
6	29.56	29.94	53	56	51	44	F	F	C	29.71	29.20	53	52	52	55	R	R	R	R	30.43	30.44	41	46	43	37	C	C	C	C
7	30.02	29.91	42	58	52	49	F	F	F	29.27	29.67	42	48	40	31	F	F	F	F	30.46	30.32	32	45	40	35	F	F	F	F
8	29.87	30.18	54	68	58	47	F	F	F	29.73		32				F	F	F	F	30.30	30.14	36	47	42	38	F	F	F	F
9	30.30	30.33	44	55	48	45	F	F	F							F	C	F	F	29.91	29.80	46	51	48	43	C	R	C	F
10	30.35	30.20	40	61	57	51	F	C	C	29.80		37	33	27	C	C	F	F	29.85	29.89	38	55	49	4	F	C	R	F	
11	30.16	30.11	53	65	60	52	C	C	F	29.93	30.08	24	32	28	23	F	F	F	F	29.90	29.78	37	49	45	F	F	F	F	F
12	30.09	29.96	54	63	58	55	R	C	C	30.10	29.89	23	31	29	31	F	C	S	C	29.34	29.26	43	57	53	48	C	C	F	F
13	29.82	29.67	57	63	66	65	R	C	C	29.84	29.81	35	43	40	37	F	C	R	C	28.94	28.88	48	49	45	43	R	R	C	C
14	29.83	29.70	64	75		58	F	F	F	29.97	30.20	36	45	41	39	F	C	F	C	29.13	29.58	38	44	40	36	F	F	F	C
15	29.63	29.59	59	63	65	53	R	R	F	30.25	30.31	40	45	42	41	C	C	C	C	29.7	29.80	33	43	37	30	F	F	F	F
16	29.74	29.77	50	62	58	52	F	F	C	30.34	30.21	46	45	43	45	C	C	R	R	29.70	29.69	32	36	34	31	C	C	C	C
17	29.61	29.69	50	54	50	43	R	C	C	29.97	29.31	45	47	47	46	R	R	R	R	29.66	29.75	30	36	30	24	F	F	F	F
18	29.83	30.04	37	46	42	34	F	F	F	29.12	29.50	37	37	31	21	S	C	F	F	29.83	29.82	40	35	30	28	F	F	F	F
19	30.06	29.60	40	45	46	44	C	C	R	29.60	29.72	16	24	22	21	F	C	F	C	29.71	29.69	30	44	39	35	F	F	F	F
20	29.61	30.02	44	52	48	41	F	F	F	29.81	29.88	18	34	32	29	F	F	F	F	29.99	30.13	22	26	23	18	F	F	F	F
21	30.13	30.13	37	43	37	F	F	F	F	29.70	29.48	41	43	39	35	C	R	C	R	30.16	30.45	14	27	24	19	F	F	F	F
22	30.09	30.14	44	51	46	38	R	C	F	29.63	29.81	45	38	35	29	F	F	F	F	30.40	30.40	13	25	22	17	F	F	F	F
23	30.22	30.40																											



Table with columns for JANUARY, FEBRUARY, and MARCH. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for 8 A.M., 10 P.M., 8 N., St., 10. Data rows include dates and corresponding values.

Table with columns for APRIL, MAY, and JUNE. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for 8 A.M., 10 P.M., 8 N., St., 10. Data rows include dates and corresponding values.

N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.

JULY.										AUGUST.										SEPTEMBER.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	29.90	29.80	68	75	66	63	F	R	R	29.97	30.03	72	84	73	63	F	F	F	F	30.02	30.01	71	88	77	71	F	F	F	F
2	29.86	29.96	73	82	69	65	F	R	R	30.08	30.10	67	78	68	62	F	F	F	F	29.98	29.89	72	93	78	72	F	F	R	F
3	30.01	30.01	74	82	72	68	F	F	F	30.06	29.93	68	76	66	65	F	F	F	C	29.93	29.88	73	81	70	68	F	F	F	F
4	29.98	29.88	77	88	75	71	F	F	F	29.95	30.00	72	77	66	61	C	R	C	F	29.98	30.26	70	80	70	62	C	F	F	F
5	29.83	29.89	76	94	76	74	R	F	R	30.02	30.08	67	74	66	64	F	F	F	C	30.36	30.33	63	74	65	59	F	F	F	F
6	30.01	30.05	72	74	66	63	F	F	F	30.08	30.12	70	72	67	63	C	F	F	F	30.35	30.20	65	75	65	61	F	F	F	F
7	29.97	29.82	75	93	83	78	F	F	R	30.17	30.18	69	70	65	60	C	C	F	F	30.16	30.08	68	82	75	68	F	F	F	F
8	29.97	30.01	78	88	77	69	F	F	F	30.12	29.99	70	75	65	63	F	F	C	R	30.06	30.06	74	89	77	72	F	F	F	F
9	30.01	29.79	76	85	77	73	F	C	F	29.82	29.82	63	74	64	61	R	C	F	F	30.09	30.12	77	78	70	66	F	F	F	F
10	29.68	29.73	82	90	83	78	C	F	F	29.84	29.89	71	82	74	68	C	F	F	F	30.09	29.98	72	90	79	75	C	F	R	R
11	29.82	29.79	72	78	68	66	F	F	F	30.00	30.17	73	81	70	67	F	F	F	F	29.98	30.16	69	70	57	55	C	R	R	R
12	29.70	29.93	71	87	73	67	C	F	F	30.32	30.29	67	67	63	62	F	C	C	C	30.30	30.30	53	55	57	56	R	R	R	R
13	29.69	29.89	73	81	70	61	F	F	F	30.27	30.19	63	72	64	58	C	C	F	F	30.29	30.10	61	71	67	63	R	R	C	F
14	29.96	30.01	69	82	73	66	F	F	F	30.16	30.09	70	78	68	66	F	F	F	F	30.13	30.16	68	75	65	60	F	F	F	F
15	30.08	29.70	69	62	66	62	C	R	R	30.08	30.07	73	87	76	70	F	F	F	F	30.11	29.99	67	82	75	69	F	F	F	F
16	29.74	29.69	67	76	72	71	C	F	F	30.07	30.02	71	85	76	70	F	F	F	F	29.93	29.71	71	85	75	73	F	F	F	F
17	29.67	29.83	71	77	64	58	F	F	F	30.13	30.20	70	77	69	63	C	F	F	F	29.73	30.02	78	69	63	61	F	F	R	R
18	29.86	29.94	64	72	62	55	F	F	F	30.19	30.04	67	78	71	64	F	F	F	F	30.08	30.11	51	51	52	53	R	R	R	R
19	29.88	29.51	67	66	60	60	F	R	R	29.97	29.78	72	90	80	74	F	F	F	F	30.02	30.05	57	62	58	57	C	R	R	R
20	29.43	29.54	59	63	60	57	C	R	C	29.72	29.91	78	86	77	68	F	F	F	F	29.88	30.17	54	55	50	45	R	R	R	F
21	29.61	29.74	61	75	68	60	C	F	F	29.93	29.93	71	82	74	67	F	F	F	F	30.33	30.07	49	64	58	49	F	F	F	F
22	29.76	29.51	67	75	63	64	C	R	R	29.92	29.82	68	74	65	62	C	C	C	F	29.99	29.96	56	73	66	57	F	F	F	F
23	29.48	29.75	69	78	68	61	C	F	F	29.86	29.86	62	71	64	57	F	F	F	F	30.01	30.05	54	67	57	50	F	F	F	F
24	29.98	30.11	69	76	66	60	F	F	F	29.94	29.95	62	77	69	58	F	F	F	F	30.14	30.20	48	63	45	63	F	F	F	F
25	30.11	30.08	70	75	65	60	F	F	F	30.03	30.12	64	53	66	64	F	F	F	F	30.24	30.16	49	63	53	63	F	F	F	C
26	30.00	30.01	68	78	70	62	F	F	F	30.12	30.10	68	70	66	64	C	F	R	C	30.09	29.78	93	56	55	50	R	C	F	F
27	30.02	30.00	68	82	72	65	F	F	F	30.08	30.14	68	73	67	63	C	C	C	C	29.83	29.77	96	71	64	56	F	F	F	F
28	30.12	30.11	74	82	73	69	F	F	F	30.24	30.32	63	71	63	54	C	C	F	F	29.73	29.82	61	68	54	47	F	F	F	F
29	30.11	30.03	76	90	77	74	F	F	F	30.36	30.26	60	71	63	59	F	F	F	F	29.83	29.85	46	54	47	38	F	F	F	F
30	30.00	29.90	80	95	79	77	F	F	C	30.20	30.00	77	69	67	64	C	F	F	C	29.83	29.99	39	48	43	37	F	F	F	F
31	29.94	29.90	80	70	68	69	F	R	C	29.96	29.99	73	85	75	68	F	F	F	F										
Mean			71	80	70	66						68	78	69	64														

OCTOBER.										NOVEMBER.										DECEMBER.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	30.08	30.22	43	56	51	47	C	C	C	30.21	30.16	28	42	36	33	F	F	F	F	29.70	29.68	44	47	42	36	F	C	C	C
2	30.27	30.31	49	58	51	44	C	F	F	30.06	30.00	38	61	55	44	F	F	F	F	29.51	29.60	32	43	33	26	F	S	F	F
3	30.32	30.23	42	51	33	48	F	F	F	30.12	30.23	52	65	55	47	F	F	F	F	29.58	29.41	22	36	33	32	F	F	F	C
4	30.11		52	70		53	F	F	F	30.28	30.04	47	52	49	44	F	F	C	C	29.36		34				S	C	F	F
5		29.83	55	74	65	58	F	F	C	29.82	29.81	46	48	45	38	R	C	C	F							S	C	C	C
6	29.87	29.72	52	58	53	50	C	C	C	29.84	30.01	37	47	43	34	F	F	F	F	29.99						29	F	F	F
7	29.62	29.72	46	60	53	43	F	R	F	30.07	30.18	33	44	40	32	C	C	F	F	30.01	29.74	30	36	35	40	C	S	C	C
8	29.80	29.70	45	59		43	F	F	F	30.23	30.15	30	44	38	35	F	F	C	F	29.74	29.87	39	37	33	26	R	C	C	F
9	29.60	29.20	52	49	44		R	R	R	30.10	29.90	32	35	34	33	S	S	S	R	29.87	29.60	24	35	32	29	F	C	F	F
10	29.43	29.59	41	44	43	39	C	R	R	29.64	29.37	41	46	40	38	R	C	C	C	29.73	30.10	21	27	21	15	F	C	F	F
11	29.61	29.78	44	56	51	43	C	F	F	29.51	29.53	37	46	40	36	F	F	F	F	30.00	30.09	25	36	30	28	F	C	C	C
12	29.81	29.80	43	58	51	41	F	F	F	29.57	29.60	36	40	38	32	F	F	S	F	30.18	29.98	18	19	16	13	C	S	S	F
13	30.00	30.21	45	64	55	45	F	F	F	29.83	30.17	30	37	30	25	F	F	F	F	30.14	30.42	10	19	13	3	F	F	F	F
14	30.35	30.27	39	55	45	43	F	F	F	30.32	30.18	24	35	30	31	F	F	C	C	30.18	30.33	-16	13	8	F	C	F	C	
15	30.29	29.89	44	58	52	48	F	C	R	30.10	29.30	42	53	41	35	R	C	R	C	30.26	29.68	16	23	25	33	C	S	C	S
16	29.82	29.05	50	63	54	49	F	C	F	29.58	29.93	28	34	29	25	F	F	F	F	29.15	29.34	37	43	36	30	R	C	F	C
17	30.23	30.21	47	47	46	44	C	C	R	29.99	30.01	21	34	30	28	F	C	C	F	29.50	29.81	19	26	21	14	F	F	F	F
18	30.03	29.79	44	48	46	44	R	R	R	30.06	30.03	26	22	36	29	F	F	C	F	30.10	30.11	14	26	22	22	F	F	C	C
19	29.72	29.76	42	53	49	42	C	F	F	30.03	30.01	28	46	41	34	F	F	F	F	30.33	30.45	14	18	18	6	F	F	F	F
20	29.90	30.00	42	55	47	42	F	F	F	30.08	30.25	33	49	40	35	F	F	F	F	30.46	30.31	5	20	20	16	C	C	C	C
21	30.00	30.11	46	64	58	52	F	F	F	30.16	30.01	35	48	44	43	C	C	C	C	30.26	30.01	16	22	22	25	C	C	C	C
22	30.41	30.47	40	41	39	38	R	C	C	30.03	29.92	30	50	45	33	C	F	F	F	29.92	29.81	28	32	31	24	C	C	C	C
23	30.40	30.09		53	50	50	C	C	C	29.92	30.25	39	54	49	36	F	F	F	F	29.89	29.83	16	34	30	29	C	C	C	C
24	29.90	29.79	55	64	57																								



JANUARY.										FEBRUARY.										MARCH.										
Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.				
8 A. M.	10 P. M.		8 N.	St.	10	8	N.	St.	10	8 A. M.	10 P. M.		8 N.	St.	10	8	N.	St.	10	8 A. M.	10 P. M.		8 N.	St.	10	8	N.	St.	10	
1	29,77	29,59	19	27	23	22	F	F	F	C	29,51	29,23	23	33	34	31	F	S	S	F	30,10	29,94	30	50	41	36	F	F	F	F
2	29,39	29,67	21	24	19	15	S	F	F	F	29,30	29,40	27	33	24	18	F	F	F	F	29,89	29,78	35	55	46	38	F	F	F	F
3	29,66	29,39	16	20	17	19	S	S	C	C	29,42	29,50	15	22	13	C	S	C	S	29,95	30,08	37	46	40	32	F	F	F	F	
4	29,27	29,79	13	9	3	-3	S	F	F	F	29,49	29,49	12	17	9	7	C	F	F	F	30,17	30,13	32	44	37	29	F	F	F	F
5	29,53	29,48	2	12	6	4	S	S	S	C	29,49	29,73	10	22	18	15	F	F	F	F	30,18	30,19	33	53	43	33	F	F	F	F
6	29,86	30,17	5	13	8	5	F	F	F	F	29,93	30,15	13	28	25	20	F	F	F	F	30,22	30,13	35	54	46	40	F	F	F	C
7	29,94	29,53	17	21	23	22	S	C	C	C	30,18	29,74	21	32	32	33	C	S	R	R	30,10		47	58	46	43	R	F	F	C
8	29,99	30,20	18	23	18	13	F	F	F	F	29,51	29,50	31	35	32	31	C	C	S	C	30,08	30,04	43	53	50	46	R	C	R	F
9	29,86	29,63	26	34	33	36	R	R	R	F	29,51	29,82	30	35	30	27	S	C	F	F	30,18	30,31	47	48	41	41	C	R	R	C
10	30,00	29,89	33	32	27	26	C	R	S	S	30,03	29,88	25	40	33	32	F	C	C	C	30,32	30,06	37	35	34	35	C	R	R	C
11	30,08	30,43	19	28	21	14	S	C	F	F	29,82	29,88	35	49	40	39	C	F	C	C	29,79	29,70	35	37	38	34	R	C	C	F
12	30,05	30,36	4	20	19	20	F	F	C	C	29,95	30,02	37	50	41	31	R	F	F	F	29,73	29,68	33	39	34	32	C	C	C	F
13	29,97	29,75	33	41	34	25	R	C	F	F	30,13	30,10	34	46	35	35	F	F	F	C	29,74	29,92	24	29	23	18	C	C	C	F
14	29,93	30,10	15	18	12	3	F	F	F	F	29,83	28,85	37	39	39	38	R	C	R	R	30,08	30,19	18	35	32	25	F	F	F	F
15	30,12	30,01	5	19	13	6	F	F	C	F	29,12	29,49	26	31	25	18	S	F	F	F	30,40	30,32	32	40	37	34	F	F	C	C
16	29,81	29,57	5	19	19	22	C	C	C	C	29,44	29,52	16	23	17	12	F	C	C	F	30,18	30,11	37	50	45	37	C	C	C	F
17	29,38	29,25	30	40	34	C	C	C	C	29,62	29,73	13	21	15	11	F	F	F	F	30,20	30,15	57	45	40	37	C	F	C	F	
18	29,19	28,96	36	40	37	41	C	C	R	R	29,74	29,90	14	28	25	23	F	F	F	F	30,01	29,75	43	59	51	54	C	F	F	C
19	29,14		32	28	24	15	F	S	C	S	30,03	29,99	26	42	35	33	F	F	C	C	30,05	30,23	52	48	41	40	C	C	C	C
20	29,93	29,80	12	24	19	19	F	S	S	29,91	29,84	33	41	34	28	F	F	F	F	30,16	29,80	40	43	40	40	C	R	C	C	
21	29,43		20	31	25	11	S	S	R	R	29,78	29,98	30	42	35	27	F	F	F	F	29,59	29,70	49	61	53	44	C	R	R	C
22	29,50	29,80	7	10	8	4	F	F	F	F	30,10	30,10	24	37	31	27	F	F	F	F	29,86	30,11	33	37	32	25	F	F	F	F
23	30,06	29,92	9	23	19	27	F	S	S	C	30,05	29,80	30	45	37	36	F	F	C	R	30,20	30,28	26	36	29	26	F	F	F	F
24	30,06	30,09	30	37	33	29	C	F	C	29,83	29,92	40	51	43	36	F	F	C	F	30,31	30,18	30	39	33	31	F	F	F	F	
25	29,97	29,72	31	34	33	36	R	R	R	29,89	29,85	36	46	37	38	F	F	C	R	30,02	29,88	38	61	48	44	F	C	C	F	
26	29,90	29,93	33	44	36	34	F	F	C	C	30,01	30,24	35	37	32	32	S	C	C	C	30,08	30,18	43	38	36	35	C	R	R	C
27	29,88	29,75	31	30	26	27	S	S	S	30,26	30,10	31	47	38	32	F	F	F	F	30,20	30,20	37	45	38	36	C	C	C	C	
28	29,07	29,23	25	26	26	25	S	S	S	30,04	30,05	36	45	36	29	C	F	F	F	30,15	30,22	41	51	41	35	C	C	C	F	
29	29,12	29,32	23	23	20	22	S	S	F	F											30,31	30,45	39	42	35	34	F	C	C	C
30	29,58	29,90	27	37	34	28	C	F	F	F											30,42	30,20	36	40	38	39	C	R	R	R
31	29,95	29,70	24	39	32	32	F	F	C											30,01	29,89	42	53	45	45	C	R	R	R	
Mean			20	27	22	20					26	36	31	27							37	48	40	36						

APRIL.										MAY.										JUNE.										
Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.				
8 A. M.	10 P. M.		8 N.	St.	10	8	N.	St.	10	8 A. M.	10 P. M.		8 N.	St.	10	8	N.	St.	10	8 A. M.	10 P. M.		8 N.	St.	10	8	N.	St.	10	
1	29,91		50	57	41	C	C	F	F	30,01	29,89	49	56	51	45	F	F	F	C	29,86	29,90	61	71	65	60	F	F	F	F	
2	30,31	30,13	44	49	47	41	F	F	F	F	29,70	29,98	56	73	61	49	F	F	F	F	29,99	29,72	63	69	63	57	F	F	F	F
3	30,04	29,90	48	63	53	49	F	F	C	R	30,07		55	58	53	58	F	F	F	F	29,74	29,70	63	71	60	56	F	F	F	F
4	29,90	30,02	54	64	52	47	F	F	R	R		29,72	65	78	63	60	F	F	F	F	29,68		65	73	65	60	C	C	C	C
5	30,11	30,01	44	53	45	40	R	C	F	F	29,58	29,69	57	59	55	47	C	C	F	F			63	71	57	57	R	C	C	C
6	29,76	29,51	35	39	37	35	R	R	R	C	29,63	30,00	51	61	50	41	F	F	F	F	30,00	30,00	53	58	53	53	C	C	C	C
7	29,49	29,51	41	54	44	41	C	C	F	F	30,09	30,27	47	59	51	44	F	F	F	F	29,93	29,73	54	57	52	52	C	R	C	R
8	29,54	29,60	44	60	49	42	F	F	F	F	30,29	30,07	59	62	52	49	F	C	C	C	29,58	29,54	52	50	50	49	R	C	R	C
9	29,46	29,10	44	48	47	43	R	R	R	29,95	29,71	57	56	55	54	R	R	R	C	29,57	29,59	52	67	55	56	C	C	C	C	
10	29,29	29,37	43	47	42	38	C	R	C	C	29,78	29,89	56	69	62	54	F	F	F	F	29,62	29,90	61	73	63	59	F	C	C	C
11	29,38	29,50	42	46	41	39	F	R	C	F	29,87	29,63	57	58	59	59	F	R	R	R	29,97	30,04	66	79	69	62	F	F	F	F
12	29,56	29,64	44	57	48	41	F	C	C	F	29,61	29,59	59	75	62	57	C	C	C	C	30,12	30,14	69	78	65	62	F	F	F	F
13	29,59	29,75	68	46	42	F	F	F	F	29,50		64	75	58	R	F	F	F	F	30,15	30,13	72	87	74	69	F	F	F	F	
14	29,72	29,73	52	71	62	51	F	F	F	F			63								30,13	30,00	72	85	73	68	F	F	F	F
15	29,78	29,84	43	53	52	44	F	F	F	F		30,04	50	54	44	43	C	R	R	R	30,00	30,06	79	90	77	72	F	F	F	F
16	29,81	29,71	47	64	56	49	F	F	F	F	29,98	30,80	45	48	44	43	R	R	R	R	30,09	30,11	74	80	72	69	F	F	F	F
17	29,68	29,68	57	70	62	52	F	F	F	F	29,62	30,53	46	50	49	46	R	C	F	F	30,11	30,00	77	93	78	70	F	F	F	F
18	29,60	29,61	62	79	69	56	F	F	F	F	29,60	30,50	57	70	63	58	F	F	F	F	29,96	29,87	79	93	83	80	F	F	F	C
19	29,71	29,84	56	53	46	45	F	F	F	F	29,75	30,80	64	78	66	59	F	F	F	F	29,88	29,99	75	73	61	59	F	F	F	C
20	29,81	29,61	49	47	44	42	C	C	R	R	29,83	30,83	65	77	66	60	F	C	C	C	30,04	30,06	61	63	61	60	C	C	C	C
21	29,69	29,41	41	40	40	40	R	C	R	R	29,77	30,67	58	65	54	53	R	C	F	F	30,00	29,93	63	72	64	63	R	C	C	C
22	29,42	29,62																												



JULY.										AUGUST.										SEPTEMBER.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	29.94	30.06	70	77	67	63	F	F	F	29.90	29.88	67	76	66	62	C	C	C	C	30.28	30.25	70	77	67	59	C	C	F	F
2	30.13	30.15	73	70	72	68	F	F	F	29.81	29.89	68	72	65	64	C	C	C	C	30.23	30.18	64	77	67	60	F	F	F	F
3	30.17	30.10	79	92	77	72	F	F	F	29.95	29.93	69	71	67	65	C	C	C	C	30.13	30.02	66	77	67	62	F	F	F	F
4	30.10		80				F	F	F	29.84	29.87	67	80	70	67	R	C	C	C	29.99	29.97	67	74	68	64	F	F	F	F
5		29.91	79	90	76	75	F	F	F	29.91	30.03	73	83	77	67	F	F	F	F	30.02	30.13	68	83			F	F	F	F
6	30.01	30.06	73	85	69	66	F	F	C	30.11	30.16	70	80	71	68	F	F	F	F	30.21	30.14	71	76	69	65	F	F	F	F
7	30.07	30.15	71	78	68	64	F	F	F	30.19	30.16	74	82	74	70	F	F	F	F	30.07		72	84	71	65	F	F	F	F
8	30.16	29.83	73	83	74	58	F	C	F	30.17	30.17	76	89	75	71	F	F	F	F	30.18	30.26	69	69	63	57	C	C	F	F
9	29.83	30.00	78	86	77	70	F	F	C	30.16	30.11	75	85	75	72	C	C	F	F	30.30	30.30	63	71	65	62	F	F	F	F
10	30.02	30.17	66	76	65	58	F	F	F	30.08	30.06	78	89	81	74	R	F	F	F	30.25	30.12	68	81	72	67	F	F	F	F
11	30.22	30.07	69	80	72	69	F	F	F	29.98	29.99	77	93	72	69	R	F	F	F	30.00	29.98	72	87	76	70	F	F	F	F
12	29.93	29.91	81	90	85	80	F	F	F		29.88	74	81	76	69	F	F	F	F	30.00	30.12	67	62	57	56	C	C	R	R
13	29.89	29.92	84	99	81	77	F	F	C	29.74	29.98	78	93	72	69	R	C	F	F	30.22	30.22	55	59	59	61	C	R	C	C
14	29.98	30.00	65	78	68	68	C	C	C	30.00	30.09	70	81	71	65	F	F	F	F	30.15	30.07	63	71	67	66	R	C	R	C
15	30.02	29.94	78	88	79	71	F	F	F	30.11	29.98	70	74	70	68	C	C	F	F	29.95	30.03	69	80	75	70	C	R	F	F
16	29.91	29.82	82	97	85	78	F	F	F	29.72	29.89	74	81	74	67	R	F	F	F	30.11	30.18	70	79	71	70	F	F	F	F
17	29.73	29.75	82	95	86	77	F	F	F	30.00	30.03	68	76	72	65	F	F	F	F	30.21	30.19	73	85	76	73	F	F	F	C
18	29.82	29.96	80	86	79	72	F	F	F	30.07	30.01	69	80	71	67	F	F	F	F	30.20	30.11	73	83	71	69	F	F	F	F
19	30.02	30.00	78	85	74	71	F	F	F	30.01	30.11	74	73	68	64	F	F	F	F	30.10	30.07	72	87	79	71	R	F	F	F
20	30.02	30.10	72	75	67	64	R	F	F	30.17	30.18	70	74	68	62	F	F	F	F	30.09	29.87	70	80	75	72	F	F	F	F
21	30.19	30.24	71	76	66	62	F	F	F	30.07	29.90	72	88	80	74	F	F	F	F	29.80	30.11	72	78	66	57	F	F	F	F
22	30.30	30.25	74	83	72	66	F	F	F	29.89	29.95	79	87	73	69	F	F	F	F	30.21	30.06	52	65	56	54	F	F	F	F
23	30.22	29.93	74	85	70	68	F	F	F	30.00	30.06	73	77	68	65	F	F	F	F	29.92	29.83	56	57	52	49	R	R	R	C
24	29.79	29.92	77	90	76	71	R	F	F	30.07	30.09	71	77	68	66	C	F	F	F	29.80	30.00	50	63	58	51	F	F	F	C
25	29.98	29.96	70	74		65	F	F	C	30.06	30.05	69	77	68	67	C	F	C	F		30.01	57	74	65	58	F	F	F	C
26	29.88	29.73	76	83	72	70	C	R	R	30.03	30.08	71	78	70	67	C	C	C	C	30.00	29.82	63	76	68	54	F	F	C	C
27	29.78	29.83	66	78	66	61	F	F	F	30.07	30.19	76	82	72	69	C	C	R	C	29.92	30.20	62	67	55	52	F	F	C	C
28	29.84	29.93	67	81	68	63	F	F	F	30.27	30.19	66	65	59	60	R	R	C	C	30.32	30.27	50	57	49	51	C	C	C	C
29	30.00	29.99	70	80	71	67	F	F	F	30.11	29.93	64	74	70	70	C	R	R	R	30.22	30.19	52	52	51	49	R	R	R	R
30	29.98	30.00	74	89		71	F	F	F	29.98	30.05	71	78	72	67	F	F	F	F	30.18	30.14	58	55	53	52	C	F		
31	29.99	29.96	75	77	69	67	F	F	C	30.15	30.21	70	78	70	66	F	F	C	C										
Mean			76	84	73	69						78	80	71	67														

OCTOBER.										NOVEMBER.										DECEMBER.										
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	
1	30.11	30.05	54	61	52	52	F	C	F	C	30.02		45	61	55	51	C	C	F	F	29.62	29.90	41	42	37	33	F	F	F	F
2	30.01	29.73	51	63		55	F	C	R	R			53	69			C	F	F	F	30.00	29.85	31	43	40	37	F	F	C	C
3	29.33	29.71	56	67	59	56	R	F	C		29.80	56	49	42		F	F	F	F	30.03	30.28	32	40	34	24	F	F	F	C	
4	29.87	30.16	50	65	57	45	F	F	F	29.72	29.67	47	57		42	C	F	F	F	30.35	30.24	23	44	42	40	F	F	F	C	
5	30.16	29.88	43	63	58	56	F	R	C	29.73	29.97	40	48	43	34	F	F	F	F	30.20	30.08	43	52	46	45	C	F	C	R	
6	29.81	29.98	56	61	53	44	R	C	F	30.01	30.09	36	50	48	39	C	C	C	C	30.00	29.70	51	56	54	53	C	C	R	R	
7	30.07	30.20	39	52	45	36	F	F	F	30.28	30.29	24			34	F	F	F	F	29.60	29.68	50	51	47	42	F	F	C	C	
8	30.23	30.12	35	51	45	41	F	F	C	30.30	30.40	33	38	36	33	C	C	C	C	29.70	29.68	40	40	41	33	C	C	F	F	
9	30.01	30.00	46	67	55	43	F	F	F	30.47	30.22	26	35	35	38	C	C	C	C	29.70	29.82	34	40	35	28	F	F	F	F	
10	29.96	29.83	46	57	52	50	F	C	R	29.84	29.81	47	50	43	36	R	F	F	F	29.82	29.89	25	30	28	22	F	F	F	F	
11	29.80	29.69	47	62	60	55	R	F	F	29.89	30.17	34	40	36	31	F	C	C	F	30.06	30.20	18	28	26	22	F	F	F	F	
12	29.71	29.57	50	74	66	62	F	F	C	30.30	30.13	26	47	30	35	F	F	F	F	30.20	30.11	30	44	37	39	C	F	C	F	
13	29.64	30.00	58	60		45	F	C	F	30.11	30.19	37			43	1	C	R	R	30.14	30.11	44	57	51	43	F	F	C	C	
14	30.09	29.97	44	62	56	51	F	F	F	30.21	30.10	43	49	47	45	R	C	R	R	29.93	29.62	48	58	51	54	C	C	R	R	
15	29.98	30.13	57	72	60	54	F	F	F	30.05	29.70	44	46	46	46	R	R	R	R	29.66	29.63	44	50	43	41	F	F	C	C	
16	30.13	29.71	55	54	55	56	C	F	R	29.74	29.72	38	52	47	38	F	F	C	F	29.58	29.76	34	42	38	28	S	F	F	C	
17	29.60	29.76	52	65	57	48	R	F	F	29.73	29.73	34	48	41	35	F	F	F	F	29.87	30.07	27	36	31	24	F	F	F	F	
18	29.76	29.75	45	58	50	41	F	F	C	29.73	29.87	33	41	43	29	F	F	F	F	30.17	30.27	21	38	33	31	F	F	F	F	
19	29.78	30.01	41	54	47	39	F	F	F	29.88	29.82	28	44	40	30	F	F	F	F	30.25			48	45	42	C	C	C	F	
20	30.11	30.03	36	50	42	42	F	F	C	29.76	29.60	39	39	39	34	C	C	C	C	29.87	29.91	49	52	50	45	R	F	F	F	
21	29.96	29.92	40	50	47	46	R	F	C	29.77		29	14		29	F	F	F	F	30.08	30.12	37	50	43	34	F	F	F	F	
22	29.75	29.47	49	48	42	40	R	R	R	29.88	29.99	28	40	36	30	F	F	F	F	30.11	29.72	34	48	45	46	F	C	C	C	
23																														

Table with columns for JANUARY, FEBRUARY, and MARCH. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for 8 A.M., 10 P.M., 8 N., St., and 10. Data rows are numbered 1 to 31.

Table with columns for APRIL, MAY, and JUNE. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for 8 A.M., 10 P.M., 8 N., St., and 10. Data rows are numbered 1 to 31.

N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.



JULY.										AUGUST.										SEPTEMBER.										
Barometer.		Therm.			Weather.			Barometer.		Therm.			Weather.			Barometer.		Therm.			Weather.									
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10					
1	29,74	29,74	60	64	60	59	R	C	C	30,18	30,10	61	72	63	61	F	F	F	C	30,01	29,93	67	77	67	64	C	F	F	R	R
2	29,70	29,74	65	77	74	66	R	F	F	29,98	29,59	65	66	66	63	C	R	R	R	29,74	29,72	71	72	66	66	R	R	R	R	R
3	29,80	29,79	69	78	69	68	F	F	C	29,98	29,84	65	76	68	62	F	F	F	F	29,46	29,58	63	64	54	52	R	R	R	R	C
4	29,81	30,00	69	82	69	61	F	F	F	29,92	30,00	68	82	71	67	F	F	F	F	29,81	30,01	55	65	60	59	C	F	C	C	R
5	30,06	30,16	70	83	71	65	F	F	F	30,00	30,00	70	66	64	C	R	R	C	30,07	30,12	58	64	56	55	R	C	R	R	R	
6	30,17	30,10	70	82	70	65	F	F	F	29,98	29,97	68	77	71	67	F	F	F	F	30,12	30,10	60	73	68	64	F	C	R	R	R
7	30,02	30,03	76	86	77	69	R	C	C	29,98	29,99	75	82	76	70	F	F	F	F	30,19	30,29	65	65	62	60	C	C	C	C	C
8	30,00	29,93	77	70	68	64	F	F	R	29,93	29,74	69	83	76	70	R	C	F	F	30,25	30,13	58	71	63	59	R	C	C	C	F
9	29,93	29,93	70	86	74	69	F	F	F	29,73	29,96	78	79	69	61	R	F	F	F	30,01	29,91	64	80	75	68	F	F	F	F	F
10	29,93	29,91	81	86	71	66	F	R	R	30,01	30,10	66	80	69	60	F	F	F	F	30,01	30,13	57	62	54	47	F	F	F	F	F
11	30,01	30,12	67	67	62	56	C	F	F	30,13	30,15	65	74	66	59	F	F	F	F	30,21	30,20	48	65	57	51	F	F	F	F	F
12	30,13	30,12	62	70	61	57	R	C	F	30,13	30,03	65	65	65	65	F	F	F	C	30,15	29,98	61	58	56	58	C	R	R	R	R
13	30,08	30,03	63	69	63	57	C	F	F	29,84	29,80	68	66	63	61	C	R	R	R	29,83	30,09	62	76	66	57	R	C	F	F	F
14	29,98	29,90	69	73	63	57	F	F	F	29,87	29,91	66	68	63	63	C	C	C	C	30,18	30,20	56	67	58	51	F	F	F	F	F
15	29,85	29,91	69	80	66	66	F	R	F	29,99	30,07	68	82	75	70	C	C	C	C	30,20	30,23	55	63	60	56	F	F	F	F	F
16	30,02	30,05	68	82	67	67	F	F	F	30,11	30,08	70	73	64	64	F	C	C	C	30,29	30,21	59	71	62	58	F	F	F	F	F
17	30,05	29,83	72	78	79	70	F	F	R	30,00	29,86	70	77	71	67	C	F	F	F	30,04	30,07	64	83	74	64	F	F	F	F	F
18	29,81	29,75	76	80	69	67	F	C	R	29,93	30,01	68	79	67	60	F	F	F	F	30,07	30,01	65	75	70	67	F	F	F	F	F
19	29,73	29,72	64	68	63	62	R	C	C	30,01	68	79	72	68	F	F	C	C	29,99	30,18	68	68	59	57	F	F	R	C	C	
20	29,67	29,78	71	83	73	66	F	F	F	30,17	30,24	63	70	62	58	R	F	F	F	30,18	30,14	58	68	62	60	C	C	C	C	C
21	29,78	29,73	72	89	70	64	F	R	F	30,28	30,11	64	75	66	60	C	F	F	F	30,06	29,95	64	81	73	70	C	C	C	C	C
22	29,68	29,50	67	68	65	61	R	C	C	29,96	29,80	73	90	71	69	F	R	F	F	30,05	30,19	65	70	59	50	F	F	F	F	F
23	29,53	29,76	66	79	70	63	F	F	F	29,76	29,80	71	67	63	R	R	C	R	30,28	30,22	51	62	53	49	F	F	F	F	F	
24	29,89	30,03	68	83	73	67	F	F	F	29,80	29,63	60	59	59	60	R	R	R	R	30,18	30,10	50	65	58	51	F	F	C	C	C
25	30,08	30,08	75	91	80	72	F	F	F	29,80	30,04	63	77	65	61	F	F	F	F	30,09	30,03	53	64	57	56	C	R	F	F	F
26	30,07	29,96	79	93	82	78	F	F	F	30,11	30,02	66	72	65	60	C	F	F	F	29,99	29,84	57	62	57	56	C	R	F	F	F
27	29,90	29,77	82	87	72	69	F	C	R	29,98	30,10	71	75	66	60	C	F	F	F	29,70	29,89	61	74	68	58	C	R	F	F	F
28	29,63	29,70	79	73	61	59	R	C	C	30,18	30,21	60	74	66	57	F	F	F	F	29,99	30,00	53	68	61	50	F	F	F	F	F
29	29,67	29,92	62	68	62	60	R	C	R	30,25	30,14	63	81	67	59	F	F	F	F	30,00	29,88	49	71	62	59	F	F	F	F	F
30	29,94	29,99	64	62	60	60	R	R	R	30,12	30,03	65	79	71	64	F	F	F	F	29,77	29,77	58	63	58	57	R	C	C	C	R
31	29,98	60	63	57	52	C	C	C	F	29,99	30,01	68	81	69	64	F	F	R	F											
Mean		70	77	69	64					69	76	68	63							59	70	62	58							

OCTOBER.										NOVEMBER.										DECEMBER.										
Barometer.		Therm.			Weather.			Barometer.		Therm.			Weather.			Barometer.		Therm.			Weather.									
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10					
1	29,81	29,83	57	64	59	60	C	C	F	29,89	29,98	33	49	41	33	F	F	F	F	30,05	30,08	33	44	40	32	F	F	F	F	F
2	29,94	30,11	54	51	51	F	F	F	F	30,06	30,16	33	49	43	35	F	F	F	F	30,07	30,09	33	41	36	28	F	F	C	C	F
3	30,18	30,00	50	68	60	55	F	F	F	30,36	30,48	34	42	37	28	F	F	F	F	30,16	29,69	24	32	30	32	F	C	C	C	F
4	29,83	29,94	62	77	72	59	F	F	F	30,48	30,40	28	48	41	35	F	F	F	F	29,07	29,31	40	41	35	29	R	C	C	C	F
5	30,08	30,09	53	68	61	52	F	F	F	30,43	30,47	32	49	42	34	F	F	F	F	29,71	29,67	29	38	34	31	F	F	C	C	R
6	30,02	30,00	53	76	66	59	F	F	F	30,38	30,14	35	54	47	43	C	C	C	R	29,73	29,74	27	37	32	25	F	F	F	F	F
7	30,13	30,30	54	63	56	49	F	F	F	30,04	29,59	48	56	53	54	R	R	R	R	29,78	29,97	26	27	25	19	S	S	C	F	F
8	30,37	30,27	47	59	53	47	F	F	F	29,33	29,35	52	58	52	51	R	F	F	F	30,00	29,96	15	31	28	21	F	S	C	F	F
9	30,18	30,06	55	66	60	55	F	F	F	29,54	29,60	47	62	54	49	F	C	R	R	29,85	29,81	24	36	33	32	C	C	C	C	C
10	30,30	30,47	48	57	49	40	F	F	F	29,66	29,99	43	41	36	30	C	C	C	F	29,74	29,55	32	33	39	31	C	R	R	R	R
11	30,43	30,13	45	59	52	53	F	C	R	30,11	30,10	30	42	37	30	F	F	F	F	30,15	30,21	14	21	20	20	C	F	C	C	C
12	30,00	29,89	59	73	65	60	R	C	C	29,98	29,65	39	46	47	39	C	R	R	C	30,22	29,65	18	27	29	35	C	S	S	S	S
13	29,61	29,60	62	68	57	49	R	C	F	29,62	29,78	35	47	44	38	F	F	C	C	29,19	29,51	39	40	30	24	F	F	F	F	F
14	29,64	29,89	48	58	53	44	F	F	F	29,90	30,00	34	46	40	31	F	F	F	F	29,71	30,05	19	27	24	20	F	F	F	F	F
15	29,93	29,89	42	59	50	40	F	F	F	29,86	29,43	39	41	38	39	C	R	R	R	30,30	30,43	18	31	26	18	F	F	F	F	F
16	29,80	29,78	38	49	42	34	F	F	F	29,43	29,47	35	33	33	33	R	S	S	S	30,51	30,43	12	32	27	21	F	F	F	F	F
17	29,77	29,91	34	50	46	37	F	F	F	29,57	29,69	33	35	34	33	S	S	S	S	30,40	30,30	18	39	34	27	F	F	C	C	R
18	29,88	29,90	38	56	47	44	C	F	F	29,78	29,80	32	37	34	31	C	S	C	S	30,18	29,97	29	35	34	31	C	C	C	R	R
19	30,00	30,19	46	53	46	47	C	F	F	29,83	29,87	30	41	36	30	F	C	F	F	29,81	29,62	30	39	36	37	C	C	F	F	F
20	30,26	30,23	38	56	46	36	F	F	F	29,90	29,91	27	42	38	29	F	F	F	F	29,66	29,86	36	47	41	34	F	F	F	F	F
21	30,19	30,12	36	60	51	40	F	F	F	29,92	29,91	29	36	33	27	S	S	C	F	29,99	29,91	27	35	29	25	F	F	F	C	F
22	30,14	30,18	40	52	44	36	F	F	F	30,00	30,01	28	45	44	31	F	F	F	F	29,78	30,00	29								



JANUARY.										FEBRUARY.										MARCH.													
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.								
S.A.M.	10P.M.	8	N.	St.	10	8	N.	St.	10	S.	N.	St.	10	8	N.	St.	10	S.	N.	St.	10	8	N.	St.	10	S.	N.	St.	10	8	N.	St.	10
1	30,49	30,29	2	19	17	13	F	F	F	29,26	29,54	37	32	29	24	S	S	F	F	29,26	29,48	36	42	30	26	R	C	F	F				
2	30,14	29,87	18	31	26	23	F	F	F	29,90	29,61	25	37	34	33	S	C	F	C	29,60	29,73	19	28	24	18	F	F	F	F				
3	29,77	29,83	26	25	17	12	C	F	F	29,73		20	30	24	19	F	F	F	F	29,87	29,90	18	33	27	22	F	F	F	F				
4	29,77	29,84	16	17	21	25	F	C	C	29,98	30,03	14	25	18	11	F	F	F	F	29,91	29,98	25	32	27	20	C	F	F	F				
5	29,76	29,60	29	48	39	36	C	F	F	30,15	30,02	6	19	15	15	F	F	F	C	29,95	30,00	23	31	28	20	C	C	C	F				
6	29,45	29,38	39	43	41	35	C	R	R	29,53	29,10	27	36	31	18	S	C	C	S	30,18	30,12	18	33	29	23	F	F	F	F				
7	29,54	29,58	31	43	37	30	F	F	F	29,60	29,99	12	19	12	3	F	F	F	F	30,15	30,00	24	42	33	28	F	F	F	F				
8	29,64	29,81	29	23	14	F	F	F	F	30,12	30,30	-3	10	7	1	F	F	F	F	29,99	29,80	29	42	35	34	C	C	S	S				
9	29,97	29,79	10	27	23	23	F	F	F	30,45	30,33	2	24	17	13	F	F	F	C	29,81	29,74	34	38	37	36	R	R	R	C				
10	29,71	29,51	29	38	32	C	F	C	C	30,31	30,35	16	31	23	12	C	F	F	F	29,70	29,78	33	36	34	34	S	R	C	C				
11	29,42	29,49	28	39	32	24	F	F	F	30,40	30,30	11	36	30	29	F	F	C	C	29,84	29,99	35	43	37	31	C	C	F	F				
12	29,45	29,51	19	27	20	10	F	F	F	30,38	30,23	32	41	33	25	C	F	F	C	30,01	29,97	28	38	35	30	F	F	F	F				
13	29,57	29,58	8	18	13	6	F	F	F	30,20	29,95	27	40	35	35	C	C	C	C	29,88	29,58	31	41	36	33	C	C	C	C				
14	29,63	29,55	4	15	14	16	F	F	C	29,73	29,39	36	43	39	37	R	R	R	R	29,47	29,82	27	37	31	24	C	C	F	F				
15	29,59	29,63	22	39	30	33	F	F	C	28,95	29,06	38	45	35	15	R	C	C	F	29,97	30,01	24	38	29	21	F	F	F	F				
16	29,56	29,90	33	37	31	21	C	F	F	29,36	29,80	3	12	10	6	F	F	F	F	30,04	29,80	19	35	30	21	F	F	F	F				
17	30,02	30,02	21	31	30	32	C	C	C	30,11	30,29	12	28	24	24	F	F	F	C	29,72	29,58	29	49	38	31	F	F	F	F				
18	29,99	30,79	27	30	25	24	S	S	S	30,22	29,61	30	36	35	39	S	R	R	R	29,45	29,43	35	34	33	32	C	S	F	F				
19	29,99	30,14	9	23	17	6	F	F	F	29,32	29,58	41	41	36	32	C	F	C	C		29,43	26	35	29	25	F	F	F	C				
20	30,18	29,98	7	24	22	1	F	F	F	29,67	29,70	22	26	21	19	F	F	C	C	29,51	29,62	28	38	32	29	F	F	F	F				
21	30,07	30,24	21	30	22	11	F	F	F	29,72	29,73	16	25	22	21	F	F	F	F	29,67	29,69	32	41	38	33	C	C	F	F				
22	30,26	30,28	0	16	10	0	F	F	F	29,70	29,78	23	37	34	28	F	F	F	F	29,72	29,60	35	49	39	32	C	F	F	F				
23	30,31	29,88	-5	20	18	23	F	C	C	29,78	29,71	25	38	35	28	F	F	F	F	29,63	29,94	31	37	32	24	S	C	F	F				
24	29,57	29,61	33	40	31	22	S	C	C	29,61	29,30	28	38	34	29	C	C	C	S	29,81	29,56	29	40	35	31	F	F	C	S				
25	29,51	29,71	18	27	19	9	C	F	F	29,30	29,53	28	37	32	23	S	F	F	F	28,97	29,14	36	47	41	35	F	C	F	F				
26	30,07	30,33	-5	4	-1	-6	F	F	F	29,67	29,89	23	35	29	21	F	F	F	F	29,29	29,49	34	40	36	30	F	C	F	F				
27	30,26	29,84	-3	18	18	29	C	S	C	30,00	30,30	18	34	27	18	F	F	F	F	29,50	29,63	33	47	37	32	F	C	S	F				
28	29,81	29,59	27	36	33	35	R	R	R	30,38	29,95	14	33	29	31	C	C	C	C	29,80	29,71	36	45	40	31	F	F	F	F				
29	29,59	29,71	35	42	37	29	C	F	F											29,59	29,51	35	39	33	31	S	C	C	F				
30	29,88	30,08	29	34	28	22	C	F	F											29,64	29,77	35	44	35	29	C	F	F	F				
31	30,10	29,49	25	35	36	39	C	R	R											29,52	28,80	36	32	35	32	S	S	S	S				
Mean			18	29	24	21					21	32	27	22																			

APRIL.										MAY.										JUNE.													
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.								
S.A.M.	10P.M.	8	N.	St.	10	8	N.	St.	10	S.	N.	St.	10	8	N.	St.	10	S.	N.	St.	10	8	N.	St.	10	S.	N.	St.	10	8	N.	St.	10
1	29,11	29,56	30	39	32	30	F	F	F	29,63	29,59	55	64	52	51	C	C	C	C	30,14	29,90	49	49	47	47	R	C	C	R				
2	29,66	29,58	32	43	35	32	F	C	R	29,43	29,40	53	59	50	47	R	C	C	C	29,71	29,80	53	69	59	56	R	C	F	F				
3	29,01	29,30	33	40	34	31	F	C	F	29,39	29,57	42	56	47	43	R	C	F	F	29,92	29,91	60	68	55	5	F	F	F	F				
4	29,29	29,42	33	40	34	33	C	F	C	29,60	29,59	48	65	50	48	F	F	C	C	29,93	30,14	70	68	58	56	F	C	R	F				
5	29,02	29,78	38	43	37	36	C	F	F	29,64	29,71	53	67	58	48	F	F	F	F	30,27	30,26	62	66	57	54	F	F	F	F				
6	29,80	29,71	38	45	36	32	F	F	F	29,71	29,56	53	17	42	41	C	R	R	R	30,22	29,99	62	65	64	63	C	R	R	R				
7	29,66	29,66	40	58	42	40	F	F	F	29,47	29,44	44	46	46	40	R	R	R	R	29,97	29,95	73	85	76	70	F	F	F	F				
8	29,68	29,69	42	55	43	37	F	F	F	29,49	29,79	55	48	42	42	C	F	F	F	29,98	29,93	76	88	69	62	F	F	F	F				
9	29,67	29,66	43	54	43	41	F	F	C	29,89	29,98	45	44	42	41	C	C	C	C	29,96	29,59	67	75	80	77	F	F	F	F				
10	29,62	29,71	41	49	47	43	R	C	F	30,01	30,06	42	48	43	38	C	F	F	F	29,54	29,50	77	92	80	71	C	F	C	F				
11	29,82	29,99	40	50	44	36	F	F	F	30,07	30,03	46	60	50	44	F	F	F	F	29,66	29,90	66	75	63	57	F	F	F	F				
12	30,03	29,92	41	44	38	37	C	C	C	30,08	30,05	55	71	56	50	F	F	F	F	29,98	29,97	59	72	56	51	F	F	C	C				
13	29,81	29,70	41	42	38	37	C	F	F	30,03	29,99	59	68	59	53	F	F	F	F	29,99	30,00	55	62	55	53	R	C	C	C				
14	30,06																																

JULY.										AUGUST.										SEPTEMBER.										
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	
1	29,79	29,91	71	78	67	60	F	F	F	29,99	30,01	70	85	71	65	F	F	F	F	29,74	29,86	61	71	63	54	F	F	F	F	
2	29,92	30,00	67	73	64	57	F	C	C	30,02	30,05	72	82	72	66	C	F	F	F	29,84	29,64	60	74	66	62	F	F	C	R	
3	30,01	29,95	68	81	69	65	F	F	F	30,03	29,97	72	81	68	65	C	F	C	C	29,56	29,66	61	72	65	59	C	F	F	F	
4	29,85	29,65	76	84	69	68	F	C	C	29,85	29,77	68	72	70	68	R	R	R	F	29,68	29,58	60	74	65	61	F	F	F	C	
5	29,72	29,80	68	80	71	63	F	F	F	29,78	29,78	74	79	71	68	C	F	F	F	29,51	29,69	67	70	64	61	R	C	F	F	
6	29,87	29,93	67	78	71	61	F	F	F	29,79		74	80	69	66	F	F	F	F	29,91	30,00	62	76	69	61	F	F	F	F	
7	29,98	29,99	70	78	69	63	F	F	F	29,99	29,99	76	80	69	66	F	R	F	F	30,00	30,00	65	78	68	65	F	F	F	F	
8	29,99	29,99	71	76	68	61	F	C	C	29,99	29,97	66	68	65	64	C	R	C	C	29,93	30,06	72	73	59	56	C	C	R	R	
9	29,96	29,82	69	76	68	64	F	C	C	29,99	29,97	69	82	75	69	F	F	F	F	30,23	30,26	53	63			50	F	F	F	
10	29,88	29,83	70	78	68	64	C	F	F	29,93	29,96	76	89	80	69	F	F	F	R	30,26	30,12	54	68	59	51	F	F	F	F	
11	29,83	29,83	75	79	69	67	C	F	C	29,98	29,99	70	77	67	62	C	C	C	F	30,05		55	66			54	F	F	F	
12	29,86	29,82	78	87	74	73	F	C	C	30,01	30,08	69	75	66	61	F	F	F	F	29,98	29,87	61	73			60	F	F	F	
13	29,78	29,82	76	92	77	73	C	F	R	30,08	29,90	71	72	62	65	C	C	R	R	29,71	29,65	65	75	69	65	C	C	C	C	
14	30,04	30,10	68	76	75	62	F	F	F	29,90	29,81	71	73	65	66	C	C	R	R	29,67	29,61	51	57	49	49	R	C	C	C	
15	30,05	29,79	68	71	66	63	C	R	R	29,76		70	80	71	67	C	F	F	F	29,66	29,60	54	59	51	48	C	F	F	F	
16	29,81	29,83	75	86	71	68	F	R	F	29,88		73	85	76	71	F	F	F	F	29,61	29,83	49	61	54	46	F	F	F	F	
17	29,83	29,83	75	85			72	F	R	29,89	29,88	77	86			72	F	C	C	29,89	29,89	50	65	58	51	F	F	C	C	
18	29,90	29,96	83	92	74	71	R	R	F	30,00	29,99	75	85	71	69	F	F	C	C	29,98	29,90	51	63	56	56	F	F	C	C	
19	29,96	29,85	75	85	77	73	C	F	C	29,97	29,99	70	75	68	65	R	C	C	C	29,83	29,70	60	72	65	66	C	C	C	R	
20	29,77	29,93	77	87	75	73	R	R	R	29,97	29,88	64	67	65	67	C	C	R	R	29,57	30,01	63	74	67	59	C	F	F	F	
21	29,97	30,00	73	81	69	66	C	C	C	29,86	29,90	70	77	70	60	R	R	R	R	30,08	30,15	56	72	61	56	F	C	F	C	
22	29,92	29,85	68	76	67	66	C	C	C	29,87	29,83	69	72	70	67	R	R	R	C	30,21	30,21	55	63	57	55	C	C	C	C	
23	29,77		69	74	68	66	R	R	C	29,78	29,89	67	73	64	57	C	F	F	F	30,17	30,14	55	64	57	51	C	R	C	F	
24	29,66	29,80	74	84	78	72	F	F	F	29,98	30,17	59	73	69	60	F	F	F	F	30,18	30,10	52	68			51	F	F	F	
25	29,81	29,81	76	78	72	70	F	C	C	30,19	30,19	65	73	67	61	F	F	F	F	30,10	30,02	57	71	61	54	F	F	F	F	
26	29,81	29,84	76	77	73	69	F	F	F	30,15	30,02	64	74	66	62	F	F	F	F	30,09	30,21	56	68	57	51	F	R	F	F	
27	29,83	29,81	75	81	71	68	F	F	C	29,93	29,83	69	84			68	F	F	F	30,31	30,37	53	63	57	52	F	C	F	F	
28	29,77	29,70	67	76	73	72	R	C	R	29,79	29,84			68	66	C	R	C	C	30,33	30,26	53	66	61	53	F	F	F	F	
29	29,81	29,90	78	82	74	67	F	F	F	29,94	29,98	65	72			64	C	C	F	C	30,21	30,17	57	70	64	56	F	F	F	F
30	29,83	29,90	69	80	71	65	F	F	F	29,97	29,85	70	79	69	66	C	F	F	F	30,11	30,05	58	73			59	F	F	F	
31	29,87		69	79	71	63	F	F	F	29,78	29,78	73	86	79	68	F	F	R	F											
Mean			72	80	71	67						70	78	69	65															

OCTOBER.										NOVEMBER.										DECEMBER.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	30,06	30,06	58	65	57	51	F	C	C	29,58	29,70	36	45	36	35	F	C	C	S	30,08	30,03	32	43	41	39	F	C	C	C
2	29,99	29,70	55	56	55	57	C	R	R	29,84	29,84	34	55	49	47	F	F	F	F	30,10									
3	29,40	29,57	61	62	62		R	R	R	29,84	29,93	46	55	49	46	C	C	C	C										
4	29,78	29,81	60	63	59	54	F	C	R	29,81	29,70	48	50	50	47	C	C	C	R	30,01		45				29	F	F	F
5	29,90	30,09	52	61	54	41	C	C	F	29,70	29,79	41	52	47	40	C	F	F	C	29,82	29,00	35	39	38	42	C	R	R	F
6	30,18	30,22	45	55	48	42	F	F	F	29,41	29,08	43								29,11	29,40	34	40	35	29	F	C	F	F
7	30,28	30,34	47	61	54	41	F	F	F	29,18	29,65		46	40	39	F	F	C	C	29,66	30,65	24	32	29	25	F	F	F	F
8	30,40	30,32	42	58	53	47	F	F	F	29,87	29,88	37	50	45	42	F	F	C	C	30,10	30,05	27	38	33	34	C	F	C	S
9	30,33	30,19	49	65	57	56	F	C	F	29,80	29,93	40	52	43	33	F	F	F	F	29,92	29,71	38	45	41	38	C	C	C	F
10	30,18	30,19	59	74	66	59	F	F	F	29,92	29,83	34	48	37	34	C	F	F	F	29,73	29,58	40	44	44	43	C	R	C	R
11	30,21	30,15	57	77	64	58	F	F	F	29,89	29,77	32	48	43	38	F	F	F	F	29,68	29,93	39	43	43	32	R	C	F	F
12	30,10	30,00	57	78	67	59	F	F	F	29,68	29,58	47	57	53	52	F	C	R	R	29,81	29,86	34	46	42	35	C	F	F	F
13	29,96	29,80	55	72	63	58	F	F	C	29,65	29,85	41	43	39	32	R	C	F	F	29,81	29,43	39	45	41	42	R	R	R	R
14	29,78	29,64	57	79	68	63	F	F	F	29,98	30,08	24	40	33	27	F	F	F	F	29,49	29,84	40	54	46	37	C	F	F	C
15	29,67	29,92	60	74	60	50	F	F	F	30,15	30,11	24	37	32	25	F	F	F	F	29,98	29,77	38	43	35	38	C	S	S	S
16	30,02	30,13	47	66	58	48	F	F	F	30,11	29,88		36	32	24	F	F	F	F	29,30	29,80	37	45	38	32	R	F	F	F
17	30,21	29,95	50	56	54	54	C	C	R	29,81	29,73	20	34	30	33	F	F	C	C	30,12	29,97	25	36	32	32	F	F	F	F
18	29,70	29,68	62	74	57	51	F	R	C	29,57	29,72	24	32	33	30	S	S	S	S	29,61	29,70	38	42	34	28	C	F	F	F
19	29,61	29,63	44	53	45	35	C	F	F	29,18	29,34		37	34	35	C	R	C	R	29,62	29,71	26	36	32	26	C	F	F	F
20	29,79	29,96	36	46	39	36	F	F	C	29,48	29,62	30	40	36	30	F	F	F	F	30,04	29,77	15	29	32	32	C	C	F	F
21	29,93	29,73	47	59	53	53	F	F	F	29,61	29,57	21	37	35	33	F	C	S	R	29,66	29,81	34	50	41	35	F	C	F	F
22	29,65	29,81	53	57	47	37	R	F	F	29,69	29,71	32	40	35	29	F	F	F	F	29,78	29,68	27	46	39	38	F	F	F	F
23	29,84	29,66	31	47	39	34	F	F	F	29,68	29,61	27	44	38	32	F	F	F	F	29,85	29,90	29	47	36	32	F	F	C	F
24	29,55	29,38	34	53	44	40	F	F	F	29,69	29,79	28	41	35	31														



JANUARY.										FEBRUARY.										MARCH.											
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.						
S A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10	8 N.	St.	10	S A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10	S A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10					
1	29,86	29,87	26	34	29	22	C	F	F	F	29,62	29,49	41	46	43	40	R	R	F	F	29,79	30,12	44	42	39	33	C	C	F	F	
2	30,01	29,54	11	18	15	10	F	F	F	F	29,65	30,06	35	40	32	24	F	F	F	F	30,46	30,49	27	33	30	25	F	F	F	F	
3	29,83	29,50	15	23	27	17	S	S	S	S	30,30	30,29	18	34	31	30	F	F	F	C	30,42	30,24	26	51	44	33	F	F	F	F	
4	29,77	30,06	15	15	9	8	C	F	F	F	30,13	29,90	34	39	35	34	R	R	C	C	30,13	29,95	36	58	52	44	F	F	F	F	
5	30,29	30,30	6	25	20	12	F	F	F	F	30,08	30,16	37	39	35	34	R	C	C	R	29,79	29,81	48	68	57	42	F	F	C	F	
6	30,29	30,07	11	27	25	30	F	S	S	S	30,14	30,09	35	36	34	33	C	C	C	C	30,00	30,21	31	30	24	18	F	F	F	F	
7	30,01	30,01	27	30	31	29	C	C	C	C	30,02	29,78	33	34	33	32	C	S	S	S	30,25	30,18	16	31	27	20	F	F	F	F	
8	29,68	29,58	34	34	26	20	S	S	S	S	29,49	29,22	35	33	32	32	R	R	C	C	30,08	29,70	29	39	34	35	F	C	R	F	
9	29,75	29,99	18	26	23	16	C	F	F	F	28,98	29,19	31	34	30	30	S	F	C	C	29,98	29,94	34	51	44	35	F	F	F	F	
10	30,18	30,23	10	25	20	12	F	F	F	F	29,38	29,61	32	35	34	31	C	F	F	F	29,90	29,61	35	53	41	38	C	C	C	R	
11	30,31	29,90	8	31	33	33	F	C	C	S	29,72	29,70	30	41	35	33	F	F	C	S	29,29	29,79	39	44	37	32	R	F	F	F	
12	29,69	29,73	33	44	36	31	F	F	F	F	29,84	29,75	31	47	38	33	F	F	C	C	30,13	30,22	25	34	31	26	F	F	F	F	
13	29,90	30,01	18	28	23	15	F	F	F	F	29,67	29,67	34	46	39	33	C	F	F	F	30,22	30,04	27	39	33	34	F	F	F	C	
14	29,80	29,01	17	32	32	19	S	S	S	S	29,59	29,31	35	37	37	33	C	R	R	F	30,01	30,04	33	35	32	29	S	C	C	F	
15	29,43	29,98	8	18	14	8	F	F	F	F	29,36	29,78	27	32	27	22	F	F	F	F	30,18	30,18	33	37	33	32	S	S	F	F	
16	30,25	30,28	2	20	15	15	F	F	F	F	30,12	30,26	18	29	27	27	F	F	F	C	30,01	29,70	37	40	49	45	R	R	R	R	
17	30,10	30,06	25	40	36	35	F	C	C	C	30,16	29,89	29	35	24	18	S	F	S	C	29,99	30,20	39	45	40	32	F	F	F	F	
18	29,88	29,55	39	40	42	40	R	R	R	R	29,87	30,41	23	27	18	10	F	F	F	F	30,21	29,78	36	47	40	39	F	F	C	C	
19	29,62	29,80	30	32	26	18	F	F	F	F	30,50	30,31	6	26	27	11	F	F	F	S	29,83	29,91	41	47	41	33	C	C	C	C	
20	29,97	30,17	4	28	21	19	F	S	F	F	29,36	29,78	27	32	27	22	F	F	F	F	29,96	29,45	35	35	35	35	R	R	C	R	
21	30,29	30,09	20	36	33	34	F	F	C	C	29,48	29,78	28	40	32	24	S	C	C	F	29,66	30,18	36	44	36	31	F	F	F	F	
22	30,19	30,11	35	45	38	39	C	C	C	C	29,78	29,40	27	40	35	34	C	C	C	F	30,31	30,33	34	46	40	34	F	F	F	F	
23	29,75	29,43	41	44	42	40	R	R	R	F	29,48	29,72	29	34	25	18	F	F	F	F	30,22	30,19	39	59	48	40	F	F	F	F	
24	29,57	29,69	34	44	34	28	F	F	F	F	29,81	29,67	21	35	30	25	C	C	C	F	30,08	29,54	40	44	51	53	R	R	C	R	
25	29,93	30,20	17	27	24	17	F	F	F	F	29,63	29,73	23	32	21	13	F	F	F	F	29,63	30,03	49	52	41	35	F	F	F	F	
26	30,28	30,21	15	34	33	34	F	F	C	C	29,74	29,65	8	22	19	13	F	F	F	F	30,22	30,05	34	50	44	36	F	F	F	F	
27	30,02	29,70	35	46	45	45	C	C	C	C	29,71	29,76	20	39	33	28	C	F	C	F	29,79	29,45	45	63	55	51	C	F	F	C	
28	29,80	30,08	31	29	23	15	S	C	F	F	29,98		33	47	38	35	F	C	F	F	29,93	29,83	53	48	34	27	C	F	F	F	
29	30,18	30,21	13	28	23	18	F	F	F	F	29,71	29,63	40	54	51	45	C	C	F	F	29,97	29,90	28	42	37	32	F	F	F	F	
30	30,32	30,32	17	31	25	18	F	F	F	F											29,76	29,73	41	56	50	40	C	F	F	F	
31	30,27	30,01	22	40	33	34	F	F	F	C											29,76	29,85	40	41	36	34	C	R	R	C	
Mean			21	31	28	24							28	37	32	28								36	46	40	35				

APRIL.										MAY.										JUNE.										
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					
S A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10	8 N.	St.	10	S A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10	S A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10				
1	29,78	29,70	36	44	41	35	R	C	F	F	30,18	30,08	53	65	56	50	F	F	F	F	29,61	29,61	54	59	57	58	C	R	C	C
2	29,67	29,61	40	53	44	41	C	C	F	C	30,00	29,97	63	80	63	57	F	F	F	F	29,71	29,77	60	77	67	60	F	F	F	F
3	29,59	29,91	39	45	43	44	R	C	C	C	29,99	30,00	60	74	64	57	F	F	F	F	29,87	30,09	74	85	65	58	F	F	F	F
4	29,91	29,80	47	59	48	42	C	F	F	F	30,06	29,99	59	67	57	51	F	F	F	F	30,18	30,10	68	78	64	62	F	F	F	F
5	29,67	29,34	43	44	39	40	R	R	R	F	29,86	29,61	58	68	54	53	F	F	F	C	30,08	29,97	76	92	80	74	F	F	F	F
6	29,37	29,44	40	50	46	36	F	F	F	F	29,47	29,67	53	63	57	49	R	F	F	F	29,99	29,91	79	93	74	73	F	F	C	C
7	29,43	29,54	42	55	47	39	F	F	F	F	29,67	29,60	56	55	49	45	F	R	R	F	29,93	30,06	65	68	57	54	F	C	C	R
8	29,66	30,06	42	50	43	35	F	F	F	F	29,59	29,63	43	51	46	43	C	C	F	F	30,11	30,21	60	71	63	56	F	F	F	F
9	30,10	30,17	38	51	39	32	C	F	F	F	29,63	29,85	48	62	55	47	C	C	F	F	30,27	30,21	66	78	65	58	F	F	F	F
10	30,33	30,36	29	38	32	30	F	F	F	F	29,93	30,02	55	58	50	47	F	C	F	F	30,12	30,03	63	85	73	67	F	F	F	F
11	30,33	30,07	34	48	38	38	F	F	C	R	30,03	29,91	55	51	45	44	C	C	R	R	29,98	29,88	77	86	73	60	C	F	F	F
12	29,74	29,78	44	53	48	40	R	C	F	F	29,78	29,50	44	46	47	45	R	R	R	R	29,89	30,00	70	73	64	64	R	R	R	R
13	29,73	29,65	44	49	40	38	F	F	F	F	29,53	29,50	56	61	51	48	C	C	C	C	30,09	30,19	58	62	54	50	R	F	F	F
14	29,58	29,77	46	65	48	42	C	F	F	F	29,36	29,35	48	53	46	49	R	R	C	R	30,17	29,97	55	65	58	55	F	F	F	F
15	29,92	29,97	51	61	45	43	F	F	F	F	29,35	29,48	56	56	53	53	R	C												



JULY.										AUGUST.										SEPTEMBER.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	29.66	29.65	82	97	86	79	F	F	C	29.92	29.98	70	85	76	69	F	F	F	30.21	30.09	69	84	73	66	F	F	F		
2	29.89	29.97	68	72	62	61	C	C	C	29.98	30.01	75	80	77	72	F	F	F	30.10	30.11	68	87	79	67	F	F	F		
3	30.01	30.02	63	70	60	60	C	C	C	30.05	30.03	76	85	74	70	F	F	F	30.13	30.11	69	89	77	70	F	F	F		
4	29.86	29.73	64	78	69	69	R	C	R	29.97		80	96			F	F	F	30.08	29.94	75	87	72	70	C	F	R		
5	29.80	29.96	72	87	75	69	F	F	C	30.06	80	68	64	60	F	C	C	F	29.89		75	82	74	70	F	F	F		
6	30.01	30.09	68	76	66	62	R	F	F	30.14	30.12	65	73	63	59	F	F	F	29.68	29.68	75	85	76	68	F	F	R		
7	30.11	30.13	69	82	69	62	F	F	F	30.09	29.91	66	77	65	62	C	F	F	29.79	30.03	63	75	68	58	F	F	C		
8	30.13	30.11	70	75	64	63	C	F	C	29.87	29.98	67	77	66	59	R	F	F	30.24	30.38	61	68	59	55	F	F	F		
9	30.03	30.04	59	64	60	61	R	C	R	30.01	30.02	66	74	65	60	F	F	F	30.38	30.29	58	68	60	55	F	F	F		
10	30.10	30.20	67	81	74	69	R	C	R	29.98	66		68	F	F	F	30.19	30.08	59	76	65	59	F	F	F				
11	30.20	30.10	72	81	71	69	R	R	F	30.02		71	65	F	F	F	30.01	30.02	63	79	65	61	F	F	F				
12	30.07	30.05	77	88	78	74	F	F	F	29.98	29.93	69	79	70	65	F	F	F	30.07	30.10	59	62	58	56	C	C	C		
13	30.09	30.12	74	77	69	63	R	F	F	29.95	71	78	70	66	F	F	F	30.11	29.93	57	67	59	57	F	F	F			
14	30.19	30.22	69	79	69	65	F	F	F	29.82	67	82	74	71	C	C	C	29.94	30.00	62	73	62	58	F	F	F			
15	30.23	30.11	73	81	72	69	F	F	F	30.06	65	74	66	57	F	F	F	30.03	30.21	65	79	65	61	C	C	C			
16	30.03	29.93	76	93	80	76	F	F	F	30.30	30.28	62	70	69	53	F	F	F	30.29	30.17	65	70	63	63	C	C	C		
17	29.93	29.80	84	98	78	77	F	R	F	30.23	30.07	58	68	61	56	F	F	F	29.94	29.79	69	79	75	68	R	R	F		
18	29.94	30.11	81	86	73	67	F	F	F	29.95	29.95	62	69	64	62	F	F	F	29.71	29.70	70	87	77	70	F	F	F		
19	30.18	30.16	67	72	67	59	F	F	C	30.05	30.21	66	68	62	58	C	R	C	29.69	29.69	74	90	78	68	F	F	R		
20	30.17	30.04	78	69	62	F	F	F	30.21	30.13	66	69	61	57	F	F	F	29.73	29.65	68	69	61	55	C	R	R			
21	29.90	29.80	70	84	69	68	F	F	C	30.15	30.00	61	73	63	59	F	F	F	29.65	29.97	48	56	40	48	F	F	F		
22	29.70	29.67	77	84	73	69	C	F	C	30.11	30.09	60	69	59	60	F	F	F	30.16	30.20	43	58	50	48	C	F	F		
23	29.62	29.70	76	77	69	68	C	R	R	30.08	30.04	61	72	66	F	F	F	30.25	30.28	53	64	55	50	C	F	F			
24	29.79	30.02	70	76	69	64	R	C	F	30.04	30.00	68	79	70	54	F	F	F	30.26	30.04	52	64	61	57	C	F	C		
25	30.10	30.10	68	77	68	65	F	F	F	29.98	29.83	72	85	78	71	F	F	F	29.80	29.54	64	68	52	62	C	C	C		
26	30.08	29.93	69	72	70	67	C	R	C	29.67	29.66	77	88	78	71	F	F	F	29.62	29.88	60	58	48	43	C	F	F		
27	29.98	30.03	73	74	71	67	F	F	F	29.70		65	78	68	58	F	F	F	29.99	30.11	40	51	45	45	C	F	F		
28	30.11	30.09	72	82	69	67	F	F	F	29.80	29.89	61	76	68	58	F	F	F	30.17	30.17	42	62	55	51	F	F	F		
29	30.03	29.94	71	81	68	62	C	R	R	29.94	30.05	64	80	69	59	F	F	F	30.17	30.15	56	64	58	58	C	C	C		
30	29.58	29.82	67	80	72	66	R	C	F	30.09	30.13	64	77	67	58	F	F	F	30.20	30.24	61	74	65	58	R	C	F		
31	29.89	29.91	75	81	72	65	C	F	F	30.22	30.23	59	71	67	58	F	F	F											
Mean			71	80	70	67							67	77	69	62							61	72	64	59			

OCTOBER.										NOVEMBER.										DECEMBER.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	30.26	30.05	64	73	61	58	C	C	F	30.33	30.01	36	57	51	47	F	F	C	30.00	30.18	37	39	37	33	C	C	R		
2	29.98	30.04	64	72	60	C	R	F	C	29.98	29.98	48	63	57	48	F	F	C	30.20	30.10	34	39	39	39	C	C	R		
3	30.20	30.25	51	57	52	44	F	F	F	30.03	30.20	44	49	47	46	C	C	C	29.91	29.48	40	43	44	45	R	R	R		
4	30.28	30.03	48	56	53	52	C	R	R	30.27	30.20	41	42	42	35	C	C	C	28.88	29.22	52	48	45	37	R	C	F		
5	29.91	29.83	52	60	56	53	R	R	F	30.11	29.82	36	48	42	33	F	F	F	29.39	29.63	32	38	32	26	F	F	S		
6	29.83	29.48	57	56	51	45	C	R	R	29.62	29.73	32	53	48	44	F	C	C	30.16	30.06	23	27	23	20	C	F	F		
7	29.79	30.08	44	56	51	47	F	F	C	29.91	29.93	32	42	39	35	F	F	F	29.87	30.21	12	25	23	15	F	F	F		
8	30.18	30.30	40	51	48	40	F	F	F	29.78	29.71	36	59	51	41	F	F	R	30.28	30.39	10	24	20	15	F	F	F		
9	30.30		37	57	51	50	F	F	C	29.71	29.43	38	53	53	52	C	R	C	30.38	29.99	10	28	29	35	F	F	F		
10	29.90	29.90	53	63	58	54	R	C	F	29.59	29.80	53	65	57	50	C	C	C	29.92	30.05	30	42	36	28	C	F	F		
11	30.00	30.14	59	72	62	55	C	F	F	30.07	30.17	43	46	43	43	C	C	C	29.95	29.23	36	41	41	45	C	R	R		
12	30.18	29.90	57	61	57	56	C	R	C	30.13	29.93	15	49	48	48	C	C	C	29.28	29.66	42	43	35	30	F	F	F		
13	29.68	29.97	60	69	60	48	R	C	F	29.71	29.33	49	51	52	52	R	R	R	29.74	29.69	29	33	29	27	F	C	C		
14	30.07		43	54	48		F	F	F	29.44	29.62	40	51	45	38	F	F	F	29.57	29.29	18	22	22	21	S	F	F		
15	30.01	30.20	40	60	53	44	F	F	F	29.52	29.10	42	45	48	43	R	F	R	29.18	29.33	17	29	28	26	F	F	F		
16	30.22	30.08	48	54	53	50	C	F	F	29.12	29.44	38	48	44	40	F	F	C	29.50	29.68	23	35	32	25	F	F	F		
17	29.91	29.81	48	61	61	R	C	R	C	29.50	29.50	33	50	44	38	F	F	C	29.74	29.95	18	34	32	27	F	F	F		
18	30.02	30.32	58	53	43	34	F	F	F	29.71	29.73	35	47	40	31	F	F	C	30.03	29.79	21	38	38	42	F	C	R		
19	30.42	30.40	33	47	41	39	F	C	C	30.01	30.16	28	40	35	31	F	F	F	29.72	29.53	45	48	45	42	R	C	C		
20	30.32	30.18	42	49	46	44	F	C	F	30.06	29.99	34	42	39	40	C	R	R	29.19	29.93	52	48	38	32	R	F	F		
21	30.18	30.30	42	57	48	39	F	F	F	30.00	29.83	36	49	43	C	C	C	30.14	30.24	30	36	33	33	C	F	F			
22	30.26	29.72	48	49	51	60	F	R	C	29.80	29.41	46	51	48	47	R	C	C	30.20	30.11	35	41	34	34	R	C	R		
23	29.80	30.12	59	69	49	F	R	C	C	29.45	29.51	41	45	38	32	F	F	C	30.08	29.90	40	55	56	53	C	C	C		
24	30.30	30.35	43	45	41	36	C	C	F	29.52	29.59	32	37	32	27	F	F	F	29.85	30.03	50	40	33		R	S	S		
25	30.35	30.11	34	44	44	46	C	C	C	29.56	29.66	23	37	34	29	F	F	F	30.23										

Table with columns for JANUARY, FEBRUARY, and MARCH. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for 8 A.M., 10 P.M., 8 N., St., 10 S., N., St., 10. Data rows include dates and corresponding values.

Table with columns for APRIL, MAY, and JUNE. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for 8 A.M., 10 P.M., 8 N., St., 10 S., N., St., 10. Data rows include dates and corresponding values.

N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.



JULY.										AUGUST.										SEPTEMBER.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	30.00	29.79	70	82	69	65	F	F	F	30.13	30.08	71	80	70	65	F	F	F	29.97	29.92	67	83	70	63	F	F	F	F	
2	29.67	29.92	66	80	72	65	R	C	F	30.07	30.07	72	85	71	64	F	F	F	29.97	29.92	67	83	70	63	F	F	F	F	
3	30.10		60	77		60	F	F	F	30.07	29.99	70	77	67	64	F	F	F	29.95	30.00	50	68	61	60	C	C	C	C	
4		30.19	63	78	67	58	F	F	F	29.96	29.85	74	80	69	66	R	C	F	29.98	29.98	65	77	69	63	F	F	R	F	
5	30.24	30.13	67	77	67	62	F	F	F	29.86	29.93	77	94	76	74	F	F	F	30.00	30.05	58	70	58	53	F	F	F	F	
6	30.11	30.00	68	77	69	62	F	F	F	29.93	30.00	79	88	78	72	F	F	F	30.05	30.14	55	59	57	53	F	F	C	F	
7	29.98	30.01	62	74	62	58	C	F	F	29.97	29.93	78	88	74	67	C	F	F	30.22	30.21	55	66	55	54	F	F	F	F	
8	30.00	29.93	70	78	70	67	F	F	F	29.88		74	85	72	66	F	R	F	30.18	30.12	58	76	67	57	F	F	F	F	
9	29.91	29.83	75	92	80	75	F	F	F	29.90		71	61	56	F	F	F	30.09	30.02	60	78	70	62	F	F	F	F		
10	29.79	29.82	80	94	79	73	F	F	F	29.96	29.99	61	79	66	60	F	F	F	29.99	29.92	67	84	74	65	F	F	F	F	
11	29.88	30.00	76	79	63	63	F	C	C	30.00	30.02	66	75	63	61	C	F	C	29.93	29.86	67	85	75	69	F	F	F	F	
12	30.01	29.89	58	57	58	61	R	R	R	30.02	30.11	63	77	66	63	C	C	C	29.98	30.09	67	76	64	55	C	F	F	F	
13	29.92	29.97	60	76	68	65	R	C	F	30.13	30.06	66	77	67	65	C	C	F	30.16	30.20	53	61	53	45	F	F	F	F	
14	29.81	29.84	75	84	75	70	F	R	F	30.00	29.93	72	84	72	69	C	F	F	30.20	30.09	50	64	56	47	F	F	F	F	
15	29.90	30.00	78	86	72	68	F	F	R	29.92	30.08	75	78	68	63	R	F	F	29.99	29.83	54	65	50	56	C	R	F	R	
16	30.09	30.10	67	72	65	62	C	F	F	30.12	30.07	67	78	67	61	F	F	F	29.92	30.14	52	53	51	45	F	R	R	F	
17	30.07	30.03	64	63	58	56	C	R	R	30.04	29.90	66	70	65	63	C	R	R	30.22	30.16	49	59	54	51	F	F	F	F	
18	29.89	29.97	58	57	54	51	R	R	R	29.93	30.10	67	78	68	62	R	F	F	30.18	30.12	52	68	58	52	F	F	F	F	
19	29.92	29.80	55	57	55	55	R	R	R	30.14	30.12	63	74	61	55	F	F	F	30.10	30.02	57	74	62	56	F	F	F	F	
20	29.72	29.72	57	70	61	61	C	C	C	30.10	30.01	61	72	63	58	F	F	F	30.02	30.10	60	71	62	56	F	F	F	F	
21	29.73	29.69	69	75	63	58	F	C	F	29.99	30.02	64	85	72	68	F	F	F	30.17	30.18	57	70	60	55	F	F	F	F	
22	29.68	29.79	68	75	64	61	F	C	F	30.07	30.20	69	78	67	57	F	F	F	30.13	30.01	56	69	63	57	F	F	F	F	
23	29.81	29.89	68	73	63	60	F	R	F	30.28	30.21	60	74		62	F	F	F	29.93	29.74	62	77	66	61	C	F	F	R	
24	29.91	29.81	68	75	68	62	F	C	C	30.09	29.88	64	71	65	68	R	C	C	29.69	29.90	61	73	60	53	F	F	F	F	
25	29.84	29.89	66	77	67	68	C	F	F	29.97	29.99	55	59	56	57	R	C	C	29.93	29.92	53	72	65	55	F	F	F	F	
26	29.73	29.79	70	79	65	64	F	R	F	29.95	29.88	62	72	61	61	C	F	R	30.08	30.06	19	59	54	45	F	F	F	F	
27		29.68	70	75	66	64	F	R	F	29.80	29.67	59	70	66	63	R	R	C	30.10	29.90	16	61	56	53	F	F	F	F	
28	29.78	29.97	71	82	73	63	F	F	F	29.73	29.89	63	81		61	F	F	F	29.91	30.02	51	66	56	48	F	F	F	F	
29	30.08	30.16	70	78	67	63	F	F	F	29.88	29.89	66	74	65	59	F	F	F	30.06	30.03	16	63	57	52	F	F	F	F	
30	30.18	30.13	68	78	66	61	F	F	F	29.96	29.83	66	75	63	61	F	F	F	30.03	30.03	56	84	66	55	F	F	F	F	
31	30.16	30.13	69	78	67	62	F	F	F	29.71	29.82	70	83	74	66	R	F	F											
Mean			67	76	66	63						67	78	67	63														

OCTOBER.										NOVEMBER.										DECEMBER.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	30.03	30.11	58	55	75	61	F	F	F	30.46	30.51	34	50	45	37	F	F	F	30.05	29.73	26	35	35	40	F	F	C	R	
2	30.18	30.19	60	73	64	63	F	F	F	30.48	30.15	33	54	52	52	F	F	F	29.58	29.72	36	45	43	38	C	C	F	R	
3	30.23	30.29	64	85	71	63	F	F	F	29.93	29.63	58	68	64	64	F	C	F	29.96	30.18	39	46	44	34	F	C	C	F	
4	30.29	30.20	65	75	69	68	R	C	C	29.68	29.71	46	40	35	37	R	R	R	30.28	30.12	30	43	37	38	F	R	R	C	
5	30.18	30.08	68	82	72	67	C	C	F	29.78	29.92	34	36	31	32	C	C	C	29.87	29.69	41	45	43	51	C	R	R	C	
6	30.03	30.03	72	57	77	68	F	C	R	30.18	30.20	29	34	30	25	F	F	F	29.77	29.65	49	54	55	54	C	R	C	C	
7	30.19	30.24	59	70	60	57	F	F	F	30.21	30.06	29	49	44	43	F	F	F	29.66	30.08	59	63	59	45	C	C	C	C	
8	30.32	30.19	53	64	58	55	F	F	F	30.30	30.50	38	31	28	25	C	F	F	30.47	29.44	32	37	34	38	F	F	C	C	
9	30.10	29.87	59	80	76	66	F	F	F	30.46	30.18	27	39	35	35	C	F	C	29.33	30.13	41	47		46	R	R	R	R	
10	29.80	29.73	67	87	79	73	F	F	F	29.81	29.59	45	54	49	47	R	C	R	30.10		41	41	39	34	R	R	R	R	
11	29.97	30.23	59	64	58	50	R	F	F	29.71	29.92	37	42	35	27	F	F	F	30.18	30.11	32	33	31	30	S	S	S	S	
12	30.41	30.40	50	55	51	52	C	F	C	29.99	29.79	18	31	28	24	F	F	F	30.09	30.12	30	36	34	32	C	F	F	C	
13	30.37	30.30	56	63	60	55	C	C	C	29.79	29.70	25	44	40	36	F	F	C	30.13	30.00	32	39	37	39	C	C	C	C	
14	30.22	30.14	59	77	71	64	F	F	R	29.68	29.67	35	45	42	37	R	C	R	29.77	29.81	44	51	45	34	F	F	F	F	
15	30.12	30.16	66	74	66	57	C	C	C	29.80	29.98	35	47	40	32	F	F	F	29.93	30.03	30	38	34	32	F	F	F	F	
16	30.26		52	57	51	48	C	C	C	30.06	30.04	29	37	33	25	F	F	F	30.06	29.98	26	31	27	22	C	F	F	C	
17	30.10	29.99	48	55	52	52	C	R	R	29.99	29.78	24	37	34	32	F	F	F	29.98	30.18	20	33	29	23	F	F	F	F	
18	29.95	29.99	48	59	52	44	F	F	F	29.71	29.70	32	42	36	29	C	F	F	30.30	30.32	19	34	31	25	F	F	F	F	
19	30.03	30.08	46	59	50	45	F	F	F	29.58	29.71	31	44	39	31	C	C	F	30.28	30.06	31	37	34	32	C	F	F	F	
20	30.12	30.14	44	54	46	48	F	F	F	29.82	29.74	30	30	27	28	C	S	C	29.83	29.56	36	42	37	34	C	C	C	C	
21	30.19	30.20	40	56	49	40	F	F	F	29.72	29.60	29	32	32	28	S	S	S	29.64	29.60	29	39	34	34	F	F	C	C	
22	30.29	30.23	40	59	52	42	F	F	F	29.69	30.00	25	31	26	18	F	C	F	29.47	29.67	45	39	34	23	R	S	F	F	
23	30.15	29.89	40	69	53	52	F	F	R	30.17	30.21	15	32	25	27	F	F	F	29.75	30.03	14	30	25	12	F	F	F	F	
24	29.80	29.80	52	59	53	49	C	F	F	29.90	29.63	24	23	24	24	S	S	C	30.23	30.19	8	20	18	28	F	F	F	F	
25	29.90	30.00	36	53	46	37	F	F	F	29.78	2																		



Table with columns for months (JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE) and sub-columns for Barometer, Therm., and Weather. Each sub-column has further sub-columns for 8 A.M., 10 P.M., 8 N., St., 10. Includes a 'Mean' row at the bottom of each month's data.

N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.

JULY.										AUGUST.										SEPTEMBER.									
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.				
8 A.M.	10P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10P.M.	8	N.	St.	10	8	N.	St.	10
1	29,84	29,97	69	76	67	61	F	F	F	29,90	29,80	79	76	72	67	F	F	C	F	30,08	30,00	61	64	60	54	C	F	C	F
2	30,01	30,13	65	75	65	60	F	F	F	29,80	29,86	70	71	62	64	F	C	R	C	30,00	30,01	58	72	65	61	F	F	F	F
3	30,17	30,12	78	65	61	F	F	F	29,83	30,00	67	72	62	59	R	F	F	F	29,97	29,91	69	81	74	67	F	F	F	F	
4	30,06	29,84	69	67	60	F	F	C	30,03	29,89	70	83	70	66	F	F	F	F	29,95	30,12	72	82	72	64	R	F	F	F	
5	29,79	29,90	76	81	70	63	R	F	29,72	29,79	73	75	66	60	F	R	R	C	30,19	29,99	64	73	67	64	F	F	F	F	
6	29,97	29,91	71	87	75	68	F	F	29,88	30,04	61	73	66	58	F	F	F	F	29,86	29,91	69	84	73	64	F	F	F	F	
7	29,82	29,71	76	88	75	71	F	F	30,12	30,11	66	80	68	64	F	F	F	F	30,02	30,06	63	69	64	60	F	F	F	F	
8	29,72	29,66	78	91	62	60	C	R	30,12	30,10	68	82	73	68	F	F	F	F	30,15	30,37	61	71	69	55	R	C	F	F	
9	29,81	30,13	65	76	68	61	F	F	30,07	29,99	73	88	77	70	F	F	F	F	30,43	30,40	55	65	58	55	F	F	F	F	
10	30,15	30,10	71	76	65	60	C	F	29,97	29,84	69	70	65	65	R	R	R	R	30,33	30,21	60	77	66	63	F	F	F	C	
11	30,06	29,91	64	75	66	65	C	F	29,80	29,78	67	81	69	66	C	C	R	30,20	30,21	67	82	71	65	F	F	F	F		
12	29,82	29,89	76	88	78	72	F	F	29,60	29,70	74	89	79	71	R	F	F	F	30,22	30,23	68	83	71	64	F	F	F	F	
13	29,97	29,90	77	87	74	66	C	F	29,77	73	78	70	66	F	F	F	R	30,21	30,16	68	83	72	66	F	F	F	F		
14	29,86	29,89	65	81	68	62	C	F	29,57	29,84	65	73	65	62	R	C	R	30,08	29,81	69	83	72	70	C	F	C	F		
15	29,98	29,88	66	77	69	62	F	F	29,95	30,10	64	72	64	58	F	R	F	29,82	30,22	63	66	58	52	R	F	C	F		
16	29,80	29,71	78	61	60	F	C	R	30,14	30,02	65	77	62	F	F	F	F	30,25	30,29	52	61	55	45	F	F	F	F		
17	29,80	29,96	57	70	63	54	F	F	29,97	29,89	69	79	70	C	C	C	30,29	30,24	53	58	57	56	F	F	F	C			
18	30,02	29,97	62	72	65	60	F	F	29,82	29,83	67	77	69	65	C	C	F	30,24	30,18	63	68	59	56	F	F	F	F		
19	29,80	29,83	70	84	76	68	C	F	29,91	30,01	66	65	60	60	R	R	R	30,11	30,09	63	66	61	60	C	C	C	R		
20	29,78	29,76	80	67	62	C	F	R	30,04	30,17	58	60	58	59	R	R	30,11	30,10	60	65	64	60	R	C	C	R			
21	29,80	30,01	71	78	67	67	C	F	30,18	30,12	66	77	67	66	R	F	F	30,09	29,95	60	61	60	61	R	C	R	C		
22	30,13	30,11	71	77	69	66	F	F	30,02	29,89	65	75	66	66	R	C	F	29,90	29,80	65	77	64	65	F	F	F	C		
23	29,98	29,83	66	76	68	64	R	F	29,87	29,97	70	81	72	68	R	C	F	29,87	29,92	59	57	54	R	R	R	R			
24	29,86	30,03	74	80	69	63	F	F	29,98	29,99	71	82	72	70	F	R	C	29,98	29,97	53	54	52	52	R	R	R	R		
25	30,00	30,01	70	82	68	61	F	F	29,98	29,83	74	77	68	68	C	R	R	29,99	29,97	56	54	54	54	R	R	R	R		
26	30,08	66					F	F	29,87	29,91	69	81	71	67	R	F	F	29,99	30,00	56	66	58	53	R	C	F	F		
27	30,10	63					F	F	29,96	29,90	73	86	73	69	F	F	F	30,03	30,01	55	69	61	53	F	F	F	F		
28	30,08	30,04	72	75	66	65	F	C	29,88	29,88	73	85	74	68	F	F	F	30,07	30,12	61	76	67	61	C	F	F	F		
29	30,02	30,11	67	71	66	66	R	C	29,81	29,62	72	81	74	73	C	R	F	30,17	30,10	65	82	70	66	F	F	F	F		
30	30,12	30,10	70	79	75	71	R	C	29,72	29,92	69	75	68	60	C	F	F	30,10		67	83	74	69	F	F	F	F		
31	30,06	29,98	80	87	73	71	C	C	30,03	30,10	60	69	63	58	F	F	F												
Mean			70	79	69	64						69	79	69	65							62	71	64	60				

OCTOBER.										NOVEMBER.										DECEMBER.									
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.				
8 A.M.	10P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10P.M.	8	N.	St.	10	8	N.	St.	10
1	30,00	29,90	67	83	75	67	F	F	F	30,12	30,12	21	35	33	32	F	F	F	C	30,08	30,11	26	44	45	30	F	F	F	F
2	30,07	30,22	67	68	58	57	C	F	C	30,07	30,03	27	25	24	24	S	S	S	S	30,20	30,14	25	35	32	25	F	F	F	F
3	30,23	30,10	60	65	59	54	C	F	F	30,07	30,08	25	33	29	24	S	C	F	C	30,02	29,67	32	35	35	33	S	C	C	S
4	30,08	30,04	59	78	70	63	F	F	F	29,98	29,89	23	34	32	21	C	F	F	F	29,67	29,68	32	34	32	36	S	S	S	S
5	30,03	29,94	63	81	68	62	F	F	F	29,81	29,81	22	40	37	36	F	F	F	F	29,69	29,67	26	34	30	25	F	F	F	F
6	29,85	29,63	62	81	71	66	F	F	F	29,88	30,14	37	48	42	34	F	F	F	F	29,67	29,62	26	37	33	27	F	F	F	F
7	29,57	29,43	61	60			57	R	R	30,29	30,32	28	42	37	28	F	F	F	F	29,57	29,40	23	36	34	32	F	S	F	C
8	29,20	29,38	52	61	58	53	R	C	30,31	30,27	30	45	41	37	F	F	C	C	29,24	29,52	30	38			28	C	F	C	
9	29,41	29,68	46	60	52	47	F	F	C	30,22	30,20	39	48	45	45	C	R	C	29,65		21	33	25	20	F	F	F	F	
10	29,80	29,94	61	51	49	F	F	F	30,25	30,18	45	48	44	45	C	C	C	29,78	29,63	29	43	39	35	C	F	F	F		
11	30,09	30,27	42	51	44	35	F	F	30,17	30,22	47	49	48	47	R	C	C	30,00	30,06	24	29	25	20	F	F	F	F		
12	30,33	30,29	35	52	46	35	F	F	30,26	30,26	46	48	45	43	C	C	C	29,92	29,13	14	26	30	32	F	S	S	F		
13	30,27	30,09	35	56	50	52	F	F	30,25	30,20	40	50	46	45	C	C	C	29,24	29,62	22	28	22	17	C	F	F	F		
14	30,02	30,11	56	64	56	52	C	F	30,18	30,00	48	52	51	50	C	C	C	29,73	29,89	17	32	26	16	F	F	F	F		
15	30,10	30,10	52	59	53	49	C	F	29,90	29,80	51	62	54	50	C	F	F	29,91	29,58	9	26	28		F	C	C	S		
16	29,98	29,82	44	62	53	52	F	F	29,67	29,58	54	60	56	43	R	R	R	29,32	29,53	30	40	34	20	C	F	F	F		
17	29,78	29,98	57	51	43	36	C	F	29,77	30,01	33	43	38	32	F	F	F	29,70	29,87	12	32	18		F	F	F	F		
18	30,06	30,23	34	48	42	30	F	F	30,18	30,23	29	44	37	32	F	F	F	30,61	30,08	8	23	17	11	F	F	F	S		
19	30,30	36					F	F	30,17	29,86	46	49	48	50	C	R	R	29,78	29,54	26	39	38	36	C	C	R	R		
20	30,19	30,01	39	58	52	50	C	C	29,62	29,62	51	60	55	48	C	C	F	29,71	30,00	28	37	31	27	C	F	F	C		
21	29,99	29,80	50	68	61	54	C	F	29,82	29,92	30	40	34	29	F	F	F	30,00	29,90	29	33	31	29	S	R	C	C		
22	29,62	29,78	54	67	56	46	F	F	29,92	29,99	33	43	36	32	F	F	C	29,66	29,64	29	36	35	40	C	C	C	F		
23	29,93	30,12	34	39	35	31	F	F	29,94	29,84	32	36	34	33	C	C	C	30,10	30,20	25	34	27	23	F	F	F	C		
24	30,21	30,35	29	42	39	30	F	F	29,97	30,02	25	34	32	26	C	F	F	30,28	30,06	22	36			32	F	F	F	C	
25	30,48	30,40	32	43	36	35	F	F	29,94	29,81	20	42	38	36	F	F	F	29,67	30,38	24	45	35	20	F	F	F	F		
26	30,32																												



JANUARY.										FEBRUARY.										MARCH.										
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	
1	30,17	30,12	17	21	19	22	C	C	C	S	29,95	30,02	32	32	32	31	S	C	S	S	29,41	29,60	35	50	40	36	F	F	F	F
2	30,00	29,87	25	34	32	24	C	C	F	F	30,08	30,05	30	32	30	32	C	C	C	C	29,76	29,89	30	36	31	26	F	F	F	F
3	30,18	30,34	16	23	20	10	F	F	F	F	29,97	29,73	32	32	32	30	S	S	S	S	29,91	29,79	24	42	35	33	F	F	F	C
4	30,37	30,19	14	22	27	31	C	S	S	S	29,62	29,59	30	33	32	32	S	S	S	S	29,69	29,79	30	42	33	31	F	F	F	C
5	30,00	30,00	33	34	32	35	C	C	C	C	29,68	29,83	30	32	32	32	S	S	C	C	29,77	29,91	36	45	38	35	C	F	C	C
6	30,08	29,96	34	44	40	40	C	C	C	C	29,90	29,96	25	33	32	33	C	C	C	C	29,87	29,63	30	31	28	27	C	S	S	S
7	29,87	29,71	46	55	51	50	C	C	F	F	29,97	29,89	35	39	33	33	C	C	C	C	29,57	29,85	23	34	23	19	C	F	F	F
8	29,71	29,84	47	39	39	39	C	C	C	C	29,78	29,80	35	37	30	29	C	S	S	C	30,02	29,83	16	36	32	32	F	F	C	C
9	29,70	29,63	35	39	39	42	C	C	C	C	29,82	29,88	30	37	32	32	S	S	S	S	29,79	30,02	37	33	44	35	C	F	C	F
10	29,88	29,90	28	29	30	31	S	C	S	S	29,92	29,99	29	32	28	25	C	S	C	C	30,20	30,36	31	41	34	27	F	F	F	F
11	29,71	29,90	23	32	30	25	C	F	F	F	30,03	30,23	20	39	31	24	F	F	F	F	30,29	30,09	33	43	40	35	F	F	C	C
12	29,94	30,08	29	40	33	22	C	F	F	F	30,23	29,79	19	38	33	33	C	S	S	S	29,99	29,97	40	56	49	46	C	C	F	F
13	30,12	29,93	20	24	23	14	C	S	S	S	29,18	29,75	40	43	32	25	F	F	F	F	30,30	30,40	38	47	36	32	F	F	F	F
14	29,82	29,99	11	21	19	14	S	C	F	F	29,99	29,84	18	32	26	22	F	F	F	F	30,46	30,22	31	44	37	33	F	F	F	F
15	30,17	30,29	10	31	24	16	F	F	F	F	29,78	30,03	25	40	31	23	F	F	F	F	30,13	30,10	39	60	51	39	F	F	F	F
16	30,36	29,86	11	33	32	34	C	S	R		30,12	29,73	20	34	27	28	F	F	C	S	30,17	30,12	39	50	41	35	F	F	F	F
17	29,81	30,43	36	37	30	19	C	F	F	F	29,51	29,54	27	33	27	28	C	C	C	C	30,26	30,53	40	47	39	36	F	F	F	F
18	30,60	30,53	6	19	13	10	F	C	F	F	29,47	29,30	22	26	22	20	S	S	C	C	30,67	30,55	32	38	33	30	C	F	C	F
19	30,43	29,99	7	29	26	31	F	C	C	R	29,38	29,64	18	28	16	10	C	F	F	F	30,42	30,11	29	50	43	36	F	F	F	F
20	29,78	29,99	34	40	38	37	C	C	C	C	29,80	29,75	7	27	19	17	F	F	C	C	30,05	29,80	45	67	57	49	C	F	F	F
21	29,99	29,71	33	38	34	28	C	F	F	F	29,86	30,16	12	21	13	5	F	F	F	F	29,74	30,19	58	68	46	35	F	F	F	F
22	29,63	29,89	28	41	35	25	F	F	F	F	30,20	29,98	3	16	11	12	C	S	C	S	30,23	29,97	39	48	39	40	F	C	C	C
23	30,16	30,27	5	11	8	4	F	F	F	F	30,00	29,98	6	20	15	8	C	F	F	F	29,80	29,89	52	60	56	54	C	C	C	C
24	30,27	30,12	1	14	12	8	F	F	F	F	29,90	29,81	13	28	26	25	C	C	C	F	29,87	29,72	55	64	58	55	R	C	C	R
25	30,01	29,69	6	20	18	12	F	F	F	F	29,89	29,86	25	39	34	34	C	F	F	F	29,92	30,24	44	45	37	31	C	F	F	F
26	29,61	29,58	7	25	22	28	F	F	F	F	29,87	29,49	36	39	35	36	C	C	R		30,33	30,23	30	44	39	34	F	F	F	F
27	29,66	29,76	21	34	27	26	F	C	C	F	29,19	29,20	35	46	40	39	R	R	C	C	30,31	30,33	31	46	30	28	F	F	F	F
28	29,88	29,99	19	28	24	16	F	C	F	F	29,55	29,37	40	50	36	35	F	F	C	F	30,40	30,39	33	42	30	29	F	F	F	F
29	29,98	29,90	10	26	23	17	F	F	F	F											30,38	30,24	35	43	34	35	C	F	C	F
30	29,84	29,91	17	36	33	32	F	F	C	S											30,14	30,14	39	42	40	39	R	R	R	R
31	29,93	29,90	33	36	34	33	R	S	C	C											30,14	30,03	40	41	39	38	R	R	R	R
Mean			21	31	28	25					25	33	28	26							36	47	39	35						

APRIL.										MAY.										JUNE.										
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	
1	29,78	30,09	44	44	36	27	R	R	F	F											29,72	29,62	66	87	69	64	C	F	C	C
2	30,09	29,90	27	36	29	32	F	F	F	C	30,18		45	41	F	F	F	F	F	F	29,68	29,90	74	85	73	69	F	F	C	C
3	29,82	29,73	34	48	39	39	F	C	C	C	30,12	30,10	50	61	50	44	F	F	F	F	30,00	30,07	71	74	62	60	F	F	F	F
4	29,61	29,59	40	46	43	40	C	R	C	R	30,17	30,13	52	69	59	52	F	F	F	F	30,01	29,92	69	73	59	56	F	F	F	F
5	29,74	29,86	36	48	44	36	F	F	F	F	30,18	30,19	60	75	60	55	F	F	F	F	30,01	29,96	62	65	56	55	F	F	F	F
6	29,82	29,53	40	58	49	39	F	F	F	F	30,13	29,96	57	77	63	60	R	C	C		29,81	29,76	65	77	65	65	F	F	C	F
7	29,43	29,60	38	48	40	34	S	C	F	F	29,81	29,81	64	78	65	58	R	F	F	F	29,82	29,80	63	74	60	57	C	F	F	F
8	29,59	29,66	41	50	42	36	C	F	F	F	29,70	29,57	58	73	62	59	C	C	R		29,71	29,74	66	67	55	54	R	C	C	
9	29,67	29,81	45	55	47	43	F	F	F	F	29,39	29,41	58	63	55	48	C	R	C		29,77	29,74	61	72	61	57	F	R	C	F
10	29,85	29,86	45	52	42	37	F	C	F	F	29,66	30,02	52	66	55	46	F	F	F	F	29,72	29,83	61	57	54	54	C	R	C	C
11	29,80	29,63	43	42	37	37	R	C	C	C	30,10	30,01	56	67	53	52	F	F	F	F	29,90	30,09	58	68	60	58	R	C	C	C
12	29,62	29,80	34	42	38	35	S	F	F	F	29,93	29,88	62	75	62	59	C	F	F	C	30,17	30,30	64	74	62	57	F	C	C	F
13	29,87	30,04	36	42	35	30	C	F	F	F	29,86	29,76	58	68	50	49	C	R	R		30,24	30,10	64	74	62	58	F	F	F	F
14	30,08	30,15	43	62	56	48	F	F	F	F	29,88	30,08	51	65	53	47	F	F	F	F	30,12	29,96	61	70	60	58	C	C	C	F
15	30,30	30,34	51	63	41	45	F	F	F	F	30,18	30,29	53	62	52	48	F	F	F	F	29,83	29,80	75	87	77	71	F	F	F	F
16	30,37	30,32	51	72	55	48	F	F	F	F	30,37	30,43	56	67	52	46	C	F	F	F	29,80	29,68	78	87	67	68	F	R	C	R
17	30,30	30,21	55	74	59	49	F	F	F	F	30,43	30,22	54	62	45	45	F	F	F	F	29,62	29,68	76	89	72	70	F	R	C	F
18	30,21	30,19	54	65	50	46	F	F	F	F	30,17	30,13	53	62	52	47	F	F	F	F	29,87	30,11	64	74	63	56	F	F	F	F
19	30,13	30,00	51	65	48	45	F	F	F	F	30,21	30,36	56	59	52	47	F	F	F	F	30,27	30,33	65	73	67	60	F	F	F	F
20	29,08	29,70	48	58	51	50	C	F	F	F	30,30	30,15	53	59	50	48	F	F	R		30,36	30,28	73	89	75	71	F	F	F	F
21	29,61	29,43	52	54	50	50	C	R	R	R	30,00	29,81	48	50	50	50	R	R	R	R	30,22	30,02	77							



JULY.										AUGUST.										SEPTEMBER.									
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.				
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	30,20	30,00	64	72	62	62	F	F	F	29,79	29,88	69	64	66	63	R	R	R	C	30,22	30,13	72	83	74	71	C	F	F	F
2	29,97	29,88	75	92	75	74	F	F	F	29,96	29,96	63	74	65	61	F	F	F	F	30,14	30,21	87	76	74	74	F	F	F	F
3	29,81		80	93	85	80	C	F	C	29,87	29,88	85	75	72	F	F	F	F	30,25	30,10	73	79	73	73	C	F	F	F	
4	29,78	29,88	84	97	77	75	F	F	F	29,91	29,89	76	85	73	70	F	F	F	R	30,06	29,92	75	90	79	74	F	F	F	F
5	29,87	29,81	85	100	88	82	F	F	F	29,83	29,92	70	80	70	61	F	F	F	F	29,82	29,90	75	87	72	69	F	F	R	C
6	29,79	29,90	86	99	83	78	F	F	F	29,96	29,90	67	74	68	62	F	F	F	F	30,00	30,11	68	75	65	56	C	F	F	F
7	30,03	30,07	75	75	69	63	F	C	F	29,80	29,83	69	76	67	60	F	F	C	F	30,15	30,20	60	76	66	57	F	F	C	F
8	30,11	29,99	65	77	71	67	F	C	F	29,87	30,01	69	74	65	56	F	F	F	F	30,28	30,28	55	87	59	49	F	F	F	F
9	29,92	29,89	67	71	65	63	R	C	C	30,07	30,11	61	73	63	62	F	F	R	R	30,25	30,28	60	66	59	49	F	F	F	F
10	29,81	29,82	63	67	64	61	R	C	C	30,09	29,97	68	70	66	68	R	R	R	R	30,24	30,19	51	71	62	55	F	F	F	F
11	29,87	29,87	58	67	51	58	R	C	C	29,88	29,73	75	76	70	68	R	F	F	F	30,17	30,00	59	78	68	62	F	F	F	F
12	29,86	29,80	62	64	59	57	R	C	C	29,77	30,09	66	76	69	60	F	F	F	F	29,87	29,77	67	73	66	67	R	F	R	F
13	29,83	29,82	59	63	61	61	R	R	R	30,00	30,28	66	79	72	63	F	F	F	F	29,70	29,72	69	79	70	66	C	F	F	F
14	29,90	29,99	69	76	70	65	C	F	F	30,31	30,29	71	80	71	65	F	F	C	C	29,66	29,80	68	80	71	62	F	F	F	F
15	30,02	30,01	72	84	72	70	C	F	F	29,82	30,18	72	81	70	66	C	F	C	F	29,80	29,87	59	70	62	59	F	F	F	F
16	29,98	29,87	76	86	75	72	F	F	F	30,18	30,20	70	79	71	66	R	F	C	F	29,72	29,98	68	79	70	60	F	F	F	F
17	29,80	29,99	75	76	75	70	C	R	R	30,18	30,09	72	81	72	70	C	F	F	F	30,02	29,93	59	73	68	65	F	F	F	F
18	30,13		69	74			F	F	F	29,98	29,95	76	89	80	74	F	F	F	F	29,93	29,87	69	86	74	67	F	F	F	F
19										29,93	29,89	78	93	83		F	F	F	F	29,82	30,07	72	81	72	62	F	F	C	F
20		30,18	84	74	72	72	C	F	F	29,88	29,87	83	97	86	80	F	F	F	F	30,13	30,10	56	65	56	50	F	F	F	F
21	30,14	30,12	79	92	76	73	F	F	F	29,90	29,93	81	89	76	72	F	R	R	F	30,12	30,08	53	56	53	43	F	F	F	F
22	30,12	29,99	81	89	75	73	F	F	F	29,94	29,71	75	86	74	70	C	R	R	R	30,08	30,08	50	66	57	52	F	F	C	R
23	29,97	30,10	70	77	65	63	R	R	F	29,87	30,02	76	73	65	62	C	R	R	R	30,12	30,16	52	65	55	45	C	F	F	F
24	30,17	30,10	66	79		63	F	F	F	29,99	30,32	62	74	64	61	R	C	F	F	30,13	29,88	47	64	55	55	F	F	F	F
25	30,06	29,89	71	82	72	71	F	F	C	30,08	30,13	62	75	69	60	F	F	F	F	29,71	29,71	65	70	63	58	R	R	R	R
26	30,03		65	76	65	56	F	F	F	30,13	30,17	64	74	66	59	F	F	F	F	29,90	30,23	57	66	58	46	F	F	F	F
27			66	74	62		F	F	F	30,17	30,31	62	77	68	61	F	F	F	F	30,26	30,19	49	63	56	56	F	F	F	F
28		30,04	71	76	65		F	F	F	30,38	30,30	69	76	65	60	F	F	F	F	29,87	29,79	58	72	64	57	F	F	F	F
29		29,78	72	75	73	71	R	R	C	30,20	29,98	67	74	69	65	C	F	F	F	29,63	29,61	60	71	64	54	C	R	C	R
30	29,82	29,85	77	90	75	72	F	F	F	29,89	30,02	73	69	65	F	F	F	F	29,60	30,04	47	59	55	44	F	F	F	F	
31	29,84	29,80	77	87	76	73	F	F	C	30,18	30,21	68	72	68	68	R	R	R	R										
Mean			72	80	71	68						70	79	70	65							61	73	64	59				

OCTOBER.										NOVEMBER.										DECEMBER.									
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.				
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	30,37	30,58	39	53	52	45	F	F	F	29,47	29,62	50	54	48	42	C	F	F	F	29,87	30,03	35	45	41	36	F	F	C	F
2	30,58	30,20	47	63	59	57	F	F	F	29,74	29,75	36	53	46	40	F	F	F	F	30,18	30,12	31	44	37	32	F	F	F	F
3	30,27		59	69	61		F	F	F	29,93	30,18	39	49	41	37	C	F	C	F	30,00	29,90	33	47	42	37	F	F	F	F
4			83				C	C	F	30,22	30,11	33	50	43	33	F	F	F	F	29,90	29,98	36	54	48	38	F	F	F	F
5		30,25	57		51		C	C	F	30,08	30,08	56	46	45	F	F	F	C	29,97	29,62	35	49	48	49	F	F	C	R	
6	31,31	30,29	51	57	55	55	R	R	C	30,11	30,07	45	50	50	47	R	R	C	R	29,47	29,39	49	53	46	36	R	F	C	F
7	31,37	30,28	57	63	56	56	F	C	C	30,08		46	57	49	F	C	C	C	29,47	29,46	37	48	42	41	F	F	F	C	
8	31,19	29,91	60	72	69	68	R	R	C	30,07	29,93	47	52	50	48	C	F	C	R	29,10	29,56	42	42	36	31	R	F	F	C
9	29,88	29,91	69	84	72	66	C	F	C	29,90	29,77	50	57	56	53	R	R	C	C	29,70	29,92	24	36		26	F	F	C	C
10	30,08	29,89	59	62	56	57	C	F	C	29,84	30,00	46	54	47	39	F	F	F	F	29,98	29,81	25	36	33	32	F	F	F	F
11	29,83	29,70	62	78	71	65	C	F	F	30,02	29,98	34	47	44	34	F	C	C	F	29,75	29,80	32	42	38	33	C	F	C	F
12	29,58	29,59	70	84	73	69	F	F	F	30,11	30,18	34	44	38	35	C	F	C	F	29,87	30,04	29	41	39	31	F	F	F	F
13	29,78	29,74	60	75	66	61	F	F	C	30,10	29,77	36	48	47	43	F	C	C	F	30,12	30,28	31	38	35	29	C	F	C	C
14	29,80	30,21	68	75	60	50	C	F	C	29,80	29,93	39	48	44	39	F	F	F	F	30,32	30,30	24	24	21	16	C	C	C	F
15	30,23	30,20	54	57	62	50	C	C	R	30,07	30,19	35	45	40	31	F	F	F	F	30,38	30,20	11	20	19	26	S	C	C	C
16	30,00	29,58	53	64	60	67	R	R	C	30,26	29,91	29	47	44	47	F	F	C	R	30,08	30,28	34	38	36	28	R	C	F	F
17	30,02	30,29	49	57	50	41	F	F	F	29,48	29,88	50	60	47	37	F	F	F	F	30,30	30,01	27	38	35	36	C	C	C	C
18	30,29	30,04	38	62	54	52	F	F	F	30,02	30,13	29	40	36	31	F	F	F	F	29,69	29,10	38	41	46	45	R	R	R	R
19	29,91	29,76	59	74	69	63	F	C	R	30,22	30,47	32	43	37	31	F	F	F	F	29,00	29,38	43	29	21	12	R	S	C	F
20	29,67	29,97	67	74	65	45	F	R	R	30,50	30,17	31	36	38	42	S	R	R	R	29,70	30,09	7	12	8	5	F	F	F	F
21	29,37	28,58	35	46	41	38	F	F	F	29,73	29,41	32	39	38	35	C	R	R	R	30,29	29,92	10	25	28	34	F	F	C	S
22	29,53	30,07	35	55	50	52	C	C	R	29,40	29,70	37	45	41	37	C	F	F	F	29,89	29,83	29	37	33	25	F	F	F	F
23	29,57	29,99	61	69	61	50	R	R	F	29,86	29,78	31	46	41	43	F	F	F	F	29,68	29,31	24	38	36	36	F	C	C	R
24	30,10	29,99	41	41	41	36	C	C	C	29,78	30,09																		

JANUARY.										FEBRUARY.										MARCH.									
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.				
8 A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10	8 N.	St.	10	8 A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10	8 A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10			
1	29,37	29,08	35	40	41	35	R	R	C	C	29,98	30,29	29	39	31	23	F	F	F	29,98	30,10	15	20	14	6	S	F	F	F
2	29,13	29,25	34	32	30	27	R	S	S	S	30,27	30,01	20	39	38	39	F	F	F	30,20	30,08	6	24	15	10	F	F	F	F
3	29,21	29,11	21	32	27	25	S	S	S	C	30,07	29,55	33	41	35	40	C	F	C	30,03	30,23	10	27	17	9	F	F	F	F
4	29,12	29,38	25	35	35	33	C	C	C	C	29,28	29,72	37	38	32	26	R	F	F	30,29	29,96	7	32	25	18	F	F	C	C
5	29,47	29,52	25	41	36	32	F	F	F	F	29,70	29,63	26	40	35	26	F	C	C	29,94	29,69	28	48	37	33	F	F	F	F
6	29,61	29,51	29	41	36	33	C	C	C	C	29,81	30,10	7	16	24	12	F	F	F	29,67	30,00	38	42	34	23	F	F	F	F
7	29,60	29,60	26	36	31	23	F	F	F	F	30,08	30,11	29	42	38	36	F	F	C	30,09	30,03	18	42	24	18	F	F	F	F
8	29,51	29,57	29	37	32	23	C	F	F	F	29,71	29,39	30	44	45	41	R	R	C	30,02	30,00	20	33	27	23	C	C	S	S
9	29,58	29,77	18	28	18	11	F	F	F	F	29,53	30,07	37	35	30	24	R	F	F	30,10	30,30	25	37	30	24	F	F	F	F
10	29,87	29,88	15	28	20	18	F	F	F	F	30,11	30,10	24	38	35	32	F	F	F	30,43	30,17	20	34	28	25	F	F	F	F
11	29,86	30,09	15	27	20	13	F	F	F	F	29,88	29,84	30	24	23	21	S	S	C	29,73	29,57	35	46	38	38	C	F	F	F
12	30,09	29,70	10	20	18	16	C	S	S	S	30,03	30,12	9	13	9	4	F	F	F	29,66	29,79	27	32	27	21	F	F	F	F
13	29,62	29,91	16	28	21	16	C	F	F	F	30,20	30,29	5	25	21	14	F	F	F	29,92	30,01	17	28	24	19	F	F	F	F
14	30,02	29,44	14	27	29	29	C	F	C	C	30,20	29,75	21	37	36	39	F	C	R	30,17	30,22	18	27	24	24	C	C	C	C
15	29,51	29,88	37	34	24	15	F	F	C	C	29,87	30,17	35	44	35	29	F	F	F	30,27	30,14	26	33	29	30	C	C	C	C
16	29,80	29,81	5	7	8	3	C	C	F	F	30,32	30,20	17	25	22	22	C	C	S	30,01	29,95	29	34	33	33	R	C	C	C
17	29,78	29,78	1	15	9	4	F	S	S	F	30,16	29,91	21	23	21	19	S	S	S	29,89	29,92	34	35	33	33	R	C	C	C
18	30,08	30,19	-6	0	-2	-6	F	F	F	F	29,88	29,88	24	36	32	31	C	C	C	30,08	30,17	23	29	23	17	F	F	C	F
19	29,93	29,72	0	7	4	6	S	S	S	S	30,04	30,17	24	36	25	19	F	F	F	30,20	30,17	18	30	28	24	F	F	F	F
20	29,43	29,12	24	10	6	8	S	S	S	C	30,27	30,28	16	21	16	11	F	F	F	30,17	30,07	26	36	33	33	F	F	C	C
21	29,37	29,80	3	10	3	0	F	F	F	F	30,28	30,12	5	20	18	18	F	F	F	30,14	30,22	34	38	35	32	C	C	C	C
22	30,17	30,17	-4	6	2	-2	F	F	F	F	30,09	30,15	16	34	26	21	F	F	F	30,19	30,19	33	42	35	33	F	F	C	C
23	29,97	30,07	16	30	26	20	C	F	C	F	30,27	29,86	23	28	27	31	C	S	S	30,22	30,16	32	37	32	25	F	F	F	F
24	29,90	29,68	23	19	18	18	S	S	S	C	29,56	30,30	15	17	17	8	S	F	F	30,12	30,02	32	35	31	26	F	F	F	F
25	29,56	29,61	23	34	27	26	C	F	F	C	30,37	29,99	9	24	21	25	C	F	C	30,00	29,88	29	40	34	31	F	R	C	F
26	29,48	29,68	32	43	37	34	C	F	C	F	29,60	29,59	31	37	30	18	S	F	F	29,78	29,71	36	48	44	42	C	R	C	F
27	29,80	30,08	35	39	32	27	C	F	C	F	29,81	29,89	2	13	11	10	F	F	F	29,71	29,77	40	53	42	39	F	C	F	R
28	30,27	30,34	16	30	24	24	C	F	C	C	29,70	29,87	15	24	20	21	S	C	S	29,77	29,50	39	39	34	34	C	R	R	S
29	30,42	29,83	14	25	24	23	C	F	C	C	29,80		26	29	13	11	S	C	S	29,33	29,50	35	35	33	34	R	R	S	C
30	29,57	29,49	30	33	33	33	C	R	R	C									29,72	30,09	30	33	33	32	S	S	C	F	
31	29,42		33	42	38	33	C	F	F	F									30,12	30,11	31	37	34	26	F	F	F	F	
Mean			19	27	23	20					21	30	26	23								26	25	30	26				

APRIL.										MAY.										JUNE.									
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.				
8 A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10	8 N.	St.	10	8 A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10	8 A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10			
1	30,08	30,03	36	44	35	30	F	F	F	F	29,83	30,07	50	60	46	38	F	F	F	29,82	29,78	63	64	56	53	C	F	F	F
2	30,00	29,94	39	53	44	35	F	F	F	F	30,05	29,96	41	58	46	44	F	F	F	29,77	29,46	58	65	57	56	C	F	R	F
3	29,91	30,03	40	48	40	35	F	F	F	F	29,87	29,83	45	45	38	38	C	R	R	29,44	29,68	64	52	52	52	C	R	R	R
4	29,91	29,99	40	45	39	36	F	F	F	F	29,77	29,42	35	34	34	33	S	S	S	29,71	29,73	48	57	52	49	R	C	C	F
5	29,97	30,00	37	48	44	43	C	C	C	C	29,31	29,46	35	45	43	40	S	C	C	29,72	29,60	62	76	63	59	F	C	C	F
6	30,01	30,20	39	44	37	32	C	F	F	F	29,57	29,72	42	47	40	35	C	C	C	29,62	29,68	65	73	65	64	F	F	F	F
7	30,32	30,28	43	33	37	37	F	F	C	C	29,73	29,89	45	53	46	42	F	C	C	29,75	66	76	61	60	F	F	F	F	
8	30,27	30,36	37	37	35	32	S	S	C	C	29,92	29,93	45	52	46	44	F	F	F	29,70	29,72	68	84	73	65	C	F	F	F
9	30,39	30,19	37	42	36	35	F	F	F	F	29,82	30,07	52	60	42	42	F	F	F	29,72	29,79	76	83	65	63	F	F	F	F
10	30,28	29,51	40	50	49	49	R	C	C	C	30,01	30,12	46	58	48	43	F	F	F	29,81	29,81	57	56	58	53	R	R	R	R
11	29,59	29,60	44	61	42	48	C	F	F	F	30,15	30,09	52	61	50	49	F	F	C	29,78	29,98	55	65	52	51	R	C	R	R
12	29,89	30,17	31	38	35	30	F	F	F	F	29,99	29,79	49	58	53	52	R	R	R	29,89	29,98	53	56	56	52	R	C	R	R
13	30,19	29,90	38	35	33	33	C	S	S	S	29,81	29,90	57	64	49	49	F	F	F	29,97	29,97	48	51	48	48	C	C	C	C
14	29,93	30,18	33	45	40	38	F	F	F	F	30,04	29,90	54	64	53	48	F	F	C	29,90	29,89	62	62	53	50	C	R	C	C
15	30,22	30,18	41	56	47	43	C	F	C	C	29,83	29,75	59	60	49	50	F	F	C	29,88	29,88	62	66	59	59	F	F	C	F
16	30,18	30,19	46	46	46	39	C	C	C	C	29,66	29,68	42	42	40	39	R	R	R	29,86	29,76	65	65	64	54	C	R	F	F
17	29,96	29,70	44	49	45	45	R	C	C	C	29,78	29,94	41	48	45	41	C	R	C	29,58		60	79	64	62	F	F	F	F
18	29,70	29,75	60	88	65	53	F	C	F	F	29,94	29,88	40	43	39	30	R	R	R	29,73	29,85	62	63	59	55	C	R	F	F
19	29,76	29,63	50	56	48	47	C	F	C	R	29,92	30,01	40	50	44	42	C	C	C	29,90	29,85	65	82	63	68	F	F	F	F
20	29,80	29,92	47	56	48	42	F	C	C	F	29,03	29,94	47	50	45	44	C	C	C	29,77	29,77	66	87	69	66	R	R	R	F
21	30,09	30,19	46	46	39	34	F	F	F	F	29,96	29,74	46	48	47	45	R	R	R	29,90	29,90	64	78	68	60	F	F	F	F
22	30,21	29,98	42	48	45	40	F	F	F	F	29,57	29,77	54	63	56	51	R	F	C	29,89	29,94	61	76	63	58	F	F	F	F
23	29,86	30,12	47	56	45	38	R	F	F	F	29,79	29,90	52	63	49	49	F	C	C	29,99	30,02	64	81	69	63	F	F	F	F
24	30,16	29,90	45	56	45	47																							



JULY.										AUGUST.										SEPTEMBER.										
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	
1	30.09	30.09	67	71	63	62	F	F	F	29.87	29.71	66	71	66	63	C	R	R	30.04	29.95	56	69	62	65	F	F	F	F	F	
2	30.01	29.83	59	68	62	64	C	R	C	29.65	29.63	69	80	69	64	F	F	C	29.89	29.86	64	82	69	67	C	F	C	C	C	
3	29.77	29.93	73	83	75	65	F	F	F	29.69	29.83	68	81	71	65	F	F	F	29.91	30.07	67	76	66	60	C	F	C	F	F	
4	29.99	29.85	74	89	78	69	F	F	F	29.93	30.06	65	83	68	62	F	F	F	30.22	30.28	59	60	57	56	C	C	C	C	C	
5	29.80	29.87	78	88	68	63	F	F	F	30.12	30.19	69	79	69	64	F	F	F	30.17	30.11	60	58	57	54	C	R	R	R	R	
6	30.01	29.94	72	82	68	68	F	F	F	30.17	29.99	69	67	65	63	C	C	R	30.11	30.11	59	64	58	54	R	C	F	F	F	
7	29.97	30.10	75	77	65	65	F	F	C	29.95	29.98	71	81	71	64	C	R	F	30.11	30.08	61	65	59	57	F	F	F	C	C	
8	30.11	30.11	63	61	60	59	R	C	R	30.04	30.08	68	83	73	65	F	F	F	30.03	29.97	61	66	60	55	C	F	F	F	F	
9	30.01	29.98	59	67	62	60	R	C	R	30.10	30.10	72	87	76	71	F	F	F	29.92	29.93	61	79	69	63	F	F	F	F	F	
10	29.99	30.09	59	64	59	58	R	C	C	30.10	30.10	72	78	69	68	F	F	C	30.05	30.20	61	71	61	56	F	F	F	F	F	
11	30.07	29.95	60	60	56	55	C	R	C	29.92	29.85	64	62	60	58	R	R	R	30.32	30.31	58	67	62	58	F	F	F	F	F	
12	29.91	29.99	61	75	63	60	R	C	F	29.86	29.94	55	58	56	56	R	R	R	30.26	30.13	61	77	65	64	F	F	F	F	F	
13	30.03	30.00	65	76	64	64	F	F	F	29.93	29.95	60	63	61	60	R	R	C	30.08	29.97	69	84	73	69	F	F	F	F	F	
14	29.98		74	85			F	F	F	29.95	29.86	59	65	58	58	C	R	C	30.07	30.11	59	66	60	59	R	C	C	R	R	
15							C	R	C	29.97	29.74	63	76	67	62	C	F	F	30.17	30.21	59	68	62	54	F	F	C	F	F	
16		30.10	78	66	58	58	F	F	F	29.81	29.90	65	80	68	63	F	F	F	30.31	30.30	54	66	58	53	F	F	F	F	F	
17	30.10	29.97	66	80	68	63	F	F	F	29.89	29.95	64	64	60	58	R	C	F	30.29	30.12	56	67			57	F	F	C	C	
18	29.87	29.69	68	83	65	64	F	F	R	30.02	30.16	60	69	63	61	F	F	F	30.05	29.93	60	70	63	53	R	C	F	C	F	
19	29.64	29.69	67	76	66	60	C	R	F	30.18	30.20	63	69	66	66	R	C	C	29.88	29.70	52	64	58	52	F	F	C	C	F	
20	29.68	29.70	65	79	65	65	F	F	C	30.20	30.08	70	83	69	68	C	C	C	29.57	29.50	49	53	47	42	F	R	C	F	C	
21	29.72	29.77	68	75	66	64	F	F	F	29.97	29.94	66	65	63	62	R	R	R	29.58	29.80	43	55	50	46	F	F	F	F	F	
22	29.78	29.75	70	80	67	65	C	F	C	29.81	29.86	62	64	62	60	R	R	C	29.92	29.93	50	63	58	45	F	R	C	F	F	
23	29.76	29.80	69	79	68	63	R	F	F	29.91	29.95	66	76	67	64	C	F	F	29.99	30.06	44	58	52	42	F	F	C	F	F	
24	29.76	29.76	67	73	63	60	C	F	R	29.97	29.89	65	79	70	64	C	C	F	30.06	30.08	44	60	53	52	F	F	C	C	C	
25	29.79	29.82	67	76	65	60	C	R	F	29.82		71	86	77	71	F	F	F	30.08	30.09	50	59	50	45	C	R	C	C	C	
26	30.83	29.91	66	79	71	63	F	R	F	29.90		72	82	68	60	F	F	F	30.08	29.88	48	63	54	49	F	F	F	F	F	
27	29.98	29.90	68	78	65	63	F	F	F	30.00	29.95	56	66	60	52	C	C	C	29.77	30.11	54	69	55	45	F	F	F	F	F	
28	30.01	30.10	70	76	63	60	C	R	C	30.00	29.97	58	72	66	60	F	F	F	30.30	30.37	45	56			38	F	C	F	F	
29	30.09	30.01	67	70	63	63	C	R	R	29.90	29.79	65	82	71	64	F	F	F	30.31	30.10	42	58	50	50	F	F	F	F	F	
30	29.82	29.77	65	72	64	63	R	R	R	29.76	29.92		83	70	60	F	F	C	29.84	29.62	50	57	57	58	R	R	R	R	R	
31	29.81	29.83	64	74	64	63	C	R	F	30.02	30.04	59	63	58	53	C	F	F												
Mean			67	70	65	62						65	74	66	62										55	60	59	54		

OCTOBER.										NOVEMBER.										DECEMBER.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	29.72	29.87	59	74	64	61	F	F	F	29.53	29.79	43	56	49	41	F	F	F	29.69	30.08	32	37	33	26	S	F	C	C	C
2	29.89	29.92	61	76	65	57	F	F	F	29.93		37	54			F	F	F	30.12	30.08	26	34	32	34	C	F	C	C	C
3	29.86	29.62	63	70	68	68	C	R	C			47				F	C	F	30.07	30.32	34	33	32	29	S	S	S	S	S
4	29.34	29.61	52	70	58	53	R	R	F		30.17	46		43	F	F	F	30.28	29.58	36	36	37	40	R	R	R	R	R	
5	29.73	29.69	53	68	59	57	F	F	F	30.05	30.18	54	70	64	58	C	F	C	29.31	29.27	39	54	49	38	C	R	R	R	R
6	29.69	29.90	50	57	46	41	R	F	F	30.40	30.53	43	47	42	35	F	F	F	29.57	30.01	32	35	32	26	F	F	F	F	F
7	29.92	29.68	40	59	54	51	F	F	C	30.49	30.30	33	39	34	27	C	C	C	30.12	30.06	20	35	30	34	F	F	C	C	C
8	29.68	29.76	49	56	48	40	F	F	F	30.22	30.12	25	42	39	32	F	F	F	29.80	29.66	40	44	42	34	C	F	C	C	C
9	29.89	30.02	39	50	45	37	F	F	F	30.08	29.90	26	46	40	43	F	F	F	29.51	29.19	34	36	35	33	C	R	C	C	S
10	30.05	30.11	40	60	53	47	F	F	F	29.78	29.51	46	55	55	50	R	C	R	29.11	29.21	24	30	29	23	C	C	C	F	F
11	30.10	29.93	50	61	48	47	C	R	C	29.46	29.48	43	52	45	36	F	F	F	29.29	29.36	18	21	26	15	F	F	C	F	F
12	29.75	29.82	60	61	47	41	C	C	C	29.48	29.39	32	44	38	36	F	F	C	29.38	29.35	17	27	22	18	F	F	F	F	F
13	29.72	30.00	38	46	39	32	F	F	F	29.33	29.25	30	37	34	33	F	F	C	29.39	29.74	20	33	31	33	F	F	F	F	F
14	30.02	29.79	32	50	46	43	F	F	F	29.22	29.30	32	33	33	34	S	S	R	29.88	29.89	26	39	34	26	F	F	F	F	F
15	29.73	29.68	48	69	60	53	F	F	F	29.49	29.59	27	38	35	32	F	F	F	29.89	30.01	21	35	32	27	F	F	C	F	F
16	29.50	29.45	50	50	50	49	C	C	C	29.64	29.89	37	42	37	34	F	F	F	30.00	29.91	24	32	28	21	C	F	F	F	F
17	29.50	29.59	51	55	50	44	F	C	C	29.92	29.79	29	42	37	32	F	F	F	29.83	29.88	18	34	31	23	F	F	F	F	F
18	29.65	29.99	43	51	46	42	F	C	C	29.47	29.39	32	40	39	34	C	R	C	29.88	29.82	21	35	32	32	F	F	C	F	F
19	30.10	30.30	38	52	45	36	F	F	F	29.38	29.38	30	40	34	29	F	C	C	29.60	29.49	36	39	36	30	C	C	F	F	F
20	30.37	30.20	34	53	47	44	F	F	F	29.37	29.48	22	35	29	27	F	F	F	29.57	29.76	25	26	17	F	F	F	F	F	
21	30.08	30.13	50	62	55	45	C	F	F	29.66	29.39	28	37	33	28	F	F	F	29.79	29.78	13	23	19	18	F	F	F	F	F
22	30.21	30.12	39	53	47	37	F	F	F	30.06	30.13	23	40	36	28	F	F	F	29.53	29.63	21	24	19	19	S	C	C	C	C
23	30.09	29.90	41	44	43	41	R	R	R	30.17	29.91	26	46	41	43	F	F	C	29.56	29.72	25	35	35	35	C	C	F	F	F
24	29.98	30.11	37																										



JANUARY.										FEBRUARY.										MARCH.												
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.						
S.A.M.	10P.M.	8	N.	St.	10	8	N.	St.	10	S.A.M.	10P.M.	8	N.	St.	10	8	N.	St.	10	S.A.M.	10P.M.	8	N.	St.	10	8	N.	St.	10			
1	30,14	29,85	32	39	56	32	C	C	C	29,45	29,75	29	33	27	19	C	C	C	F	29,48	29,50	35	37	29	28	R	R	C	C	F		
2	29,71	29,17	39	44	42	45	C	C	C	30,05	30,21	3	17	12	4	F	F	F	F	29,50	29,97	29	37	33	22	S	F	F	F	F		
3	29,10	29,32	36	35	32	29	C	F	C	S	30,18	30,10	5	30	24	25	F	F	C	S	30,02	29,75	21	27	31	24	F	S	S	S	S	
4	29,50	29,71	25	30	27	21	F	F	F	F	30,01	29,93	32	34	30	29	C	S	S	S	29,72	30,00	30	41	31	25	C	F	F	F	F	
5	29,65	29,93	19	25	21	14	F	F	F	F	29,86	29,72	31	40	34	30	C	C	F	F	29,88	30,07	26	35	31	17	S	S	C	F	F	
6	29,83	29,54	17	32	28	24	F	F	F	C	29,68	29,63	30	39	34	34	C	F	F	C	30,21	30,22	1	11	9	4	F	F	F	F	F	
7	29,47	29,31	25	31	35	32	F	F	C	C	29,68	29,38	36	43	45	36	C	C	R	S	30,18	29,90	2	27	20	15	F	C	C	F	F	
8	29,52	30,00	6	4	3	-1	S	F	F	F	29,57	29,98	35	44	37	31	F	F	C	F	29,80	29,93	15	24	21	14	C	S	S	F	F	
9	30,07	29,88	1	22	25	26	F	C	S	S	30,00	29,73	31	41	35	35	C	C	C	C	30,07	30,20	16	26	22	13	F	F	F	F	F	
10	30,00	30,00	23	25	17	13	F	F	F	F	29,72	29,80	31	39	32	25	S	F	F	F	30,12	29,79	23	45	36	35	F	F	C	C	R	
11	30,50	30,20	6	33	19	14	F	F	F	F	29,68	29,59	30	37	32	32	F	C	C	F	29,66	29,53	36	39	36	35	C	C	C	R	R	
12	29,97	29,73	16	34	31	27	F	F	F	F	29,68	29,28	30	38	33	36	C	F	S	R	29,45	29,40	33	27	26	24	S	S	S	C	F	
13	29,62	29,84	39	36	26	F	F	C	F	F	29,19	29,67	33	32	21	18	C	F	F	F	29,59	30,10	25	32	24	18	F	F	C	F	F	
14	30,05	30,10	12	21	18	19	F	F	C	C	29,84	29,78	15	30	24	21	F	F	F	F	30,09	29,73	21	33	32	32	C	C	S	F	F	
15	29,73	29,68	23	13	14	15	S	S	C	C	29,67	29,97	26	35	25	18	F	F	F	F	29,96	30,13	22	30	24	18	C	F	S	F	F	
16	29,98	29,68	7	26	26	30	F	F	F	F	30,11	30,13	13	25	19	14	F	F	F	F	30,13	30,27	19	25	28	28	C	F	S	C	C	
17	29,67	29,79	26	38	32	32	C	F	C	F	30,17	29,88	17	56	35	34	F	C	C	C	30,30	30,07	32	37	34	33	C	R	R	R	R	
18	29,83	30,02	25	35	25	15	F	F	F	F	29,98	30,30	29	28	23	17	F	F	F	F	29,96	29,50	34	38	36	34	C	R	C	R	R	
19	29,79	29,32	32	40	39	36	C	C	C	R	30,37	30,46	11	23	18	11	F	F	F	F	29,62	30,18	37	37	33	28	F	F	F	F	F	
20	29,30	29,68	23	22	20	18	S	F	F	F	30,46	30,20	10	21	18	19	C	C	C	F	30,09	29,71	33	42	37	37	C	C	C	C	F	
21	29,73	29,77	23	34	34	27	F	F	F	C	30,13	29,99	16	25	25	25	C	C	C	C	29,96	30,30	26	25	24	20	F	F	F	F	F	
22	30,10	29,94	21	25	22	25	F	F	C	F	29,81	29,70	32	36	33	31	S	S	C	C	30,13	29,53	29	38	36	36	C	C	C	F	F	
23	30,01	30,32	25	30	25	18	F	F	F	F	29,93	29,94	22	31	23	17	F	F	F	F	29,61	29,58	41	55	46	10	F	F	F	F	F	
24	30,11	29,68	27	32	33	17	S	R	C	R	29,94	29,93	22	37	30	28	F	F	F	F	29,68	30,21	36	27	20	15	F	F	F	F	F	
25	29,71	29,68	21	29	28	32	C	C	C	R	29,80	29,63	30	44	41	40	F	F	F	F	30,22	30,40	12	22	19	15	F	F	F	F	F	
26	29,68	30,16	25	20	19	12	S	S	C	R	29,59	30,20	10	17	13	9	F	F	F	F	30,41	30,39	19	35	32	28	F	F	F	F	F	
27	30,40	30,43	-1	16	11	6	F	F	F	F	30,29	30,19	6	24	19	19	F	F	F	F	30,46	30,49	31	39	35	34	F	F	F	F	F	
28	30,43	29,93	7	25	22	25	F	F	C	S	29,53	29,63	33	36	39	38	S	R	C	F	30,31	29,82	37	41	40	43	R	R	R	R	R	
29	29,54	29,99	26	32	17	5	C	F	F	F											29,92	30,04	40	48	42	36	F	F	F	F	F	
30	30,47	30,33	-7	2	0	-3	F	F	F	F											30,04	30,12	38	51	43	15	F	F	F	F	F	
31	30,28	29,98	5	28	23	25	F	C	C	S											30,17	30,18	38	42	37	34	F	C	C	F	F	
Mean			19	28	25	21					23	33	28	25										27	35	31	27					

APRIL.										MAY.										JUNE.										
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				
S.A.M.	10P.M.	8	N.	St.	10	8	N.	St.	10	S.A.M.	10P.M.	8	N.	St.	10	8	N.	St.	10	S.A.M.	10P.M.	8	N.	St.	10	8	N.	St.	10	
1	30,10	29,83	33	41	34	30	F	F	F	F	29,58	29,98	49	54	44	43	C	C	R	R	29,98	30,01	53	68	60	54	F	F	F	F
2	29,70	29,61	36	41	35	30	C	C	C	F	30,05	30,11	49	50	42	38	F	F	F	F	30,11	30,13	63	75	63	56	F	F	F	F
3	29,58	29,77	38	42	39	33	C	C	F	F	29,94	30,14	52	65	42	38	F	F	F	F	30,13	30,16	67	80	66	60	F	F	F	F
4	29,80	29,82	37	54	49	43	F	F	F	C	30,12	30,09	45	51	46	44	F	F	F	C	30,08	30,04	70	85	64	60	F	F	F	F
5	29,77	29,79	41	43	40	39	C	R	C	C	30,08	30,11	45	53	47	45	C	C	C	C	30,00	29,94	68	78	63	59	F	F	F	F
6	29,86	30,07	44	51	44	42	C	C	C	C	30,11	30,11	45	51	43	43	C	C	C	C	29,89	29,85	66	77	65	61	F	F	F	F
7	30,07	30,01	44	58	46	41	F	F	F	F	30,12	30,19	42	44	39	40	R	R	R	R	29,80	29,84	65	74	60	57	C	C	R	R
8	30,02	30,18	50	56	44	38	F	F	F	F	30,08	29,70	40	44	43	45	R	R	R	R	29,94	29,99	78	68	63	F	F	F	F	
9	30,23	30,02	46	61	48	45	F	F	F	C	29,56	29,62	48	58	51	48	C	C	F	F	30,07	30,18	67	80	64	66	F	F	F	F
10	29,86	29,94	52	72	57	46	R	F	F	F	29,64	29,78	59	65	55	50	C	F	F	F	30,21	30,18	65	68	56	51	F	C	C	F
11	30,02	30,13	37	48	42	35	F	F	F	F	29,79	29,69	58	66	59	54	F	R	C	R	30,10	29,91	62	66	61	56	C	C	R	R
12	30,15	30,14	35	42	34	32	F	F	F	F	29,71	29,76	50	63	55	48	F	C	C	F	29,97	30,05	59	70	60	57	F	F	F	F
13	30,01	29,66	41	44	46	48	C	R	R	R	29,78	29,90	50	58	50	47	F	C	C	C	29,96	29,88	60	60	59	55	C	R	R	R
14	29,42	29,52	56	67	56	49	R	R	F	R	29,96	30,06	48	48	45	43	R	R	C	C	29,87	29,85	64	69	59	56	C	F	F	F
15	29,56	29,65	53	54	49	42	C	F	F	F	30,00	30,11	46	59	46	44	F	F	F	F	29,99	30,05	62	67	57	55	C	F	C	C
16	29,71	29,89	42	49	39	F	F	F	C	30,08	30,07	48	58	48	43	F	F	C	F	30,02	30,07	56	54	54	54	R	R	R	R	
17	29,92	30,16	49	50	45	36	F	F	F	F	29,90	29,74	52	71	56	49	F	C	R	F	30,01	29,86	63	69	70	66	R	R	F	F
18	30,27	30,29	42	55	48	43	F	F	F	F	29,77	29,97	51	56	48	46	F	R	C	F	29,87	30,11	78	85	70	64	F	F	F	F
19	30,23	30,00	49	64	55	52	F	F	F	F	30,01	30,08	45	50	45	42	C	F	F	F	30,12	30,00	68	70	61	61	C	F	C	C
20	29,88	29,70	56	62	58	56	C	R	C	R	30,02	29,97	40	58	48	45	F	F	F	C	29,91	29,72	63	60	57	55	C	R	R	R
21	29,																													

JULY.										AUGUST.										SEPTEMBER.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	29.91	29.94	75	84	70	70	F	F	F	30.31		70	86	78	70	F	F	F	F	30.01	30.06	65	73	65	63	F	F	F	F
2	29.93	29.88	79	86	70	72	F	C	C	30.31	30.26	75	86	75	69	F	F	F	F	30.02	30.00	75	88	78	72	C	F	F	C
3	29.78	29.75	70	81	70	68	R	F	F	30.23	30.18	76	86	76	70	F	F	F	F	29.90	29.88	78	84	69	69	F	C	C	R
4	29.69		80	90	78	75	F	F	C	30.11	30.07	79	88	78	72	F	F	F	F	29.93	30.02	66	77	65	64	F	F	F	F
5	29.58	29.88	78	83	67	59	F	F	F	30.05	30.07	78	86	75	70	F	F	F	F	30.07	30.07	63	75	66	57	F	F	F	F
6	29.91	29.90	67	75	65	59	F	R	F	30.10	30.09	70	76	65	64	F	F	F	F	30.07	30.13	64	66	59	52	F	F	F	F
7	29.97	30.01	67	81	70	67	F	F	F	29.99	29.87	73	92	74	69	F	R	F	R	30.11	30.13	61	70	62	54	F	F	F	F
8	29.97	29.73	70	92	82	75	R	F	R	29.84	29.85	77	90	81	75	C	F	F	F	30.17	30.14	57	72	61	58	F	F	F	F
9	29.59	29.68	82	93	74	69	F	R	F	29.82	29.80	80	92	69	70	F	R	C	C	30.10	29.92	64	73	67	69	C	C	R	R
10	29.82	30.09	64	78	67	60	F	F	F	29.72	29.84	71	78	69	61	R	F	F	F	29.88	30.00	69	82	77	64	C	F	F	F
11	30.12	30.20	67	77	65	62	F	F	F	29.81	29.82	64	80	64	61	F	R	C	C	30.07	30.00	69	83	76	70	C	C	C	F
12	30.12	30.07	69	73	62	58	F	R	R	29.87	30.02	62	68	64	57	F	F	F	F	29.97	29.95	78	91	83	78	F	F	F	F
13	30.02	30.06	62	74	66	59	F	F	F	30.10	30.17	61	70	65	60	F	F	F	F	29.91	29.87	80	93	83	80	F	F	F	F
14	30.02	30.01	68	81	67	60	F	F	F	30.17	30.08	64	76	66	63	F	F	F	F	30.02	30.12	68	78	69	62	F	F	F	F
15	29.98	29.86	66	74	64	62	C	R	C	30.02	29.99	68	88	73	67	F	F	F	F	30.20	30.26	61	77	64	58	F	F	F	F
16	29.62	29.70	64	75	68	64	R	F	R	29.97	29.89	70	84	73	68	C	F	F	F	30.22	30.31	60	75	62	59	F	F	F	F
17	29.80	29.92	62	74	65	61	F	F	C	29.75	29.70	74	82	74	70	R	R	C	F	30.31	30.23	63	72	66	65	C	F	R	C
18	30.04	30.01	65	76	68	63	C	F	C	29.81	29.99	62	73	65	65	F	F	F	F	30.32	30.31	62	69	63	61	R	C	R	C
19	29.84	29.87	62	72	67	68	R	R	R	30.04	30.11	62	70	68	59	F	F	F	F	30.21	30.11	60	70	61	55	F	F	F	F
20	29.92	30.04	76	78	67	66	C	C	F	30.15	30.10	64	81	70	66	F	F	F	F	29.99	29.83	60	81	74	68	F	F	F	F
21	30.08	30.10	68	78	65	62	F	C	C	30.03	30.11	73	83	67	63	F	F	F	F	29.93	29.99	63	70	64	56	F	F	F	F
22	30.10	30.11	64	71	62	67	C	C	F	30.07	29.90	69	85	75	74	F	F	F	F	29.99	29.86	54	70	67	62	F	F	F	F
23	30.09	30.11	66	70	63	60	C	C	C	29.89	29.82	70	84	63	63	F	F	F	F	29.81	29.80	62	70	62	59	F	F	F	R
24	30.07	29.95	64	72	68	67	C	C	C	29.82	29.88	70	88	78	68	C	F	F	F	29.79	29.81	60	62	60	59	C	C	C	C
25	29.90	29.87	71	86	77	69	F	F	F	29.98	30.13	64	75	63	58	F	F	F	F	29.77	29.85	63	74	58	49	C	F	F	F
26	29.98	30.07	66	65	61	59	F	C	C	30.18	30.17	61	72	63	59	F	F	F	F	29.85	30.01	50	65	59	57	F	F	F	F
27	30.01	29.93	63	69	62	63	C	C	C	30.12	30.12	65	76	70	64	F	F	F	F	30.03	30.11	54	59	52	54	C	F	C	C
28	29.97	29.95	66	79	68	65	C	C	R	30.11	30.01	67	78	70	65	C	F	F	F	30.11	30.11	53	55	51	53	C	C	C	C
29	29.84	30.06	68	78	70	63	R	C	F	29.98	29.88	71	79	68	65	C	F	C	C	30.06	29.76	54	53	51	50	R	R	R	R
30	30.12	30.20	69	81	68	64	F	R	R	29.67	29.59	66	68	65	66	R	C	C	C	29.53	29.84	51	50	53	52	R	R	R	C
31	30.23	30.30	64	79	72	66	F	F	F	29.73	29.98	73	82	75	66	F	R	F	F										
Mean			68	78	68	65						69	81	71	66							63	73	65	61				

OCTOBER.										NOVEMBER.										DECEMBER.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	29.98	30.00	47	53	51	50	C	C	C	29.98	29.76	29	43	35	F	F	F	C	29.76	29.56	43	50	45	34	C	C	F	F	
2	29.96	29.7	53	58	53	53	C	C	R	29.86	30.06	35	45	39	32	F	F	F	F	29.50	29.58	33	40	34	27	C	F	F	S
3	29.71	29.72	55	53	53	50	R	R	R	29.92	29.84	43	55	52	43	C	C	F	F	29.67	29.88	15	26	24	17	F	F	F	F
4	29.72	29.70	51	64	56	50	F	F	F	29.79	29.62	41	53	53	C	C	R	R	30.00	30.19	17	33	31	22	F	F	F	F	
5	29.59	29.71	53	61	49	40	F	R	F	29.80	30.27	36	50	44	37	F	F	F	F	30.20	30.18	21	40	33	27	F	F	F	F
6	29.72	29.69	39	52	48	37	F	F	F	30.35	30.34	34	50	17	44	F	F	F	F	30.06	29.86	35	43	40	37	C	C	C	C
7	29.74	29.66	45	59	53	53	C	C	C	30.38	30.41	38	60	55	45	F	F	F	F	29.67	29.79	39	48	43	35	R	F	F	F
8	29.47	29.38	56	61	57	53	R	R	C	30.42	30.45	39	57	50	37	F	F	F	F	29.80	29.53	34	40	37	34	F	C	R	R
9	29.63	29.87	52	65	55	45	F	F	F	30.43	30.33	33	58	58	46	F	F	F	F	29.41	29.71	34	39	35	30	S	R	C	F
10	29.76	29.50	55	64	60	57	C	R	C	30.23	29.99	52	62	55	52	F	F	F	F	29.82	29.75	27	34	29	24	F	F	F	F
11	29.63	29.62	43	53	46	37	F	C	F	29.72	29.67	59	60	58	45	R	R	R	R	29.65	29.50	28	36	33	29	C	F	F	F
12	29.70	29.86	37	48	42	35	F	F	F	29.62	29.73	38	41	32	C	F	F	F	29.50	29.54	25	34	28	22	F	F	F	F	
13	29.90	29.86	36	32	46	40	F	F	F	29.87	29.96	33	37	26	35	C	R	R	R	29.62	29.77	21	32	28	29	F	F	F	F
14	29.87	30.06	39	52	36	36	F	F	F	30.02	30.00	33	37	35	30	C	C	S	S	29.78	29.95	27	35	32	25	F	F	F	F
15	30.20	30.17	35	50	47	50	F	F	C	29.61	29.48	29	30	30	30	S	S	S	S	29.99	30.18	23	36	33	23	F	F	F	F
16	30.11	30.17	52	58	55	51	R	F	F	29.56	29.79	33	37	33	30	C	S	F	F	30.20	30.09	18	37	32	33	F	F	F	C
17	30.01	29.78	37	60	60	60	C	R	F	29.95	30.19	59	34	34	F	F	F	C	29.97	29.78	37	41	38	36	R	C	C	C	
18	30.00	30.05	60	63	56	50	F	F	F	30.25	29.99	40	41	45	5	R	R	R	R	29.67	29.83	32	39	38	32	R	F	F	F
19	29.94	29.92	57	57	39	36	F	R	C	29.62	29.57	49	54	50	41	R	R	F	F	29.84	30.01	30	42	34	27	F	F	F	F
20	29.98		33	43	37	31	F	F	F	29.61	29.88	39	48	43	37	F	F	F	F	29.95	29.64	28	31	28	24	C	F	C	C
21			29	39	34	26	F	F	F	30.03	30.25	38	49	43	34	F	F	F	F	29.67	30.12	11	19	13	9	F	F	F	F
22		30.30	29	43	38	35	F	F	F	30.29	30.20	31	45	43	42	F	F	C	C	30.22	30.16	10	28	26	24	F	C	F	F
23	30.22	30.17	40	52	46	45	C	C	C	30.18	30.12	43	58	51	42	F	F	F	F	30.11	29.86	23	40	35	28	F	C		



Table with columns for JANUARY, FEBRUARY, and MARCH. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for 8 A.M., 10 P.M., 8 N., St., 10 S., N., St., 10. Data rows include dates and corresponding values.

Table with columns for APRIL, MAY, and JUNE. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for 8 A.M., 10 P.M., 8 N., St., 10 S., N., St., 10. Data rows include dates and corresponding values.

N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.



JULY.										AUGUST.										SEPTEMBER.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	29.98	29.97	72	84	67	C	F	F	C	30.09	30.01	76	70	66	60	F	F	C	R	30.23	30.06	64	85	77	72	F	F	F	F
2	30.08	30.08	70	82	70	C	F	F	C	30.02	29.90	61	66	61	60	R	R	C	R	30.00	29.88	76	90	72	72	F	F	F	F
3	29.89	29.61	74	67	62	F	C	R	C	29.97	30.00	67	77	65	64	C	F	F	C	29.71	29.91	76	87	77	69	F	F	F	F
4	29.60	29.60	73	85	75	72	C	F	F	29.98	30.18	64	74	60	C	F	R	C	29.94	29.70	72	90	80	76	F	F	F	C	
5	29.63	29.87	76	80	65	62	F	F	F	30.29	30.35	65	71	62	56	C	F	F	F	29.92	30.12	56	60	54	46	C	F	F	F
6	29.88	29.67	72	82	72	70	C	F	F	30.33	30.20	64	75	65	60	F	F	F	F	30.17	30.07	50	65	57	46	F	F	F	C
7	29.64	29.91	72	76	62	58	F	F	F	30.08	29.93	67	75	70	68	R	C	C	C	29.98	29.88	58	66	59	56	R	F	F	F
8	29.92	30.06	65	76	69	62	F	F	F	29.80	29.42	71	70	65	65	R	R	R	R	29.72	29.70	66	82	73	64	F	F	F	C
9	30.12	30.12	62	77	65	62	F	F	F	29.63	29.82	72	76	70	70	C	F	F	C	29.83	30.02	60	68	59	54	F	F	F	F
10	30.13	30.00	72	79	68	63	F	F	C	29.88	30.00	70	77	69	63	F	F	F	C	30.10	29.98	60	68	60	56	F	F	F	F
11	29.78	29.47	62	64	63	63	R	R	C	29.97	29.85	73	78	69	71	F	F	F	F	29.92	29.94	61	82	68	65	F	F	F	F
12	29.51	29.88	68	75	58	52	F	F	F	29.82	29.87	78	90	80	73	F	F	F	F	29.97	30.12	63	61	64	55	C	R	R	C
13	29.90	29.99	59	75	66	60	F	F	F	29.91	29.99	74	89	80	71	F	F	F	F	30.17	30.06	55	58	53	50	C	R	R	C
14	30.01	29.93	69	85	84	67	F	F	F	30.08	30.21	73	76	65	63	F	F	F	F	29.85	29.83	54	54	52	52	R	R	R	C
15	29.93	29.92	76	93	79	75	F	F	F	30.20	30.03	64	64	64	66	R	R	C	C	29.87	29.82	53	62	56	56	C	F	C	C
16	29.93	29.97	79	92	82	76	F	F	F	29.98	29.93	74	87	76	72	R	F	F	F	30.17	30.09	63	66	60	59	C	C	C	C
17	29.97	29.76	79	90	72	71	F	R	C	29.81	29.98	80	91	80	69	F	F	F	F	29.62	29.61	62	73	64	61	R	F	C	C
18	29.88	30.19	74	84	73	62	C	F	F	30.00	30.60	70	81	72	65	F	F	F	F	29.55	29.73	63	71	61	54	F	F	F	F
19	30.20	30.12	69	74	64	58	F	F	F	29.97	29.92	72	85	75	70	F	F	F	F	29.80	30.07	53	64	59	51	F	F	F	F
20	30.07	29.98	67	73	64	59	F	F	F	29.89	29.73	75	88	76	67	F	F	F	F	30.08	30.10	53	77	71	65	F	F	F	F
21	29.90	29.85	65	73	63	62	F	F	C	29.74	30.03	63	73	61	53	F	F	F	F	30.17	30.09	63	66	60	59	C	C	C	C
22	29.82	29.83	64	81	68	64	C	F	F	30.10	30.20	55	69	60	52	F	F	F	F	30.01	29.93	61	66	62	59	C	R	R	C
23	29.89	30.00	72	84	74	67	F	F	F	30.22		58	73	62	56	F	F	F	F	29.83	30.02	58	66	63	58	R	C	F	F
24	30.00	29.90	74	90	77	71	F	F	F		29.79	68	76	69	68	F	R	F	R	30.12	29.98	57	64	58	56	F	F	F	C
25	29.81	29.87	76	80	74	67	F	R	F	29.77	29.94	72	78	66	58	F	R	F	F	29.73		59	68	65	48	C	F	F	F
26	29.91	29.99	69	83	72	65	F	F	F	30.08	30.13	57	68	59	58	F	F	F	F	29.78	29.73	15	59	51	47	F	F	F	F
27	30.02	30.03	69	84	69	68	F	F	C	30.17	30.19	62	73	62	60	F	F	C	R	29.85	29.99	48	61	53	45	F	F	F	F
28	29.99	29.98	76	84	74	68	R	F	R	29.96	29.79	60	60	57	55	R	R	R	R	30.02	29.90	52	60	56	52	C	F	C	F
29	29.71	29.89	74	77	73	67	R	R	F	29.95	30.12	50	73	66	56	C	F	F	F	30.02	30.10	53	63	56	53	C	F	F	F
30	29.98	30.06	69	82	73	66	F	F	F	30.13	30.12	62	82	74	67	F	F	F	F	30.19	30.27	52	67	55	54	C	F	F	F
31	30.06	30.09	76	89	80	75	F	F	F	30.22	30.33	72	69	61	54	F	F	F	F										
Mean			71	81	68	65						68	76	68	63							59	69	62	58				

OCTOBER.										NOVEMBER.										DECEMBER.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	30.23	30.00	55	60	64	60	C	F	F	30.42	30.55	34	46	40	33	F	F	F	F	30.03	29.99	39	39	32	R	R	R	R	
2	29.87	29.90	62	77	68	58	F	F	F	30.57	30.41	29	41	36	24	F	F	F	F	30.01	30.29	30	39	36	33	C	F	F	F
3	29.97	29.84	54	68	61	56	F	R	F	30.27	30.09	30	38	39	39	C	S	R	F	30.34	30.31	28	33	28	27	F	F	F	F
4	29.93	30.08	55	70	62	54	F	F	F	30.10	30.09	42	45	42	41	C	F	C	C	29.94	29.68	25	34	28	27	S	R	C	F
5	30.12	29.83	52	64	57	F	C	C	C	30.07	30.01	39	52	46	45	C	F	C	C	29.79	29.95	18	27	23	15	F	F	F	F
6	29.96	29.73	59	61	53	46	R	F	F	29.98	29.80	42	46	45	45	C	C	C	C	29.86	29.78	13	23	23	19	C	F	F	F
7	29.76	29.93	43	49	44	36	F	C	F	29.58	29.48	44	46	46	45	R	C	R	C	29.81	29.80	20	23	20	23	F	F	F	F
8	30.63	30.29	39	47	42	35	F	F	F	29.68	30.14	35	48	43	36	F	F	F	F	29.71	29.64	18	27	22	16	F	F	F	F
9	30.39	30.32	35	56	49	42	F	F	F	30.30	30.25	33	49	42	34	F	F	F	F	29.67	29.78	14	22	27	14	F	F	F	F
10	30.30	30.35	41	62	53	44	F	F	F	30.13	30.03	41	56	51	43	F	F	C	C	29.81	29.83	10	33	26	26	F	F	C	C
11	30.38	30.20	45	62	55	50	F	F	F	30.15	30.19	38	55	47	44	F	F	C	C	29.67	29.54	23	30	25	23	C	F	C	C
12	30.02	29.93	49	76	61	58	F	F	F	30.20	30.29	32	53	46	43	F	F	F	F	29.53	29.49	19	57	29	26	F	F	F	F
13	30.00	30.11	59	66	60	48	F	F	F	30.21	30.04	16	61	58	57	C	F	C	C	29.48	29.58	22	34	24	29	F	F	F	F
14	30.09	29.77	43	73	64	59	F	F	F	29.86	30.12	58	62	59	49	R	C	R	C	29.62	29.73	19	33	27	23	F	F	F	C
15	29.61	29.58	64	77	56	F	C	R	C	30.36	30.52	34	49	44	34	F	F	F	F	29.83	30.13	23	37	32	21	F	F	F	F
16	29.83	30.10	42	45	43	34	R	C	F	30.54	30.46	33	47	43	42	F	C	C	C	30.03	29.48	23	38	40	36	S	R	F	F
17	30.02	29.77	34	46	41	32	F	F	F	30.34	30.09	44	48	49	49	R	C	C	C	29.66	29.75	23	39	34	31	F	R	F	F
18	29.62	29.48	33	57	52	48	F	F	C	29.89	29.67	49	62	58	51	F	F	F	F	29.86	29.76	29	37	35	31	C	C	C	C
19	29.45	29.52	49	61	51	41	R	C	F	29.53	29.42	47	45	33	33	R	R	R	R	29.65	29.68	29	32	23	24	S	S	S	S
20	29.41	29.66	47	57	47	39	C	R	F	29.58	29.84	32	37	36	35	S	C	C	C	29.80	29.89	4	14	12	13	F	F	F	F
21	29.68	29.70	37	52	48	42	F	C	R	30.00	30.10	33	43	37	31	F	F	F	F	29.80	29.93	14	28	24	22	F	F	F	F
22	29.79	29.86	36	53	47	40	F	F	F	30.11	29.96	28	46	42	43	F	F	C	R	29.91	29.65	24	40	37	35	F	F	F	C
23	29.83	29.73	35	49	44	38	C	C	C	29.96	29.58	37	54	51	54	F	F	F	F	29.53	29.63	33	41	36	31	F	F	F</	

JANUARY.										FEBRUARY.										MARCH.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	29,60	29,63	33	51	44	38	F	F	F	29,83	30,01	3	23	21	16	F	F	F	29,82	29,98	32	52	36	33	F	F	F		
2	29,70	29,63	34	49	43	41	F	F	F	29,88	30,04	20	31	24	18	S	F	F	30,08	30,05	34	48	41	37	F	F	F		
3	29,70	29,29	39	43	43	33	C	C	R	29,96	29,70	18	33	30	25	C	C	C	30,05	30,01	38	50	40	37	F	F	F		
4	29,63	30,13	28	28	23	18	F	F	F	29,79	29,62	25	33	27	27	C	C	C	29,99	29,84	36	49	43	44	F	F	F		
5	30,18	29,99	23	34	31	25	S	C	C	29,74	29,86	19	28	24	22	C	C	C	29,82	29,66	39	53	44	47	C	C	C		
6	29,97	30,27	24	22	17	6	C	C	C	29,84	29,89	23	32	15	S	S	S	29,91	30,13	46	55	46	39	F	F	F			
7	30,41	30,33	4	19	16	19	F	F	F	30,00	29,89	18	28	21	9	C	F	F	30,17	30,29	35	40	33	26	F	C	C		
8	30,22	30,11	24	37	34	33	C	F	C	29,76	29,68	6	25	19	13	F	F	F	30,41	30,41	25	39	31	28	F	F	F		
9	30,02	30,14	26	42	35	28	F	F	F	29,67	29,67	19	35	22	23	C	F	F	30,32	30,22	32	48	40	31	F	F	F		
10	30,16	29,96	22	35	33	33	F	F	C	29,80	29,87	10	25	18	14	F	F	F	30,26	30,18	32	54	42	39	F	F	F		
11	29,59	29,67	40	45	43	34	R	R	C	29,89	29,88	11	27	19	17	F	F	C	30,23	29,96	39	51	47	40	F	F	F		
12	29,98	29,33	22	22	19	12	F	F	F	29,69	29,71	20	27	22	21	C	F	F	30,07	30,07	41	59	50	44	R	F	C		
13	29,36	30,09	8	20	21	23	F	C	C	29,86	29,99	11	22	14	7	S	F	F	30,05	29,89	34	36	34	32	S	R	C		
14	29,97	30,01	18	25	21	15	S	F	F	29,98	29,62	4	26	19	10	F	F	F	30,08	29,77	33	39	34	32	C	C	C		
15	30,10	30,13	15	26	22	15	F	F	C	29,60	29,80	14	32	25	14	F	F	F	29,31	29,47	35	60	47	35	R	F	F		
16	30,13	30,13	21	31	33	32	C	C	C	29,74	29,80	24	40	31	25	C	F	F	29,72	30,09	30	34	31	25	F	F	F		
17	30,08	29,99	34	35	33	30	C	C	S	30,03	29,85	18	33	29	25	C	F	S	30,11	29,39	31	30	30	33	F	S	S		
18	30,09	30,17	20	24	24	22	S	C	C	29,66	29,71	24	25	20	14	S	S	S	29,48	29,50	33	37	34	28	F	S	F		
19	30,12	29,71	22	34	32	35	S	S	C	29,90	30,00	11	27	19	14	F	F	F	29,83	30,00	32	42	31	24	F	S	F		
20	29,78	29,81	30	43	35	32	F	F	F	30,03	29,65	13	35	32	35	F	F	C	29,94	30,19	27	25	23	13	S	F	F		
21	29,95	29,09	25	38	34	25	F	F	F	29,52	29,62	35	39	38	35	C	C	C	30,20	30,27	10	25	20	16	F	F	F		
22	29,82	29,24	21	30	27	18	C	C	S	29,97	30,20	20	26	21	14	R	C	C	30,39	30,28	18	26	23	25	F	F	C		
23	29,15	29,40	21	23	21	17	S	C	C	30,34	30,48	6	25	18	9	F	F	F	30,11	29,97	32	30	30	30	C	R	C		
24	29,53	29,72	10	23	17	10	F	F	F	30,53	30,20	20	31	27	25	C	S	S	29,87	29,69	33	40	50	45	C	R	C		
25	29,6	29,57	21	35	27	20	C	F	F	30,07	29,71	25	29	32	22	C	S	R	29,90	30,29	38	47	32	F	F	F			
26	29,53	29,78	21	21	11	3	F	F	F	29,89	30,20	29	40	34	23	F	F	F	30,50	30,39	25	37	28	29	F	F	F		
27	29,88	29,70	0	17	11	12	F	C	F	30,23	29,87	20	43	32	30	F	F	C	30,08	29,72	33	48	53	49	R	R	C		
28	29,60	29,79	1	28	18	8	F	F	F	29,83	29,66	35	43	35	30	F	F	C	29,90	30,31	49	44	31	F	C	S	F		
29	29,83	29,89	1	18	6	-1	F	S	F										30,40	30,13	32	32	29	32	C	S	F		
30	29,72	29,60	0	14	7	4	F	F	F										29,86	29,70	33	34	32	32	R	R	R		
31	29,68	29,74	-9	-3	-9	-7	F	F	F										29,43	29,21	33	35	33	33	R	R	C		
Mean			19	29	25	20						18	31	25	20														

APRIL.										MAY.										JUNE.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	29,59	30,00	23	38	33	38	F	F	F	29,99	29,99	45	51	42	37	F	F	F	30,10	30,04	53	58	52	51	R	C	F		
2	29,92	29,87	34	34	31	30	S	S	S	29,98	29,80	44	51	44	44	F	F	C	29,92	29,81	61	67	51	55	F	C	R		
3	30,03	30,17	30	39	34	30	F	F	F	29,69	29,80	40	40	37	C	C	C	29,70	29,77	58	60	56	53	R	R	F			
4	30,10	29,71	33	44	40	45	C	C	F	29,79	29,91	43	53	45	43	C	C	R	29,92	29,93	64	70	59	58	F	F	F		
5	29,60	30,09	54	46	40	39	C	C	C	29,98	30,07	48	62	55	49	F	F	F	29,93	29,90	59	63	51	51	F	F	C		
6	30,18	30,18	38	42	36	32	C	C	F	30,06	30,03	51	53	46	44	F	F	C	29,75	29,69	54	63	55	51	R	C	F		
7	30,20	30,09	40	52	38	38	F	C	C	30,00	30,00	43	49	41	40	R	C	R	29,67	29,63	50	64	55	52	R	R	R		
8	29,90	30,00	34	38	32	R	C	R	29,97	29,95	38	47	42	38	C	R	R	29,60	29,61	60	69	56	52	F	F	F			
9	30,17	30,18	35	43	37	33	F	F	F	29,88	29,78	48	62	48	43	F	R	F	29,63	29,84	61	76	63	55	F	F	F		
10	30,11	29,89	40	54	40	37	F	F	R	29,72	29,91	42	58	54	44	F	F	F	29,91	30,05	62	73	57	53	F	F	F		
11	29,60	29,61	40	62	60	54	F	F	F	29,95	29,93	55	59	51	49	F	F	C	30,10	30,11	64	82	64	62	F	F	F		
12	29,86	29,99	44	56	42	35	F	F	F	29,92	29,57	54	63	49	48	F	F	C	30,11	30,08	72	87	69	62	F	F	F		
13	29,91	29,88	47	64	57	50	F	F	C	29,62	29,81	55	61	53	49	F	F	F	30,00	29,81	70	81	66	65	F	F	C		
14	29,80	29,84	45	52	33	29	C	F	C	29,84	29,99	48	54	43	40	F	F	F	30,02	30,03	61	74	59	56	F	F	F		
15	29,98	29,79	34	45	36	37	F	F	C	29,81	30,02	45	56	48	42	F	F	F	30,12	29,97	65	83	62	57	F	F	F		
16	29,62	29,71	46	64	47	39	F	F	F	30,09	29,99	52	67	49	49	F	F	F	29,80	29,61	68	84	67	64	F	F	F		
17	29,81	29,93	42	53	43	40	F	F	F	29,91	29,63	51	48	47	46	R	R	R	29,65		75	89	76	68	F	F	F		
18	29,93	29,93	49	55	43	40	F	F	F	29,74	29,94	55	68	56	54	F	F	F		30,14	71	82	70	61	F	F	F		
19	29,78	29,61	42	47	39	39	C	R	R	29,97	29,63	44	40	40	40	R	R	R	30,13	29,69	64	68	65	67	C	R	F		
20	29,75	29,95	44	42	38	38	C	F	F	29,69	29,90	49	58	50	42	C	F	F	29,63	29,77	82	94	80	70	F	C	F		
21	30,00	29,99	48	49	40	35	F	F	F	29,97	30,04	51	72	62	56	F	F	F	29,88	29,90	73	86	70	68	F	F	C		
22	29,83	29,37	44	38	37	33	C	R	R	30,09	30,08	63	81	66	59	F	F	F	29,76	29,69	76	91	78	73	C	F	C		
23	29,27	29,62	37	40	40	40	R	R	R	30,06	29,98	63	78	61	55	F	F	F	29,69	29,81	71	81	69	60	F	F	F		
24	29,83	30,29	45	48	43	35	F	F	F	29,89	29,87	69	76	65	60	C	F	F	29,83	30,01	66	74	64	57	F	F	F		
25	30,42	30,26	40	48	43	39	F	F	F	29,87	29,91	63	75	60	59	F	F	C	30,02	29,99	63	80	64	59	F	F	F		
26	30,16	30,00	49	71	57	50	F	F	F	30,01	30,06	59	67	62	57	F	F	F	29,90	29,89	61	67	69	56	C	C</			



JULY.										AUGUST.										SEPTEMBER.									
Barometer.		Therm.		Weather.						Barometer.		Therm.		Weather.						Barometer.		Therm.		Weather.					
8 A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10	8 N.	St.	10	8 A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10	8 A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10			
1	29,93	29,69	75	91	75	73	F	F	F	F	29,76	29,90	79	98	76	66	F	H	F	30,02	30,12	55	70	68	53	F	F	F	
2	29,68	29,73	79	92	79	74	F	F	F	F	29,86		68	80	69	65	F	F	C	30,09	30,00	59	73	68	62	F	F	F	
3			75	86	67	63	F	R	R	C	29,85	29,90	63	75	64	57	F	F	C	29,98	30,13	65	79	68	60	R	F	C	
4	29,89	30,08	63	77	70	62	F	F	F	F	29,89	29,83	61	79	70	62	F	F	C	29,26	30,29	50	59	52	47	F	F	F	
5	30,17	30,20	67	84	71	64	F	F	F	F	29,70	29,60	71	78	64	62	R	F	C	29,22	30,91	54	54	54	54	R	R	R	
6	30,23	30,20	71	77	64	61	F	F	F	F	29,63	29,90	62	74	62	57	F	F	F	29,69	29,70	55	57	51	51	R	R	C	
7	30,18	30,12	66	78	67	67	F	F	F	F	30,00	30,02	62	80	73	65	F	F	F	29,86	30,00	60	77	68	62	F	F	F	
8	30,10	30,00	65	69	64	65	C	R	R	C	30,08	30,14	66	66	62	60	F	F	F	30,12	30,20	64	79	72	62	F	F	F	
9	29,90	29,90	77	86	77	73	C	F	F	F	30,11	30,04	64	71	61	56	F	F	F	30,27	30,14	61	70	69	66	F	F	F	
10	29,95	29,95	78	94	78	75	F	F	F	F	30,02	29,93	75	62	59	C	F	F	F	30,08	30,00	73	89	75	71	F	F	F	
11	29,92	30,08	82	94	75	72	F	F	F	F	29,88	29,97	62	64	61	61	R	R	R	30,00	30,09	77	90	68	66	F	F	R	
12	30,11	30,09	74	84	72	72	C	F	F	F	30,01	30,04	65	75	63	58	C	C	C	30,07	30,07	64	67	59	58	R	C	F	
13	30,11	30,10	80	98	85	79	F	F	F	F	29,89	29,90	58	64	58	58	R	C	C	30,01	29,93	65	68	63	61	R	C	F	
14	30,11	30,18	79	77	68	64	F	F	F	F	29,88	29,88	66	75	64	60	C	R	F	29,96	29,77	65	80	66	66	C	F	F	
15	30,11	30,03	65	67	68	63	R	F	C	R	29,93	30,00	66	85	70	66	F	F	F	29,81	29,89	64	74	67	62	F	F	F	
16	29,96	29,85	64	72	67	66	R	R	R	F	29,98	29,81	72	68	63	63	C	R	R	29,82	29,73	65	74	70	68	R	C	F	
17	29,86	29,88	75	88	78	67	C	F	F	F	29,87	30,09	63	71	65	61	C	C	C	29,70	29,78	72	82	67	61	F	R	F	
18	30,03	30,11	72	86	75	65	F	F	F	F	30,17	30,12	66	72	63	62	C	C	R	29,67	30,00	57	67	59	52	R	R	F	
19	30,16	30,17	73	87	72	67	F	F	F	F	30,02	29,96	65	74	66	66	C	C	R	30,08	30,20	61	53	45	45	F	F	F	
20	30,17	30,13	76	92	78	74	F	F	F	F	29,89	29,90	72	79	64	63	F	R	C	30,27	30,30	47	62	53	47	F	F	F	
21	30,13	30,21	81	90	76	71	F	F	F	F	29,86	29,94	64	68	63	62	C	C	R	30,25	30,35	53	59	53	50	C	F	F	
22	30,19	29,99	76	89	78	76	R	C	C	C	29,92	29,99	63	68	61	58	C	C	C	30,34	30,24	53	56	56	53	R	R	C	
23	29,92	30,00	83	77	74	67	F	R	C	29,00	30,09	60	64	62	60	C	C	C	29,83	29,82	59	66	64	61	R	C	F		
24	29,98	29,73	71	82	76	73	C	F	F	F	30,07	30,01	64	72	62	60	C	F	R	29,92	30,02	57	68	59	52	F	F	C	
25	29,68	29,84	84	99	67	65	F	R	C	29,92	29,98	61	64	60	60	R	C	F	30,10	30,11	55	72	59	54	F	F	F		
26	29,93	30,07	63	70	63	61	R	C	C	29,96	29,99	64	78	69	67	C	F	F	30,08	29,99	56	75	65	55	F	F	F		
27	30,10	30,17	62	74	67	64	C	F	F	30,00	30,06	69	80	68	61	F	F	F	30,01	30,17	59	62	54	46	F	C	C		
28	30,17	30,03	73	89	75	73	F	F	C	30,13	30,21	66	73	63	62	F	F	C	30,22	30,11	45	61	53	51	F	F	C		
29	29,95	30,08	78	92	83	77	C	F	F	30,22	30,18	64	72	68	65	C	C	C	30,08	29,97	51	71	55	55	F	F	F		
30	30,09	30,07	75	82	71	71	F	F	F	30,11	30,00	87	76	71	F	F	C	29,98	29,89	59	72	60	56	F	F	F			
31	29,99	29,80	75	96	82	77	C	F	29,96	29,92	68	71	62	59	C	C	F												
Mean			73	84	73	69							65	74	65	62								59	70	62	57		

OCTOBER.										NOVEMBER.										DECEMBER.									
Barometer.		Therm.		Weather.						Barometer.		Therm.		Weather.						Barometer.		Therm.		Weather.					
8 A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10	8 N.	St.	10	8 A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10	8 A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10			
1	29,84	29,90	58	79	64	58	F	F	F	F	30,23	30,23	38	52	43	38	C	F	F	29,97	30,20	16	36	26	24	F	F	F	
2	30,00	30,17	52	56	50	42	C	C	F	F	30,17	29,99	38	64	55	50	F	F	C	30,31	30,33	15	31	25	19	F	F	F	
3	30,18	30,20	45	62	50	48	F	F	F	F	29,99	30,20	51	48	46	45	C	C	R	30,20	29,82	24	43	40	36	F	F	F	
4	30,18		45	63			F	F	F	F	30,29	30,28	44	47	46	48	R	C	R	29,63	29,68	41	50	42	35	R	F	C	
5							F	F	F	C	30,23	30,02	48	57	51	52	C	F	C	29,92	30,15	22	33	29	23	F	F	F	
6		30,10					R	C	F	F	29,87	29,59	52	60	58	56	C	C	C	30,18	29,93	20	40	40	39	F	F	R	
7	30,23	30,14	50	57	51	53	R	F	C	R	29,68	30,24	51	51	33	R	F	F	29,77	29,39	31	40	36	35	C	R	R		
8	29,99	29,72	55	59	58	59	R	R	R	30,48	30,50	22	37	34	29	F	F	F	30,09	32	27	19	15	F	F	F			
9	29,64	29,81	60	71	58	51	F	F	F	30,38	29,88	38	53	51	56	C	C	C	30,22	30,40	12	25	19	12	F	F	F		
10	29,89	29,71	55	66	57	55	F	F	C	R	29,79	30,00	56	64	51	42	R	F	F	30,53	30,64	9	18	17	9	F	F	F	
11	29,81	30,00	52	67	59	49	F	F	F	30,10	30,23	34	40	36	27	C	F	F	30,61	30,40	8	28	24	20	F	F	F		
12	29,84	30,08	55	73	62	50	F	F	F	30,32	30,33	25	36	32	29	F	F	F	30,18	30,08	28	39	38	32	C	C	C		
13	30,19	30,22	48	66	58	47	F	F	F	30,30	30,29	28	38	33	23	F	F	F	30,28	30,13	32	41	34	28	F	F	F		
14	30,27	30,11	48	62	53	53	F	F	C	30,25	30,21	26	47	39	33	F	F	F	30,03	29,91	24	40	34	26	F	F	F		
15	30,05	30,10	47	51	45	38	C	F	F	30,20	30,20	28	51	44	36	F	F	F	29,86	29,83	28	34	34	32	C	C	C		
16	30,10	30,07	37	55	51	51	F	F	C	30,21	29,88	34	41	41	42	C	R	R	29,80	29,50	32	37	38	41	C	R	C		
17	30,03	30,03	48	59	53	52	F	F	C	29,76	30,04	37	42	39	37	C	R	R	29,43	29,34	34	37	35	33	C	R	C		
18	30,06	30,13	52	57	50	50	C	C	C	30,28	30,28	29	44	41	40	F	F												



Table with columns for JANUARY, FEBRUARY, and MARCH. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for S.A.M., I.P.M., and N. St. 10.

Table with columns for APRIL, MAY, and JUNE. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for S.A.M., I.P.M., and N. St. 10.

N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.

JULY.										AUGUST.										SEPTEMBER.										
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					
S. A. M.	10 P. M.	8 N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10		
1	30,23	30,10	59	69	57	54	F	F	F	F	29,80	29,90	69	80	63	61	C	F	R	F	29,88	29,85	52	66	59	54	F	F	F	F
2	30,04	29,91	67	80	69	63	F	F	F	F	29,97	30,05	69	81	70	66	F	F	F	F	29,77	29,68	61	80	71	65	C	F	F	C
3	29,86	29,71	66	76	67	63	F	F	F	C	30,05	30,01	73	82	71	63	F	F	F	F	29,78	30,00	71	82	71	66	F	F	F	F
4	29,72	29,83	64	77	65	59	F	F	F	F	29,93	29,86	70	70	64	63	C	R	R	C	30,00	30,00	62	76	64	59	C	F	F	F
5	29,54	29,60	68	81	68	63	F	F	F	C	29,82	29,94	64	66	62	62	R	C	C	C	30,01	29,82	62	74	68	60	F	F	F	F
6	29,50	29,71	72	75	64	59	R	F	F	C	29,98	30,02	64	73	64	60	C	F	F	F	29,73	29,73	64	79	68	61	F	C	C	F
7	29,50	29,89	59	74	66	56	F	F	F	F	29,98	30,18	68	77	66	60	C	F	F	F	29,79	29,88	60	74	61	58	F	F	F	F
8	29,80	29,95	63	75	63	58	F	F	F	F	30,22	30,24	67	73	62	62	F	F	F	F	29,88	29,97	66	79	69	64	F	F	F	C
9	30,02	30,10	56	71	62	56	F	F	F	F	30,13	29,89	64	63	62	61	C	R	R	C	29,98	30,18	63	66	62	61	F	C	C	C
10	30,15	30,20	66	83	68	61	F	F	F	F	29,88	29,84	68	70	66	63	C	F	F	F	30,18	30,19	57	68	57	51	C	C	F	C
11	30,20	30,18	67	82	64	58	C	F	F	F	29,87	29,81	69	84	73	66	F	F	F	F	30,21	30,22	53	60	53	50	F	C	C	F
12	30,11	30,00	63	72	61	57	F	F	F	F	29,75	29,94	73	88	75	69	C	F	F	F	30,20	30,22	54	59	53	54	C	C	C	C
13	29,89	29,82	64	71	61	56	F	F	C	C	30,03	30,24	73	84	73	68	F	F	F	F	30,23	30,19	55	55	54	54	R	R	R	C
14	29,77	29,72	63	72	60	58	F	F	C	C	30,31	30,33	68	72	65	62	F	F	F	F	30,06	29,99	56	58	60	56	R	R	R	C
15	29,72	29,88	69	83	66	69	F	F	F	F	30,19	29,86	69	88	76	73	C	C	F	F	29,80	29,74	56	67	58	57	R	R	C	C
16	29,78	29,74	66	83	74	69	R	F	F	F	29,80	29,91	75	87	68	68	C	F	F	F	29,78	29,96	60	68	62	58	C	C	C	C
17	29,71	29,93	72	84	69	57	R	F	F	F	29,99	30,03	74	86	71	67	F	F	F	F	30,09	30,19	54	65	62	49	F	F	F	F
18	30,01	30,10	62	76	69	60	F	F	F	F	29,91		95	84	74		F	F	R	C	30,18	30,19	55	68	58	53	F	F	F	F
19	30,11	29,98	68	79	70	67	F	F	F	F	29,67	75	91	82	75		F	F	C	R	30,20	30,10	52	66	59	57	F	F	C	R
20	29,88	29,80	72	89	73	68	F	F	F	F	29,57	29,63	76	88	69	58	C	F	F	F	29,97	29,98	54	64	59	59	R	F	F	F
21	29,81	29,91	70	78	66	64	F	F	F	F	30,08	30,32	53	67	60	51	F	F	F	F	30,12	30,19	52	63	54	47	F	F	F	F
22	29,96	30,00	68	76	65	62	F	F	C	F	30,40	30,38	74	61	56		F	F	F	F	30,21	30,17	48	68	62	53	F	F	F	F
23	30,01	29,89	64	75	62	61	C	F	C	C	30,32	30,10	63	73	61	58	C	R	R	F	30,12	29,90	54	67	61	59	F	F	C	C
24	29,78		85	72	65	61	F	F	F	F	30,01	29,97	58	74	64	61	C	F	F	F	29,73	29,94	55	66	59	56	R	F	F	C
25	29,70	29,78	60	75	66	59	R	F	F	F	30,07	30,08	58	67	59	56	F	F	C	C	30,00	30,08	54	60	54	54	C	F	F	C
26	29,80	29,78	63	80	71	62	F	F	F	F	29,93	29,72	59	61	61	59	R	C	F	C	30,17	30,31	45	56	49	40	F	F	F	F
27	29,77	29,73	67	77	65	63	C	F	F	F	29,68	29,77	64	72	63	56	C	F	F	F	30,37	30,49	40	52	46	35	F	F	F	F
28	29,70	29,80	66	62	60	58	R	R	R	R	29,80		51	64	58	52	C	F	F	F	30,51	30,43	38	61		47	F	F	F	F
29	29,89	30,00	61	67	62	51	C	F	F	F	30,08	30,07	54	72	60	56	F	F	F	F	30,42	30,24	43	71	57	51	F	F	F	F
30	30,00	29,96	62	69	64	55	F	F	F	F	30,01	29,97	61	76	63	57	F	F	F	F	30,21	30,15	51	73	59	54	F	F	F	F
31	29,89	29,81	63	75	62	58	C	F	C	C	29,84	29,84	64	70	63	55	R	C	F	F										
Mean			65	77	66	60							66	76	67	62							55	67	60	55				

OCTOBER.										NOVEMBER.										DECEMBER.									
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.				
S. A. M.	10 P. M.	8 N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	
1	30,20	30,19	53	72	58	53	F	F	F	30,27	29,87	38	53	48	45	F	F	F	F	30,01	30,20	33	40	34	27	F	F	F	F
2	30,17	30,00	52	73	61	54	F	F	F	30,01	30,03	42	55	50	46	F	F	C	C	30,21	30,04	19	24	23	20	C	C	C	C
3	29,87	30,07	57	75	58	46	F	F	F	30,03	30,08	50	65	60	52	R	F	F	F	29,90	29,79	11	26	23	23	F	F	F	F
4	30,10	30,09	43	55	49	41	F	F	F	30,06	30,00	54	63	58	55	R	C	C	C	29,96	30,18	22	25	22	16	F	F	F	F
5	30,02	29,72	39	55	53	49	F	F	F	29,91	29,86	69	63	59	59	C	R	R	C	30,16	29,99	18	32	31	24	F	F	F	F
6	29,72	29,97	49	55	45	42	F	F	F	29,80	30,09	59	55	50	45	R	F	F	F	29,95	29,65	25	44	43	40	F	F	F	F
7	30,10	30,10	38	50	44	36	C	F	F	30,11	29,91	44	46	46	47	C	R	C	R	29,81	29,88	33	50		35	F	F	F	F
8	29,90	29,78	40	62	56	51	F	F	C	29,79	29,73	46	52	49	49	R	R	C	C	29,78	30,16	38	54	47	31	C	F	F	F
9	29,72	29,78	51	72	56	53	F	F	C	29,78	29,91	44	54	48	36	C	R	C	F	30,31	30,11	22	31	30	27	C	C	S	S
10	29,82	29,97	52	62	52	51	C	R	C	29,94	29,97	35	43	37	30	C	C	F	F	30,13	30,24	17	24	24	25	C	C	C	C
11	30,01	30,10	49	57	52	49	C	F	C	29,98	30,00	30	39	35	29	C	F	F	F	30,27	30,00	25	34	34	38	S	C	R	R
12	30,12	30,09	48	60	51	46	C	F	F	30,10		32	39			C	F	F	F	29,80	29,69	35	48	46	43	R	C	C	F
13	30,09	30,05	48	60	50	46	F	F	F							F	F	F	F	29,74	29,63	41	52	45	34	F	F	F	F
14	30,01	29,82	48	56	53	52	R	R	R	29,93		33				F	F	F	F	29,72	30,20	35	42	36	25	F	F	F	F
15	29,80	29,81	54	62	57	55	C	C	C	29,72	29,88	47	50	51	38	R	R	C	F	30,20	29,83	17	30	29	34	F	F	F	C
16	29,81	29,71	55	62	55	54	C	R	C	30,22	30,20	33	46	38	34	F	F	F	F	30,10	30,31	18	17	13	8	F	F	F	F
17	29,52	29,44	53	60	47	37	R	R	R	30,25	30,28	38	61	56	52	F	F	F	F	30,27	29,92	13	27	27	26	C	F	F	C
18	29,53	29,91	37	50	45	42	F	F	F	30,29	30,28	56	67	62	59	C	F	F	F	29,72	29,71	32	44	39	42	F	F	F	C
19	30,02	30,20	38	59	51	39	F	F	F	30,24	30,12	60	69	62	58	F	F	F	F	30,05	30,19	21	32	26	21	F	F	F	F
20	30,23	30,23	40	62	55	51	F	F	C	30,02	29,75	54	67	61	59	F	F	F	C	30,08	29,87	19	34	30	20	F	F	F	F
21	30,26	30,21	53	61	52	52	R	R	R	29,74	30,14	48	49	39	28	F	F	F	F	29,85	30,32	22	29	21	9	F	F	F	F
22	30,01	29,68	55	56	56	59	R	R	C	30,30	30,38	23	30	30	27	F	F	F	F	30,50	30,56	2	11	18	19	F	F	F	F
23	29,71	29,75	52	66	60	54	F	F	C	30,30	30,																		



JANUARY.										FEBRUARY.										MARCH.										
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	
1	30,01	29,90	29	45	39	36	F	F	F	F	29,81	29,73	8	19	18	11	F	F	C	C	29,46	29,75	21	29	22	19	C	C	S	C
2	30,06	30,26	36	47	40	39	F	F	F	C	29,76	29,70	13	33	26	6	F	C	C	C	30,01	30,20	14	33	23	16	F	F	F	F
3	30,32	30,12	25	43	38	39	F	F	F	R	29,62	29,59	23	28	20	14	C	F	C	S	30,21	30,12	12	34	32	18	F	F	F	F
4	29,56	29,36	49	47	45	41	R	R	C	R	29,76	29,91	5	15	7	2	F	F	F	F	30,17	29,99	25	45	35	35	F	F	F	C
5	29,31	30,21	26	29	25	19	F	F	F	F	29,96	29,83	-3	25	1	-2	F	F	F	F	30,00	30,13	38	50	40	35	F	F	F	C
6	30,26	29,76	26	35	33	33	F	F	C	C	29,76	29,89	5	23	23	19	S	F	F	F	30,09	29,68	31	47	38	37	F	F	C	R
7	29,71	29,71	27	42	37	34	F	F	F	C	29,89	29,96	20	36	28	20	F	F	F	F	29,53	29,30	40	50	41	34	F	C	F	F
8	29,67	29,72	30	32	26	23	S	C	C	C	29,90	29,89	21	37	33	25	C	F	F	C	29,98	29,76	24	40	35	33	F	F	F	C
9	29,73	29,68	30	41	34	33	F	F	F	F	29,69	29,63	31	30	23	22	S	S	C	F	29,63	29,72	33	44	38	34	S	F	F	R
10	29,22	29,40	39	41	36	34	R	C	C	F	29,68	29,62	22	35	32	23	C	F	F	F	29,68	29,39	34	41	35	34	C	C	R	R
11	29,40	29,71	34	34	25	20	S	F	F	F	29,68	30,05	4	14	7	2	F	F	F	F	29,40	29,94	33	34	32	21	C	S	C	F
12	29,78	29,93	16	24	19	18	F	F	F	F	29,79	29,80	7	16	11	1	S	S	C	F	30,00	29,91	15	23	23	16	F	F	F	F
13	30,05	30,01	10	24	21	18	F	F	F	F	29,58	29,62	0	19	17	17	S	F	F	F	29,93	29,96	26	30	23	22	F	F	C	C
14	30,00	30,22	14	18	14	7	S	F	F	F	29,72	30,12	3	-2	-8	-11	F	F	F	F	29,52	29,68	22	34	29	28	C	C	C	C
15	30,23	30,15	9	26	23	25	F	F	F	C	30,22	30,22	-9	8	4	3	F	F	F	F	29,67	29,78	22	36	33	24	F	F	F	F
16	30,00	30,00	20	32	28	21	S	S	S	S	30,22	30,19	2	18	12	4	F	F	F	F	30,00	30,19	28	36	30	24	F	F	F	F
17	30,05	29,53	18	30	34	37	C	C	C	R	29,96	29,73	7	25	20	20	F	S	S	S	30,21	30,19	29	41	34	30	F	R	R	C
18	29,22	29,03	39	36	32	19	C	C	R	29,59	29,61	21	26	28	29	C	S	S	S	29,88	29,53	35	37	36	34	R	R	R	C	
19	29,19	29,42	10	15	10	8	F	F	F	F	29,78	29,82	23	36	29	23	C	F	C	F	29,60	29,71	29	30	18	10	F	F	F	
20	29,54	29,51	10	21	18	19	F	F	F	C	29,93	30,00	20	42	34	25	F	F	F	F	29,67	29,66	8	22	18	19	F	F	C	C
21	29,47	29,68	19	19	23	16	C	F	F	F	30,01	29,52	31	39	34	34	R	C	C	R	29,67	29,91	21	39	36	35	F	F	C	C
22	29,90	30,17	7	20	15	8	F	F	F	F	29,52	29,67	35	47	10	34	F	F	F	F	30,07	30,28	35	48	41	35	F	F	C	F
23	30,24	30,02	5	25	22	22	F	F	C	C	29,61	29,59	34	44	35	32	F	F	F	F	30,43	30,46	33	44	37	34	F	F	C	F
24	29,67	29,79	33	30	28	29	S	S	S	S	29,28	29,79	27	34	27	18	S	S	S	S	30,33	30,00	35	38	35	35	R	C	C	C
25	29,88	29,73	18	34	27	24	F	F	F	F	29,20	29,73	14	27	19	14	F	F	F	F	30,00	29,96	38	52	42	37	C	C	C	C
26	29,50	29,48	25	34	21	13	C	F	C	F	30,01	30,29	11	29	20	11	F	F	F	F	29,73	29,64	34	36	33	29	R	R	C	S
27	29,58	29,61	2	19	16	15	F	F	F	F	30,21	29,71	11	31	31	25	S	S	C	C	29,97	30,23	30	33	33	27	F	F	F	
28	29,78	29,97	1	7	2	-2	F	F	F	F	29,72	29,59	24	36	29	29	C	C	S	S	30,25	30,12	43	44	33	34	F	F	C	C
29	29,94	29,72	-1	15	17	16	F	F	F	S	29,95	30,05	35	44	31	30	F	F	F	F	30,11	30,11	33	47	34	F	F	F	F	
30	29,65	29,71	6	14	7	-1	F	F	F	F	30,01	29,91	37	41	36	34	C	F	C	C	30,01	29,91	37	41	36	34	C	F	C	
31	29,67	29,85	3	30	19	11	C	F	F	F											29,30	29,33	29							
Mean			20	30	25	21					15	27	21	17								20	30	25	21					

APRIL.										MAY.										JUNE.										
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	
1	29,55	30,04	37	52	38	F	F	F	F	30,24	30,27	63	72	54	55	F	F	F	F	30,06	30,15	46	65	54	49	F	F	F	F	
2	30,22	30,22	42	50	39	38	F	F	F	C	30,27	30,27	65	73	59	56	F	F	F	F	30,21	30,28	57	67	54	50	F	F	C	F
3	29,98	30,11	41	59	43	37	C	F	F	F	30,27	30,28	61	72	55	43	F	F	F	F	30,31	30,31	56	65	53	52	F	C	F	C
4	30,19	30,20	38	45	37	34	F	F	F	F	30,29	30,33	59	57	45	43	F	F	C	C	30,22	29,93	51	55	54	53	C	R	R	R
5	30,28	30,35	36	42	37	36	C	C	C	C	30,29	30,22	50	64	60	51	C	F	F	F	29,78	29,70	55	77	65	64	R	F	F	F
6	30,35	30,18	40	45	38	38	F	C	R	30,22	30,18	55	74	62	56	C	F	F	F	29,62	29,79	69	75	67	61	F	F	F	F	
7	29,88	29,68	40	43	41	38	R	C	R	30,11	30,10	65	75	59	53	F	F	F	F	29,80	29,82	67	86	65	60	F	F	R	C	
8	29,88	29,80	37	46	38	37	R	F	F	30,02	29,96	57	63	55	55	C	C	R	R	29,93	29,93	56	66	59	54	F	F	F	F	
9	29,72	29,68	39	52	47	44	C	C	R	F	30,01	30,08	53	65	52	49	C	F	F	F	29,91	29,51	63	65	56	57	F	C	R	R
10	29,80	29,80	44	63	58	43	F	F	F	F	30,06	29,93	52	58	51	48	C	F	F	C	29,40	29,26	61	80	63	63	R	R	R	R
11	29,93	30,16	34	42	35	33	F	F	F	F	29,80	29,75	55	68	51	51	C	F	R	C	29,48	29,78	65	75	65	59	R	F	F	F
12	30,18	29,85	37	52	41	41	F	F	C	C	29,80	29,97	55	63	50	42	C	F	F	F	29,91	29,94	61	75	65	59	F	F	F	F
13	29,56	29,66	47	53	43	39	R	F	F	F	30,00	29,90	41	52	50	42	F	F	F	F	29,96	29,89	66	81	61	61	F	C	F	C
14	29,77	30,03	46	53	37	37	F	F	F	F	29,88		50	52			F	F	F	C	29,87	29,89	70	64	57	55	F	R	R	R
15	30,21	30,03	43	53	46	42	F	F	C	C											29,73	29,71	52	53	51	50				



JULY.										AUGUST.										SEPTEMBER.										
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	
1	29,68	29,70	65	75	63	56	F	C	R	F	30,02	30,08	64	73	65	63	C	C	C	C	30,11	30,12	62	71	63	61	C	C	C	F
2	29,77	29,97	66	80	71	63	F	F	F	30,02	29,93	70	79	70	63	F	F	F	C	30,11	30,04	65	73	64	60	F	F	F	F	
3	29,96	30,00	68	80	66	63	F	F	F	29,91	29,87	70	84	71	68	F	F	C	R	29,99	29,96	64	84	74		F	F	F	F	
4	29,99	29,94	72	85	65	62	F	F	F	29,76	29,77	74	85	76	69	C	F	F	F	29,92		73	88	74	68	F	F	F	F	
5	29,88	29,90	72	80	64	62	F	F	R	29,87	30,11	73	81	67	59	F	F	F	F		29,98	74	91	79	75	F	F	C	C	
6	29,91	29,93	73	83	71	67	F	C	C	30,20	30,13	76	66	60	F	F	F	F		30,03	30,20	65	75	66	62	C	C	F	C	
7	29,86	29,89	72	84	76	72	R	F	F	30,08	29,90	65	78	71	59	F	F	F	C	30,30	30,32	61	73	62	58	F	F	F	F	
8	29,88	29,82	70	74	60	59	R	C	C	29,88	29,93	73	79	72	70	R	R	C	C	30,31	30,23	61	75	62	61	F	C	F	C	
9	29,87	30,27	72	77	67	69	F	F	F	29,95	29,78	74	73	67	64	R	R	R	C	30,17	30,15	66	78	68	63	C	F	C	C	
10	30,37	30,40	62	71	60	56	F	F	F	29,87	30,07	72	84	71	64	C	F	F	F	30,08	30,01	72	87	75	71	F	F	F	F	
11	30,32	30,12	67	75	69	68	C	F	C	30,18	30,19	68	68	62	60	F	C	C	R	30,02	30,01	75	78	67	66	F	F	C	R	
12	30,02		78	85	70	68	C	R	F	30,09	29,98	57	71	67	64	R	R	R		30,00	30,01	76	81	71	69	F	C	R	R	
13	29,94	30,06	73	86	72	67	C	R	C	30,01	30,12	71	86	78	68	F	F	F	F	30,12	30,29	60	63	57	50	C	F	C	F	
14	30,18	30,27	65	75	62	59	F	F	F	30,00	29,98	74	78	70	70	F	F	C	C	30,37	30,38	56	59	52	51	F	C	C	C	
15	30,28	30,27	69	78	66	58	F	F	F	29,77	29,87	78	89	74	70	R	C	R	C	30,33	30,16	56	60	57	58	C	C	C	C	
16	30,28	30,11	68	85	72	68	F	F	F	30,02	30,01	72	77	67	63	F	F	F	F	29,96	29,86	60	63	60	59	R	R	F	C	
17	30,11	30,11	77	84	73	72	F	F	F	30,08	29,91	72	80	73	71	F	F	C	C	29,88	29,88	63	76	68	60	F	R	F	F	
18	30,07	30,03	79	97	79	75	F	F	F	29,92	30,01	76	92	81	75	F	F	F	F	29,82	30,12	63	74	67	56	R	F	F	F	
19	30,00	29,85	79	95	78	75	F	F	C	30,22	30,06	71	73	65	73	F	F	C	C	30,23	30,29	54	69	60	55	F	F	F	F	
20	29,74	29,83	79	94	73	68	F	R	F	29,86	29,89	71	74	62	61	R	R	R		30,22	29,99	61	76	71	68	F	F	C	C	
21	30,04	30,10	66	80	63	60	F	F	F	29,83	29,78	68	78	73	68	C	C	F	F	30,11	30,11	58	66	58	50	C	F	C	F	
22	29,98	29,80	64	77	73	71	C	R	C	29,87	29,98	68	81	72	64	F	F	F	F	30,13	29,94	52	65	58	57	F	F	C	R	
23	29,91	30,12	72	87	69	62	F	F	F	30,00	29,77	67	81	71	68	F	F	F	C	29,75	29,64	59	79	65	60	C	F	F	F	
24	30,18	30,11	69	77	65	61	F	F	C	29,77	30,09	59	56	54	53	C	R	R	R	29,47	29,79	68	64	57	R	F	F	F	F	
25	30,11	30,19	66	75	64	59	F	F	F	30,18	30,24	56	70	59	54	F	F	F	F	29,82	29,83	52	65	58	46	F	F	F	F	
26	30,21	30,23	66	80	67	62	F	F	F	30,23		59	74	62	57	F	F	F	F	29,83	29,78	47	65	59	53	F	F	F	F	
27	30,18	30,11	69	81	65	60	F	F	F			61	73	63	56	F	F	F	F	29,73	29,73	59	69	62	60	F	F	F	F	
28	30,02	29,99	67	82	65	63	F	F	F		30,14	62	73	60	F	F	F	F	29,78	29,30	51	64	54	47	R	F	F	F	F	
29	30,00	30,00	75	92	78	72	F	F	F	30,10	30,08	67	75	69	61	F	F	C	F	29,97	29,98	49	61	52	45	F	F	F	F	
30	29,86	29,92	72	80	71	67	C	R	F	30,07	30,04	62	71	62	60	F	F	F	F	30,02	30,10	44	56	44	37	F	F	F	F	
31	29,95	30,02	72	75	62	59	F	F	F	30,09	30,11	59	61	60	59	R	R	R												
Mean			70	82	68	65						68	77	68	63															

OCTOBER.										NOVEMBER.										DECEMBER.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	30,10	30,01	37	54	46	38	F	F	F	30,07	29,83	49	48	48	46	R	R	R		29,66	29,74	38	45	40	31	F	F	F	F
2	30,01	30,00	38	61	53	50	F	F	C	29,64	29,68	43	42	40	34	R	R	R		29,72	29,20	38	47	46	51	C	C	R	R
3	29,99	29,99	47	54	45	C	F	F	F	29,78	29,98	33	41	38	36	C	C	C		29,40	29,67	37	41	33	27	C	S	R	F
4	30,01	30,00	47	66	55	51	F	F	F	30,02	30,17	33	38	36	29	C	C	C		29,72	29,88	20	31	28	20	F	F	F	F
5	29,91	29,82	54	75	63	58	F	F	C	30,20	30,29	30	47	40	34	F	F	F		29,72	29,85	20	33	27	22	F	F	F	C
6	29,81	29,78	58	75	62	58	R	F	C	30,21	30,00	34	54	51	51	F	C	C		29,59	30,04	18	33	27	22	F	F	F	C
7	29,62	29,52	59	74	66	56	R	C	R	30,02	30,22	52	66	59	48	F	F	C		30,19	30,20	15	27	23	14	F	F	F	F
8	29,85	30,05	50	62	54	45	F	F	F	30,29	30,28	42	56	49	46	F	F	F		30,19	30,17	16	30	25	23	C	F	F	F
9	29,98	30,03	50	67	45	38	F	C	R	30,17		49	64	59	58	C	F	F		30,12	29,93	12	34	30	25	F	F	F	F
10	29,99	29,99	39	53	49	40	F	F	F	30,10	30,14	55	66	61	58	C	C	C		29,87	29,90	30	47	40	32	C	F	F	F
11	30,08	29,92	38	55	50	46	F	F	F	30,15	30,02	51	62	62	61	C	C	C		29,88	29,97	33	38	35	36	C	F	F	F
12	29,80	29,59	48	68	61	58	F	R	F	29,90	29,70	58	67	64	64	C	C	C		30,16	29,87	27	38	39	34	R	R	R	R
13	29,50	29,90	60	70	62	51	F	F	F	30,01	30,20	42	55	49	37	F	F	F		30,02	30,23	27	29	28	28	C	C	C	C
14	29,80	29,91	47	54	54	40	C	F	F	30,28	30,20	33	51	45	38	F	F	F		30,15	29,58	30	42	42	53	C	R	R	C
15	29,93	29,89	39	50	50	45	F	F	C	30,10	29,60	39	46	47	47	C	R	C		29,43	29,51	51	49	47	34	R	R	R	C
16	29,86	29,88	37	53	44	38	F	F	C	29,71	29,99	39	40	44	34	F	F	F		29,86	30,00	25	35	34	32	F	F	F	C
17	29,85	29,71	33	44	44	F	F	C	C	29,11	29,99	32	40	38	39	C	R	R		30,01	30,08	33	32	32	C	C	C	C	
18	29,67	29,89	42	54	47	35	F	F	F	29,69	29,44	45	41	42	R	R	R		30,12	29,82	24	37	35	38	F	F	S	C	
19	29,92	29,69	30	54	50	48	F	F	F	29,71	30,10	37	46	38	32	F	F	F		29,63	29,75	35	42	36	28	C	F	F	F
20	29,82	30,21	42	48	43	34	F	F	F	30,16	30,15	31	43	37	34	F	F	C		29,78	29,77	23	35	29	24	F	F	F	C
21	30,32	30,26	32	61	48	41	F	F	F	30,12	30,25	34	40	35	26	F	F	F		29,51	29,77	14	14	12	11	S	F	S	C
22	30,21	30,19	46	69	59	55	F	F	F	30,00	29,90	31	34	33	32	S	C	C		29,11	29,39	5	15	11	9	F	F	F	F
23	30,17		51	71	59	52	F	F	F	29,95	30,12	24	33	33	20	F	F	C		29,48	30,55	16	32	28	21	F	F	F	F
24	30,02	29,89	54																										

Table with columns for JANUARY, FEBRUARY, and MARCH. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for time of day (8 A.M., 10 P.M., etc.) and weather conditions (S, N, St, 10).

Table with columns for APRIL, MAY, and JUNE. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for time of day (8 A.M., 10 P.M., etc.) and weather conditions (S, N, St, 10).

N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.



JULY.										AUGUST.										SEPTEMBER.										
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					
8 A.M.	10 P.M.	8 N.	St.	10	8	N.	St.	10	8	A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8	A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	29.59	30.11	69	78	63	62	F	F	F	30.01	30.14	77	90	78	72	F	F	F	F	29.78	29.72	67	81	70	66	C	F	F	F	
2	30.11	30.11	68	80	69	68	F	F	F	30.17	30.12	76	84	72	69	F	F	F	F	29.76	29.37	68	81	64	62	F	C	C	F	F
3	30.12	30.15	70	73	63	62	C	R	R	29.95		72	86	74	69	C	F	R	F	29.91	30.00	64	85	74	66	F	F	F	F	F
4	30.16	30.17	65	76	66	64	C	R	C	29.86	29.97	71	84	74	69	F	F	F	F	30.09	30.17	63	77	71	59	F	F	F	F	F
5	30.11	30.03	70	81	67	64	C	C	C	29.90	29.82	73	89	77	71	F	F	F	F	30.20	30.19	62	76	65	62	F	F	F	F	F
6	30.02	30.12	68	82	63	66	C	F	F	29.70	29.97	77	85	67	59	C	C	F	F	30.15	30.10	70	72	65	60	F	F	F	F	F
7	30.17	29.99	70	78	66	65	C	C	C	30.09	30.03	60	78	66	59	F	F	F	F	33.01	29.87	64	72	66	66	C	C	C	R	R
8	29.81	29.74	76	90	82	76	F	F	F	30.10	30.02	65	82	70	66	F	F	F	C	29.78	29.68	64	62	56	58	R	R	R	R	R
9	29.71	29.73	81	92	69	69	F	F	R	30.03	30.05	69	82	63	63	F	F	F	F	29.46	29.69	54	56	57	56	R	R	R	R	R
10	29.81	29.78	72	91	79	74	F	F	C	30.04	30.06	69	83	72	66	F	F	F	F	29.78	29.99	60	66	60	54	C	F	C	F	F
11	29.71	29.79	84	98	89	84	F	F	F	30.02	30.00	75	86	73	66	F	F	F	F	30.01	30.06	58	74	63	55	F	F	F	F	F
12	29.82	29.88	85	99	88	82	F	F	F	29.97	29.98	74	91	80	74	F	F	F	F	30.16	30.28	60	60	56	52	C	C	C	C	F
13	29.86	29.97	80	88	75	72	F	C	F	29.84	29.71	74	90	82	75	C	F	F	F	30.20	30.21	60	65	56	55	C	C	C	C	F
14	30.00	29.98	74	90	74	69	F	F	F	29.63		76	82	71	66	F	F	F	F	30.05	30.08	56	68	60	57	C	C	C	C	F
15	29.53	30.01	75	73	60	58	F	F	F	29.96	29.98	63	82	70	63	F	F	C	F	30.00	29.83	72	66	64	R	C	C	R	R	
16	30.05	30.07	69	80	69	68	F	F	F	29.98	30.00	67	82	73	66	F	F	F	F	29.85	29.70	70	75	59	55	R	R	R	R	R
17	30.02	30.03	70	73	64	61	F	F	F	30.01	30.09	69	72	61	55	F	F	F	F	29.64	29.87	57	62	58	54	R	C	R	F	F
18	29.99	30.00	70	86	69	64	F	F	F	30.09	30.15	61	74	62	58	F	F	F	F	30.07	30.17	55	65	58	57	F	F	C	F	F
19	29.96	30.00	72	72	69	69	R	R	R	30.19		62	75	64	61	F	F	F	C	30.01	29.68	57	62	59	66	R	R	R	R	R
20	30.01	30.02	73	86	70	69	R	C	C	30.20	30.09	69	75	69	65	C	F	C	F	29.62	29.66	65	73	62	54	C	C	C	F	F
21	30.08	29.93	71	84	74	72	R	C	F	29.97	29.92	71	99	78	69	C	F	F	F	29.63	29.67	54	62	56	52	C	C	C	F	F
22	29.86	29.90	72	84	72	70	F	F	F	29.88	29.96	71	83	69	64	F	F	F	F	29.65	29.77	56	70	60	56	F	F	F	F	F
23	29.97	29.97	77	86	70	65	R	F	R	29.97	30.00	68	78	67	60	F	F	C	C	29.82	29.97	50	64	57	48	F	F	F	F	F
24	29.84	29.85	75	89	71	66	F	F	F	30.07	29.80	69	72	62	64	F	F	C	C	29.95	29.87	59	71	63	58	F	F	F	F	F
25	29.92	29.91	69	85	74	69	R	C	F	29.88	29.98	68	78	66	60	C	C	C	C	29.78	29.85	64	82	72	61	R	F	F	F	F
26	29.87	29.77	75	70		65	F	F	F	30.06	30.03	63	73	65	60	C	F	F	F	29.92	29.99	54	68	60	50	F	F	F	F	F
27	29.79	29.83	73	70	67	67	F	F	F	30.03	30.00	65	71	69	58	C	F	F	F	29.95	29.96	46	61	54	46	F	F	F	F	F
28	29.92	30.02	73	85	76	71	C	F	F	30.05	30.00	65	70	62	59	C	C	F	F	29.94	29.90	49	62	54	47	F	F	F	F	F
29	29.99	30.03	75	85	76	70	F	F	C	30.00	30.11	64	72	64	59	F	F	F	F	29.95	30.02	49	59	52	44	F	F	F	F	F
30	30.03	29.91	76	82	70	69	F	F	C	30.09	30.03	64	72	64	62	F	F	F	C	30.02	30.19	49	61	53	F	F	F	F	F	
31	29.82	29.94	84	94	78	72	F	F	F	29.98	29.37	62	78	66	62	C	F	F	F											
Mean			74	83	72	69						68	81	69	64															

OCTOBER.										NOVEMBER.										DECEMBER.										
Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					Barometer.		Therm.			Weather.					
8 A.M.	10 P.M.	8 N.	St.	10	8	N.	St.	10	8	A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10	8	A.M.	10 P.M.	8	N.	St.	10	8	N.	St.	10
1	30.18	30.19	49	66	56	50	F	F	F	29.71	29.73	53	64	52	49	C	C	F	F	30.12	30.18	24	35	34	36	F	C	F	C	F
2	30.12	30.00	51	68	58	51	F	F	F	29.72	29.79	43	53	45	40	F	F	F	F	30.30	30.17	26	34	32	26	C	C	F	F	F
3	29.81	29.55	58	69	62	60	R	R	R	29.80	29.79	33	45	50	46	F	F	F	C	30.17	30.20	24		21	F	F	F	F	F	
4	29.47	29.40	59	71	63	57	F	C	F	29.49	29.83	43	52	46	45	F	C	R		30.22	30.17	22	40	34	26	F	F	F	F	F
5	29.46	29.36	53	60	48	46	F	C	F	29.76	29.88	45	56	50	49	C	C	R		30.10	29.81	24	45	40	42	F	F	F	C	C
6	29.92	30.06	44	59	45	38	C	C	F	29.87	29.74	49	58	52	51	R	R	R		29.24	29.35	50	43	42	36	R	R	F	F	F
7	30.09	30.10	39	61	53	47	F	F	F	29.63	29.61	56	60	57	54	R	R	R		29.63	29.59	30	41	34	26	F	F	F	F	F
8	30.16		48	67	61	54	F	F	F	29.70	29.77	46	53	48	44	C	F	F		30.06	29.80	16	28	26	28	F	F	F	C	F
9		30.25	54	71	60	54	F	F	F	29.76	29.48	36	43	38	37	F	F	F		29.60	30.02	36	41	38	31	C	C	C	F	S
10	30.22	30.12	54	62	57	49	C	F	F	29.60	29.69	37	53	43	42	F	F	C		30.15	30.15	20	32	29	27	F	C	C	C	F
11	30.12	30.12	51	69	58	51	F	C	C	29.66	29.70	44	48	47	42	R	R	C		30.02	29.97	26	27	28	30	R	C	C	C	F
12	30.08	30.18	53	74	61	53	C	F	F	29.82	30.05	38	49	42	40	C	F	F		29.92	30.05	23	25	22	16	C	F	F	F	F
13	30.30	30.27	56	57	52	52	C	F	F	30.11	30.09	33	52	44	42	F	F	C		30.16	30.14	16	32	27	24	F	F	C	C	F
14	30.12	29.93	51	59	49	49	R	R	C	29.92	29.76	45	60	54	52	F	F	F		30.02	30.10	22	27	23	16	S	C	F	F	F
15	29.90	29.90	52	65	59	54	F	C	F	29.66	29.61	56	66	60	60	C	C	R		30.11	29.97	12	30	24	18	F	F	F	F	F
16	29.99	30.07	54	65	61	54	F	F	F	29.79	30.00	50	57	48	40	F	F	F		29.92	30.02	24	34	28	17	S	F	F	F	F
17	30.05	30.08	56	70	63	58	R	R	C	30.02	30.21	40	50	42	35	F	F	F		29.92	30.03	3	13	10	8	F	F	F	F	F
18	30.10	30.23	48	62	54	46	F	F	F	30.18	29.88	35	42	35	33	F	C	S		30.08	30.37	10	26	17	7	F	F	F	F	F
19	30.25	30.17	42	61	54	48	F	F	F	29.75	29.92	34	40	36	32	R	R	C		30.33	30.06	6	25	20	11	F	F	F	F	F
20	30.00	29.93	48	61		53	F	F	F	30.03	29.98	33	42	36	28	F	F	F		29.80	29.93	14	35	31	24	F	F	F	F	F
21	29.79	29.62	56	68	61	58	C	F	C	29.98	29.80	39	50	45	36	F	F	F		29.94	29.88	26	38	31	27	F	F	F	F	F
22	29.73	29.97	42	50	43	32	F	F	F	29.80	29.81	36	49	44	41	C	F	C		29.85	30.18	26	31	24	13	F	F</			



JANUARY.										FEBRUARY.										MARCH.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A. M.	10 P. M.	8 N.	St.	10	8 N.	St.	10	8 N.	St.	10	8 A. M.	10 P. M.	8 N.	St.	10	8 N.	St.	10	8 A. M.	10 P. M.	8 N.	St.	10	8 N.	St.	10			
1	29.88	30.01	31	41	41	35	F	F	F	30.02	30.01	15	34	20	23	F	F	F	29.81	29.51	36	44	35	33	F	F	C	S	
2	30.20	30.30	32	34	29	21	F	F	F	29.98	29.93	19	51	42	36	F	F	F	29.51	29.76	26	31	22	15	F	F	F	F	
3	30.11	29.62	15	32	28	27	F	F	C	29.76	29.71	30	48	42	42	F	F	F	29.95	29.99	10	26	23	20	F	F	F	F	
4	29.63	29.96	25	31	29	26	F	F	F	29.70	29.71	42	56	48	38	F	F	F	29.82	29.82	28	40	34	30	F	F	F	F	
5	30.10	30.10	17	27	27	26	F	F	C	29.79	30.12	37	24	31	30	C	C	C	30.02	29.85	28	43	35	34	F	F	F	C	
6	30.06	30.01	19	30	26	26	F	F	F	30.31	30.41	22	31	27	20	F	F	F	29.40	29.66	37	40	35	24	S	C	S	S	
7	30.22	30.48	21	33	27	20	F	F	F	30.49	30.35	27	38	34	30	C	C	C	30.02	30.24	16	21	19	18	F	F	F	F	
8	30.64	30.62	12	24	23	21	C	C	C	30.11	29.72	36	45	46	44	R	R	R	30.00	29.50	26	30	30	19	S	S	S	S	
9	30.52	30.20	19	37	32	32	F	F	C	29.76	29.57	43	59	45	38	F	F	F	29.69	30.00	19	23	21	15	S	C	F	F	
10	30.06	30.19	35	47	12	35	F	F	F	29.40	29.48	49	64	50	49	R	C	F	30.16	30.22	16	36	31	19	F	F	F	F	
11	30.13	29.99	35	44	41	40	F	F	F	29.63	29.90	37	35	35	31	F	F	F	30.13	30.04	21	44	34	32	F	F	F	C	
12	30.11	30.28	38	41	35	24	F	F	F	30.05	29.99	27	34	30	28	F	F	F	29.90	29.68	35	44	36	34	C	S	C	S	
13	30.25	29.96	38	42	34	31	F	F	F	29.73	29.53	26	28	24	21	S	S	S	29.33	29.07	34	43	36	34	C	C	S	S	
14	30.04	30.38	12	18	13	5	S	F	F	29.78	30.01	18	35	27	27	F	F	C	29.07	29.31	22	23	12	13	F	F	F	F	
15	30.30	29.84	6	31	33	38	F	C	C	30.07	29.97	30	40	34	34	C	C	C	29.58	29.74	14	28	23	16	F	F	F	F	
16	30.00	30.20	29	42	38	32	F	F	F	30.07	30.19	30	41	34	26	F	F	F	29.52	28.98	24	35	33	24	F	F	F	F	
17	30.37	30.37	35	42	34	31	F	F	F	30.17	30.01	24	31	25	22	F	C	C	29.04	29.53	24	32	21	21	F	F	F	F	
18	30.17	30.09	38	50	46	42	F	F	R	30.08	30.26	14	22	19	15	F	F	F	29.79	29.89	24	35	28	25	F	F	F	F	
19	30.16	30.11	40	42	40	40	C	C	C	30.33	30.15	19	37	30	23	F	F	F	29.82	29.68	26	47	32	32	F	F	F	C	
20	30.01	30.36	38	33	32	32	C	R	C	29.55	29.60	27	36	32	28	S	C	C	29.57	29.71	35	45	38	30	S	F	F	F	
21	30.37	30.41	28	30	31	30	C	C	C	29.48	29.51	27	35	32	27	S	C	F	29.72	30.28	24	34	27	22	R	F	F	F	
22	30.33	30.18	30	39	37	37	C	C	C	29.58	29.58	20	39	32	26	F	F	F	30.42	30.35	37	29	28	F	F	F	F	F	
23	30.05	29.96	34	56	49	40	F	F	F	29.54	29.81	32	42	33	24	F	F	F	30.21	29.72	34	48	40	41	F	F	R	R	
24	29.76	29.32	38	40	42	42	F	F	C	30.00	30.07	18	30	25	22	F	F	F	29.93	30.20	41	46	41	37	F	F	F	R	
25	29.52	29.78	35	38	37	27	F	F	F	29.94	29.40	30	37	35	35	C	C	C	29.80	29.49	35	37	36	34	R	R	R	F	
26	29.69	29.76	27	42	38	32	F	F	F	28.93	28.98	39	45	45	29	R	C	C	29.72	29.72	40	48	42	34	F	F	F	F	
27	29.88	29.90	32	43	38	32	F	F	F	29.02	29.40	32	40	33	28	C	F	F	29.70	29.98	29	34	27	23	F	F	R	F	
28	29.40	30.03	40	35	26	13	F	F	F	29.49	29.74	26	37	35	32	F	F	F	30.08	30.13	19	28	27	22	F	F	F	F	
29	30.23	30.18	2	14	14	12	F	F	F										30.18	29.93	26	32	27	31	C	S	S	S	
30	29.63	29.90	26	38	36	23	S	C	F										29.66	29.31	35	35	36	38	R	R	R	R	
31	30.15	30.12	16	23	21	20	F	F	F										29.50	30.01	44	45	31	26	F	F	F	F	
Mean			17	36	33	29						29	40	34	30														

APRIL.										MAY.										JUNE.									
Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.				Barometer.		Therm.				Weather.			
8 A. M.	10 P. M.	8 N.	St.	10	8 N.	St.	10	8 N.	St.	10	8 A. M.	10 P. M.	8 N.	St.	10	8 N.	St.	10	8 A. M.	10 P. M.	8 N.	St.	10	8 N.	St.	10			
1	30.25	30.42	26	40	32	29	F	F	F	29.77	29.68	60	65	54	52	F	F	F	29.57	29.82	52	54	50	50	R	C	C	C	
2	30.22	30.00	36	4	35	31	F	F	F	29.64	29.69	55	60	50	48	C	C	C	29.78	29.80	60	72	60	58	C	F	F	F	
3	29.94	29.95	41	61	49	45	F	F	C	29.72	29.92	49	58	55	49	R	C	C	29.78	29.97	66	74	66	59	F	F	F	F	
4	29.94	29.63	47	53	47	46	R	C	R	29.97	29.94	62	68	54	52	F	F	F	30.02	30.00	68	87	74	70	F	F	F	F	
5	29.30	29.59	51	61	42	12	R	R	F	29.87	29.89	62	74	59	55	F	F	F	30.08	30.10	78	90	75	73	F	F	F	F	
6	29.60	29.80	38	44	34	33	C	C	C	29.78	29.84	58	78	62	50	F	F	F	30.09	30.09	78	90	78	72	F	F	F	F	
7	29.85	29.48	33	50	42	37	F	F	F	29.80	30.09	47	47	41	41	C	C	C	30.03	30.00	76	85	69	68	F	F	F	F	
8	29.50	29.50	40	54	47	43	C	C	C	30.12	30.20	49	51	44	41	F	F	F	30.02		72	80	69	68	F	F	F	R	
9	29.53	29.91	42	43	36	32	F	F	F	30.21	30.06	48	56	48	47	C	C	R	30.02	29.95	72	85	74	70	F	F	F	R	
10	29.94	30.00	32	45	40	35	F	F	F	29.89	29.68	54	52	50	48	R	R	R	30.07	30.18	69	78	64	57	F	F	F	F	
11	29.92	29.49	40	40	43	43	F	F	C	29.75	30.16	48	52	15	15	R	R	R	30.21	30.03	62	69	60	60	F	C	R	R	
12	29.40	29.53	45	54	42		R	C	F	30.22	30.27	42	45	42	39	F	F	F	29.92	30.00	62	65	62	61	R	R	R	C	
13	29.57	29.84	48	61	46	43	F	F	F	30.27	30.26	44	44	42	42	F	C	R	30.11	30.24	62	68	59	54	C	F	F	F	
14	29.97	30.14	46	56	46	42	F	F	F	30.22	30.18	43	48	44	44	R	R	R	30.27	30.31	66	72	68	62	F	F	F	F	
15	30.17	30.11	48	66	52	48	F	F	F	30.10		50	56	52	51	R	R	R	30.30	30.22	75	82	66	62	F	F	F	C	
16	30.11	30.08	49	51	42	40	F	F	F	29.62	29.43	54	58	54	51	R	R	R	30.27	30.00	69	86	73	65	F	F	F	F	
17	30.02	29.82	45	44	41	39	C	C	R	29.29	29.37	54	65	53	50	R	F	F	29.91	29.84	95	84	78	F	F	F	C	C	
18	29.62	29.72	41	40	37	36	R	R	R	29.37	29.45	58	62	50	47	F	F	C	29.77	29.66	82	91	68	67	F	F	F	C	
19	29.73	29.82	36	38	37	37	R	R	R	29.57	29.80	52	62	53	46	F	F	F	29.61	29.83	79	92	70	64	F	F	F	C	
20	29.86	29.91	30	42	39	37	C	C	C	29.81	29.99	55	62	56	49	C	F	F	29.97	29.92	65	74	60	58	F	F	F	F	
21	29.89	29.90	46	52	44	38	C	F	F	29.98	30.01	59	73	63	57	F	F	F	29.88	29.97	72	78	68	63	F	F	F	F	
22	29.83	30.00	50	58	47	38	F	F	F	30.05	29.84	57	66	63	61	F	F	F	30.00	30.03	68	76	67	67	F	F	F	C	
23	30.00	29.85	44	53	44	44	F	F	F	29.98	30.00	56	62	54	52	C	F	F	29.93		73	83	69	56	F	F	R	C	
24	29.83	29.90	46	54	47	41	F	F	F	29.89	29.64	52	63	53	52	R	C	C	29.95	29.99	69	75	63	61	F	F	R	C	
25	29.87	30.07	45	57	46	42	F	F	C	29.																			

JULY.											AUGUST.											SEPTEMBER.										
Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.				
8 A.M.	10 P.M.		8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.		8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.		8	N.	St.	10	8	N.	St.	10
1	29.67	29.75	73	77	65	67	R	C	R	F	29.98	30.06	84	100	76	72	F	F	R	R	30.02	30.00	69	86	76	71	F	F	F	F		
2	29.77	29.77	71	82	69	65	F	F	F	F	30.00	30.03	79	93	75	73	F	F	R	R	29.99	29.97	75	92	83	77	F	F	F	F		
3	29.78	29.90	67	75	64	59	F	F	F	F	30.02	30.21	76	88	76	68	F	F	F	F	29.89	29.87	80	94	85	79	F	F	F	F		
4	29.89	30.09	67	82	63	59	F	F	F	F	30.26	30.27	68	79	68	64	F	F	F	F	29.91	29.85	75	89	79	74	F	F	F	F		
5	30.22		60	70	59	55	F	F	F	F	30.27	30.22	69	82	70	66	F	F	F	F	29.88	30.03	71	76	67	64	F	F	F	F		
6				75	72	57	F	F	F	F	30.21		73	90	74	70	F	F	F	F	30.07	30.01	70	78	71	70	F	F	F	F		
7				75	64	60	F	F	F	F	30.12		80	94	80	76	F	F	F	F	29.95	29.83	75	84	72	70	C	C	R	R		
8		30.08	69	89	77	70	F	F	F	F	29.99	29.93	81	88	83	72	F	F	R	R	29.87	29.72	68	75	68	68	F	F	F	F		
9	30.08	30.08	80	88	72	74	F	F	F	F	29.82	29.98	73	88	78	70	R	F	F	F	29.67	29.97	76	81	69	60	F	F	F	F		
10	30.04	30.01	83	98	87	79	F	F	F	F	30.01	30.10	74	86	74	71	F	F	F	F	30.07	30.21	62	73	65	56	F	F	F	F		
11	29.92	29.81	84	94	77	74	F	F	R	C	30.07	30.04	75	81	75	71	F	F	F	C	30.31	30.36	57	73	62	58	F	F	F	F		
12	29.85	29.82	78	87	76	71	F	F	F	F	29.97	29.87	79	91	82	80	F	F	F	F	30.38	30.29	63	78	70	62	F	F	F	F		
13	29.97	30.12	73	80	67	63	F	F	F	F	29.86	30.00	83	91	78	72	F	F	F	F	30.18	30.64	65	79	70	69	R	F	F	F		
14	30.18	30.19	70	81	67	63	F	F	F	F	29.97	29.99	75	91	77	72	F	F	F	C	29.75	30.01	67	68	55	48	F	F	F	F		
15	30.11	29.94	68	79	67	67	F	F	F	F	30.02	30.09	71	71	67	61	F	F	F	F	30.07	30.22	52	65	57	48	F	F	F	F		
16	29.46	29.80	67	87	77	72	R	F	F	F	30.07	29.92	65	64	62	58	R	R	R	R	30.27	30.27	57	79	61	58	F	F	F	F		
17	29.86	29.90	75	79	70	69	F	F	F	F	29.76	29.90	62	67	62	61	R	R	R	R	30.32	30.13	60	70	62	57	F	F	F	F		
18	29.97	30.10	78	87	71	65	F	F	F	F	29.98	30.09	67	76	67	64	F	F	F	F	30.00	30.02	60	78	68	60	F	F	F	F		
19	30.08	30.19	70	78	66	62	F	F	F	F	30.07	30.07	69	77	69	68	R	F	F	F	30.05	29.98	62	75	62	58	F	F	F	F		
20	30.17	30.12	79	84	72	67	F	F	F	F	30.04	30.01	74	91	80	74	F	F	F	F	29.98	30.19	58	59	54	F	F	F	F			
21	30.09	30.14	72	77	65	62	F	F	F	F	29.99	30.01	80	90	79	73	F	F	F	F	30.22	30.38	56	52	52	C	C	F	R	F		
22	30.13		70	83	72	68	F	F	F	F	29.93	29.77	79	86	75	74	F	F	R	R	30.27	30.20	57	60	53	55	R	F	F	F		
23				75	88	74	69	F	F	R	29.79	30.18	76	75	63	56	R	F	F	F	30.05	30.03	62	68	63	61	F	F	R	C		
24	30.20	30.21	76	82	69	68	F	F	F	F	30.27	30.29	58	71	57	57	F	F	F	F	30.03		61	72	66	62	R	C	R	R		
25	30.08	30.03	70	80	70	66	R	F	F	F	30.28	30.30	60	74	64	58	F	F	F	F	29.97	30.00	63	65	62	60	C	C	R	R		
26	30.00	30.07	68	77	65	67	R	R	F	C	30.31	30.30	66	74	64	57	F	F	F	F	29.91	29.41	59	58	58	60	F	F	F	F		
27	30.02	30.09	66	67	65	64	R	R	R	C	30.24	30.10	66	71	65	64	F	F	F	F	29.55	29.82	66	77	71	66	F	F	F	F		
28	30.05	30.03	74	86	76	74	R	F	F	F	29.93	29.82	65	67	66	64	R	R	R	C	29.84	29.89	66	75	64	61	F	F	F	F		
29	29.98	29.97	80	82	78	74	F	F	F	F	29.76	29.93	67	82	73	66	F	F	F	F	29.88	29.91	61	66	63	61	R	F	R	C		
30	29.98	29.99	85	95	85	80	F	F	F	F	30.05	30.12	63	73	65	58	F	F	F	F	29.88	29.81	62	70	63	60	F	F	F	F		
31	29.98	29.99	84	99	87	80	F	F	F	F	30.11	30.07	60	74	65	62	F	F	F	F												
Mean			74	83	72	67							72	78	76	67										65	74	66	62			

OCTOBER.											NOVEMBER.											DECEMBER.										
Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.					Barometer.			Therm.			Weather.				
8 A.M.	10 P.M.		8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.		8	N.	St.	10	8	N.	St.	10	8 A.M.	10 P.M.		8	N.	St.	10	8	N.	St.	10
1	29.68	29.47	61	69	61	61	C	C	F	F	29.96	29.74	32	50	45	42	F	F	F	F	29.68	29.34	29	40	36	F	F	F	C	R		
2	29.53	29.68	57	64	52	48	F	F	R	F	29.75	29.46	48	53	52	51	F	C	R	R	29.37	29.65	32	42	29	F	F	R	C	C		
3	29.70	29.90	51	54	51	50	F	F	F	F	29.36	29.47	49	57	50	45	C	F	F	F	29.81	29.60	18	30	27	30	F	F	F	F		
4	29.98		48	56	50	43	F	F	F	F	29.40	29.28	45	54	45	42	R	C	C	R	29.51	30.14	35	42	35	22	F	F	F	F		
5	30.19	30.19	53	68	62	58	F	F	F	F	29.21	29.58	32	50	45	39	C	F	F	F	30.39	30.48	15	28	26	23	F	F	F	F		
6	30.17	30.22	62	83	74	67	F	F	F	F	29.85	29.77	32	48	42	42	F	C	R	R	30.44	30.32	23	40	36	30	F	F	F	C		
7	30.23	30.20	65	83	70	64	F	F	F	F	29.58	29.81	47	57	47	40	F	F	F	F	30.33	30.11	37	51	44	40	F	F	F	F		
8	30.20	30.17	65	82	72	64	F	F	F	F	30.02	30.27	36	45	40	32	F	F	F	F	30.07	29.79	30	53	44	42	F	F	F	F		
9	30.16	29.97	64	69	61	62	F	F	F	F	30.27	29.87	31	46	44	36	R	C	C	C	29.50	29.47	45	56	50	32	F	F	C	S		
10	29.67	29.88	65	64	55	47	R	C	C	F	30.07	30.37	41	47	41	38	F	F	F	F	29.46	29.48	19	27	21	20	F	S	F	F		
11	30.00	30.16	45	61	54	45	F	F	F	F	30.31	29.98	37	44	45	47	F	F	F	F	29.42	29.41	17	26	20	18	F	F	F	F		
12	30.18	30.26	47	55	48	47	F	F	F	F	29.80	29.74	49	67	56	46	R	F	F	F	29.37	29.48	20	26	22	20	F	F	F	F		
13	30.27	30.17	47	42	38	34	F	C	R	F	29.55	29.79	43	48	42	34	R	F	F	F	29.60	29.76	18	32	27	21	F	F	F	F		
14	30.00	29.67	34	49	48	45	F	F	F	F	29.87	29.91	33	37	37	25	F	F	R	R	29.73	29.76	23	32	30	30	F	S	C	C		
15	29.42	29.53	53	67	59	52	F	F	F	F	29.95	30.04	26	40	35	32	F	F	F	R	29.76	29.76	25	41	35	29	C	r	F	F		
16	29.57	29.68	56	67	59	55	F	F	F	F	30.10	30.00	33	43	45	C	C	C	C	29.72	29.77	30	35	33	27	F	F	F	C			
17	29.59	29.77	55	62	52	44	F	F	F	F	29.82	29.70	49	62	60	55	R	R	R	R	29.88	30.01	27	38	34	28	F	r	F	F		
18	29.78	29.90	40	54	46	40	F	F	F	F	29.92	29.88	41	55	47	39	R	F	F	F	30.11	30.18	29	37	31	24	F	r	F	F		
19	29.98		56	46	46	46	F	F	F	F	29.76	30.01	41	52	48	35	C	F	F	F	30.11	29.59	34	38	35	41	C	C	R	R		
20							F	F	R	R	30.11	30.10	30	48	41	37	F	F	F	F	29.50	29.50	35	44	37	33	F	r	F	F		
21		29.79	43	54			F	F	F	F	30.23	30.51	42	49	43	32	F	F	F	F	29.62	29.77	31	40	35	30	F	r	F	F		
22	29.79	29.92	44				C																									



Table with columns for JANUARY, FEBRUARY, and MARCH. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for 8 A.M., 10 P.M., and 8 N., 10 St., 10. Data rows are numbered 1 to 31.

Table with columns for APRIL, MAY, and JUNE. Each month has sub-columns for Barometer, Therm., and Weather, with further sub-columns for 8 A.M., 10 P.M., and 8 N., 10 St., 10. Data rows are numbered 1 to 31.

N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.



JULY.										AUGUST.										SEPTEMBER.																
Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.										
8 A.M.	10 P.M.		8 N.	St.	10	8 N.	St.	10		8 A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10		8 A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10		8 A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10	
1	29.7	30.20	83	89	73	69	F	F	F	30.07	30.00	75	81	68	65	F	F	R	29.90	29.98	70	81	68	65	F	F	F	29.90	29.98	70	81	68	65	F	F	F
2	30.32	30.37	74	77	67	64	F	F	F	29.97	30.04	72	81	75	70	F	F	F	29.96	30.22	76	65	58	F	F	F	30.28	30.26	72	85	76	70	F	F	F	
3	30.37	31.22	73	92	76	70	F	F	F	30.08	30.03	69	83	73	67	F	F	F	30.28	30.24	59	75	66	62	F	F	F	30.21	30.26	65	82	74	69	F	F	F
4	30.22	31.11	80	95	80	72	F	F	F	29.97	29.88	72	83	69	70	F	F	R	30.21	30.26	65	82	74	69	F	F	F	30.28	30.26	72	85	76	70	F	F	F
5	31.05	31.03	84	95	82	78	F	F	F	29.88	29.97	73	87	68	67	F	F	R	30.20	30.14	73	91	81	74	F	F	F	30.20	30.14	73	91	81	74	F	F	F
6	30.03	31.10	86	92	79	74	F	F	C	30.07	30.26	49	76	65	63	F	F	F	30.20	30.14	73	91	81	74	F	F	F	30.20	30.14	73	91	81	74	F	F	F
7	30.11	30.14	81	89	77	71	F	F	F	30.29		60	81	69	63	F	F	F	30.27	30.27	70	73	65	63	F	F	F	30.19	30.10	68	90	78	72	C	F	F
8	30.12	30.02	79	89	74	72	C	F	F	30.23	30.10	71	79	68	67	F	F	C	30.04	29.98	73	92	80	76	F	F	F	30.04	29.98	73	92	80	76	F	F	F
9	29.38	29.98	77	93	76	72	F	F	F	29.98	29.81	75	91	80	75	F	F	F	29.97	29.93	80	99	87	78	F	F	F	29.97	29.93	80	99	87	78	F	F	F
10	30.00	30.20	79	82	71	70	F	F	F	29.82	29.88	72	80	72	72	C	F	F	29.90	29.89	80	89	77	74	F	F	F	29.90	29.89	80	89	77	74	F	F	F
11	30.25	31.23	70	72	68	65	F	F	F	29.82	29.88	72	80	72	72	C	F	F	29.82	29.88	72	80	72	72	C	F	F	29.82	29.88	72	80	72	72	C	F	F
12	31.10	29.93	73	92	77	74	F	F	F	29.80	29.75	80	97	83	80	F	F	C	29.60	29.78	77	74	69	65	C	C	R	29.60	29.78	77	74	69	65	C	C	R
13	29.86	29.87	82	95	80	77	F	F	F	29.76	30.00	80	87	74	70	F	F	F	29.89	30.11	64	78	68	58	F	F	F	29.89	30.11	64	78	68	58	F	F	F
14	29.76	29.72	77	85	74	72	F	R	R	30.02	30.08	68	73	66	60	F	F	F	30.16	30.06	57	67	64	62	F	F	F	30.16	30.06	57	67	64	62	F	F	F
15	29.68	29.71	73	84	73	70	C	F	F	30.07	30.12	68	74	67	64	F	F	C	30.02	30.11	62	72	64	63	R	F	F	30.02	30.11	62	72	64	63	R	F	F
16	29.96	30.10	80	87	74	71	F	F	F	30.11	30.07	70	74	65	64	F	F	F	30.12	30.17	63	78	68	66	R	F	F	30.12	30.17	63	78	68	66	R	F	F
17	30.11	30.16	79	85	72	70	F	F	F	29.90	29.90	66	74	64	61	R	F	R	30.16	30.21	69	85	74	69	F	F	F	30.16	30.21	69	85	74	69	F	F	F
18	30.12	30.08	76	80	76	73	F	F	F	29.91	29.94	68	80	67	64	F	F	F	39.26		71	75	65	61	R	F	F	39.26		71	75	65	61	R	F	F
19	30.06	31.09	80	92	69	67	F	R	R	29.92	29.90	67	80	68	61	F	F	F			60	53	53	51						60	53	53	51			
20	31.11	30.13	70	74	68	64	F	F	F	29.82	29.88	68	81	71	62	F	F	F			51	60	53	45						51	60	53	45			
21	30.08	30.07	70	82	68	63	F	F	F	29.85	29.99	58	77	69	62	F	F	F			45	55	49	43						45	55	49	43			
22	30.06	31.02	68	74	66	64	F	F	F	30.02	30.11	65	77	67	63	F	F	F			47	63	58	54						47	63	58	54			
23	30.24	31.24	71	79	66	63	F	F	F	30.14	30.17	65	79	67	62	F	F	F			55	70	63	58	F	F	F			55	70	63	58	F	F	F
24	31.19	30.02	65	78	68	65	F	F	F	30.19	30.20	68	80	68	66	F	F	F	29.78	27.73	62	74	65	56	R	F	F	29.78	27.73	62	74	65	56	R	F	F
25	29.92	29.98	76	95	83	77	F	P	F	30.18	30.11	69	79	69	66	R	F	F	29.67	30.03	57	77	60	47	F	F	F	29.67	30.03	57	77	60	47	F	F	F
26	29.97	29.85	80	92	79	74	F	C	R	30.05	29.59	70	81	70	69	F	F	F	30.22	30.27	42	58	50	48	F	F	F	30.22	30.27	42	58	50	48	F	F	F
27	29.71	29.67	77	88	73	70	R	C	F	29.57	29.93	67	81	71	70	F	F	F	30.27	30.30	49	65	56	52	F	F	F	30.27	30.30	49	65	56	52	F	F	F
28	29.73	29.90	78	88	76	74	F	F	F	30.00	29.97	64	74	68	64	C	F	F	30.32	30.46	50	66	56	50	R	F	F	30.32	30.46	50	66	56	50	R	F	F
29	29.93	30.01	76	83	74	73	R	C	R	29.97	30.08	64	77	66	63	F	F	F	30.47	30.31	56	70	57	56	F	F	C	30.47	30.31	56	70	57	56	F	F	C
30	31.02	30.09	80	91	75	72	R	P	B	30.12	30.11	68	76	67	65	F	F	F	30.21	30.31	56	78	70	64	C	F	F	30.21	30.31	56	78	70	64	C	F	F
31	31.07	30.08	78	91	77	74	F	F	F	30.03	29.90	66	77	68	67	F	F	C																		
Mean			77	87	74	70																														

OCTOBER.										NOVEMBER.										DECEMBER.																
Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.				Barometer.			Therm.			Weather.										
8 A.M.	10 P.M.		8 N.	St.	10	8 N.	St.	10		8 A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10		8 A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10		8 A.M.	10 P.M.	8 N.	St.	10	8 N.	St.	10	
1	30.36	30.39	57	65	56	53	F	F	F	29.91	29.77	45	58	50	47	R	R	R	29.70	29.70	13	21	22	26	F	F	C	29.70	29.70	13	21	22	26	F	F	C
2	30.30	30.15	57	70	65	58	R	C	F	29.66	29.60	45	50	48	46	R	C	R	29.50	29.79	30	38	36	32	F	F	F	29.50	29.79	30	38	36	32	F	F	F
3	30.02	29.88	60	64	59	50	R	R	C	29.62	29.80	40	52	46	40	F	C	C	29.82	29.95	27	38	37	29	F	F	F	29.82	29.95	27	38	37	29	F	F	F
4	29.83	29.85	59	59	56	57	C	R	R	29.64	29.75	40	53	47	46	F	C	C	29.89	29.99	29	38	38	40	C	R	R	29.89	29.99	29	38	38	40	C	R	R
5	29.87	29.97	56	57	55	55	F	F	F	29.81	29.62	39	48	41	F	C	C	29.59	29.68	32	39	39	32	S	R	R	29.59	29.68	32	39	39	32	S	R	R	
6	29.94	30.13	57	61	55	56	R	F	F	29.73	30.01	39	48	41	38	F	F	F	29.78	29.96	32	38	32	27	F	F	F	29.78	29.96	32	38	32	27	F	F	F
7	30.27	30.30	47	62	53	45	F	F	F	30.10	30.11	35	45	39	34	F	F	F	29.86	29.66	24	37	34	36	F	C	R	29.86	29.66	24	37	34	36	F	C	R
8	30.30	30.19	42	56	48	45	F	F	F	29.95	29.63	40	49	49	19	C	R	C	29.69	29.76	32	44	38	32	F	F	F	29.69	29.76	32	44	38	32	F	F	F
9	31.11	29.88	45	58	53	55	C	R	R	29.50	29.73	48	55	47	37	C	F	C			29.76	32	38	38						29.76	32	38	38			
10	29.86	29.77	50	58	55	56	R	F	F	30.05	30.27	29	33	28	22	F	F	F	29.41	29.58	26	29	21	F	F	F	29.41	29.58	26	29	21	F	F	F		
11	29.38	29.69	62	66	56	50	R	F	F	30.30	30.18	29	33	32	30	F	F	F	29.53	29.73	20	25	19	13	F	F	F	29.53	29.73	20	25	19	13	F	F	F
12	29.78	30.08	47	56	49	40	F	F	F	29.91	29.50	32	35	33	28	S	R	R	29.67	29.80	10	23	19	14	F	F	F	29.67	29.80	10	23	19	14	F		





	JULY.										AUGUST.										SEPTEMBER.									
	Therm.					Weather.					Therm.					Weather.					Therm.					Weather.				
	Nt.	8	N.	St.	10	8	N.	St.	10	Nt.	8	N.	St.	10	8	N.	St.	10	Nt.	8	N.	St.	10	8	N.	St.	10			
1	53	74	85	69	65	F	F	F	F	78	83	100	85	80	F	F	C	C	63	74	79	70	70	C	C	R	R			
2	58	70	82	69	66	F	F	F	F	69	79	87	75	72	F	F	F	F	63	73	81	73	71	C	C	R	R			
3	58	68	70	66	59	R	C	F	F	68	76	82	72	70	C	C	F	F	68	75	87	74	71	F	F	R	R			
4	47	60	69	59	56	F	F	F	F	67	74	89	78	72	F	F	F	F	69	74	75	73	69	C	C	R	R			
5	42	61	73	61	57	F	F	F	F	60	74	86	72	66	F	F	F	F	64	68	75	70	63	F	F	F	F			
6	47	62	70	60	57	F	F	F	F	58	69	81	71	65	F	F	F	F	63	67	77	67	60	F	F	F	F			
7	48	64	76	66	62	F	F	F	F	57	64	76	67	65	F	F	C	C	51	56	68	62	60	F	F	F	F			
8	48	68	82	66	62	C	R	F	F	56	66	71	63	58	R	F	C	F	60	60	86	73	70	F	F	R	R			
9	58	65	80	67	65	F	F	F	F	49	63	79	68	64	F	F	F	F	65	70	84	74	72	C	C	R	R			
10	58	68	77	66	62	F	F	F	F	50	69	88	77	72	F	F	F	F	64	71	76	68	62	F	F	F	F			
11	58	64	65	63	63	C	F	R	R	55	76	92	82	78	F	F	C	C	52	62	75	61	59	F	F	R	R			
12	52	61	71	66	62	F	F	F	F	55	70	79	70	64	F	F	F	F	52	57	67	61	60	F	F	R	C			
13	52	64	80	69	61	F	F	F	F	54	85	72	77	F	F	F	F	51	60	72	64	55	F	F	F	F				
14	50	64	80	69	64	F	F	F	F	60	72	93	80	74	F	F	F	F	51	60	71	63	55	F	F	F	F			
15	49	69	85	70	65	F	F	F	F	66	80	99	88	80	F	F	F	F	46	55	67	58	53	F	F	F	F			
16	58	72	87	71	65	F	F	F	F	68	78	93	72	68	F	F	F	F	45	57	71	61	58	F	C	R	C			
17	56	71	83	71	69	F	F	F	C	63	71	80	65	61	C	C	F	F	54	54	61	58	58	R	F	C	C			
18	63	76	88	69	64	F	F	F	F	62	77	91	69	70	C	C	R	R	56	62	67	61	57	C	F	F	F			
19	54	69	81	67	64	F	F	F	F	61	75	84	69	67	F	F	F	F	47	56	68	62	56	F	F	F	F			
20	53	70	80	64	62	F	F	F	F	59	71	85	75	71	F	F	C	C	46	51	62	54	54	F	F	F	F			
21	53	68	76	64	61	F	F	R	F	63	72	80	69	62	R	R	F	F	52	64	75	67	60	R	F	F	F			
22	58	64	75	66	61	F	F	F	F	55	64	75	65	59	F	F	F	F	48	57	69	61	54	F	F	F	F			
23	55	65	78	67	66	C	C	C	C	52	63	77	65	60	F	F	F	F	46	53	71	64	57	F	F	F	R			
24	54	69	70	66	64	R	C	R	R	52	63	78	66	66	C	C	F	F	46	57	61	56	57	F	F	R	R			
25	55	65	78	66	65	C	C	R	F	59	66	78	65	60	F	F	F	F	45	58	74	66	61	F	F	F	C			
26	62	75	79	70	66	C	C	F	F	54	63	76	66	68	C	F	F	R	40	48	61	51	47	F	F	F	F			
27	64	73	80	70	67	F	F	C	C	54	61	69	64	57	C	F	F	F	36	45	62	54	49	F	F	F	F			
28	59	72	89	77	72	F	F	F	F	50	63	75	64	58	F	F	F	F	36	54	70	53	F	F	F	F	F			
29	58	76	80	66	65	F	C	C	C	50	67	78	65	66	C	F	F	C	43	50	67	58	53	F	F	F	F			
30	62	72	93	82	79	C	C	C	C	71	73	69	64	C	R	R	C	44	49	70	59	57	F	F	F	F				
31	62	83	94	80	78	F	F	F	F	63	73	88	75	70	F	F	F	52	59	70	64	59								
Mean	55	69	79	68	64					58	71	82	71	67																

	OCTOBER.										NOVEMBER.										DECEMBER.									
	Therm.					Weather.					Therm.					Weather.					Therm.					Weather.				
	Nt.	8	N.	St.	10	8	N.	St.	10	Nt.	8	N.	St.	10	8	N.	St.	10	Nt.	8	N.	St.	10	8	N.	St.	10			
1	53	58	62	60	60	C	F	F	R	51	55	48	43	R	R	F	F	21	23	30	26	C	C	C	C	C				
2	56	61	67	60	56	C	F	F	F	39	53	46	38	F	F	F	F	17	17	25	20	C	C	R	R	F				
3	54	58	70	67	57	F	F	F	F	31	55	51	51	F	F	F	F	34	36	46	40	33	F	F	F	F				
4	45	53	67	58	49	F	F	F	F	53	67	53	45	R	R	S	S	30	33	45	39	35	C	F	F	F				
5	53	72	64	58	58	F	F	F	F	57	46	45	45	R	R	F	F	33	35	40	38	35	C	F	F	F				
6	61	77	64	53	53	F	F	F	F	43	47	45	47	F	R	R	R	30	32	34	30	27	S	S	F	F				
7	47	63	55	54	54	F	F	F	F	43	49	59	48	44	R	R	F	F	22	25	40	33	27	F	F	F	F			
8	57	61	58	47	47	C	F	F	F	40	44	57	50	42	F	F	F	F	25	29	37	37	37	F	F	R	R			
9	41	58	50	44	44	F	F	F	F	33	36	53	48	48	F	F	F	C	19	25	42	37	30	F	F	F	F			
10	43	53	46	39	39	F	F	F	F	46	50	54	51	40	F	F	R	F	25	29	35	34	34	F	F	F	C			
11	35	53	44	42	42	F	F	F	F	29	33	48	42	46	F	F	F	F	31	34	35	34	28	C	F	F	R			
12	49	53	52	60	60	C	C	R	C	39	48	57	46	39	R	C	F	F	19	22	30	27	21	F	F	F	R			
13	61	70	61	33	33	F	F	F	F	29	33	45	38	32	F	F	F	S	19	30	34	34	35	S	C	R	R			
14	49	60	51	46	46	R	F	F	R	26	30	41	37	33	F	F	C	S	19	28	33	27	22	F	F	F	F			
15	40	58	52	51	51	F	F	F	C	28	33	44	40	36	C	F	F	F	13	17	24	20	15	F	F	F	F			
16	43	62	46	46	46	F	F	C	F	26	34	47	41	43	C	F	F	F	8	9	25	21	19	F	F	F	F			
17	39	55	46	39	39	F	F	F	F	32	44	41	38	48	C	F	F	R	18	22	37	33	30	F	F	F	F			
18	37	44	42	41	41	C	F	F	F	30	36	49	35	35	C	F	F	F	28	34	36	34	31	C	F	R	R			
19	34	43	40	33	33	S	S	R	R	30	36	42	37	34	C	F	F	F	17	19	31	28	24	F	F	F	F			
20	32	48	48	42	42	F	F	F	F	28	32	44	30	34	F	F	F	F	17	22	30	30	30	C	C	C	C			
21	42	67	62	56	56	F	F	F	F	29	33	42	40	35	F	F	F	C	19	35	38	33	33	R	F	R	C			
22	51	58	44	36	36	F	F	F	F	28	33	44	45	46	C	F	R	R	31	34	35	31	28	R	F	S	R			
23	32	57	42	33	33	F	F	F	F	32	36	47	42	35	C	F	F	F	21	21	30	19	14	F	F	F	F			
24	31	50	44	35	35	F	F	F	F	27	34	41	38	40	F	C	R	R	9	17	30	27	26	F	F	F	F			
25	32	48	40	39	39	F	F	F	F	27	44	41	39	35	F	C	R	R	19	22	27	26	24	C	S	S	C			
26	37	64	56	48	48	F	F	F	F	25	29	40	35	30	F	F	F	F	10	15	23	20	13	F	S	F	F			
27	45	70	59	55	55	F	F	F	F	24	28	36	31	28	F	F	F	F	9	17	29	21	20	F	F	F	F			
28	46	60	54	48	48	F	F	F	F	17	21	35	30	23	F	F	F	F	19	26	42	38	27	C	F	F	F			
29	45	68	64	56	56	F	F	F	F	20	23	31	30	28	F	F	C	S	10	10	10	7	3	F	F	F	S			
30	48	62	53	44	44	F	F	F	F	23	26	29	28	24	S	S	C	C	0	4	12	18	20	F	C	S	F			
31	35	51	46	45	45	F	F	F	C	29	37	46	42	38					10	13	30	25	17	F	F	F	F			
Mean	45	60	53	47	47					29	37	46	42	38					20	24	32	29	25							

Nt. Night. N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Had. S. Snow.



	JANUARY.										FEBRUARY.										MARCH.										
	Therm.					Weather.					Therm.					Weather.					Therm.					Weather.					
	Nt.	8	N.	St.	10	8	N.	St.	10	Nt.	8	N.	St.	10	8	N.	St.	10	Nt.	8	N.	St.	10	8	N.	St.	10				
1	10	14	34	32	31	F	F	F	F		18	19	35	27	21	F	F	F	C		33	41	64	55	49	F	F	F	F		
2	35	35	41	31	18	R	C	F	F	F	7	11	29	25		F	F	F	F		37	40	54	45	45	C	C	F	R	R	
3	6	9	33	32	32	F	F	F	F	F	5	8	35	27	30	F	F	F	F		44	44	51	40	33	C	C	F	F	F	
4	12	12	14	8	2	F	F	F	C	C	20	32	35	34	32	S	S	S	S		28	36	42	37	32	F	F	F	F	F	
5	-7	-6	5	2	-1	F	F	F	F	F	7	9	27	20	17	F	F	F	F		26	34	56	50	40	F	F	F	F	F	
6	-3	9	23	19	15	S	C	F	F	F	8	26	35	33	26	C	C	F	S		32	43	65	46	38	F	F	F	F	F	
7	7	9	26	22	19	F	F	F	F	F	8	9	15	11	8	F	F	F	F		31	37	38	34	34	F	F	F	F	F	
8	17	30	34	34	32	S	R	C	C	F	1	17	27	23	15	F	F	F	F		29	31	31	25	20	S	S	C	C	F	
9	25	26	35	27	26	F	F	R	C	C	1	4	36	30	22	F	F	F	F		9	16	26	20	17	F	F	F	F	F	
10	16	6	14	8	5	F	F	F	F	F	18	26	31	22	12	C	C	C	C		11	18	37	31	26	F	F	F	F	F	
11	-2	0	19	15	4	F	C	F	F	F	5	8	27	21	24	F	F	F	F		21	24	47	40	42	F	F	F	F	F	
12	11	27	36	31	25	C	C	F	F	F	18	27	26	23	20	C	C	C	C		13	43	58	51	35	F	F	F	F	F	
13	23	27	26	18	12	S	S	F	F	F	17	17	24	20	16	S	S	S	S		32	30	36	27	23	F	F	F	F	F	
14	-9	-5	7	5	7	F	F	F	F	F	11	15	18	17	16	C	C	C	C		20	26	37	37	27	F	F	F	F	F	
15	0	20	35	29	20	F	F	F	F	F	3	8	26	26	10	F	F	F	F		20	28	45	39	30	F	F	F	F	F	
16	12	14	20	15	5	F	F	F	F	F	3	10	35	32	35	F	C	R	R		20	34	44	41	33	F	F	F	F	F	
17	-3	0	16	12	14	F	F	F	F	F	33	36	40	37	33	C	C	R	R		25	30	45	37	41	F	F	F	F	F	
18	11	18	35	34	34	F	F	F	F	F	26	31	32	14	22	F	F	S	S		32	40	16	40	32	F	F	F	F	F	
19	32	39	47	41	35	R	C	C	C	C	19	25	33	25	19	S	C	F	F		23	35	45	35	33	F	F	F	F	F	
20	32	35	39	35	33	C	C	C	C	C	9	18	38	34	32	F	F	F	F		21	33	60	50	40	F	F	F	F	F	
21	27	29	42	38	36	F	F	F	F	F	32	36	41	44	46	C	C	R	C		30	36	43	35	30	F	F	F	F	F	
22	34	36	48	39	37	F	F	F	F	F	32	39	52	46	40	F	F	F	F		24	36	40	35	35	F	C	C	R	C	
23	22	22	16	18	0	F	F	F	F	F	18	19	23	20	18	F	F	F	F		34	39	40	34	28	C	C	C	R	C	
24	-4	-2	5	12	1	F	F	F	F	F	15	26	40	35	31	F	F	F	F		22	29	45	39	33	F	F	F	F	F	
25	-4	-1	9	6	5	F	F	F	F	F	18	18	21	16	14	F	F	F	F		28	32	41	34	30	F	F	F	F	F	
26	4	7	30	25	24	F	F	F	F	F	9	14	38	33	28	F	F	F	F		25	32	60	53	45	F	F	F	F	F	
27	23	27	34	31	24	C	F	F	S	F	25	32	53	49	45	F	F	F	F		25	40	45	35	38	F	F	F	F	F	
28	13	17	38	31	25	F	C	F	F	F	32	37	53	45	40	F	F	F	F		35	47	53	51	51	R	R	R	R	R	
29	13	30	38	34		F	F	F	F	R											32	38	42	33	27	F	F	F	F	F	
30	23	29	34	30	32	C	S	S													21	33	40		29	F	F	F	F	F	
31	20	22	34	21	20	C	S	S													23	30	40	35	34	F	F	F	F	F	
Mean	13	17	28	24	19						15	21	33	25	25						25	34	46	39	37						

	APRIL.										MAY.										JUNE.									
	Therm.					Weather.					Therm.					Weather.					Therm.					Weather.				
	Nt.	8	N.	St.	10	8	N.	St.	10	Nt.	8	N.	St.	10	8	N.	St.	10	Nt.	8	N.	St.	10	8	N.	St.	10			
1	33	43	50	42	32	F	F	F	F		53	67	75	60	54	C	R	R	F		60	65	80	72	60	C	F	F	F	
2	22	27	41	35	33	F	F	F	F	F	51	62	75	73	67	C	C	C	C		58	68	80		63	C	C	C	F	C
3	33	39	57	46	38	F	F	F	F	F	51	57	65	57	50	F	F	F	F		60	68	80	69	62	F	F	F	F	F
4	23	32	49	44	35	F	F	F	F	F	38	48	63	55	50	F	F	F	F		56	61	59	56	50	F	R	R	R	R
5	34	39	42	37	35	R	R	R	C	C	42	42	44	50	45	R	C	F	F		42	50	66	56	53	F	F	F	F	F
6	29	32	45	37	33	F	F	F	F	F	35	46	60	53	45	F	F	F	F		49	57	68	56	52	F	F	F	F	F
7	32	40	61	47	45	F	F	C	C	C	35	50	71	55	53	F	F	C	C		47	61	70	60	58	F	F	F	F	F
8	32	49	47	43	36	C	C	R	R		53	59	70	60	52	F	F	F	F		56	67	82	65	60	C	C	R	C	
9	25	37	39	36	34	C	C	C	C	C	39	54	63	50	49	F	F	F	F		52	62	80	70	62	F	F	F	F	F
10	32	35	37	35	36	C	C	R	R		38	51	53	51	49	F	F	F	F		51	70	85	76	70	F	F	F	F	F
11	34	41				F	F	F	F		38	51	64	51	48	F	F	F	F		52	68	74	70	69	F	F	C	C	
12	35	42	51	43	38	F	F	F	F		37	53	68	56	55	F	F	F	F		57	71	82	66	62	R	F	F	F	F
13	37	40	40	40	42	F	F	C	R		46	57	79	60	56	F	F	F	F		53	60	68	59	55	F	F	F	F	F
14	36	37	58	56	50	R	F	R	C	C	40	60	76	62	56	F	F	F	F		48	65	71	59	53	C	C	F	F	F
15	36	40	50	42	34	F	F	F	F		54	63	73	70	62	C	C	F	F		53	63	85	75	68	F	F	F	F	F
16	30	36	42	39	39	C	C	R	R		47	55	66	55	52	F	F	F	F		52	76	95	70	63	F	F	F	F	F
17	37	44	53	45	38	F	F	F	F		42	57	68	55	52	F	F	C	R		51	67	78	60	59	F	C	C	R	R
18	29		45	40	36	F	F	F	R		50	61	76	63	60	C	F	F	F		53	55	65	53	50	R	C	R	R	R
19	33	39	45	42	40	F	F	F	F		48	58	67	58	55	F	F	R	F		44	61	68	58	56	C	C	C	R	C
20	36	39	44	39	35	R	R	C	F		43	55	65	59	54	F	F	F	F		49	61	70	58	57	C	C	R	F	F
21	25	39	47	40	38	C	C	F	F		42	59	71	61	62	C	C	R	C		55	64	84	73	68	F	F	F	F	F
22	35	40	43	42	39	C	C	C	F		60	67	79	68	65	C	C	C	C		60	64	84	70	63	R	C	F	F	F
23	35	40	46	40	40	F	F	F	F		59	70	84	67	60	C	C	F	F		56	69	83	72	65	F	F	F	F	F
24	39	44	60	53	46	R	C	C	C	C	48	60	69	55	50	F	F	F	F		59	64	68	68	62	R	F	F	F	F
25	38	52	64	49	62	C	C	C	C		39	52	62	51	46	F	F	F	F		58	71	83		65	F	F	F	F	F
26	47	58	68	58	43	F	F	F	F		41	55	63	57	54	F	F	F	F			66	75	74	65					
27	40	44	60	49	44	R	F	C	C		50	66	74	72	65	R	R	R	R			68	83	64						
28	50	54	62	53	49	R	R	C	C		61	74	93	75	72	F	F	F	F		58	68	87	70	69	F	F	F	F	F
29	45	57	69		50	F	F	F	F		63	77	88	69	61	F	F	F	F		61	71	86	73	69	F	F	F	F	F
30	41	55	69	58	58	F	C	R		55	65	68	57	55	F	F	F	F		65</										

	JULY.							AUGUST.							SEPTEMBER.												
	Therm.				Weather.			Therm.				Weather.			Therm.				Weather.								
	Nt.	8	N.	St.	10	8	N.	St.	10	Nt.	8	N.	St.	10	8	N.	St.	10	Nt.	8	N.	St.	10	8	N.	St.	10
1	64	81	97	75	73	F	F	F	F	53	67	79	68	65	F	F	F	F	51	63	78	70	65	F	F	F	F
2	65	72	75	64	42	F	F	F	F	51	90	77	73	F	F	F	F	50	71	80	71	68	F	F	F	F	
3	59	62	80	67	65	R	R	C	C	69	75	92	81	74	F	F	F	F	60	69	83	76	70	R	R	C	C
4	60	71	85	74	73	F	F	F	F	68	71	87	75	71	C	C	C	C	60	69	82	70	67	F	F	F	F
5	60	74	80	70	66	F	F	F	F	67	72	83	70	65	C	C	C	C	50	60	75	68	61	F	F	F	F
6	64	75	87	75	73					49	62	72	63	59	F	F	F	F	48	61	73	63	59	F	F	F	F
7	68	80	92	78	74	F	F	C	C	46	63	72	63	56	F	F	F	F	45	77	68	66	F	R	C	R	R
8	67	68	64	63	C	C	R	F	F	57	62	73	64	60	C	C	C	C	39	64	80	8	63	F	F	F	F
9	57	68	81	71	64	F	F	F	F	54	67	79	68	64	F	F	F	F	39	66	83	72	65	F	F	F	F
10	57	72	86	68	67	F	F	F	F	54	69	83	73	69	F	F	F	F	60	68	80	71	68	C	C	C	C
11	63	67	82	72	69	R	R	R	R	65	74	88	78	73	F	F	F	F	60	73	86	79	70	F	F	F	F
12	63	71	84	70	68	R	R	R	R	67	76	91	77	71	F	F	F	F	57	68	80	70	68	F	F	F	F
13	63	73	92	77		F	F	F	F	65	76	94	70	66	F	F	F	F	59	70	86	76	67	F	F	F	F
14	68	69	81	78	71	C	R	R	C	53	66	77	68	65	F	F	F	F	58	68	70	67	66	C	C	C	C
15	68	77	88	72	70	R	R	R	R	61	70	78	76	67	R	R	R	C	61	68	83	77	73	C	C	C	C
16	68	75	83	68	C	C	F	F	F	54	65	82	75	68	F	F	R	C	61	66	75	68	57	F	F	C	C
17	60	70	82	74	69	F	F	F	F	60	74	89	84	65	F	F	R	C	45	54	65	54	46	F	F	F	F
18	64	75	87	75	75	F	F	F	F	53	66	76	66	63	F	F	F	F	35	48	67	62	51	F	F	F	F
19	62	70	89	77	73	F	F	F	F	53	69	71	69	67	C	R	C	R	45	66	68	61		F	F	F	F
20	62	80	95	82	76	F	F	F	F	66	72	88	74	69	R	R	R	R	58	61	65	63	63	R	R	R	R
21	71	78	96	76	72	C	C	C	R	63	75	75	65	65	F	F	F	F	55	63	73	64	55	F	F	F	F
22	66	73	82	69	65	C	C	C	F	61	67	74	63	62	C	R	C	R	42	50	63	54	45	F	F	F	F
23	62	71	82	72	68	F	F	F	F	58	64	68	63		R	C	C	C	34	42	65	57	49	F	F	F	F
24	65	75	88	75	60	C	C	F	F	52	63	74	64	62	F	F	F	F	38	45	79	61	55	F	F	F	F
25	64	74	83	69	64	R	C	F	R	52	62	76	67	62	F	F	F	F	38	50	71	63	57	F	F	F	F
26	53	61	73	64	59	F	F	C	C	51	65	78	67	61	F	F	F	F	37	61	80	70	66	C	C	F	F
27	48	62	75	70	63	F	F	C	F	50	64	70	65	61	F	F	F	F	64	69	83	74	70	C	C	C	C
28	59	64	72	70	69	R	R	R	C	54	62	72	65	64	C	C	C	C	68	72	83	73	70	C	C	C	C
29	60	69	82	70	65	F	F	F	F	54	67	80	68	80	F	F	F	F	65	70	72	68	66	R	R	R	R
30	58	71	80	66	63	F	F	F	F	47	61	74	64	58	F	F	F	F	64	67	82	72	62	C	F	F	F
31	51	67	77	67	63	F	F	F	F	44	60	75	66	63	F	F	F	F									
Mean	61	71	84	72	67					57	68	80	69	66					52	63	76	67	62				
	OCTOBER.							NOVEMBER.							DECEMBER.												
	Therm.				Weather.			Therm.				Weather.			Therm.				Weather.								
	Nt.	8	N.	St.	10	8	N.	St.	10	Nt.	8	N.	St.	10	8	N.	St.	10	Nt.	8	N.	St.	10	8	N.	St.	10
1	46	59	62	55	50	F	F	F	F	37	40	49	42	34	R	C	C	R	57	64	65	53	38	C	R	F	R
2	43	49	66	59	44	C	C	F	F	25	30	44	40	37	F	F	F	F	28	30	38	30	F	F	F	F	F
3	39	46	57	43	F	F	F	F	31	33	47	42	32	F	F	F	F	26	30	36	25	33	C	S	S	C	
4	38	43	62	53	48	F	F	F	F	21	28	47	40	31	F	F	C	C	4	11	30	23	22	C	R	R	C
5	38	48	64	52	50	F	F	F	F	23	28	55	45	42	F	C	F	F	11	17	35	31	30	C	C	C	C
6	30	52	68	50	84	F	F	F	F	33	35	51	43	38	F	F	F	F	15	22	31	24	16	F	F	F	F
7	46	52	68	62	58	F	F	F	F	31	37	54	44	50	C	C	C	C	9	15	35	28	35	F	F	F	F
8	45	63	69	58	R	R	C	C	31	51	58	45	42	C	C	C	C	25	31	45	40	32	C	C	F	F	
9	47	54	64	48	44	C	F	F	F	37	40	41	38	32	C	C	C	C	9	25	37	34	33	F	F	F	F
10	45	58	75	68	64	C	R	R	R	24	29	47	40	34	F	F	F	F	31	34	40	40	33	C	R	R	F
11	59	63	63	61	60	R	C	C	C	33	60	45	42	C	C	F	F	31	40	55	50	41	F	F	F	F	
12	55	61	72	66	59	C	R	C	F	31	65	63	55	C	C	C	C	25	28	39	36	22	C	C	C	C	
13	49	56	70	62	51	F	F	F	F	41	44	42	48	45	F	F	F	F	24	32	39	37	36	C	C	C	C
14	41	48	52	48	46	C	C	F	F	41	44	44	42		R	R	C	C	24	35	44	42	40	C	C	C	C
15	36	55	48	38	F	F	F	F	34	35	49	43	35	F	F	F	F	34	42	38	26	13	F	F	F	F	
16	33	46	64	59	58	C	R	F	F	29	33	58	51	41	F	F	F	F	5	9	24	22	22	F	F	F	F
17	45	51	67	57	50	F	F	C	C	37	38	63	50	44	F	F	F	F	15	34	41	38	30	R	R	F	F
18	45	53	71	63	62	R	C	F	C	37	40	42	45	47	C	C	F	R	19	23	36	33	F	F	F	F	
19	56	62	73	63	62	C	C	C	C	36	42	57	51	41	C	F	F	F	19	42	48	45	47	R	R	C	C
20	57	57	56	54	53	R	R	C	C	32	51	48			F	F	F	F	31	37	38	29	C	C	C	C	
21	50	50	62	54	52	R	R	R	R	42	55	54	53	43	R	R	R	R	23	32	29	28	S	C	C	C	C
22	48	52	59	48	38	F	F	F	F	38	40	43	41	41	C	C	R	R	20	24	49	32	24	F	F	F	F
23	30	35	51	43	38	F	F	F	F	36	37	48	45	43	F	F	F	F	15	18	19	15	8	F	F	F	F
24	30	34	59	44	40	F	F	C	C	31	32	37	25	F	F	F	F	2	11	28	25	18	F	F	F	F	
25	29	35	48	42	35	F	F	F	F	21	27	43	43	49	R	C	C	C	12	31	29	29	C	F	C	C	C
26	26	32	46			F	F	F	F	37	41	48	30	30	C	C	C	C	14	18	32	30	21	F	F	F	F
27	26	31	47	42	42	F	C	R	R	19	28	42	34		C	F	F	F	10	23	27	24	F	F	C	C	C
28	39	41	47	45	37	R	R	C	C	28	35	44	45	51	C	R	R	R	20	22	34	30	25	C	F	C	C
29	35	54	47	42	F	F	F	F	42	44	53	46	39	C	C	C	R	11	14	38	32	30	F	F	F	F	
30	36	40	50	48	39	F	F	F	F	35	49	63	60	60	C	C	C	R	14	16	31	26	18	F	F	F	F
31	36	40	58	55	50	F	F	F	F									9	12	25	20	16	F	F	F	F	
Mean	41	48	60	53	50					32	38	50	45	36					19	26	36	32	29				

Nt. Night. N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.



	JANUARY.										FEBRUARY.										MARCH.																
	Therm.					Weather.					Therm.					Weather.					Therm.					Weather.											
	Nt.	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	Nt.	8	N.	St.	10	8	N.	St.	10	Nt.	8	N.	St.	10	8	N.	St.	10						
1	12	21	30	21	31	C	R	S	S	F	14	17	24	17	16	F	F	F	F	-1	32	24	19	F	F	F	F	5	39	33	33	F	C	R	C		
2				44	10	32	F	F	F	F	2		33	29	21	F	F	F	F	5																	
3	18	23	38	33	31	R	R	C	C	C	12	27	32	32	32	C	C	S	S	15	17	13	9	4	F	F	F	F	15	17	13	9	4	F	F	F	F
4	24	26	29	25	21	C	C	R	S	S	23	27	43	31	22	C	C	C	C	-6	32	17	13	F	F	F	F	10	21	44	37	39	R	C	C	C	
5	19	35	20	21	16	S	R	S	R	F	5	10	24	17	13	F	F	C	C	38	42	45	44	42	C	C	C	30	33	35	27	22	F	C	F	F	
6	3	8	18	11	5	F	F	F	F	F	0		14	9	6	F	F	F	F	16	24	40	36	33	F	F	F	16	24	40	36	33	F	F	F	F	
7	-5	0	16	11	9	F	F	F	F	F	0		18	16	15	C	C	C	C	31	34	39	34	28	C	C	C	31	34	39	34	28	C	C	C	C	
8	4	18	33	28	19	F	F	F	F	F	7	11	29	22	16	F	F	F	F	16	20	30	26	27	F	F	F	16	20	30	26	27	F	F	F	F	
9	13	34	31	31	28	C	C	C	C	C	9	14	34	32	29	F	F	C	C	9	31	39	33	32	C	C	C	9	31	39	33	32	C	C	C	C	
10	30	39	36	28	C	C	C	C	C	C	31	38	39	33	32	S	S	F	F	18	22	32	25	18	F	F	F	18	22	32	25	18	F	F	F	F	
11	4	7	14	10	10	F	F	F	F	F	9	18	35	33	29	F	F	C	C	9	18	35	33	29	F	F	C	9	18	35	33	29	F	F	C	C	
12	6	12	23	17	S	C	C	C	C	C	20	23	37	29	18	F	F	F	F	20	23	37	29	18	F	F	F	20	23	37	29	18	F	F	F	F	
13	2	4	16	11	8	F	F	F	F	F	14		24	9	C	C	C	C	14		24	9	C	C	C	C	14		24	9	C	C	C	C			
14	-3	2	16	12	7	F	F	F	F	F	-5	3	24	16	17	F	F	F	F	-5	3	24	16	17	F	F	F	17	21	35	23	17	C	C	C	S	
15	3	37	25	30	C	C	C	C	C	C	3	9	13	12	10	F	F	F	F	3	9	13	12	10	F	F	F	3	9	13	12	10	F	F	F	F	
16	5	12	33	28	21	F	F	F	F	F	6		34	18	20	S	C	C	S	6		34	18	20	S	C	C	6		34	18	20	S	C	C	S	
17	10	14	35	27	23	F	F	F	F	F	12	28	43	33	32	F	F	F	F	12	28	43	33	32	F	F	F	12	28	43	33	32	F	F	F	F	
18	18	40	34	36	F	F	F	F	F	F	10	35	44	32	26	F	F	F	F	10	35	44	32	26	F	F	F	10	35	44	32	26	F	F	F	F	
19	15	49	41	40	C	C	C	C	C	C	9	17	24	28	30	F	F	F	F	9	17	24	28	30	F	F	F	9	17	24	28	30	F	F	F	F	
20	26	37	39	37	37	R	C	R	R	R	16	19	20	18	18	S	S	S	S	16	19	20	18	18	S	S	S	16	19	20	18	18	S	S	S	S	
21	32	34	41	33	29	C	C	C	C	C	18	22	37	29	23	S	S	S	S	18	22	37	29	23	S	S	S	18	22	37	29	23	S	S	S	S	
22	23	27	42	32	31	F	F	F	F	F	9	17	38	31	32	F	R	S	R	9	17	38	31	32	F	R	S	9	17	38	31	32	F	R	S	R	
23	24	30	35	32	24	S	R	R	R	R	22	27	37	25	12	F	F	F	F	22	27	37	25	12	F	F	F	22	27	37	25	12	F	F	F	F	
24	15	17	33	29	27	F	F	F	F	F	2		7	19	13	6	F	F	2		7	19	13	6	F	F	2		7	19	13	6	F	F	2		
25	20	24	36	32	31	R	C	C	C	C	2		7	19	13	6	F	F	2		7	19	13	6	F	F	2		7	19	13	6	F	F	2		
26	23	31	28	34	33	C	C	C	C	C	2		7	19	13	6	F	F	2		7	19	13	6	F	F	2		7	19	13	6	F	F	2		
27	32	33	39	34	33	C	C	C	C	C	2		7	19	13	6	F	F	2		7	19	13	6	F	F	2		7	19	13	6	F	F	2		
28	29	31	41	34	32	C	C	C	F	F	2		7	19	13	6	F	F	2		7	19	13	6	F	F	2		7	19	13	6	F	F	2		
29	25	29	36	31	21	F	F	F	F	F	2		7	19	13	6	F	F	2		7	19	13	6	F	F	2		7	19	13	6	F	F	2		
30	17	23	38	31	F	R	R	S	S	S	2		7	19	13	6	F	F	2		7	19	13	6	F	F	2		7	19	13	6	F	F	2		
31	16	23	34	32	28	C	R	C	S	S	11	29	30	24	20					11	29	30	24	20				11	29	30	24	20					
Mean	15	20	32	28	25						11	29	30	24	20					11	29	30	24	20				11	29	30	24	20					

Nt. Night. N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.



JULY.												AUGUST.												SEPTEMBER.											
Therm.												Therm.												Therm.											
Weather.												Weather.												Weather.											
	Nt.	8	N.	St.	10	8	N.	St.	10			Nt.	8	N.	St.	10	8	N.	St.	10			Nt.	8	N.	St.	10	8	N.	St.	10				
1	55	69	88	78	73	F	F	F	F			59	68	77	67	66	C	C	C	C			59	60	69	61	55	C	C	C	C				
2	63	79	95	80	75	F	F	C	C			59	72	81	69	70	R	C	C	C			46	57	68	55	56	F	F	F	F				
3	59	59	65	59	54	C	C	F	F			60	70	78	72	68	C	C	R	R			45	60	74	68	67	F	F	F	F				
4	45	64	75	62	60	F	F	F	F			61	72	87	71	64	F	F	R	R			65	73	90	74	64	F	R	R	R				
5	53	71	93	79	75	C	C	F	F			59	67	78	68	64	F	F	F	F			50	63	76	65	61	F	F	F	F				
6	63	64	61	58	58	R	R	R	R			58	71	84	73	70	F	F	F	F			50	85	78	73	F	F	F	F					
7	54	68	76	63	63	C	C	C	C			64	72	88	80	74	F	F	F	F			59	64	63	59	52	C	C	C	C				
8	59	68	87	79	73	R	R	C	C			59	75	96	88	80	C	C	C	R			49	58	64	59	52	C	C	C	C				
9	62	77	91	75	70	F	F	F	F				73	80	71	64	F	F	F	F			42	53	68	68	52	F	F	F	F				
10	64	74	92	76	65	F	F	F	F			54	66	84	69	64	F	F	F	F			43	51	68	61	53	C	C	R	R				
11	64	74	90	76	72	F	F	R	R			60	63	65	62	62	R	R	R	R			40	51	68	62	59	F	F	F	F				
12	70	84	92	80	75	F	F	F	F			58	73	88	78	75	R	R	C	C			40	62	68	62	57	F	F	F	F				
13	56	78	88	74	61	C	C	C	C			57	70	80	70	65	F	F	R	R			48	63	68	60	54	C	C	C	C				
14	65	84	74	69	69	F	F	F	F			56	70	82	66	65	F	F	F	F			48	61	80	75	61	C	C	C	C				
15	61	70	68	70	65	C	R	R	R			57	66	82	67	65	C	R	C	C			49	62	68	60	52	F	F	F	F				
16	61	70	74	63	62	F	C	R	R			59	63	70	65	64	R	R	R	R			44	52	70	63	60	F	F	F	F				
17	53	64	76	67	65	F	F	F	F			59	65	71	63	61	C	C	C	C			54	63	70	63	63	C	C	C	C				
18	58	87	77	66	62	F	C	C	C			57	63	70	66	62	C	C	C	C			55	70	85	77	68	C	C	C	C				
19	55	69	77	66	60	F	F	F	F			59	65	79	70	65	R	R	C	C			62	68	74	67	58	F	F	F	F				
20	49	64	79	70	65	F	F	F	F			62	70	88	77	60	F	F	F	F			48	60	75	69	61	F	F	F	F				
21	55	65	75	63	60	F	F	F	F			58	79	88	68	66	F	F	R	R			50	59	64	55	45	C	C	C	C				
22	52	64	81	65	63	F	F	F	F			59	64	72	64	56	F	F	F	F			32	41	57	50	40	F	F	C	C				
23	55	70	81	69	65	F	F	F	F			44	59	33	64	58	F	F	F	F			30	46	59	50	48	F	F	C	C				
24	55	77	90	75	70	F	F	F	F			47	60	75	65	60	F	F	F	F			43	54	55	55	52	C	C	C	C				
25	64	72	81	65	63	C	F	C	C			48	62	81	69	62	F	F	F	F			40	50	64	59	53	C	C	C	C				
26	58	62	72	67	65	R	C	R	F			48	63	85	74	64	F	F	R	C			42	57	67	58	52	C	C	R	C				
27	62	71	87	78	70	C	F	R	F			57	69	78	76	72	F	F	R	C			45	53	57	51	45	C	C	C	C				
28	64	72	82	79	72	F	F	F	F			67	74	87	79	70	R	F	C	C			32	41	64	55	42	F	F	C	C				
29	65	73	82	74	73	F	R	R	R			60	69	80	69	65	F	F	F	F			29	40	63	46	40	F	F	F	F				
30	60	66	76	63	63	C	C	C	C			57	68	80	72	65	F	F	F	F			25	34	54	48	40	F	F	F	F				
31	60	65	68	62	62	C	C	C	C			61	79	94	78	74	F	F	F	F															
Mean	70	81	71	66	66							56	68	81	71	66							45	55	67	61	55								

OCTOBER.												NOVEMBER.												DECEMBER.											
Therm.												Therm.												Therm.											
Weather.												Weather.												Weather.											
	Nt.	8	N.	St.	10	8	N.	St.	10			Nt.	8	N.	St.	10	8	N.	St.	10			Nt.	8	N.	St.	10	8	N.	St.	10				
1	33	45	67	55	50	F	F	F	F			58	45	45	42	R	R	R	R																
2	34	47	73	64	55	F	F	F	F			40	46	41	38	32	R	R	R	R															
3	40	53	75	63	56	F	F	F	F			25	30	46	38	32	F	F	F	F															
4	43	50	74	66	60	F	F	C	C			24	35	50	64	38	C	C	F	F			33	37	45	45	49	F	F	F	F				
5	43	62	74	65	64	F	F	C	C			21	29	46	32	29	F	F	F	F			35	37	36	22	28	F	F	F	F				
6	48	56	82	55	60	F	F	F	F			22	25	44	38	39	F	F	C	C			19	23	35	31	29	F	F	F	F				
7	33	45	67	51	51	F	F	F	F				35	44	39	35	R	R	C	C			27	37	45	40		C	C	C	C				
8	48	50	62	53	52	C	C	C	C			33	34	42	40	31	F	F	F	F			26	34	25	19	C	C	C	C	C				
9	40	63	63	58	C	C	C	C	C			25	31	52	46	37	F	F	F	F			14	15	32	25	30	R	C	S	S				
10	40	52	53	54	45	F	F	F	F			25	45	57	53	49	C	C	F	C			19	28	27	20	S	S	S	S	S				
11	27	39	53	36	F	F	F	F	F			49	54	52	93	32	R	R	R	R			20	25	22	20	R	R	R	R	R				
12	22	36	54	47	43	F	F	F	F			22	26	36	32	25	F	F	F	F			23	23	20	31	S	C	C	C	C				
13	28	57	55	54	48	C	C	R	R			22	33	43	35	26	C	C	C	C			19	35	28	25	F	F	F	F	F				
14	28	40	46	40	34	F	F	F	F			20	35	45	43	10	F	F	F	F			28	41	35	35	C	C	C	C	C				
15	16	32	55	51	48	F	F	F	F			26		51	4	35	F	F	F	F			31	30	30	25	C	S	C	C	C				
16	34	51	61	58	53	C	C	R	R			17	22	34	25	25	F	F	F	F			30	32	35	35	49	C	S	S	S				
17	41	51	63	47	C	C	C	C	C			24	33	31	30	26	C	C	C	C			18	22	29	27	22	F	F	F	F				
18			43	41	37	R	R	R	R			15	25	32	25	23	F	F	F	F			18	20	35	32	32	F	F	F	F				
19	21	35	55	50	34	F	F	F	F			20	23	37	32	28	C	R	R	R			33	37	42	42	31	C	R	R	R				
20			37	59	52	44	F	F	F			15	27	43	45	38	F	F	C	R			37	32	41	37	30	F	F	F	F				
21			46	61	57	51	F	F	F			18	35	42	45	41	F	F	F	F			34	37	35	27	23	F	F	F	F				
22			54	56	45	39	F	F	F			30	44	52	47	35	R	R	R	R			16	19	23	23	22	C	R	R	R				
23			35	56	52	51	F	F	C			20	26	36	26	F	F	F	F																
24	46	51	57	50	40	C	C	C	C			20	23	34	28	23	F	F	F	F															
25	20	46	49	43	39	C	C	C	C				36	39	36	35	C	C	C	C			19	21	32	25	22	F	F	F	F				
26	34	35	47	40	40	C	C	C	C				38	40	38	35	R	R	R	R			18	20	24	31	38	F	F	F	F				
27	36	40	44	44	44	C	C	C	C			35	36	43	10	35	F	F	F	F			18	25	39	36	36	F	F	C	C				
28	37	46	51	50	45	C	R	C	C					32	25	20	F	F	F	F															
29	48	42	54	47	42	C	F	F	C					29	25	25	F	F	F	F			23	25	40	37	29	F	F	F					



	JULY.										AUGUST.										SEPTEMBER.													
	Therm.					Weather.					Therm.					Weather.					Therm.					Weather.								
	8	N.	Sl.	10		8	N.	Sl.	10		8	N.	Sl.	10		8	N.	Sl.	10		8	N.	Sl.	10		8	N.	Sl.	10		8	N.	Sl.	10
1	78	88	74	68	F	F	F	F	F		65	78	68	64	F	F	F	F	F		61	71	65	60	R	C	F	F	C					
2	75	81	69	61	C	F	F	F	C		67	84	72	66	F	F	F	R	R		61	78	65	62	F	F	F	F	F					
3	72	90	74	67	C	F	F	F	C		68	75	69	66	F	C	F	R	C		62	71	70	67	F	F	F	F	F					
4	64	78	70	64	F	F	F	F	F		63	70	64	52	C	C	C	C	C		70	78	71	64	R	C	F	R	C					
5	66	84	67	65	F	F	F	F	F		60	68	63	56	F	F	F	F	F		69	88	76	71	F	F	F	F	F					
6	69	78	70	68	F	F	F	F	F		61	78	65	61	F	F	F	F	F		73	85	75	66	R	R	C	C	C					
7	79	86	72	67	F	F	F	C	R		69	72	66	62	C	R	R	R	C		65	72	63	63	F	F	C	R	R					
8	70	86	75	68	F	F	C	R	C		70	83		66	C	C	C	C	C		63	68	68	61	R	R	R	R	R					
9	77	87	75	70	F	F	C	C	C		70	73	67	66	C	C	C	C	C		56	65	59	52	F	F	F	F	F					
10	72	66	62	62	C	R	R	R	R		70	81	73	65	F	F	F	F	F		57	68	61	63	F	F	F	F	F					
11	65	82	69	63	F	F	F	F	F		62	81	71	61	F	F	F	F	F		58	68	61	60	C	F	C	C	C					
12	67	78	68	65	F	F	F	F	F		62	81	70	60	F	F	F	F	F		65	72	65	63	R	F	R	R	R					
13	72	77	67	65	C	C	C	C	C		69	72	58	55	C	R	F	F	F		65	82	70	67	C	F	R	R	R					
14	70	73	68	66	C	C	C	C	C		58	70			F	F	F	F	F		67	85	71	66	F	F	F	F	F					
15	76	85	71	65	F	F	F	F	F		60	71	56		F	F	F	F	F		69	87	80	71	F	F	F	F	F					
16	65	78	69	63	F	F	F	F	F		62	80	68	64	F	F	F	F	F		72	86	74	72	F	F	F	F	F					
17	66	83	71	67	F	F	F	F	F		70	87	73	68	F	F	F	F	F		73	83	74	63	R	C	F	R	F					
18	74	88	73	71	C	C	C	C	C		73	90	78	70	F	F	F	F	F		56	61	55	56	F	F	F	F	F					
19	70	82	70	67	F	F	F	F	F		76	94	77	71	F	F	F	F	F		54	62	60	56	C	C	C	C	C					
20	69	73	67	65	F	F	C	C	C		63	70	63	58	C	C	C	F	F		53	67	61	53	C	C	F	F	F					
21	65	78	69	64	F	F	C	C	C		60	71	65	64	C	C	C	C	C		61	63	57	53	F	F	F	F	F					
22	72	87	70	66	F	F	F	F	F		68	85	75	72	R	C	C	C	C		50	69	62	55	C	R	F	R	F					
23	69	88	72	69	F	F	F	F	F		68	81	70	63	F	F	C	C	C		49	58	52	46	F	F	F	F	F					
24	72	74	55	63	C	R	R	R	R		63	70	63	59	F	F	F	F	F		59	63	55	45	F	F	F	F	F					
25	68	81	71	68	R	R	R	R	R		63	73	63	61	F	F	F	F	C		45	67	62	49	F	F	F	F	F					
26	72	90	74	72	F	F	C	C	C		63	77	68	65	R	R	R	R	R		47	62	55	48	F	F	F	F	F					
27	79	78	65	64	C	F	C	C	C		66	70	67	65	R	R	R	R	R		53	66	58	55	F	F	F	C	R					
28		74	69	64	F	F	F	F	C		71	75	68	64	C	C	C	C	C		58	63	58	55	R	R	R	R	R					
29	70	81	70	70	C	F	F	C	R		63	78	66	62	F	F	C	C	C		54	56	54	52	R	R	R	R	R					
30	74	80	74	69	R	C	R	R	R		63	75	66	64	F	F	F	F	F		52	64	57	56	C	R	R	R	R					
31	77	92	75	68	C	C	C	C	C		64	65	61	63	C	C	C	C	C															
Mean	71	81	70	66							65	77	68	63							60	71	64	59										

	OCTOBER.										NOVEMBER.										DECEMBER.													
	Therm.					Weather.					Therm.					Weather.					Therm.					Weather.								
	8	N.	Sl.	10		8	N.	Sl.	10		8	N.	Sl.	10		8	N.	Sl.	10		8	N.	Sl.	10		8	N.	Sl.	10		8	N.	Sl.	10
1	48	63	55	47	F	F	F	F	F		34	45	39	39	S	S	C	C	C															
2	46	66	57	50	F	F	F	F	F		39	44	41	41	R	R	R	R	R															
3	46	66	60	51	F	F	F	F	F		32	34	28	27	F	F	F	F	F															
4	56	70	62	59	F	F	C	C	C		23	38	34	32	F	F	C	C	C															
5	58	74	4	60	F	F	F	F	F		37	47	46	48	C	C	C	C	C															
6	60	68	63	62	C	C	C	R	R		45	50	43	41	C	C	C	F	F		14	20	21											
7	61	60	60	48	R	R	R	R	R		35	48	42	35	F	F	F	F	F															
8	38	59	49	44	F	F	F	F	F		30	42	37	36	F	F	F	F	F															
9	45	67	63	57	F	F	F	F	F		30	43	41	43	C	C	R	R	R															
10	56	73	63	55	F	F	F	F	F		40	53	48	40	F	F	C	C	C															
11	59	75	65	63	C	F	F	F	F		33	45	40	29	F	F	F	F	F															
12	66	69	56	46	F	F	F	F	F		23	35	30	23	F	F	F	F	F															
13	39	57	51	46	F	F	F	F	F		23	39	34	29	F	F	F	F	F															
14	49	62	52	44	C	C	C	C	C		29	45	42	40	F	F	F	F	F															
15	38	54	48	43	F	F	F	F	F		43	48	45	52	C	C	R	R	R															
16	48	67	57	49	F	F	F	F	F		59	49	48	44	C	C	C	C	C															
17	52	70	62	45	F	F	F	F	F		30	45	43	40	C	C	C	C	C															
18	37	55	49	50	F	F	F	F	F						F	F	F	F	F															
19	55	68	60	46	F	F	F	F	F						F	F	F	F	F															
20	52	62	57	56	C	C	C	C	C						46	31	F	F	F															
21	60	65	60	47	R	R	C	F	F						49		F	F	F															
22	40	53	45	40	F	F	F	F	F						57	51	49	F	F															
23	39	49	42	35	F	F	F	F	F						44	52	45	35	F															
24	32	52	45	36	C	C	C	C	C						35	40	40	37	C															
25	30	50	44	36	F	F	F	F	F						32	40	33	28	F															
26	43	52	50	54	C	R	R	C	C							47	43	45	F															
27	49	60	51	42	F	F	F	F	F						55	55	45	39	R															
28	36	53	44	40	F	F	F	F	F							40	37	33	C															
29	39	46	40	35	C	F	F	F	F						33	35	36	33	S															
30	40	45	36	27	F	F	F	F	F							35	34	33	C															
31	25	42	30	37	F	F	F	F	F																									
Mean	47	60	53	47							36	44	41	33							28	39	36	32										

N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.





	JULY.						AUGUST.						SEPTEMBER.											
	Therm.			Weather.			Therm.			Weather.			Therm.			Weather.								
	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10				
1	69	82	71	67	C	R	F	R	75	81	70	69	C	C	C	C	60	70	60	51	F	F	F	C
2	72	80	71	69	C	C	C	C	69	60	60	60	R	C	R	R	57	67	54	54	F	F	F	F
3	75	86	76	72	C	C	C	C	64	77	67	64	C	F	F	F	58	60	62	58	F	C	R	R
4	70	71	66	63	C	R	R	C	69	87	75	69	F	F	F	F	58	66	59	52	R	R	R	R
5	66	79	69	68	C	C	C	C	72	83	74	69	F	F	F	F	54	72	62	50	F	F	R	R
6	71	85	73	68	R	F	F	F	73	89	75	69	F	F	F	F	54	69	60	55	F	F	F	F
7	74	90	85	65	F	F	F	F	70	87	72	70	F	F	F	C	54	68		56	C	C	C	R
8	67	77	68	62	F	F	F	F	74	86	77	73	F	F	F	F	61	66	66	62	C	C	C	R
9	70	88	79	72	F	F	F	F	76	87	76	72	C	C	C	C	59	71	62	56	C	C	C	C
10	70	95	88	84	F	F	F	F	71	84	74	67	F	F	C	C	65	69	54	48	C	C	F	F
11	86	92	86	84	F	F	F	F	66	77	69	62	F	F	F	F	49	62	58	51	F	F	F	F
12	85	100	84	77	F	F	F	F	64	72	66	60	F	F	F	F	59	70	60	58	F	C	C	C
13	84	85	82	78	F	F	F	F	69	86	78	72	F	F	F	F		82	70	66	F	F	F	F
14	75	87	74	72	C	F	F	F	77	88	75	68	F	F	C	C	64	78	70	64	F	F	F	F
15	76	88	75	68	F	F	F	F	73	81	75	72	C	F	F	F	62	79	66	58	F	F	F	F
16	75	85	72	69	F	F	F	F	75	81	71	64	F	F	F	F	58	75	67	64	F	F	F	F
17	75	87	81	76	F	F	F	F	64	76	67	64	F	F	F	F	58	75	74	60	F	F	F	C
18	76	88	79	70	F	F	F	F	62	69	60	58	C	F	F	F	62	68	58	57	R	R	R	R
19	74	88	77	75	F	F	F	F	60	69	63	61	C	F	F	F	61	76	68	59	F	F	F	F
20	78	99	87	81	F	F	F	F	60	60	57	60	R	R	R	R	58	75	67	64	F	F	F	F
21	88	101	88	80	F	F	F	F	60	60	57	60	R	R	R	R	56	58	52	50	F	F	F	F
22	81	88	76	73	F	F	C	C	59	60	57	55	R	R	R	R	51	67	59	57	C	F	F	F
23	75	83	74	74	C	F	C	C	58	70	60	58	C	C	C	C	51	67	60	56	C	F	F	F
24	79	91	79	76	F	R	F	F	67	80	69	63	F	F	F	F	60	64	60	60	C	C	C	R
25	80	89	75	71	F	F	C	C	68	80	70	68	F	F	F	F	68	67	57	49	R	R	R	R
26	71	89	73	66	F	F	F	F	76	87	72	66	F	F	F	F	47	65	60	48	F	F	F	F
27	68	85	74	68	F	F	F	F	68	74	65	59	F	F	F	F	48	62	57	64	C	C	R	R
28	70	85	73	68	F	F	F	F	60	75	70	60	F	F	F	F	52	53	52	51	R	R	R	R
29	68	90	76	70	F	F	F	F	64	79	69	65	F	F	F	F	49	61	56	49	C	C	F	F
30	71	86	72	68	F	F	F	F	71	80	72	62	F	F	F	F	47	69	60	53	F	F	F	F
31	77	92	72	69	F	F	F	F	66	84	75	67	F	F	F	F	53	70	63	54	F	F	F	F
Mean	75	88	77	72					68	79	73	69	F	F	F	F	56	68	63	56				
									68	78	70	65												

	OCTOBER.						NOVEMBER.						DECEMBER.											
	Therm.			Weather.			Therm.			Weather.			Therm.			Weather.								
	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10				
1	56	76	64	50	F	F	F	F	44	55	49	46	F	F	F	F	43	45	44	44	R	R	R	R
2	59	76	61	61	F	F	F	F	44	53	48	42	C	F	F	F	44	50	48	46	F	F	F	F
3	61	82	70	64	F	R	R	R	48	41	34	34	F	F	F	F	43	47	41	46	C	F	F	F
4	63	70	62	62	R	R	R	R	50	43	38	38	F	F	F	F	40	43	40	40	C	C	C	C
5	62	74	66	62	C	F	F	F	41	58	53	43	F	F	F	F	32	38	33	28	F	F	F	F
6	61	78	68	64	F	F	F	F	47	60	53	42	F	F	F	F	22	36	32	32	F	F	F	F
7	64	78	77	70	F	F	F	F	37	59	51	41	F	F	F	F	29	43	35	25	F	F	F	F
8	58	56	52	47	C	C	C	C	39	60	52	45	F	F	F	F	22	36	34	32	F	F	F	F
9	39	60	52	49	C	C	C	C	42	58	44	43	F	F	F	F	48	53	47	34	F	F	F	F
10	55	66	63	65	C	C	R	R	35	47	41	35	C	C	C	C	23	31	25	21	F	F	F	F
11	68	73	64	52	C	F	F	F	35	50	45	37	C	F	F	F	26	36	32	19	C	C	F	F
12	47	47	48	44	C	F	F	F	35	45	38	30	F	F	F	F	16	27	18	10	F	F	F	F
13	44	63	65	51	C	F	F	F	38	46	42	42	F	F	F	F	-3	2	-2	-3	F	F	F	F
14	52	53	50	51	C	C	C	C	52	55	47	38	R	R	R	R	11	24	22	22	C	F	F	F
15	52	64	52	52	C	R	R	R	34	49	42	37	F	F	C	R	28	49	41	35	F	F	F	F
16	50	66	57	46	C	R	F	F	49	46	42	37	F	F	F	F	37	48	42	40	F	F	F	F
17	42	48	42	36	C	F	F	F	39	46	43	38	C	F	C	C	45	52	52	48	R	R	R	R
18	36	48	40	36	C	F	F	F	31	35	28	22	F	F	F	F	45	44	43	41	R	R	R	R
19	32	46	41	41	F	F	F	F	17	31	27	23	F	F	F	F	33	42	37	35	F	F	F	F
20	42	58	48	44	F	F	F	F	36	41	33	33	C	C	C	C	36	40	32	24	C	C	C	C
21	42	47	37	32	C	F	F	F	32	43	36	29	F	F	F	F	20	30	24	24	F	F	F	F
22	31	45	39	36	F	F	F	F	29	33	27	25	S	C	C	C	10	20	15	8	F	F	F	F
23	41	58	52	48	F	F	C	F	27	38	37	32	C	F	F	F	7	21	18	12	F	F	F	F
24	48	56	45	35	C	F	F	F	35	41	36	27	C	C	C	F	16	22	26	28	C	C	F	F
25	36	47	41	35	C	C	C	C	35	38	38	34	C	F	C	C	36	44	45	45	C	C	C	C
26	45	51	51	56	C	C	C	C	33	41	38	32	C	C	C	C	33	31	26	21	F	F	F	F
27	60	68	63	64	C	R	R	R	32	39	36	35	C	C	C	C	16	32	32	35	F	F	C	C
28	47	50	45	39	R	F	F	F	31	44	39	32	F	F	F	F	27	42	35	28	F	F	F	F
29	36	51	45	41	C	F	F	F	32	47	41	34	F	F	F	F	32	34	32	28	C	F	F	F
30	38	50	44	41	C	F	F	F	32	44	43	42	C	C	C	C	34	36	35	38	C	R	R	R
31	43	58	55	48	C	F	F	F									38	42	39	38	R	R	R	C
Mean	49	60	54	49					35	47	41	36					29	36	33	30				

N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.



	JANUARY.						FEBRUARY.						MARCH.												
	Therm.			Weather.			Therm.			Weather.			Therm.			Weather.									
	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10					
1	35	37	39	41	C	R	R	R	C	5	8	4	8	F	F	F	C	30	34	33	R	R	R	R	
2	26	32	28	24	F	F	F	F	C	13	23	20	23	S	S	S	S	35	37	37	35	R	R	S	S
3	28	34	32	27	F	F	F	F	C	29	32	23	18	C	C	C	C	38	35	33	33	R	R	R	R
4	34	34	19	F	F	F	F	F	C	12	30	23	21	F	F	S	S	37	35	34	C	C	R	R	
5	14	19	14	10	F	F	F	F	C	27	36	32	20	C	C	F	F	37	42	35	C	C	C	R	
6	12	25	22	23	F	F	F	F	C	21	40	32	25	F	F	F	F	42	43	39	35	C	C	R	R
7	21	34	34	37	C	C	C	C	C	30	41	35	34	C	R	R	R	39	33	32	F	F	C	C	
8	39	46	40	36	R	R	R	R	R	34	44	35	28	C	C	F	F	34	39	36	R	S	C	C	
9	35	38	37	35	C	C	R	R	C	19	32	25	25	F	F	F	F	35	45	39	36	C	C	C	C
10	43	56	51	46	F	F	C	C	C	27	44	40	37	F	C	C	C	34	45	41	35	R	R	R	C
11	38	43	41	38	F	F	F	F	F	38	43	41	37	C	C	C	C	39	43	36	30	F	F	F	F
12	37	41	36	30	F	C	F	F	F	38	40	38	35	F	F	F	F	29	40	33	32	F	F	F	F
13	25	34	31	26	F	F	F	F	F	27	34	27	25	F	F	F	F	36	47	38	34	F	F	F	F
14	27	34	35	33	F	F	F	F	F	25	34	25	16	C	R	F	F	23	40	36	31	F	F	F	F
15	38	43	39	36	R	R	R	C	C	14	26	21	16	F	F	F	F	39	44	36	37	F	F	F	F
16	29	31	28	24	C	C	C	C	F	16	32	29	32	S	C	S	S	37	52	41	28	C	C	F	F
17	20	35	30	24	F	F	F	F	F	28	34	26	20	C	C	C	F	18	33	26	21	F	F	F	F
18	20	34	34	24	F	F	F	F	F	17	37	29	28	F	F	F	F	22	36	28	26	F	F	F	F
19	21	34	29	22	F	F	F	F	F	25	37	32	23	F	F	F	F	33	40	33	C	C	C	C	
20	18	30	24	27	F	F	F	F	C	29	39	36	34	C	C	C	C	34	38	37	39	C	C	C	C
21	21	30	28	21	F	F	F	F	F	31	36	35	32	S	C	C	R	36	48	38	32	C	C	F	F
22	16	29	25	21	F	F	F	F	F	27	30	25	22	F	F	C	C	34	50	44	35	F	F	F	F
23	21	35	33	34	F	C	C	R	R	19	35	34	34	F	F	C	C	40	49	40	39	C	C	F	F
24	31	36	34	32	S	S	R	R	R	34	50	41	32	F	F	F	F	44	59	45	45	C	C	C	C
25	18	21	17	9	F	S	S	S	F	33	52	47	48	F	C	R	R	46	53	34	C	C	C	C	
26	4	21	16	9	F	F	F	F	F	45	54	45	41	C	C	F	F	28	37	27	24	S	S	C	S
27	6	26	25	34	F	F	F	F	F	35	38	32	32	S	S	S	S	23	37	30	28	C	C	F	C
28	29	44	37	30	F	F	F	F	F	32	35	32	30	S	S	S	S	29	44	37	30	F	F	F	F
29	29	40	28	18	F	F	F	F	C	29	40	28	18	F	F	F	C	35	50	40	35	C	C	F	C
30	15	21	17	14	C	S	S	F	F	32	39	32	29	C	S	S	F	32	39	32	29	C	S	S	F
31	-1	1	-8	-9	F	S	S	F	F	26	38	34	31	S	S	F	F	26	38	34	31	S	S	F	F
Mean	24	33	29	26						26	36	31	28					32	42	36	33				

	APRIL.						MAY.						JUNE.												
	Therm.			Weather.			Therm.			Weather.			Therm.			Weather.									
	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10					
1	35	54	47	40	F	F	F	F	F	49	58	50	48	F	F	F	F	71	86	69	66	F	F	F	F
2	38	53	44	39	F	F	F	F	F	50	76	53	49	C	F	F	C	63	80	70	66	C	R	R	R
3	36	48	36	34	F	F	F	F	F	48	61	65	60	C	F	F	F	75	86	73	68	F	F	R	R
4	35	51	41	38	F	F	F	F	F	66	76	66	50	F	F	F	F	50	68	52	52	F	F	R	C
5	46	61	51	41	F	F	F	F	F	58	66	51	40	C	C	C	C	50	51	52	48	R	R	R	R
6	39	45	38	32	F	C	C	S	S	57	73	66	53	F	F	F	F	56	73	60	56	F	F	F	F
7	35	38	36	32	S	S	C	C	C	56	70	59	55	F	F	F	F	63	82	71	68	F	F	F	F
8	35	48	39	36	F	C	C	F	F	55	61	54	51	C	C	C	C	73	89	77	72	C	C	C	C
9	40	52	47	46	R	C	F	C	C	54	63	53	50	F	F	F	F	77	85	70	68	F	F	F	F
10	35	34	28	28	S	R	R	R	C	54	64	48	F	F	F	F	75	85	74	67	F	F	F	F	
11	25	34	24	20	F	F	F	F	F	56	71	57	52	F	F	F	F	71	92	83	73	F	F	F	F
12	24	37	33	26	F	F	F	F	F	55	73	59	56	F	F	F	F	61	76	71	62	F	F	F	F
13	27	42	37	34	F	F	F	F	F	65	88	78	71	F	F	F	F	65	77	67	60	F	F	F	F
14	41	54	45	44	C	C	R	F	C	70	82	67	63	C	F	F	C	64	87	75	70	F	F	F	F
15	47	62	49	41	F	F	F	F	F	75	98	85	78	F	F	F	F	60	75	59	55	R	C	F	F
16	46	47	44	41	C	C	C	C	C	79	97	77	76	F	F	F	F	65	71	62	55	C	C	F	F
17	50	58	52	45	R	C	F	F	F	77	96	78	70	F	F	F	F	62	76	58	58	F	F	F	F
18	48	58	52	50	F	F	F	F	F	62	76	62	53	F	F	F	F	67	82	69	62	F	F	F	F
19	50	55	55	46	C	C	C	C	C	56	66	56	53	F	F	F	F	68	89	61	60	F	F	F	C
20	51	58	48	45	F	C	C	C	C	57	72	59	57	C	C	C	C	58	59	56	56	C	C	R	R
21	44	49	41	36	F	F	F	F	F	66	81	65	63	F	F	F	F	55	57	52	52	R	R	R	R
22	39	48	35	32	F	F	C	C	C	63	75	63	59	C	C	R	F	54	61	55	55	R	R	C	C
23	39	49	42	F	F	F	F	F	F	69	86	73	67	F	F	F	F	60	63	58	55	R	C	C	C
24	44	55	46	40	F	C	C	C	C	69	76	67	61	F	F	F	F	60	64	60	59	R	R	R	R
25	46	54	44	42	C	C	C	C	C	64	67	56	52	F	F	F	F	71	81	70	67	C	C	C	C
26	45	57	44	42	C	C	C	C	C	60	78	62	60	F	F	F	F	65	75	66	68	F	C	F	F
27	45	55	49	48	C	C	C	C	C	67	78	60	60	F	F	F	C	76	88	72	67	F	C	F	F
28	46	50	43	41	F	F	F	F	F	63	84	60	55	C	R	R	C	70	86	75	69	F	F	F	F
29	43	55	53	55	R	R	R	R	R	54	69	45	43	C	C	C	C	70	89	71	70	C	R	R	R
30	50	59	53	55	F	F	F	F	F	55	61	54	55	C	C	C	C	73	87	74	71	C	C	C	C
31										60	81	73	64	F	F	F	F								
Mean	41	52	43	40						61	75	61	57					63	77	67	63				

N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hal. S. Snow.



	JULY.						AUGUST.						SEPTEMBER.										
	Therm.			Weather.			Therm.			Weather.			Therm.			Weather.							
	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10			
1	75	89	81	72	C	C	R	R	74	84	71	70	C	C	R	R	60	69	65	60	C	C	C
2	76	88	67	65	F	C	R	R	72	90	76	68	F	F	F	F	64	76	69	65	F	F	F
3	72	89	77	71	F	F	F	F	63	75	67	62	F	F	F	F	66	84	75	71	R	F	F
4	76	89	70	67	F	F	F	F	65	77	69	64	F	F	F	F	73	84	76	72	R	R	C
5	74	81	79	65	F	F	F	F	65	78	67	64	F	F	F	F	74	87	75	72	R	C	C
6	74	84	75	70	F	F	F	F	66	77	71	69	C	C	C	C	68	78	66	62	F	F	F
7	75	90	82	76	F	F	F	F	71	84	73	73	C	R	F	R	61	69	63	60	F	F	F
8	83	91	73	69	F	F	F	F	70	81	70	65	C	R	R	R	60	69	61	60	F	F	F
9	73	86	77	65	F	F	F	F	70	80	69	65	C	F	F	F	62	83	74	68	F	F	F
10	75	90	80	76	F	F	F	F	67	77	67	67	C	C	C	R	67	78	66		R	R	R
11	80	96	81	77	F	F	F	F	60	68	66	66	R	R	R	R	64	76	68	60	C	C	C
12	82	95	82	82	F	F	F	F	68	73	68	67	R	R	R	C	68	80	69	64	C	R	R
13	83	96	80	76	C	F	C	C	68	64	65	66	R	R	R	R	63	74	66		C	C	C
14	77	64	65	62	C	R	R	R	65	72	67	67	R	R	R	R	70	83	72	67	F	F	F
15	71	72	65	61	C	F	F	F	69	78	69	67	R	C	R	R	65	71	63	56	F	F	F
16	68	81	71		F	F	F	F	71	80	61	68	C	C	C	C	51	62	56	48	F	F	F
17	73	88	77	69	F	F	F	F	72	80		67	C	R	F	F	48	65	59	54	F	F	F
18	78	85	69	68	C	R	R	R	67	68	67	63	R	C	C	F	61	66	62	62	C	C	R
19	67	85	70	67	F	F	F	F	66	76	70	67	R	R	F	F	64	69	63	57	C	C	C
20	74	85	71	65	C	F	F	F	73	87	75	73	F	F	F	C	57	70	61	56	F	F	F
21	70	81	70	69	C	F	C	C	75	75	74	73	R	R	C	F	57	69	67	58	F	F	F
22	74	91	80	76	R	F	F	F	73	88	75	71	C	C	C	F	62	76	66	65	C	F	F
23	78	89	77	71	F	F	F	F	67	70	66	65	C	C	C	C	65	69	56	51	C	R	R
24	73	85	71	68	F	F	F	F	69	71	67	67	C	C	C	C	49	52	51	51	R	R	R
25	67	80	69	64	F	F	F	F	67	69	65	65	R	R	R	R	47	57	51	50	C	F	C
26	66	81	64	62	F	F	F	F	63	80	70	67	C	C	C	C	51	65	57	51	C	C	R
27	64	75	66	61	C	F	F	F	67	72	67	66	C	C	C	C	61	78	76	69	R	R	R
28	63	76	66	62	F	F	F	F	71	79	70	70	C	C	C	R	67	80	71	69	C	C	C
29	65	89	68	64	F	F	F	F	70	82	74	67	F	F	F	F					F	F	F
30	68	82	69	67	F	F	F	F	66	84	76	70	F	F	F	F	52	60	60	54	R	F	F
31	71	84	72	65	F	F	F	F	66	79	70	59	F	F	F	F							
Mean	74	85	76	69					68	77	69	67					62	73	65	60			

	OCTOBER.						NOVEMBER.						DECEMBER.										
	Therm.			Weather.			Therm.			Weather.			Therm.			Weather.							
	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10			
1	56	79	63	52	R	R	R	49	58	56	50	R	R	C	C	34	59	44	35	F	F	F	
2	40	69	61	56	F	F	F	50	53	52	47	F	F	F	F	26	36	29	21	F	F	F	
3	59	60		48	F	F	F	46	54	45	35	F	F	F	F	18	26	24	21	F	F	F	
4	45	66	65	53	F	F	F	39	39	34	34	F	F	C	C	19	33	28	22	C	C	F	
5	51	64		54	C	F	F	29	42	35	28	F	F	F	F	23	41	35	26	F	F	F	
6	59	77	69	63	F	F	F	26	47	43	43	F	F	F	F	24	46	37	35	F	F	F	
7	63	73	64	62	C	F	F	47	67	58	50	C	C	C	C	37	53	49	40	F	F	R	
8	49	57		44	R	C	F	39	45	40	32	F	F	F	F	38	47	45	48	C	C	F	
9	40	61	54	47	F	F	F	33	50	44	44	F	F	F	F	47	59	54	49	F	F	F	
10	48	60	52	43	F	F	F	48	55	47	39	R	R	R	R	47	52	43	36	C	C	R	
11	46	60	52	51	F	F	F	33	50	44	36	F	F	F	F	31	49	35	34	F	F	F	
12	53	59		55	C	F	F	35	54		49	F	F	F	F	32	42	38	38	F	F	F	
13	52	57	56	57	R	R	R	28	38		27	F	F	F	F	32	44	40	32	F	F	F	
14	53	56	53	48	R	R	R	28	35	43	44	F	F	F	R	21	30	26	22	F	S	S	
15	47	60	52	50	F	F	F	47	55	40	40	F	F	F	F	25	38	38	37	F	F	F	
16	52	63	57	53	R	R	R	39	57	49	45	F	F	F	F	36	54	47	41	F	F	F	
17	50	66	58	48	F	F	F	50	57	57	59	C	R	R	R	44	57	50	40	C	C	S	
18	42	62	57	52	F	F	F	50	51	45	33	C	F	F	F	36	41	39	34	C	S	S	
19	58	50	54	45	R	R	C	29	37	33	25	F	F	C	C	28	33	25	19	S	S	C	
20	45	55	53	52	C	R	R	22	41	37	34	F	F	F	C	16	27	22	36	F	F	F	
21	50	52	52	53	R	R	R	37	38	31	29	S	C	C	F	29	31	35	40	C	F	F	
22	57	52	49	46	R	C	C	24	33	29	26	F	F	F	C	32	40	35	32	F	F	F	
23	39	48		33	C	F	F		32		26	C	C	F	F	27	32	27	22	F	F	F	
24	40	48	41	36	C	F	F	18	32	27	23	F	F	F	F	11	19	15	13	F	F	F	
25	29	44	42	41	F	F	F	25	41	35	33	F	F	F	F		13	11		8	F	F	
26	46	55	43	40	C	F	F	37	48	47	50	F	F	F	F	28	37	47	44	C	R	R	
27	31	42		30	F	F	F	35	45	39	33	F	F	F	F		38		23	R	R	C	
28	33	50	48	52	R	R	R	38	42	38	34	F	F	F	F		4	11	9	0	F	F	
29	47	65		53	F	F	F	29	43	38	35	F	F	F	F		4	19	15	12	F	F	
30	51	55	40	40	F	F	F	32	49	44	38	C	F	F	F		15	26	29	31	S	S	
31	34	50	42	41	F	F	F										23	28	31	26	S	S	
Mean	47	58	53	48				36	46	42	67						27	37	33	30			

N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.









	JANUARY.								FEBRUARY.								MARCH.										
	Therm.				Weather.				Therm.				Weather.				Therm.				Weather.						
	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.
1	28	33	26	25	C	C	C	S	30	37	33	33	C	C	S	S	17	30	27	24	F	F	F	F			
2	27	39	37	39	C	C	C	R	37	41	35	34	C	C	C	C	31	37	33	37	C	C	C	C			
3	43	49	44	37	R	R	C	C	37	43	33	34	R	R	C	C	38	51	41	33	C	C	C	F			
4	30	41	34	36	F	F	F	F	36	50	42	38	F	F	F	F	26	30	25	20	C	C	C	F			
5	39	51	46	44	C	C	C	C	32	44	38	34	C	C	F	F	16	34	28	24	F	F	F	F			
6	39	42	39	40	F	R	R	C	36	46	42	39	C	C	C	C	32	37	34	35	F	F	F	R			
7	40	43	33	44	C	C	C	C	48	55	54	48	C	C	R	R	37	45	32	28	F	F	F	F			
8	29	26	24	20	F	R	R	C	35	44	36	34	F	F	F	F	35	39	28	32	F	F	F	C			
9	18	34	28	28	F	F	F	F	36	43	41	43	C	C	C	C	34	44	38	36	R	R	R	C			
10	23	29	28	23	F	R	C	S	44	54	43	43	C	C	C	C	40	50	39	34	F	F	F	F			
11	39	40	37	36	S	R	C	C	30	33	30	27	F	F	F	F	36	41	34	36	C	R	S	C			
12	38	46	43	41	C	C	C	C	16	22	19	15	F	F	F	F	36	46	43	36	C	C	C	C			
13	42	51	47	42	C	C	C	C	17	39	35	24	F	F	F	F	38	59	43	35	C	C	C	C			
14	29	40	36	36	F	F	F	F	31	32	27	28	C	C	C	C	34	42	35	35	F	F	F	C			
15	34	40	34	25	F	F	F	F	25	33	33	31	C	C	C	C	34	32	31	29	C	C	S	C			
16	18	24	19	22	F	F	F	F	32	43	36	33	S	S	C	C	35	35	31	24	F	F	F	F			
17	25	40	33	25	C	C	C	C	31	52	46	38	F	F	F	F	37	42	35	28	F	F	F	F			
18	25	39	33	24	F	F	F	F	34	46	41	44	C	C	C	C	29	41	38	28	F	F	F	F			
19	25	38	33	32	C	C	R	R	49	60	50	41	C	F	F	F	32	48	38	34	F	F	F	C			
20	30	33	26	20	F	F	F	F	40	52	42	41	F	F	F	F	34	49	39	32	F	F	F	F			
21	18	23	17	5	S	S	F	F	46	52	49	48	R	R	R	R	38	52	35	28	C	C	R	F			
22	3	26	13	8	F	F	F	F	33	37	31	27	F	F	F	F	23	38	33	28	F	F	F	F			
23	9	22	15	10	S	S	F	F	25	40	34	32	F	F	F	F	24	44	37	36	F	F	F	F			
24	5	22	16	10	F	F	F	F	38	36	33	30	F	F	C	S	38	47	45	40	R	R	R	R			
25	14	36	36	40	R	C	C	S	29	37	31	28	S	S	S	S	49	56	45	35	F	F	F	F			
26	40	52	44	37	F	F	F	F	22	37	31	32	F	R	C	C	40	46	40	35	C	C	C	C			
27	34	34	30	34	C	C	C	C	36	42	45	49	R	R	R	R	40	50	43	42	C	C	C	C			
28	34	34	30	23	C	C	C	C	35	35	31	36	F	F	F	F	45	72	57	46	C	F	F	F			
29	25	37	23	22	C	C	C	C	33	39	34	28	F	C	C	C	45	51	42	40	C	F	F	F			
30	16	39	24	27	F	F	F	F									46	65	56	52	C	F	R	C			
31	30	46	37	33	F	F	F	F									48	48	41	39	R						
Mean	28	37	31	29					34	42	37	35					35	46	38	34							

	APRIL.								MAY.								JUNE.										
	Therm.				Weather.				Therm.				Weather.				Therm.				Weather.						
	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.
1	37	48	40	35	F	F	R	R	54	64	51	46	F	F	F	F	54	66	58	53	R	R	R	R			
2	45	52	46	39	F	R	R	R	54	68	56	54	F	F	F	F	60	62	56	50	C	C	R	F			
3	43	56	44	39	C	C	C	F	55	65	58	56	C	C	C	C	60	60	56	55	C	R	R	R			
4	40	36	39	34	C	C	C	C	65	71	65	51	F	F	F	F	61	75	59	56	F	R	C	C			
5	46	46	38	35	S	S	S	S	54	62	52	49	F	F	F	F	60	65	58	58	R	R	R	R			
6	30	52	41	38	F	F	F	F	44	62	52	48	C	C	C	C	63	71	62	58	C	F	F	F			
7	35	53	38	33	C	F	F	F	64	70	59	54	C	F	F	F	66	80	66	63	C	F	F	F			
8	37	49	42	34	F	F	F	F	54	69	51	48	F	F	F	F	83	71	66	63	F	F	F	F			
9	40	54	47	42	F	F	F	F	57	76	63	55	F	F	F	F	64	68	65	57	F	F	F	F			
10	47	60	53	49	F	R	F	F	54	62	51	48	F	F	F	F	65	74	60	58	F	F	F	F			
11	46	56	41	40	F	F	F	F	53	60	48	46	F	F	F	F	60	71	58	58	F	C	C	C			
12	42	42	41	37	F	F	F	F	57	66	56	53	F	F	F	F	65	82	60	67	R	R	F	F			
13	44	47	38	36	F	F	F	F	60	68	53	48	F	F	F	F	78	76	68	66	R	F	F	F			
14	38	44	37	37	F	F	F	F	48	48	48	48	C	C	C	C	72	87	71	66	F	F	F	F			
15	38	45	35	46	C	F	F	F	51	51	18	47	R	R	C	C	66	76	67	65	F	F	F	F			
16	49	57	45	40	F	F	F	F	54	55	51	51	C	R	R	C	72	83	71	69	F	F	F	F			
17	44	50	46	42	F	F	F	F	57	69	58	54	C	F	F	F	73	87	73	71	C	C	C	C			
18	44	54	44	37	C	C	C	C	51	51	51	48	C	C	R	R	77	91	71	69	F	C	F	F			
19	44	54	42	40	F	F	F	F	52	54	47	46	R	R	C	C	71	85	70	62	C	C	C	C			
20	41	45	37	36	C	C	C	C	50	45	47	45	R	R	C	C	66	80	68	64	F	F	F	F			
21	30	39	38	38	R	R	R	R	48	51	46	46	C	C	F	R	70	81	70	65	F	F	F	F			
22	42	48	43	42	C	C	R	R	49	53	52	52	R	C	R	R	68	76	67	63	F	F	F	F			
23	43	56	40	46	C	C	C	C	58	73	64	56	R	C	F	F	71	86	73	69	F	F	F	F			
24	46	56	46	44	F	F	F	F	62	76	60	56	F	F	F	F	78	71	77	74	F	F	F	F			
25	45	54	43	40	C	C	C	R	55	66	58	58	F	F	F	F	79	93	81	60	F	F	F	F			
26	39	43	45	39	R	R	R	R	59	66	56	52	C	C	R	R	60	74	63	62	C	C	C	C			
27	38	46	44	42	C	C	C	C	60	60	55	55	F	F	C	R	75	83	68	67	C	C	C	C			
28	54	60	54	58	C	C	C	C	57	72	58	53	F	F	F	F	78	93	78	74	C	C	R	R			
29	52	66	53	48	F	F	F	F	62	78	62	56	C	F	F	F	73	86	75	71	C	C	C	C			
30	50	56	48	45	C	C	C	F	64	59	52	42	C	C	C	C	80	90	72	70	C	C	C	C			
31									49	58	52	57	R	R	R	R											
Mean	42	51	43	40					55	61	54	51					68	78	67	64							

N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hal. S. Snow.

	JULY.						AUGUST.						SEPTEMBER.										
	Therm.			Weather.			Therm.			Weather.			Therm.			Weather.							
	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10			
1	74	88	72	69	F	F	F	F	73	82	72	70	F	C	R	R	77	92	78	74	F	F	F
2	75	83	74	68	F	F	F	F	72	81	73	68	F	F	F	F	72	77	70	68	F	C	R
3	68	83	68	66	F	F	F	F	69	82	73	68	F	F	F	C	65	68	64	67	R	R	R
4	67	82	68	63	F	F	F	F	72	78	68	66	R	C	C	C	72	83	72	68	F	F	R
5	66	71	63	61	C	C	C	C	73	82	69	66	F	C	C	C	71	79	69	66	R	R	F
6	67	85	77	72	F	F	F	F	52	72	62	61	C	C	C	C	59	77	70	62	F	F	F
7	75	89	77	70	F	F	F	F	68	79	67	64	C	C	C	C	58	75	63	58	C	C	C
8	76	88	71	68	F	F	F	F	74	87	76	72	F	F	F	F	62	79	71	68	F	F	C
9	70	70	70	66	R	C	F	C	73	85	72	69	F	F	F	F	54	56	56	54	R	R	R
10	67	84	77	66	F	F	F	F	76	86	77	73	F	F	F	F	53	63	60	53	R	F	F
11	72	77	64	61	R	C	R	F	80	88	77	74	F	F	C	F	53	70	61	55	F	F	F
12	64	79	70	64	F	F	F	F	70	90	79	73	F	F	F	F	58	77	70	62	F	F	F
13	70	74	61	59	C	C	R	C	69	84	71	66	F	F	F	F	66	81	72	64	F	F	F
14	61	67	59	58	R	C	R	C	70	85	74	70	F	F	F	F	68	78	63	60	F	F	F
15	66	82	70	66	C	C	C	C	75	81	76	69	C	C	C	R	63	70	62	62	C	C	C
16	66	76	65	65	R	R	R	R	70	83	70	64	F	F	F	F	59	61	58	58	C	C	F
17	73	81	72	70	C	F	R	R	64	77	68	66	F	F	F	F	56	61	57	55	R	R	R
18	68	83	70	66	F	F	F	F	71	72	62	62	C	R	F	F	55	59	53	53	F	F	F
19	72	89	73	70	F	F	R	F	63	73	63	60	F	F	F	F	55	71	63	56	F	F	F
20	78	88	73	71	F	F	C	C	64	77	65	60	F	F	F	F	61	68	60	56	F	F	F
21	73	85	74	70	F	F	F	F	62	76	67	62	F	F	F	F	58	68	60	58	C	C	F
22	73	79	68	67	C	C	C	C	68	83	75	69	F	F	F	F	60	75	60	60	C	F	F
23	74	88	78	75	F	F	F	F	70	86	77	69	F	F	F	F	62	72	64	60	F	F	F
24	78	92	81	75	F	F	F	F	75	92	79	72	F	F	F	F	62	68	66	65	C	C	C
25	80	92	82	77	F	F	F	F	77	89	79	76	F	F	F	F	63	73	66	65	C	C	F
26	70	90	81	75	R	R	F	F	78	78	72	68	F	F	F	F	56	69	61	54	C	F	F
27	76	90	81	72	F	F	F	F	69	78	68	60	F	F	F	F	52	70	60	52	F	F	F
28	70	85	73	68	F	F	F	F	66	84	73	67	F	F	F	F	54	70	58	58	C	C	R
29	69	85	72	67	F	F	F	F	72	90	72	71	F	F	F	F	56	58	54	52	R	R	R
30	67	80	70	66	F	F	F	F	70	77	68	63	F	F	F	F	68	50	53	53	F	F	F
31	74	77	70	66	C	F	R	C	68	84	76	71	F	F	F	F							
Mean	71	82	72	68					70	82	72	67					61	72	63	60			

	OCTOBER.						NOVEMBER.						DECEMBER.										
	Therm.			Weather.			Therm.			Weather.			Therm.			Weather.							
	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10			
1									46	48	48	48	R	F	F	C	23	34	23	24	F	F	F
2									46	49	48	50	R	R	R	R	47	45	43	43	F	F	C
3									56	56	55	55	R	R	R	R	44	56	54	50	C	C	C
4				51					56	63	59	56	R	R	R	R	53	58	49	30	C	C	C
5	48	61	57	52	F	F	F	F	56	66	58	54	C	F	F	F	30	41	35	32	F	F	F
6	54	62	58	58	F	F	F	C	55	55	48	48	R	R	F	F	34	44	30	36	C	C	C
7	54	62	48	48	F	F	F	F	38	55	47	48	F	F	F	F	28	44	42	39	F	F	F
8	47	66	57	54	F	F	F	F	53	57	52	45	R	R	R	C	35	47	41	38	F	F	F
9	53	74	66	58	F	F	F	F	34	50	42	35	F	F	F	F	35	42	48	45	R	C	C
10	55	76	68	58	F	F	F	F	32	42	44	40	F	F	F	F	36	59	49	31	F	F	F
11	57	74	61	56	C	C	C	C	42	55	50	48	F	F	F	F	34	46	45	39	C	C	R
12	59	66	58	54	C	C	C	C	36	42	38	30	R	R	R	C	27	41	41	32	F	F	F
13	48	53	46	40	C	C	C	C	35	40	35	34	F	F	F	F	29	47	44	41	F	C	C
14	44	60	58	58	F	F	F	F	31	42	36	30	C	C	C	C	29	58	44		C	C	C
15	48	53	45	41	F	F	C	F	30	40	35	31	F	F	C	C	30	46	34	31	F	F	F
16	38	56	38	32	F	F	F	F	29	42	37	36	F	F	F	F	32	41	40	35	F	F	F
17	29	46	38	33	F	F	F	F	32	42	33	24	F	F	F	F	39	50	40	35	F	F	F
18	28	50	45	42	F	F	F	F	23	36	30	25	F	F	F	F	24	27	23	14	F	F	F
19	54	58	50	45	F	F	F	F	26	37	35	44	F	F	C	R	11	27	26	24	F	F	F
20	34	46	33	32	F	F	F	F	51	60	58	52	R	C	C	C	25	42	40	39	F	F	F
21	30	50	43	35	F	F	F	F	39	50	42	35	F	F	F	F	39	40	32	23	F	F	F
22	32	54	49	42	F	F	F	F	36	43	43	42	C	C	R	R	15	25	18		F	F	F
23	41	64	55	44	F	F	F	F	43	39	34	31	C	C	C	C	28	37	34	28	F	F	F
24	41	69	59	50	F	F	F	F	32	46	40	36	C	C	C	C	23	44	40	29	F	F	F
25	48	58	50	50	F	F	C	C	36	45	38	33	F	C	C	C	34	32	25	20	F	F	F
26	47	67	62	58	C	F	C	C	35	43	35	31	C	C	F	F	23	44	35	32	F	F	F
27	50	62	54	44	F	F	F	F	30	40	37	33	F	F	F	F	32	42	34	21	F	F	F
28	35	55	48	48	F	F	F	F	48	55	54	52	R	R	R	C	32	41	38	26	C	F	C
29	52	62	59	52	F	R	F	F	37	50	46	38	F	R	R	F	31	40	39	38	C	F	F
30	44	53	47	38	F	F	F	F	37	47	40	34	F	F	F	F	37	41	30	16	F	F	F
31	34	53	49	44	F	F	F	C									7	19	18	20	F	F	C
Mean	44	60	52	47					39	48	43	40					30	42	37	32			

N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.

	JANUARY.							FEBRUARY.							MARCH.									
	Therm.				Weather.			Therm.				Weather.			Therm.				Weather.					
	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10	8	N.	St.	10
1	33	35	34	35	C	C	C	S	11	32	25	16	F	F	S	S	17							
2	24	21	15	8	R	R	S	S	18	29	28	29	F	F	F	C								
3	-4	5	0	-6	F	F	F	F	23	27	20	14	S	S	F	F								
4	-2	11		-1	F	F	F	F	12	24	16	12	F	F	F	F								
5	7	20	17	15	F	F	F	F	7	27	21	18	F	F	F	F								
6	17	25	23	18	C	C	R	R	16	32	26	18	F	F	F	F								
7	33	51	44	33	F	F	F	F	25	42	37	23	F	F	F	F								
8	36	36	35	32	S	S	R	R	25	38	36	38	C	F	F	R								
9	29	33	28	18	S	R	R	R	36	40	35	20	C	C	C	C								
10	3	12	9	4	F	F	F	F	24	27	27	29	C	C	C	C								
11		12	8	4	F	S	S	S	24	37	31	31	C	C	F	F								
12	11	26	18	16	C	C	F	F	13	26	19	14	F	F	F	F								
13	23	34	29	25	C	C	C	C	12	26	18	13	F	F	F	F								
14	34	39	37	36	C	C	C	C	15	29	24	20	C	C	C	C								
15	39	47	45	42	R	R	R	R	24	35	28	23	F	F	F	F								
16	32	40	35	31	F	F	F	F	20	34	28	22	F	F	F	F								
17	34	38	35	35	C	C	C	C	20	35	30	24	F	F	F	F								
18	36	37	37	35	S	R	R	R	20	30	24	20	F	F	F	F								
19	35	41	36	31	F	F	C	C	18	27	10	15	F	F	F	F								
20	20	40	34	31	F	F	F	F	15	23	22	27	C	S	S	S								
21	33	38	34	32	C	C	C	C	18	25	22	9	S	S	S	S								
22	30	36	31	23	C	C	C	C	17	28	19	14	F	F	F	F								
23	20	30	33	28	F	F	F	F	8	16	15	11	F	F	F	F								
24	32	39	27	14	S	S	C	C	8	28	22	22	F	F	C	S								
25	9	8	24	28	F	F	F	F	17	33	29	31	C	C	C	C								
26	35	49	32	34	F	F	F	F	34	38	30	30	S	C	C	C								
27	33	34	30	27	C	C	C	C	20	25	17	14	F	F	R	F								
28	21	29	22	16	F	S	S	S	11	27	19	15	F	F	F	F								
29	20	30	25	12	F	F	F	F																
30	10	24	19	9	F	F	F	F																
31	4	28	20	12	F	F	F	F																
Mean	23	31	27	22					18	30	24	20												

N. Noon. St. Sunset. F. Fair. C. Cloudy. R. Rain. H. Hail. S. Snow.



TABULAR RESULTS.

1819, SIXTH SERIES.															
MEANS.							EXTREMES.								
	Nt.	8 A. M.	N.	St.	10 P. M.	Mean.	Hottest	Coldest	Range.	Greatest change in 24 hrs	Days in which 80 and above	90 and above.	Therm. is at 32 and below.	0 and below.	
							d.	d.		d.					
January,		26,74	36,25	32,70	28,50	31,12	23 56	29 -2	58	29 42			25	1	
February,		28,64	39,53	37,75	29,57	33,87	10 64	18 14	50	10 26			24		
March,		27,60	36,58	30,45	26,60	30,30	26 48	3 10	38	3 21			23		
April,		42,60	50,90	42,80	39,38	43,92	15 66	1 26	40	3 33			4		
May,		54,00	61,37	52,67	49,40	56,36	25 84	12 39	45	25 32	1				
June,		69,64	79,43	67,76	63,70	70,13	17 95	1 50	45	17 30	15	5			
July,		73,51	83,00	71,57	67,42	73,87	31 99	5 55	44	8 29	20	5			
August,		71,52	77,90	71,55	66,83	71,95	1 100	23 56	44	1 28	17	9			
September,	52,60	64,79	73,97	66,10	62,00	66,71	3 94	14 48	46	15 31	6	2			
October,	41,40	49,00	59,54	52,93	49,31	52,69	6 83	27 31	52	5 25	3				
November,	30,80	40,63	47,37	43,13	39,90	42,78	12 67	30 21	46	13 24				2	
December,	20,00	25,54	35,77	29,77	27,42	29,62	9 56	30 4	52	3 22	62	21		28	
YEAR,		47,85	56,80	49,95	45,87	50,75	100	-2	102	42	62			119	1
Winter,		26,97	37,18	33,41	28,60	31,54	64	-2	66	42	0	0		77	1
Spring,		41,40	49,62	41,97	38,46	42,86	84	10	74	33	1			27	
Summer,		71,56	80,11	70,29	65,98	71,98	100	50	50	30	52	19			
Autumn,	41,60	51,47	60,29	54,05	50,40	54,05	94	21	73	31	9	2		15	

1820, SIXTH SERIES.

1820, SIXTH SERIES.														
MEANS.							EXTREMES.							
	Nt.	8 A. M.	N.	St.	10 P. M.	Mean.	Hottest	Coldest	Range.	Greatest change in 24 hrs	Days in which 80 and above	90 and above.	Therm. is at 32 and below.	0 and below.
							d.	d.		d.				
January,	11,74	17,00	28,80	23,71	19,39	22,22	30 39	2 3	36	3 23			31	
February,	19,88	25,75	36,65	30,93	26,96	30,07	20 52	2 -8	60	3 23			24	2
March,	24,38	31,10	42,41	35,24	31,16	34,98	26 71	3 12	59	26 29			22	
April,	31,60	44,82	53,87	43,96	41,97	46,15	19 75	3 25	50	18 31			7	
May,	43,67	54,93	61,39	54,60	51,48	56,35	23 85	2 39	46	23 27	2			
June,	53,07	67,60	76,10	66,60	62,82	68,28	22 100	1 51	49	2 35	13	6		
July,	62,32	76,55	86,75	73,55	70,45	76,82	4 95	19 60	35	19 32	26	12		
August,	56,42	68,61	80,13	69,52	66,55	71,21	12 97	15 60	37	12 25	17	2		
September,	52,05	64,00	75,00	65,97	60,87	66,46	10 99	21 43	56	8 27	9	4		
October,	38,81	46,55	57,73	52,23	46,97	50,87	16 72	26 30	42	17 24				3
November,	27,33	33,30	43,83	39,00	34,80	37,74	1 58	30 12	46	11 29				14
December,	15,13	20,68	29,48	26,57	23,20	24,93	8 44	23 3	41	29 28				31
YEAR,	36,34	45,91	56,26	48,49	44,72	48,70	100	-8	108	35	67	24	132	2
Winter,	15,58	21,14	31,64	27,07	23,18	25,78	52	-8	60	28	0	0	86	2
Spring,	33,22	43,62	53,56	44,60	41,54	45,83	85	12	73	31	2		29	
Summer,	57,27	70,93	80,99	69,89	66,61	72,10	100	51	49	35	56	20		
Autumn,	39,41	47,95	58,85	52,40	47,54	51,69	99	12	87	29	9	4		17

Nt. Night. N. Noon. St. Sunset. d. days.

TABULAR RESULTS.

1821, SIXTH SERIES.																	
	MEANS.						EXTREMES.										
	Nt.	8 A. M.	N.	St.	10 P. M.	Mean.	Hottest		Coldest		Range.	Greatest change in 24 h'rs		Days in which 80 and 90 above.		Therm. is at 32 and 0 below.	
							d.	°	d.	°		d.	°	above.	above.	below.	below.
January.	7,20	13,84	25,77	21,35	16,77	19,43	31	52	25	-13	65	24	38			30	5
February,	23,79	24,78	38,89	32,17	29,00	31,21	10	48	24	10	38	25	24			27	
March,	22,19	30,32	40,32	34,13	29,93	33,67	31	60	5	11	49	31	25			19	
April,	28,73	40,82	51,37	44,38	39,87	44,11	29	71	3	26	45	29	29			6	
May,	43,22	55,58	64,84	54,93	48,77	56,03	31	88	6	39	49	13	23	1			
June,	55,43	67,23	76,73	65,73	62,17	67,94	24	94	1	50	44	14	37	12	3		
July,	55,00	68,84	79,23	67,80	64,32	70,02	31	94	4	56	38	30	28	17	2		
August,	58,07	70,53	82,48	71,00	67,32	72,50	1	100	27	57	43	31	24	18	6		
September,	52,23	58,59	69,63	63,65	59,37	62,81	3	87	27	45	42	7	26	4			
October,		45,00	59,87	53,07	46,61	51,14	6	77	24	31	46	13	37			4	
November,	29,42	37,37	46,33	41,72	38,13	40,89	4	67	28	21	46	4	22			9	
December,	19,77	24,20	32,48	28,93	24,96	27,64	3	16	29	3	43	29	32			22	
YEAR,	35,93	44,76	55,66	48,24	43,93	48,15		100		-13	113		38	52	11	117	5
Winter,	50,76	20,94	32,38	27,48	23,58	26,09		52		-13	65		38			79	5
Spring,	31,38	42,24	52,18	44,48	39,52	44,61		88		11	77		29	1		25	
Summer,	56,17	68,87	79,48	68,18	64,60	70,16		100		50	50		37	47	11		
Autumn,	40,82	46,99	58,61	52,81	48,04	51,61		87		21	66		37	4		13	

1822, SIXTH SERIES.

1822, SIXTH SERIES.																	
	MEANS.						EXTREMES.										
	Nt.	8 A. M.	N.	St.	10 P. M.	Mean.	Hottest		Coldest		Range.	Greatest change in 24 h'rs		Days in which 80 and 90 above.		Therm. is at 32 and 0 below.	
							d.	°	d.	°		d.	°	above.	above.	below.	below.
January,	12,71	17,26	27,97	23,52	19,30	22,01	22	48	14	-9	57	15	35			29	8
February,	15,18	20,62	33,03	28,28	24,89	26,70	27	53	8	1	52	9	35			27	
March,	25,45	34,03	45,93	39,47	37,19	39,15	26	66	9	9	57	26	41			27	
April,	34,37	41,52	51,28	43,93	40,63	44,34	30	69	2	22	47	2	28			9	
May,	46,26	58,55	69,54	59,80	55,52	60,85	28	93	15	34	59	15	42	4	1		
June,	53,44	65,10	77,10	65,82	61,31	67,33	16	95	5	42	53	16	44	17	1		
July,	61,42	71,42	83,58	71,70	66,97	73,42	1	97	7	48	49	7	44	25	5		
August,	56,52	68,47	79,52	69,48	65,60	70,77	12	94	31	44	50	14	41	12	4		
September,	52,13	62,83	76,03	67,47	62,48	67,20	12	86	23	34	52	9	44	14			
October,	41,23	48,34	60,16	53,43	49,83	52,94	10	75	28	26	49	6	35			6	
November,	32,40	37,70	50,07	44,79	35,82	42,09	12	66	27	19	45	12	35			15	
December,	19,39	26,28	36,16	32,16	28,58	30,86	1	65	25	2	63	2	37			29	
YEAR,	37,54	46,01	57,54	50,01	45,67	49,81		97		-9	106		44	72	11	142	8
Winter,	15,76	21,39	32,39	28,09	24,26	26,53		65		-9	74		44			85	8
Spring,	35,36	44,70	55,58	47,73	44,44	48,11		93		9	84		42	4	1	36	
Summer,	57,12	68,33	80,07	69,00	64,63	70,51		97		42	55		44	54	10		
Autumn,	41,92	49,62	62,09	53,23	49,34	54,07		86		19	65		44	14		21	

Nt. Night. N. Noon. St. Sunset. d. days.

TABULAR RESULTS.

1823, SIXTH SERIES.													
MEANS.							EXTREMES.						
	Nt.	8 A. M.	N.	St.	10 P. M.	Mean.	Hottest	Coldest	Range.	Greatest change in 24 h'rs	Days in which Therm. is at 80 and 90 and 32 and 0 and above. above. below. below.		
							d. °	d. °		d. °			
January,	14,93	20,44	32,45	23,07	24,80	26,44	19 49	7 -5	54	19 34			31 2
February,	10,54	19,22	30,43	23,87	19,86	23,36	22 44	17 -5	49	23 35			28 2
March,	22,32	30,79	38,77	33,35	30,10	33,25	21 59	4 -6	65	25 34			29 2
April,	33,21	43,80	54,30	46,52	42,38	46,75	27 70	5 21	49	28 37			15
May,	41,42	50,57	62,87	53,03	50,31	54,19	25 86	5 25	61	26 43	1		3
June,	51,73	65,04	74,93	64,47	60,34	66,19	19 96	1 39	57	6 39	10	4	
July,	58,74	70,23	80,64	71,13	66,06	72,01	2 95	4 45	50	5 40	16	7	
August,	56,38	68,48	80,52	70,64	66,00	71,41	8 96	23 44	52	27 43	20	4	
September,	45,50	54,69	67,43	60,93	51,53	59,39	4 90	30 25	65	5 40	3	1	5
October,	36,31	45,41	57,23	51,14	46,06	49,96	3 75	12 22	53	3 35			5
November,	24,85	33,04	41,10	37,86	32,23	36,06	10 57	18 15	42	16 34			22
December,	24,37	28,37	35,79	32,51	30,35	31,75	31 49	9 14	35	1 19			23
YEAR,	35,02	44,15	54,71	47,79	43,58	47,58	96	-6	102	43	50	16	161 6
Winter,	16,61	22,64	32,89	28,15	25,00	27,17	49	-5	54	35			82 4
Spring,	32,32	41,72	57,98	44,30	40,93	44,74	86	-6	92	43	1		47 2
Summer,	55,62	67,92	78,70	68,75	64,13	69,87	96	39	55	43	46	15	
Autumn,	35,55	44,38	55,25	49,08	44,27	48,47	90	15	75	40	3	1	32

1824, SEVENTH SERIES.

1824, SEVENTH SERIES.													
MEANS.							EXTREMES.						
	Nt.	8 A. M.	N.	St.	10 P. M.	Mean.	Hottest	Coldest	Range.	Greatest change in 24 h'rs	Days in which Therm. is at 80 and 90 and 32 and 0 and above. above. below. below.		
							d. °	d. °		d. °			
January,	23,30	30,48	34,42	30,42	27,60	30,74	6 49	22 3	46	7 30			28 0
February,		26,11	33,62	29,52	26,29	28,88	11 52	5 -6	58	5 45			25 1
March,		31,34	42,16	35,90	31,47	35,22	30 57	2 15	42	20 23			23 0
April,		41,55	56,17	46,63	43,43	47,69	21 74	2 30	44	3 26			3
May,		53,28	60,97	55,29	50,33	54,97	23 88	4 37	51	28 31	2		
June,		65,00	73,37	64,07	60,80	65,81	1 92	14 48	44	27 40	8	2	
July,		70,93	81,48	69,84	66,26	72,13	31 92	2 61	31	3 29	19	3	
August,		65,16	76,71	67,61	63,27	68,19	19 94	4 52	42	20 31	11	2	
September,		59,60	70,97	63,80	58,90	63,32	5 88	24 45	43	5 24	7		
October,		46,61	60,39	53,19	46,78	51,74	11 75	31 25	50	18 33			4
November,		36,04	44,47	40,96	32,81	38,57	16 59	12 23	36	12 22			11
December,		27,77	39,45	35,72	32,28	33,80	27 48	5 14	34	17 27			20
YEAR,		46,40	56,18	49,41	45,02	49,25	94	-6	100	45	47	7	114 1
Winter,		28,12	35,83	31,89	28,72	31,14	52	-6	58	45			73 1
Spring,		43,06	53,10	45,94	41,74	45,96	88	15	73	31	38		26
Summer,		67,03	77,19	67,17	63,44	68,71	94	48	44	40	7	7	
Autumn,		47,41	58,61	52,65	46,16	51,21	88	23	65	33			15

Nt. Night. N. Noon. St. Sunset. d. days.



TABULAR RESULTS.

1825, SEVENTH SERIES.																
	MEANS.						EXTREMES.									
	Nt.	8 A. M.	N.	St.	10 P. M.	Mean.	Hottest		Coldest		Range.	Greatest change in 24 h'rs	Days in which 80 and 90 and above.		Therm. is at 32 and 0 and below.	
							d.	°	d.	°			d.	°	above.	above.
January,	23,83	35,16	29,63	25,55	23,54	1	49	11	11	38	30	34				27
February,	25,67	36,14	31,96	29,00	30,69	7	48	4	9	39	8	30				26
March,	36,53	47,16	41,48	36,19	40,34	20	65	22	28	37	20	27				13
April,	46,83	57,87	49,60	44,34	49,66	16	77	21	30	47	16	27				2
May,	55,00	67,13	58,48	53,13	58,43	31	84	2	38	46	2	26	2			
June,	68,00	79,43	69,93	66,79	71,04	10	96	4	52	44	7	30	15	6		
July,	75,03	87,52	76,61	71,81	77,74	21	101	8	62	39	9	26	28	9		
August,	68,00	78,32	70,10	65,03	70,36	6	89	21	55	34	12	26	17			
September,	56,03	68,20	62,95	57,77	60,69	13	82	26	47	35	13	24	1			
October,	48,81	59,84	53,61	49,09	52,84	3	82	22	31	51	3	21	1			3
November,	34,78	46,77	41,34	35,63	39,63	8	60	19	17	43	7	23				11
December,	28,68	36,45	33,00	29,81	31,98	9	53	14	-3	56	14	30				19
YEAR,	47,24	58,33	51,55	46,84	50,99	101	84	-3	104	34	64	15	101	15	101	1
Winter,	26,06	35,92	31,53	28,12	30,41		53	-3	56	34						72
Spring,	46,12	57,39	49,85	44,55	49,47		84	28	56	27	2	2				15
Summer,	70,34	81,75	72,21	67,88	73,05		101	52	49	30	60	15				
Autumn,	46,54	58,27	52,63	46,83	51,05		82	31	51	24	2					14

1826, SEVENTH SERIES.																
	MEANS.						EXTREMES.									
	Nt.	8 A. M.	N.	St.	10 P. M.	Mean.	Hottest		Coldest		Range.	Greatest change in 24 h'rs	Days in which 80 and 90 and above.		Therm. is at 32 and 0 and below.	
							d.	°	d.	°			d.	°	above.	above.
January,	23,50	32,77	29,20	25,64	27,78	10	56	31	-9	65	30	25				25
February,	26,07	36,28	30,86	27,71	30,23	26	54	1	4	50	9	25				24
March,	31,93	42,09	36,00	32,76	35,69	24	59	17	18	41	18	34				15
April,	40,80	51,93	43,34	39,65	43,93	15	62	11	20	42	14	20				7
May,	61,00	74,71	61,10	57,19	63,50	15	98	5	40	58	15	35	9	3		
June,	62,60	76,97	66,66	62,65	67,22	11	92	5	48	44	14	27	16	1		
July,	73,58	85,07	76,21	69,00	75,96	11	96	15	61	35	29	27	27	6		
August,	68,26	76,71	69,47	66,90	70,33	2	90	11	60	30	3	27	12	1		
September,	61,69	72,53	64,83	60,14	64,80	5	87	25	47	40	9	23	7			
October,	47,29	58,26	53,21	48,32	51,77	6	77	27	30	40	6	23				1
November,	35,93	46,27	41,85	37,43	40,37	7	67	24	18	49	8	28				14
December,	27,14	37,19	33,40	29,58	31,83	9	59	28		59	26	39				23
YEAR,	46,65	57,56	50,51	46,41	50,28		98	-9	107	39	71	11	109	11	109	2
Winter,	25,57	35,41	31,15	27,64	29,94		59	-9	68	39						72
Spring,	44,58	56,24	46,81	43,20	47,71		98	18	80	35	9	3				22
Summer,	65,14	79,58	70,78	66,18	71,17		96	48	48	27	55	8				
Autumn,	43,30	59,02	53,30	48,63	52,31		87	18	69	28	7					15

Nt. Night. N. Noon. St. Sunset. d. days.

TABULAR RESULTS.

1827, SEVENTH SERIES.																
	MEANS.						EXTREMES.									
	Nt.	8 A. M.	N.	St.	10 P. M.	Mean.	Hottest		Coldest		Range.	Greatest change in 24 hrs	Days in which Therm. is at			
							d.	°	d.	°			80 and above.	90 and above.	32 and below.	0 and below.
January.	17,83	28,48	24,16	18,64	22,26	28	40	21	-7	47	6	26			29	3
February,	25,28	35,64	29,50	25,64	29,01	3	47	12	-4	51	13	29			21	1
March,	33,29	44,28	36,97	33,08	36,90	27	68	4	12	56	29	34			20	
April,	47,70	57,07	49,70	44,77	49,81	11	79	1	33	46	3	33				
May,	55,09	65,16	54,90	52,06	56,80	27	91	1	37	54	17	31	4	1		
June,	63,40	74,77	64,58	60,43	65,79	10	87	4	43	44	4	33	8			
July,	69,26	80,13	70,55	66,67	71,65	1	91	26	51	40	26	24	19	2		
August,	66,57	76,06	68,83	63,68	68,78	6	96	14	50	46	7	26	12	2		
September,	59,30	69,80	62,75	57,80	62,41	3	86	30	48	38	16	25	3			
October,	49,38	60,53	54,53	50,77	53,80	20	72	26	32	40	31	28			2	
November,	30,83	39,65	34,25	30,34	33,77	3	58	11	19	39	14	21			24	
December,	28,22	35,13	30,93	28,23	30,62	15	51	27	1	50	28	37			24	
YEAR,	45,51	55,56	48,45	44,34	48,46		96		-7	103		37	46	5	120	4
Winter,	23,78	33,08	28,19	24,17	27,30		51		-7	58		37			74	4
Spring,	45,36	55,50	47,17	43,30	47,83		91		12	79		34	4	1	20	
Summer,	66,41	76,99	67,99	63,59	68,74		96		43	53		33	39	4		
Autumn,	46,50	56,66	50,51	46,30	49,99		86		19	67		28	3		26	

1828, SEVENTH SERIES.																
	MEANS.						EXTREMES.									
	Nt.	8 A. M.	N.	St.	10 P. M.	Mean.	Hottest		Coldest		Range.	Greatest change in 24 hrs	Days in which Therm. is at			
							d.	°	d.	°			80 and above.	90 and above.	32 and below.	0 and below.
January,	27,51	36,97	31,13	28,64	31,06	26	52	22	3	49	16	22			23	
February,	33,55	42,21	37,10	34,89	36,94	19	60	12	15	45	11	24			16	
March,	35,06	45,51	37,61	33,58	37,94	28	72	5	16	56	29	27			15	
April,	42,33	50,80	42,93	40,37	44,11	29	66	21	30	36	6	22			2	
May,	55,19	60,61	54,41	51,13	55,33	29	78	30	42	36	2	22				
June,	68,45	78,50	67,38	63,72	69,51	25	93	2	50	43	25	33	16	4		
July,	70,93	82,32	72,09	67,64	73,26	24	92	14	58	34	15	24	22	4		
August,	70,09	81,97	71,74	67,39	72,80	24	92	6	52	40	6	30	20	3		
September,	60,68	71,62	63,41	59,87	63,89	1	92	29	50	42	2	20	3	1		
October,	44,75	59,57	51,96	47,03	50,83	9	76	17	25	48	23	25			6	
November,	39,33	47,83	43,23	39,93	42,58	5	66	18	23	43	9	23			12	
December,	29,97	41,71	36,64	32,45	35,19	14	58	31	7	51	31	34			22	
YEAR,	48,15	58,31	50,80	47,22	51,35		93		3	90		34	61	12	96	
Winter,	30,34	40,30	34,96	31,99	34,40		60		3	57		34			61	
Spring,	44,19	52,31	44,98	41,69	45,79		78		16	62		27			17	
Summer,	69,82	80,93	70,40	66,25	71,86		93		50	43		30	58	11		
Autumn,	48,25	59,67	52,87	48,94	52,43		92		23	69		28	3	1	18	

Nt. Night. N. Noon. St. Sunset. d. days.

TABULAR RESULTS.

SIXTH SERIES. FIVE YEARS, 1819-1823.								
Means and Extremes of each Year and of the Series.								
Months.	1819.	1820.	1821.	1822.	1823.	Series.		
Mean of each month.	January, . . . . .	31,12	22,22	19,43	22,01	26,44	24,21	
	February, . . . . .	33,87	30,07	31,21	26,70	23,36	29,04	
	March, . . . . .	30,30	34,98	33,67	39,15	33,25	34,27	
	April, . . . . .	43,92	46,15	44,11	44,34	46,75	45,05	
	May, . . . . .	56,36	56,35	56,03	60,85	54,19	56,76	
	June, . . . . .	70,13	68,28	67,94	67,33	66,19	67,97	
	July, . . . . .	73,87	76,82	70,02	73,42	72,01	73,23	
	August, . . . . .	71,95	71,21	72,50	70,77	71,41	71,57	
	September, . . . . .	66,71	66,46	62,81	67,20	59,39	64,51	
	October, . . . . .	52,69	50,87	51,14	52,94	49,96	51,52	
	November, . . . . .	42,78	37,74	40,89	42,09	36,06	39,91	
	December, . . . . .	29,62	24,98	27,64	30,86	31,75	28,97	
YEAR, . . . . .	50,75	48,70	48,15	49,81	47,58	48,92		
Mean of each daily observation.	Night,* . . . . .		36,34	35,93	37,54	35,02	36,21	
	S A. M. . . . .	47,85	45,91	44,76	46,01	44,18	45,54	
	Noon, . . . . .	56,80	56,26	55,66	57,54	54,71	56,19	
	Sunset, . . . . .	49,95	48,49	48,24	50,01	47,79	48,89	
	10 P. M. . . . .	45,87	44,72	43,93	45,67	43,58	44,75	
Mean of each season.	Winter, . . . . .	31,54	25,78	26,09	26,53	27,17	27,42	
	Spring, . . . . .	42,86	45,83	44,61	48,11	44,74	45,25	
	Summer, . . . . .	71,98	72,10	70,16	70,51	69,87	70,92	
	Autumn, . . . . .	54,05	51,69	51,61	54,07	48,47	51,98	
Extreme of each year and of each season.	Hottest days, . . . . .	100	100	100	97	96	100	
	Coldest days, . . . . .	-2	-8	-13	-6	-6	-13	
	Range, . . . . .	102	108	113	106	102	113	
	Range of the seasons.	Winter, . . . . .	66	60	65	74	54	64
		Spring, . . . . .	74	73	77	84	92	80
		Summer, . . . . .	50	49	50	55	55	52
		Autumn, . . . . .	73	87	66	65	75	73
	Greatest monthly range, . . . . .	58	60	65	63	65	65	
	Least monthly range, . . . . .	38	35	38	45	35	35	
	Greatest change in 24 hours, . . . . .	42	35	38	44	43	44	
	Days at 80 and above, . . . . .	62	67	52	72	50	61	
Days at 90 and above, . . . . .	21	24	11	11	16	17		
Days at 32 and below, . . . . .	119	132	117	142	161	134		
Days at 0 and below, . . . . .	1	2	5	8	6	4		

\* The *Night* observations are not included in the estimate of the mean temperature of the years of this series, because it would vary the standard of comparison with the other years, in which there was no such observation.



## TABULAR RESULTS.

SEVENTH SERIES. FIVE YEARS, 1824-1828.								
Means and Extremes of each Year and of the Series.								
Months.	1824.	1825.	1826.	1827.	1828.	Series.		
Mean of each month.	January, . . . . .	30,74	28,54	27,78	22,26	31,06	28,08	
	February, . . . . .	28,88	30,69	30,33	29,01	36,94	31,17	
	March, . . . . .	35,22	40,34	35,69	36,90	37,94	37,22	
	April, . . . . .	47,69	49,66	43,93	49,81	44,11	47,04	
	May, . . . . .	54,97	58,43	63,50	56,80	55,33	57,81	
	June, . . . . .	65,81	71,04	67,22	65,79	69,51	67,87	
	July, . . . . .	72,13	77,74	75,96	71,65	73,26	74,15	
	August, . . . . .	68,19	70,36	70,33	68,78	72,80	70,09	
	September, . . . . .	63,32	60,69	64,80	62,41	63,89	63,02	
	October, . . . . .	51,74	52,84	51,77	53,80	50,83	52,20	
	November, . . . . .	38,57	39,63	40,37	33,77	42,58	39,98	
	December, . . . . .	33,80	31,98	31,33	30,62	35,19	32,48	
YEAR, . . . . .	49,25	50,99	50,28	48,46	51,35	50,01		
Mean of ea. dialy obs.	8 A. M. . . . .	46,40	47,24	46,65	45,51	48,15	46,79	
	Noon, . . . . .	56,18	58,33	57,56	55,56	58,31	57,19	
	Sunset, . . . . .	49,41	51,55	50,51	48,45	50,80	50,14	
	10 P. M. . . . .	45,02	46,84	46,21	44,34	47,22	45,93	
Mean of each season.	Winter, . . . . .	31,14	40,41	29,94	27,30	34,40	30,64	
	Spring, . . . . .	45,96	49,47	47,71	47,83	45,79	47,35	
	Summer, . . . . .	68,71	73,05	71,17	68,74	71,86	70,71	
	Autumn, . . . . .	51,21	51,05	52,31	49,99	52,43	51,40	
Extreme of each year and of each season.	Hottest days, . . . . .	94	101	98	96	93	101	
	Coldest days, . . . . .	—6	—3	—9	—7	3	—9	
	Range, . . . . .	100	104	107	103	90	110	
	Range of the seasons.	Winter, . . . . .	58	56	68	58	57	59
		Spring, . . . . .	73	56	80	79	62	70
		Summer, . . . . .	44	49	48	53	43	47
		Autumn, . . . . .	65	51	69	67	69	64
	Greatest monthly range, . . . . .	58	56	65	56	56	65	
	Least monthly range, . . . . .	31	34	30	33	34	30	
	Greatest change in 24 hours, . . . . .	45	34	39	37	34	45	
	Days at 80 and above, . . . . .	47	64	71	46	61	58	
	Days at 90 and above, . . . . .	7	15	11	5	12	10	
	Days at 32 and below, . . . . .	114	101	109	120	96	108	
Days at 0 and below, . . . . .	1	1	2	4	0	2		

GENERAL RESULTS.

FORTY THREE YEARS, 1786 - 1828.									
Means and Extremes of each Series and of the whole Period.									
Series.	First. 7 Years.	Second. 7 Years.	Thirl. 7 Years.	Fourth. 7 Years.	Fifth. 5 Years.	Sixth. 5 Years.	Seventh. 5 Years.	Whole. 43 Years.	
Mean of each month.	January,	24,81	26,62	26,85	24,24	24,24	21,21	28,08	25,59
	February,	25,07	28,	29,56	27,23	24,16	29,04	31,17	27,75
	March,	36,26	36,16	36,19	33,75	33,82	34,27	37,22	35,33
	April,	45,15	47,44	46,62	46,32	44,56	45,05	47,04	46,02
	May,	56,87	58,29	57,33	55,27	55,54	56,76	57,81	56,84
	June,	67,21	68,43	67,80	66,00	65,07	67,97	67,87	67,19
	July,	71,30	72,45	72,94	70,49	71,84	73,23	74,15	72,49
	August,	69,75	72,86	71,32	69,64	68,45	71,57	70,09	70,53
	September,	61,32	63,66	64,14	62,57	61,48	64,51	63,02	62,96
	October,	49,54	50,91	52,00	52,28	50,95	51,52	52,20	51,34
	November,	40,09	38,74	40,00	39,36	42,62	39,91	38,98	39,96
	December,	27,77	29,40	32,68	31,59	29,16	28,97	32,48	30,29
YEAR,	47,93	49,49	49,79	48,23	47,66	48,92	50,01	48,86*	
Mean of each daily observation.	Night,					36,21			
	8 A. M.	46,55	47,49	47,44	45,57	44,54	45,54	46,79	46,27
	Noon,	54,15	56,22	56,63	55,17	55,06	56,19	57,19	55,80
	Sunset, 10 P. M.	47,60	49,47	49,48	48,09	47,62	48,89	50,14	48,76
Mean of each season.	Winter,	25,76	27,90	29,64	27,75	26,04	27,42	30,64	27,88
	Spring,	46,08	47,30	46,71	45,11	44,64	45,25	47,35	46,06
	Summer,	69,38	71,58	70,69	68,71	68,45	70,92	70,71	70,06
	Autumn,	50,41	51,10	52,04	51,41	51,68	51,98	51,40	51,43
Extreme of each series &c.	Hottest days,	96	99	100	100	101	100	101	101
	Coldest days,	-11	-10	-3	-7	-11	-13	-9	-13
	Whole range,	107	109	103	107	112	113	110	114
	Mean annual range,	99,70	98,27	97,07	97,64	105	106	101	100,67
	Mean annual range of the seasons	Winter,		56,85	58,92	58,5		64	59
		Spring,		76,28	71,28	70,85		80	70
		Summer,		45,41	45,92	44,5		52	47
		Autumn,		68,71	66,14	66,78		73	64
	Greatest monthly range,	59	65	67	69	60	65	65	69
	Least monthly range,	26	32	32	31	31	35	30	26
	Greatest change in 24 hours,	41	41	38	50	47	44	45	50
	Mean annual No. of days at	80 and above,	38	56,14	50,57	42,42	46	61	58
90 and above,		5,57	10,85	10,57	6	10,4	17	10	10,06
32 and below,		109,58	116	106	118,57	116,4	134	108	115,51
0 and below,		3,71	1,57	1,42	2,85	5	4	2	2,94

\* Corrected as proposed in page 112, this will give 47,09 as the mean temperature of the 43 years.

Since the preliminary remarks have passed through the press, a further examination has been made of the papers of the late Dr. Holyoke, which resulted in the discovery of the continuation of his Meteorological Journal, down to the time of his death. By the continued kindness of his grandson, the papers have been transmitted to me, to make such use of them, as should seem best calculated to advance the interests of the science which the venerable author so long cultivated.

These additional journals are much less complete than those of former years, which were copied out and prepared for publication by the author. After 1820, the observations with the barometer were discontinued ; and in the later years there are more frequent omissions in the other observations ; and the notices of the states of the weather, and of unusual occurrences, are much fewer. It was for these reasons, doubtless, that Dr. Holyoke, in preparing his journals to be presented to the Academy, which he did with his own hands in the later years of his life, thought proper to stop the preparation with the year 1821.

Yet there are considerations which give a peculiar interest to this portion of the journal, although its value as a matter of science may be somewhat less than that of the preceding portions. It adds so many years to the length of the journal, already longer, as well as more full and accurate, than any of a similar character, of which we have any knowledge, that has ever been kept by the same individual. It exhibits also a devoted attention to scientific pursuits at an advanced period of life, to which very few, in this age of the world, attain.



Dr. Holyoke completed his hundredth year on the 13th of August 1828, on which occasion the physicians of Boston and Salem united in exhibiting to him some marks of their respectful consideration. In October following there is an interruption of two or three days in his journal, occasioned by his absence on a visit to Boston and Cambridge. At this time he attended a meeting of the Counsellors of the Massachusetts Medical Society (of which he was one of the active founders, and the first president,) and visited many of the literary and scientific institutions in Boston, and the scenes of his childhood and youth, in Cambridge.

In the morning of the first day of March, 1829, the last entry is made in his meteorological journal. On that day he was first confined to his chamber by his last illness; and on the 31st day of the same month, he closed his long life of usefulness and benevolence.

In the preliminary remarks, some calculations were given, designed to ascertain the true mean temperature of Salem, as exhibited by these journals, after the proper allowances should be made for the hours of observation, and for such other circumstances as may be supposed to affect the result. In these estimates it was proposed to allow one or two degrees for the effect of *reflected* heat acting upon the thermometer during the day. But on comparing the later journals with a similar journal kept by myself during a portion of the same period, I find reason to believe that the apparent increase of temperature from this cause is at least fully counterbalanced by the opposite effects of radiation during the night; and consequently that no reduction of the mean temperature should be assumed on this account.

Abstracts of the first thirty-three years of the journal have before been published in the Memoirs of the Academy ; — the first seven years by Dr. Holyoke himself in the second volume, and twenty-six years in the fourth volume, prepared by Mr. Clap. In order to complete the journal in a uniform manner, similar tables are now published of the additional years. The former abstracts are now published of the additional years. The former abstracts are prepared in four series of seven years each, with one imperfect series of five years. The ten years now added are arranged in two series of five years each ; so that the whole period embraces seven series, the first four containing each seven years, and the last three series, five years each. I have added a table giving some of the more important results of the whole period, taken chiefly from Mr. Clap's tables in the fourth volume, with the additional years incorporated into it.

## IX.

### *Remarks on the Mineralogy and Geology of Nova Scotia.*

BY CHARLES T. JACKSON AND FRANCIS ALGER.\*

*Communicated to the Academy, August, 1831, by Thomas Nuttall, A. A. S.*

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THE peninsula of Nova Scotia is included between the 43d and 46th degrees of north latitude, and between the 61st and 67th degrees of longitude west of the meridian of Greenwich. It is

\* In justice to our readers, it becomes us perhaps to state, that the paper now offered to the public through the American Academy's Memoirs, is, in part, a republication of an essay which originally appeared in Professor Silliman's American Journal of Science in 1828-9. It is that essay corrected and enlarged to a considerable extent, by the additional facts collected during a more recent, and, from the method adopted, we believe a more general and accurate examination of the Peninsula of Nova Scotia in the summer of 1829; undertaken with the view of determining the character of some few spots which had not been visited during our former excursion, or on which, from causes beyond our control, we were then unable to bestow that minute attention, to which their structure and interesting geological relations have since shown them so fully entitled. Some paragraphs in the former paper have been omitted in this, in a few places, where it became necessary from a more particular examination of the subjects to which they related; others have also been substituted in a few places, where the description of a substance would be made more brief, or where a still more interesting form of a substance could be brought in with advantage. This paper is intended to comprise, with as much order as the blending of old observations with new would admit, such



connected with the continent by a narrow isthmus, and is bounded on the north by the Strait of Northumberland, on the northeast by the Gut of Canseau, by which it is separated from Cape Breton, on the south and southeast by the Atlantic ocean, and on the west by the Bay of Fundy. The whole Province is nearly three hundred miles in length, by one hundred and fifty in breadth, and embraces not less than fifteen thousand square miles of surface.

The face of the country presents, with some irregularity, three distinct ranges of high land, two of which have some claim to the title they bear, of mountains, although they rarely attain an elevation of more than five hundred feet above the sea. The other range consists of rounded hills of inconsiderable elevation, extending through the county of Cumberland, and the districts of Colchester and Pictou. The first two ranges are called the South and North mountains; the former extending through the Province in the direction east-northeast, and crossing the counties of Annapolis, Kings, Hants, Colchester, and Pictou. This range is bounded, on the north and west, by the valley through which the

facts relating to the geological structure and mineral productions of Nova Scotia, as have come within the scope of our personal examination. We are aware that a large blank remains to be filled up on the subjects of which it treats, before these interesting branches of the natural history of that region can be fully elucidated or its real mineral resources made known; and we can only repeat, what we have said on a former occasion, that we hope soon to see it filled up by the examinations of our own countrymen, as well as of the inhabitants of Nova Scotia, to whom, more properly, the labor seems to belong. But we trust that enough will be said, to show that the country, in her mineral constitution, has treasures laid up, which will afford ample materials for the exercise of the native skill and industry of her citizens, and will always secure to her the advantages of an exporting trade.

Annapolis river winds its course for more than eighty miles, carrying with it the rich loam brought by the rivulets and torrents which contribute their waters to swell this beautiful river, depositing it along its course, and thereby forming a part of the fertile alluvium of this valley. The North mountains, however, contribute much more generously to the fertility of the land, from the peculiar rocks of which they consist, producing by their decay the most luxuriant soil. The North mountains form the southwestern coast of the Province, skirting the Bay of Fundy, and having the Annapolis river at their southern base. They extend, with but a single interruption in their continuity, nearly one hundred and thirty miles, and present to the sea an insuperable barrier against its encroachments. The direction of this range is northeast and southwest, with a gentle curve towards the Bay of Fundy, to which it presents a series of lofty mural precipices, well adapted to resist the encroachments of its overwhelming tides and tumultuous waves. This range formed by far the most fruitful field of our researches, and rewarded our labors by presenting the most interesting appearances, and many rare and beautiful specimens. We shall describe it nearly in the order in which its different parts were examined by us, beginning with Digby Neck, which affords peculiar facilities to the researches of inquirers into its geological structure and mineral productions.

This narrow strip of land is a continuation of the North mountains from Annapolis Gut, and, extending thirty miles to the westward, is bounded on the north by the Bay of Fundy, and on the south by St. Mary's Bay, which separates it from the main territory. At its western extremity are situated Long Island and Brier's Island; the former separated from the latter by Grand Passage, and from the main peninsula by Petit Passage; but geologi-

cally considered, they are a continuation of the neck of land, with which, though separated from it by these narrow channels, they are identical in structure and composition. They are composed of trap, under its different modifications, to the entire exclusion of every other rock ; and like most islands of a similar nature when freely exposed to the ocean, they present scenery of unrivalled grandeur and magnificence. On the south side of Brier's Island near the entrance of the channel, the cliffs present a very striking assemblage of neat and regular columnar masses, which sometimes descend in lofty and continuous ranges of steps for many hundred yards into the sea ; their serrated ridges rising up here and there from beneath its surface, and appearing, at first sight, like so much pier-work reared in defence of the island ; which purpose, indeed, they may be said to answer in an admirable manner, since many of the masses scarcely break the surface of the water, and others are so concealed at shallow depths below it, as, in connexion with the currents that set in among them, to render an approach to the harbour dangerous even on ordinary occasions, and when directed by the most experienced mariners. We met with the wreck of a ship that had been driven in upon them a year or two since, and we were informed by the inhabitants, that the cargo and part of the unfortunate crew were lost. Situated as this island is, nearly in the direct route of vessels bound to St. John's, or up the Bay of Fundy, the danger of such accidents is not a little increased by the fogs and storms that suddenly close in upon this region, and which are sometimes known to endure for the continued space of three and four weeks. From the prevalence of these fogs, the island is comparatively barren of vegetation, and presents a dreary surface, affording only scanty support to the miserable sheep that



are kept upon it. Thus driven from the soil, the hardy inhabitants of the island resort to fishing as their chief employment. But this remark cannot be applied, as it unjustly has been, to many other parts of the Province, which, as respects soil and climate, are not surpassed, we believe, by any section of New England.

The columnar or basaltiform structure of the trap is exhibited in greater perfection and to a much greater extent, on this island than upon the opposite; but this is owing in a great degree to its being more exposed to the ravages of the ocean, which have developed the columns to a greater extent, and probably not so much to any intrinsic deficiency of the rock itself in exhibiting, externally, all its characteristic marks. They usually present five or seven sides, very smooth and perfect, and are very variable in their length and proportions, no less than in their internal characters; but as far as we traced them, they did not exhibit in their superposition, the depressions and corresponding convexities, so common to the trap of some regions. It is merely for the want of these characters, and a greater compactness in the mechanical arrangement of its particles, that this trap comes short of the genuine basalt of the most noted European localities. Indeed, the difference in respect to *internal* characters, on comparison with masses of basalt from the Hebrides, is found too slight to be made a point of distinction between them. No minerals were observed on this island, excepting a few narrow veins of red jasper occasionally encircling the columns; the amygdaloid, their usual gangue, not appearing along the coast so far as we followed it. We regret that foggy weather prevented us from passing round to the opposite shore of the island, where, as we were informed by the inhabitants, the cliffs rise to a more remark-

able height ; but its character was clearly indicated by the long causeway, known as the "Bar," that runs out into the sea for more than a mile, and over which the billows were heard to roll in with great violence. From the information we obtained, we are led to believe that the substrata of sandstone are there seen to crop out from beneath the trap, thus making the western terminus of the North mountains similar to the Eastern.

At the northeast point of Long Island, the amygdaloid, on which the irregular columnar rock rests, is accessible, and its cavities are found filled with nodules of chlorite, to the exclusion of the zeolites, which, as we shall have occasion to show, more generally occur in other places. These nodules, when broken, present laminæ, of a beautiful leek-green color, radiating from the centre, and rarely crystallized in low tabular crystals, often intersecting each other. The chlorite has often been removed by external causes, thus imparting to the rock a vesicular appearance ; but in some few cases, the cavities were naturally left void, constituting real vesicular amygdaloid.

The veins of jasper, as they traverse the amygdaloid, become singularly altered in their character, being converted into a substance, resembling in appearance imperfectly burned bricks of potters' clay. The specimens from the interior of the vein, where it had not been acted upon by exposure, presented the same appearance ; some parts were in fact perfect clay-stone. As the veins entered the superincumbent trap, they became altered in appearance, and in the course of a few yards, were converted into a very perfect red jasper. Three or four veins were observed, presenting similar appearances.

In crossing Petit Passage, a deep and precipitous channel, through which the flood tides rush with great violence into the

Bay of Fundy, and form a dangerous "race-way," requiring, as we found, a very strong wind to counteract it, the first spot deserving of notice on account of remarkable geological features, is an indentation on the south side of Digby Neck, known as Little River Valley. Here the trap displays, with wonderful symmetry, its basaltiform structure, and presents a lofty precipice to the sea, where the river empties into St. Mary's Bay, composed of prismatic columns of three, five, and nine sides, frequently broken horizontally, and in some places imperfectly articulated, apparently by their motion on each other, occasioned by the sea; thus resembling in a striking manner, the basaltic rocks of the Giant's Causeway on the coast of Ireland. These prismatic blocks are usually two or three feet in diameter, and sometimes as many yards in length unbroken. Not unfrequently they have been dashed from their pedestals, and tumbled in confusion against each other, forming irregular Gothic arches, which, by their rude forms, give additional wildness to the scene. The exposed surfaces of the trap, from the additional oxidizement of the iron it contains, exhibit a brownish red color, but on recent fracture, its internal structure is fine-grained, and of homogeneous aspect, the hornblende being alone visible to the naked eye. It is heavy, tenacious, and sometimes sonorous. That it is magnetic, like the trap of some other countries, we think is clearly proved by the fact, that surveyors find their compasses very sensibly influenced in running lines in different parts of Digby Neck. But this influence they have hitherto erroneously attributed to large deposits of magnetic iron, of the existence of which there is but little evidence.

We have already observed that the local peculiarities and external forms of the trap rocks in this region, give it unquestion-



able claims to the title of basalt; but as we have no particular partiality for this term, and as the rock may differ in its internal characters from most of the basalt from Ireland, we have concluded to make use of the term columnar trap, leaving the question of its identity with the basalt of Ireland, to be decided by those better able to do it than ourselves; though we are aware, that some of the best writers on geology, do not admit any distinction between them. The experiments of Sir James Hall show very plainly, that the mechanical structure of trap may be coarse or fine, in proportion to the rapidity with which it passed, from its igneous or liquid state, into its columnar form; and therefore, as might well be expected, we meet with masses that differ widely in these respects at the same locality.

The next place of interest we shall mention, is Mink Cove, which is about five miles east of Little River. It is a harbour of inconsiderable depth, and presents nothing very peculiar in its geological features. A few interesting minerals, however, occur in the columnar trap and amygdaloid. They are red, yellow, and ribbon jasper, which traverse the precipice in veins from eight inches to a foot wide, and run for a considerable distance through the rock; the yellow jasper occupying the amygdaloid on which the columnar trap rests, passes, as it enters the more dense superincumbent rock, into red jasper of fine texture, often rendered more beautiful by zones of various colors winding in concentric circles through the mass. They are fit subjects for the lapidary's wheel, and when polished, constitute ornamental specimens. A curious mineral also occurs in the amygdaloid of this place, consisting of broad lamellæ of quartz, disposed in parallel and intersecting plates, having the interstices filled with calcareous spar, giving the specimens the appearance of alternations of

siliceous and calcareous sinter. The veins of jasper present geodes of quartz and amethyst, enclosing crystals of transparent white chabasie measuring nearly an inch across the rhombic planes; they are usually indented by the quartz crystals, over which they are scattered.

The next place worthy of notice is Sandy Cove, about five miles from the last described locality. This cove is the largest indentation on the coast of St. Mary's Bay, and from its favorable situation, it is considered the finest harbour. Its surrounding walls consist of trap, rising from the strand in huge sheets, nearly in a vertical position, and sometimes divided transversely into separate blocks or tables, that lie one above another with their connecting surfaces perfectly flat. They do not exhibit in their structure, the beautiful symmetry observed in the columns of Little River and Brier's Island; from which also, they differ in being of coarser texture, and in containing a large portion of green earth, by which they assume a distinct greenish hue. This difference in mineralogical composition and external figure, which we have also noticed at other places, seems owing to certain local causes, of which we shall speak in another place. It is a difference which is observed no less distinctly in other countries.

Nearer the head of the cove, the precipice gradually falls away, and a bank of brecciated and amygdaloidal trap takes its place, and abounds with nodules and geodes of many beautifully crystallized minerals. Their inner surfaces are sometimes lined with a delicate white filamentous substance, resembling fibres of cotton; apparently fibrous mesotype, similar to that found by Dr. McCulloch on the Isle of Skye. We also met with interesting specimens of quartz, exhibiting the form of the primary obtuse rhomboid, in a few instances perfect, and measuring more than

three eighths of an inch in diameter. But usually the crystals are modified by the absence of solid angles and replacement of single planes, which, by their extension, tend to produce common six-sided pyramids. The amygdaloid is traversed by narrow and indistinct veins of specular iron ore, sometimes hollow, and enclosing white transparent chabasie. Not unfrequently, insulated crystals of the specular ore are imbedded in limpid chalcedony, thus forming a singular variety of agate.

But a substance more likely to interest the mineralogist at this place, is laumonite. This curious mineral presents itself, traversing the amygdaloid in veins sometimes a foot wide, running in vertical, inclined, and zigzag directions. The substances of these veins, especially the crystals, are more or less decayed, in situations most excluded from moisture; and the best specimens were found only in those places which were regularly covered by the tide. Into the cavities of these veins, the laumonite projects in beautiful groups of crystals, which exhibit the form of the primary oblique rhombic prism, firmly implanted at one extremity, and at the other terminated by a single rhombic plane, inclining from one acute angle to the other. The crystals are colorless and transparent, and frequently an inch in length. The calcareous spar which forms the walls of the veins, is often scattered over these groups in insulated rhomboids, considerably more obtuse than the primary crystals, and exhibits examples of hemitropic combination. Interspersed also with these, are brilliant spangles of specular iron ore, which give much additional beauty to the specimens, and serve at the same time to support the crystals of this fragile mineral. It is not a little singular that we have been unable to discover, in the form of the crystals of laumonite, the least modification by the absence of either edges or solid angles; while in



specimens from another locality, to be mentioned hereafter, it is as difficult to discover a single crystal which has not the addition of secondary planes.

The accompanying calcareous spar, like that similarly associated from Brittany, is exceedingly phosphorescent, emitting a beautiful gold-yellow light when thrown upon a heated plate of iron. But this property is by no means peculiar to this substance thus associated; for we have examined specimens from other parts of Nova Scotia, as well as from various localities in Europe and the United States, and find that all, without a single exception, possess this property, when placed on heated bodies. The Count de Bournon observed that from Brittany to be more phosphorescent than any he had seen from other localities; and we are unable to say whether this from Nova Scotia is equal to that, not having a specimen from Brittany in our possession.

About one mile east of Sandy Cove, the specular iron ore referred to, appears in more important veins, and affords specimens not inferior in beauty to those from Elba. When not massive, it occurs in flat, tabular crystals, often with curvilinear and striated faces, resembling many of the specimens of this substance from volcanic districts. Crystals, exhibiting some portion of the planes of the primary acute rhomboid, are sometimes met with attached to the gangue; but they are usually very much modified by replacements on their edges and angles. Magnetic iron ore also occurs at this locality, forming narrow veins in the amygdaloid; but neither of these ores occurs in quantities worth exploring. The best crystallized specimens of the latter, are found along the water-courses, in the soil that has been produced by the degradation of the amygdaloid that once surrounded them. Indeed, the soil is abundantly mixed with

large and very perfect crystals, in the form of the primary octahedron, exhibiting the passage of this form into rhombic dodecahedrons, which they sometimes complete, and thus become isomorphous with the Franklinite, which generally presents this decrement. They are also sometimes imbedded in earthy oxide of manganese, which occurs very sparingly.

Crossing from Sandy Cove to the Bay of Fundy, about the distance of one mile, we came to an indentation called Outer Sandy Cove, between which and the inner cove, is a small but extremely beautiful lake of fresh water, with a sandy bottom, and having a very diminutive outlet into the Bay of Fundy. These two coves are nearly connected by this little lake. The rocks at this cove present no remarkable peculiarities of structure. The shore is composed of immense sheets of trap of the amorphous variety, which shelve or dip towards the Bay of Fundy, at an angle of 10 or 15 degrees and finally disappear beneath its waters. The most interesting features of this place are the large veins of red jasper which appear in parallel ridges, resembling, in a striking manner, the brick battlements upon the inclined roofs of houses, and extending from the highest part of the shore to low-water mark. These ridges stand as monuments to show the continual effect of a turbulent sea, which has worn away the rock they traverse with comparative facility, and left them entire, or slightly polished, as obstacles to its further encroachments. They contain, in some places, geodes of quartz, amethyst, and rich specimens of agate, formed by narrow threads of red jasper traversing white transparent chalcedony, in a zigzag manner, and when polished, constitute beautiful specimens.

Following the shore of St. Mary's Bay, eastwardly as we leave Sandy Cove, and examining at low water the fragments

which have been detached from the precipices above, and profusely scattered along their base at the water's edge, we found in abundance agates of various kinds, and possessing great beauty. Some were of the variety called fortification agate, from a resemblance to military works, on the polished surface of the specimens. This variety is often found well characterized on the shore; sometimes in small nodules, which have been polished by attrition, and resemble the Scotch pebble in every respect: at other times it is found in large tabular masses, which are evidently the ruins of veins from the overhanging trap rocks. The specimens of this vicinity frequently contain the outlines of many fortifications in the compass of a few inches. The base of this agate is an opaque white chalcedony, alternating with rows of transparent quartz and yellow jasper, the last generally constituting the external layer. Fine brecciated agates were also met with, composed of angular masses of red and yellow jasper cemented by transparent and amethystine quartz, often enclosing, in geodes, beautiful crystals of purple amethyst, which, covering the whole interior of the cavity with protruding crystals, vie in beauty with any specimens brought from the banks of the Rhine. A large geode was found on the shore of St. Mary's Bay, which, weighing more than forty pounds, was composed almost entirely of the richest purple amethyst, the mass having but a thin coat of fortification agate externally. On an examination of the crystals of this geode, we found a substance of a reddish brown color, traversing the amethyst, in fibres or acicular crystals, which, beginning at the implanted extremity of the crystal, shoot out into diverging, scopiform, and fasciculated groups, to the opposite extremity. On exposure to a full red heat, this amethyst loses its color, becomes transparent, and has a vitreous lustre; the included fibres, at the



same time, are changed in color to a dark brownish black. On fracturing one of the crystals of amethyst, we obtained a portion of the fibres, which, on examination with the microscope, showed a reddish brown substance, with specks of a brass yellow, which we recognised as sulphuret of iron, the color being very speedily changed to brownish black by exposure before the blow-pipe, when it became magnetic, as did the surrounding brown substance. We are then led to conclude that the yellow is iron pyrites, and the brown fibres red oxide of iron, which doubtless had its origin from the decomposition of the former. The amethyst, traversed by this substance, is of a much deeper color than that in which it is not present, and the color appears deepest in the immediate vicinity of the fibres; hence we should be led to think that a portion of its color was derived from this mineral. The fibres are so minute, that we are unable to ascertain if manganese be present in them.

Large masses of red jasper, weighing more than a ton each, lie scattered along the base of Titus' Hill, which rises abruptly from the shore of St. Mary's Bay. This jasper is frequently of a fine texture, and is banded by stripes of various colors. Sometimes it appears to have been made up of rounded fragments of red jasper, cemented by chalcedony, thus being converted into brecciated agate; but this is not uniformly the case, for the fragments are more frequently encrusted with druses of quartz, which unite them to each other. Cavities of considerable size are found in these masses of jasper, having their interior surfaces lined with a covering of crystallized quartz, which projecting in stalactites from the superior part of the geode, to which they are attached by a slender neck, hang down into the centre, having the dependent extremity enlarged by a radiation of crystals.

Small portions of jasper are frequently included in the crystals, and give a beautiful appearance to the specimens.

On the coast of the Bay of Fundy, about six miles east of Sandy Cove, is an inconsiderable indentation, known by the name of Trout Cove. It presents but few interesting minerals. The situation of the rocks, however, is picturesque. The columnar trap is recumbent on amygdaloid, which here exists in a very narrow and almost inaccessible bed at the base of the precipice; the rocks have been tumbled in great confusion against each other, forming rude irregular passages under their walls. The only minerals to reward the collector for visiting this place, are some varieties of agate, which do not occur elsewhere on Digby Neck. They have a ground of highly translucent chalcedony of a blue color, with angular fragments of red jasper included, and are of a very fine texture; they improve much on the lapidary's wheel, and constitute beautiful specimens of this curious variety. The chalcedony has sometimes, imbedded in it, slender threads of blood-red jasper, which alternating with several different shades of color, twisted in zigzag directions, and preserving its parallelism with the others, constitutes a singular combination of fortification agate, and bloodstone in the same specimen, — the outworks of the fort being delineated by this blood-red zone. The agates occur, constituting veins in the columnar trap, which are seldom more than three inches wide. Chalcedony, of a very fine texture and smooth surface, and, on recent fracture, of a perfectly pure white, also occurs at this place. It occurs, like the agates above mentioned, in veins rarely more than an inch wide, in the columnar trap. This variety, on account of its fine texture and good color, appears well adapted to be worked into cameos and other ornaments.

The next place which we visited on the coast of the Bay of Fundy, is a cove, which has received the singular appellation of Gulliver's Hole. This cove is the largest indentation which the sea has been able to effect, on the iron-bound coast of the Bay of Fundy. It penetrates about three fourths of a mile into the land; and being narrower at its entrance, which is protected by massy columns of trap rocks, it affords a secure retreat to the small fishing-vessels which frequent these waters, when the wind is too violent for them to ride on the unsheltered coast. This locality will prove of interest to the mineralogist, on account of a curious variety of stilbite, which here occurs incrusting the walls of narrow, but deep and perpendicular fissures in the trap. On either side of these chasms, the stilbite occurs in compressed laminae, projecting horizontally, or at right angles with the rock to which they are attached, for the distance of about an inch. They are crystalized, at their free extremities, in the form of the right rectangular prism, terminated by pyramids, and with numerous other modifications. The crystals are arranged in a very irregular manner, crossing and intersecting each other at right angles, so as to produce between them cellular interstices of various forms. The color of this stilbite is white, with a slight tinge of grey; it is glistening and somewhat pearly on cleavage; before the blowpipe it melts easily into a porous glass, without color and transparent. Large sheets of it are easily detached from the rock, by means of the hammer and chisel, and they form fine specimens of a singular variety of this mineral.

Magnetic iron ore in veins about a foot wide, associated with jaspery red iron ore, occurs in the trap rock at this place; but as the veins are exceedingly irregular in their course, and often terminate abruptly, little dependence can be placed upon them



for mining. This remark will apply to all the veins of iron ore which we discovered on Digby Neck; for although the ore is very rich, yielding as much as sixty per cent. of iron, it is so scattered in narrow, unprofitable veins, that it can never do more than supply the mineralogist with specimens of the objects of his science.

Proceeding in our researches eastwardly along the opposite shore, nothing of peculiar interest presents itself, until we reach nearly the extremity of St. Mary's Bay. This bay is separated from Annapolis Basin, by a narrow isthmus on which the town of Digby is situated, and which connects Digby Neck with a moderately elevated range of hills, to be mentioned more particularly when we treat of that formation. This isthmus, which no where attains an elevation of more than one hundred feet, is composed almost entirely of sandstone without presenting, so far as our examination has gone, any traces of marine or other organic relics. It undoubtedly underlies the neighbouring trap rocks of the North mountains, and supports them through their whole extent; but its junction with the trap was not observed at this place, though in a distant section of the North mountains it is seen rising up from beneath it, and forming the coast for a considerable distance. On the shore of St. Mary's Bay, a vertical section of this sandstone is presented, of about one hundred and fifty feet in height; spreading its broad face to the sea, and being the natural barrier against its violence, it has received the appropriate appellation of "the sea-wall." It consists of the red and grey varieties, alternating with each other in long parallel strata, running nearly north and south, and gradually inclining away at an angle of about ten degrees, till it disappears beneath the surface. The strata vary much in thickness, but from four

inches to four feet will include the limits of their variation. The first ten or twelve feet of the precipice include uniform alternations of the grey variety alone ; above this succeeds a beautifully variegated kind, made up with white, grey, and variously shaded red-colored stripes, which, rising in continually widening strata, become gradually of a deeper red, and finally pass, distinctly, into the red sandstone, retaining this character through the remaining superposition of the strata. This red sandstone consists of minute grains of siliceous and calcareous matter, interspersed with spangles of mica. Attached to it are small beds of reddle, or red chalk, usually occupying the spaces between approximate strata, and preventing their actual contact. This variety is comparatively soft, and more readily acted upon by external causes than the grey, which has a much coarser, and by no means so uniform a texture. Both effervesce briskly in nitric acid, but the grey contains a greater portion of the calcareous ingredient. This sandstone does not contain veins of gypsum or limestone. In fact, the reddle was the only simple mineral which we observed in it. The entire precipice, from the feeble cohesion of its parts, is rapidly acted upon by the ordinary causes of decay ; large masses are almost continually losing their hold above, and adding new matter to the slope of *débris*, which inclines from its base into the sea.

On the road to Digby, about three miles from "the sea-wall," we met with an interesting deposit of magnetic iron ore, although it did not prove to be a very extensive one. A collection of masses, in all about twenty tons, were found lying in the soil, and confined to a very narrow space on the south side of Nichols' mountain. The rock, in which they originally occurred, and which, by its decay, had left them disconnected, is amygdaloid of

a fragile character, presenting few or no mineral ingredients. On breaking these masses, they were found to possess a coarse granular structure, and sometimes to present, in their cavities, octahedral and dodecahedral crystals of great brilliancy and perfection. They were highly magnetic, and some of the masses possessed polarity. They presented beautiful druses of amethyst in violet crystals, projecting from grounds of chalcedony containing small globular masses of mesotype and calcareous spar. They also contain brilliant druses of quartz, presented in botryoidal and stalactitic forms. Occasionally, the amethyst, quartz, and chalcedony are united in one specimen, enclosing imperfect crystals of magnetic iron, and constituting, when polished, a singular variety of brecciated agate, showing the metallic concretions deeply imbedded in the transparent mass.

Near this place, a small stream takes its rise from the mountains, called William's Brook, which, running some distance south-eastwardly, empties its waters into St. Mary's Bay. On the banks of this stream, near its source, we discovered veins of a radiated milk quartz in the amygdaloidal trap, coated externally with a thin incrustation of green earth, and having vacancies internally crystallized, and enclosing, in some of the geodes, a beautiful pearly white foliated heulandite, with stilbite often radiated, and sometimes intersected by the laminæ of heulandite. The two minerals being thus exhibited together in the same specimen, their distinguishing peculiarities are rendered much more obvious. Indeed the most unpractised eye readily distinguishes the bright pearly lustre of the heulandite, from the dull greyish white reflection of the stilbite. In the same geode with the heulandite, occurs a greenish mineral, crystallized in the form of the obtuse rhomboid, and possessing all the characters of chaba-



sie, excepting color. It is probably that mineral, colored by green earth. These masses often occupy the whole interior of the geodes, and are deeply indented by the pyramids of the surrounding quartz crystals; whence we suppose it to have been of more recent formation, or at least of more recent induration, than the quartz enveloping it. Botryoidal cacholong also occurs, encrusting the interior of the vacant cavities of the quartz. This locality will repay the mineralogical traveller for the trouble of a visit; and the course of the stream is a correct guide to the spot where specimens may be procured.

The only place which we have not already described, worthy of a visit from the geologist, is that part of Digby Neck where the North mountain range is interrupted by the Gut of Annapolis. This is two miles from the town of Digby. At this place, is situated the Light-house, which serves to guide navigators to the entrance of Annapolis Basin, the most capacious and secure harbour for large vessels in Nova Scotia, and one in which, as is observed by an historian of the country, a thousand ships may ride, secure from every wind.

The site of the Light-house is on a projecting rock of columnar trap of the most compact variety; and the numerous irregular crevices have been filled with chalcedony, jasper, and agate, which, adhering firmly to the contiguous rock, give it additional firmness, enabling it to resist successfully the fury of the waves, which, in boisterous weather, dash completely over the precipice, and wash from its surface every trace of soil or vegetation. The centres of the columns of trap appear to be more readily acted upon by the sea, than the parts contiguous to the chalcedonic veins, and thus concavities are produced, in which the spray from the sea, slowly evaporating, leaves crystals of its saline contents, as in natural salt-pans.

The rocks at this place are columnar trap, incumbent on amygdaloid, and present a surface exactly corresponding to that on the opposite side of the Gut, which is but half a mile wide, and appears as if it had been separated by violence, and not worn away by the action of the sea, which, however, at other places, has been a wonderful agent in undermining the lofty superstructure of columnar rock that skirts this coast. To the most remarkable of these we shall have occasion to refer hereafter. Des Barres, in his "Atlantic Neptune," has given several beautifully drawn views of the scenery of Nova Scotia, exhibiting the bold and magnificent features of the Bay of Fundy (equalled only by northern Ireland and the Hebrides), as well as of the tamer and more varied scenery of other parts, taken during the survey of this coast in the year 1779, by order of the British government. Among these, we have a picturesque view of the cliffs at the entrance of Annapolis Gut, just referred to, which, with some alterations making it more conformable to the *present* appearance of the spot, conveys so well the true character of this scene, that we gladly avail ourselves of this opportunity of bringing it again before the public eye, especially as the work of Des Barres has now become very rare; one perfect copy being all we met with in Nova Scotia. [See Plate I. at the end of this volume.]

Leaving Annapolis Gut, our attention will next be directed to Chute's Cove, which is about twenty miles from it. The intermediate coast we did not examine particularly, but sailed by so near it as to observe its more prominent features. It presents lofty precipices of trap rocks, and affords the mariner no harbour of sufficient security from the sudden gales that spring up on this coast. Even Chute's Cove, although it is considered the best,

and has a small settlement, will afford him a safe retreat only during certain winds, as it stands nearly open to the sea. The trap, composing the bottom of this cove, is in distinct columnar masses, the surfaces of which present, from the action of the sea, assisted by the motion of sand and pebbles, shallow, basin-like cavities, regularly curving from the centre up to the edge, which is harder, and formed of quartz and jasper, and in some places has become highly polished. The quartz and jasper are interposed between the columns like a cement, and very firmly attached to them. We observed several columns beyond the reach of the sea, which exhibited to a less extent the same appearances, proving, however, that ordinary causes have a direct tendency to produce these depressions on their surfaces. The minerals we obtained in our visit to this spot, were found about one mile west from the cove, where we met with an immense waste of water-worn and nearly globular masses of trap, running down like a pavement into the sea. Many of these masses are highly polished by attrition, and they frequently exhibit, on their surfaces, small globular concretions of heliotrope, or bloodstone, imbedded in a chalcedony of a very deep green color. This interesting mineral also occurs not far off in veins traversing amygdaloid, and exhibits, in the green chalcedony, which seems to owe its color to the green earth that frequently invests it, minute, thread-like, and diverging branches of a high crimson color. The chalcedonic part has a milky hue, and passes into carnelian.

At Chute's Cove, six miles east of the locality just mentioned, the rocks resume their abrupt character, and present lofty precipices of columnar trap resting on amygdaloid, abounding with zeolites. The shape of the cavities presented by this amygdaloid, is very singular; for instead of the spheroidal shape, in



which they usually occur, we are here presented with cylindrical cavities, from half an inch to two inches in diameter, and often more than a foot in length. They are mostly vertical or but slightly inclined, and sometimes branch in a curious manner. The interior of these cylinders is usually coated with a thin layer of green earth, over which an incrustation of beautiful crystals of heulandite is deposited. A considerable space is usually left void in the centre, and the projecting crystals are remarkably perfect, exhibiting many curious modifications on the primary form. The most common is the replacement of the solid obtuse angles, and the lateral acute edges by single planes, thus producing a hexahedral prism with dihedral summits. The heulandite is not always crystallized, but often entirely fills the tube with laminæ, intersecting each other in an irregular manner, as if it had attempted crystallization in a space too limited to allow room for the crystals to become perfect. They are evidently the product of one crystallization, for there are never concentric layers of this mineral in the tubes. These cylinders, studded with brilliant crystals of heulandite, constitute specimens highly interesting to the mineralogist; but the form and position of the cavities may be considered valuable evidence in accounting for the origin of the trap rocks. Our limits will not permit us to dwell on this subject sufficiently to weigh the evidence against any theory, but we may venture to hint at the evidence which may be derived from their form and position. If the cavities were produced by the expansion of an elastic fluid, the pressure being equal in all directions, a spherical cavity would necessarily be produced; and this might be converted into a cylindrical cavity or tube, by the hardening of that portion of the rock to which the upper hemisphere was attached,

and by a subsidence of the tenacious mass below, containing the other hemisphere. The tubes are often bent at right angles, as if the rock had been subjected to an alternate irregular elevation and depression. The occurrence of native copper in a similar cavity, a few miles to the east of this place, might probably be adduced as evidence that the production of this rock was attended with heat. In the instance referred to, there was a crystal of green analcime attached to a filament of native copper, which, projecting from the rock, probably served it as a nucleus on which to crystallize. The crystals of heulandite &c. were doubtless deposited subsequently to the formation of the cavities, as the incrustation always received its impressions from the irregularities of the tube, and never left any, although it received an indentation from the slightest prominence in the rock. The only way in which we can account for these cavities, on the supposition that the rocks were of aqueous origin, would be, to suppose the upright tubes to have been produced by the ascent of some elastic gas; but as the cavities are soon arrested by a dense superincumbent rock, and have no outlet, and at the same time diminish in size as they ascend, there is reason to suppose the cavities to have been produced by some condensible elastic fluid, as steam. Their position shows the force which produced them to have acted in a direction up and down, and their irregularities perhaps indicate the rising and falling of the liquid mass.

The inadequacy of any hypothesis to explain these appearances, if founded on the aqueous origin of the trap, is clearly shown, we think, by the evidence we have in favor of the opposite theory; a theory which satisfactorily explains the peculiarities referred to, and which derives no little support from, if it is

not confirmed by the precisely analogous phenomena presented by rocks of *known* igneous origin ; such, for example, as the volcanic lavas and obsidians of Iceland and the Lipari Isles, cited by Mr. Scrope, in his able work on Volcanos.\*

The occurrence, too, of similar cavities in the secondary trap of other regions, has been mentioned by several writers on geology, and in this country especially by Professor Hitchcock, who, in his valuable notices of the trap bordering on the Connecticut River, aptly remarks, that the rocks in which they there occur, "appear as if bored through repeatedly by an auger." † And in a paper which we have recently noticed in the "Transactions of the Royal Society of Edinburgh," ‡ written by Mr. Trevelyan, we find them mentioned as occurring in the trap of one of the Ferroe Islands. This careful observer ascribes their origin to the escape of an elastic fluid through the mass of this rock while soft.

We shall take occasion hereafter to show the relations of shale, red sandstone, and trap, in the production of trap tuff and amygdaloid ; which will lead us to infer, that the vicinity of the trap is necessary to the formation of amygdaloid, and that the production of that rock was attended by heat. But before leaving this cove, we would mention, that foliated heulandite occurs in veins two or three inches wide in the amygdaloid, and that mesotype is found abundantly in the soil formed by the disintegration of this rock.

From St. Croix Cove, pursuing the coast easterly, the amygdaloid, crowned with columnar trap, continues and forms an abrupt precipice for about five miles, where it is again interrupted

\* Page 113.

† Silliman's Journal, Vol. VI. p. 52.

‡ Vol. IX.



by Martial's Cove. The rocks at this place, and the veins presented by the neighbouring coast, cannot fail to reward the labor of those who may visit this spot, as scarcely a week passes, without the downfall of some impending cliff, that scatters its treasures along the shore, before shaded by its brink. Here the heulandite is not confined to spheroidal masses as a mere constituent of the amygdaloid, but exists in veins sometimes six inches wide, extending vertically from the base of the precipice to its very summit. Some of them, that have fallen with the masses of trap, exhibit broad folia of a pearly white appearance. This heulandite, usually colorless and transparent, is sometimes of a red color, like that from Scotland and Germany.

But in speaking of the interesting productions of this place, we should not pass over a very curious, and, in fact, hitherto unknown association of analcime with native copper. The analcime occurs in the form of the primary crystal, and by the replacement of these planes on all its solid angles, presents the passage of that form into the trapezohedron. It is of a verdigris green color externally, but, towards the centre of many crystals, this color diminishes in intensity, and in some it entirely disappears, leaving them transparent. They also approach the emerald green. The copper is partially imbedded in these crystals, sometimes in globular concretions of about the size of a common pin's head, and at other times in minute filaments, having one extremity attached to the amygdaloid, in the cavities of which they both occur. These globules are soft and malleable, and, when scraped, possess the brilliant lustre of pure copper. The crystals presenting themselves under an aspect so new and beautiful, induced us to examine them more particularly in order to ascertain the nature of their coloring matter. As the amygdaloid contained a portion of

green earth, we at first ascribed the color to this substance, as it is well known to penetrate other minerals and impart to them a green tinge. But as a few of these crystals were covered by a thin film of a green carbonate of copper, it seemed probable that this substance might be the occasion of the green stain which more uniformly pervaded them. In order to ascertain it, we digested the powder of a crystal which contained no copper mechanically united with it, in nitric acid, and detected this metal in the solution by appropriate tests. It is probable that this metal may yet be discovered at this locality in crystals occupying the cavities of the amygdaloid, as has been observed by Mr. Allan in a similar formation in one of the Ferroe Isles.

The places which next demand our attention, are two eminences known as Hadley's and Gates's Mountains. They are situated near each other, and each attains the height of about three hundred feet above the level of the Bay of Fundy. The former consists mostly of amygdaloid, in which, in many places, nodules of chlorophæite take the place of the zeolites that usually occupy the cavities of this rock. These nodules are frequently half an inch in diameter, and are sometimes hollow, enclosing crystals of dog-tooth spar. Specimens of the chlorophæite, when recently broken, are of a greenish tinge, sometimes approaching leek green. It is translucent on the edges, and soft, yielding to the nail with about the same readiness as horn silver. Its fracture is distinctly conchoidal. On exposure to the air, the color changes, and the substance becomes black and opaque. This peculiar change is also observed in specimens, before being removed from the rock, even to the depth of six inches from the surface. We would observe, that this substance, from its deceptive appearance, has occasioned much speculation among the in-

habitants, and that a company was formed not long since, for the purpose of working it as an ore of copper. This mistake seems to have originated from the use of the mineral rod, which in Nova Scotia, as well as in New England, has led many an honest farmer into ruinous speculations.

At this locality, we were kindly shown specimens of heulandite under a form, we believe, rarely presented by this mineral. One was a mass nearly cylindrical, twelve inches long and one in diameter at the larger extremity, and consisted of brilliant, transparent laminae placed at right angles to its axis. Its lustre was remarkably pearly, insomuch that it had for a long time been carefully preserved as a remarkably fine piece of "mother of pearl." It was invested with a delicate coating of green earth, and seemed, as it were, to have been painted artificially. It was found at St. Croix Cove, and obviously once filled the entire space of a cavity in the amygdaloid. We are induced to mention it, from its being a very perfect representation of the external form of this substance, as it occurs at that place.

Gates's mountain is very similar in its structure to the one just mentioned; but the minerals included in the amygdaloid are of a different character, and are so numerous as to render unnecessary even the ordinary labor of obtaining them from the rock, which, by its decay, has here left them naked in the soil to an extent sufficient to give it a white appearance. Most of them are in small masses, not larger than a pepper-corn; but among them were found globular masses of thomsonite and mesotype of the size of twenty-four pound balls. When broken through the centre, the masses of thomsonite present long and slender crystals, radiating from opposite points of the surface to the centre, where they meet and form small cells, in which may be ob-



served distinct, colorless, and transparent crystals in the primary form, and measuring more than an inch in length. These crystals are occasionally replaced on their solid angles and terminal edges, so as to produce low pyramidal terminations. This thomsonite agrees with that from Dumbarton in Scotland, in its chemical and physical characters.

The mesotype is in masses of a finely radiated or plumose structure, and when broken, presents, in the less compact parts, small intersecting fibres of a beautiful silky white appearance. Its texture, near the surface, is unusually compact, breaking with a splintery fracture; and some specimens in this respect, as well as in point of color, resemble the bones of animals, for which they are sometimes mistaken by the inhabitants, who plough them up from the soil of their fields. We did not observe in any of these specimens, well marked appearances of crystallization. Attached to the mesotype and thomsonite, are small masses of foliated stilbite and crystals of analcime. Several veins of magnetic iron ore occur on this mountain, but they are worthless, in a practical view, from their narrowness and inconsiderable extent.

The next place, which will prove interesting to the mineralogist, is Peter's Point. This name is given to a promontory, which, projecting into the Bay of Fundy, forms a shelter on the west to a small creek, into which a stream, sufficiently large to carry a saw-mill, called Stronoch's Brook, discharges its waters. The geological features of this place are similar to those at St. Croix Cove, excepting that the cylindrical cavities are here wanting, and the amygdaloid has been washed away from under the superincumbent columnar rock, which presents an overhanging precipice, threatening to crush the traveller who may venture beneath

its frowning summit, from which large masses of rock, detached by the frosts, are almost continually falling.

Near this point, under the protection of an arch of columnar trap, a deep cavity was discovered in the amygdaloid, which, having a narrow aperture, expanded internally to the diameter of six feet, in every direction. The mouth of this cavern being enlarged, so as to admit of examination, its walls were found to be thickly encrusted with laumonite in a remarkably fine state of preservation. Specimens were easily detached by the hand, and were found to consist of successive layers of radiating crystals, which, in the centre of the mass, were of a fine flesh-red color. The external surface of this crust, and the interior of cavities which frequently occur, were richly studded with transparent and colorless crystals, of great perfection and beauty. They are in the form of the oblique rhombic prism, terminated by a rhombic plane passing from one of the acute solid angles to the other, and almost constantly replaced on the acute solid angles by a single triangular plane resting on the acute lateral edges; these secondary planes are always small, and never obscure the primary form of the crystal. The cavities, in the laumonite, are often filled with water, which serves to prevent the efflorescence of the crystals, which are thus preserved in an unaltered state. The surface of this mineral is frequently enriched with crystals of calcareous spar, exhibiting the forms of the rhomboid more obtuse than the primary, and the scalene triangular planed dodecahedron. Large and perfect crystals of apophyllite, in the form of the square prism, generally replaced on the solid angles by single triangular planes, which are in various degrees of advancement, sometimes almost concealing the primary form, are found at this place. This mineral agrees perfectly with specimens in

our possession, which are from standard localities in Europe. The crystals are eminently axotomous, and this cleavage is so easily obtained, that it is with great difficulty the crystals can be preserved entire. The cleavages parallel to the sides of the right square prism are easily obtained, but the natural joints are not so open as in the direction of the terminal plane. It agrees likewise in chemical characters with the apophyllite from the Bannat; hence there can be no doubt of its identity with that species.

In visiting this interesting locality the second time in 1828, we were unable to gain access to this remarkable cavity, as the frightful cliff, that before hung over it, had fallen during the winter, and buried it among the ruins. But we met with other localities scarcely less interesting in this vicinity, in the numerous cavities and arches that have been hollowed out by the surges from the softer amygdaloid that is traversed by veins of a yielding nature; such as carbonate of lime and sandstone, the last rising probably from the immediate substrata of this rock, on which the trap reposes. These veins, at the inner extremities of the caverns, are frequently hollow and lined with stilbite, heulandite, and more rarely with apophyllite, in greenish white square prisms, an inch in length. Masses of laumonite, with surfaces more than a foot square, were obtained from them, and were found completely studded over with projecting crystals of great richness. One of these, we succeeded in preserving entire, and its crystals now possess all their native beauty and transparency. They show no tendency to effloresce when immersed in *spirits of wine*; a fluid which has great advantage over water in the winter season in not endangering the vessels in which the specimens are preserved. Between Peter's Point and French Cross Cove, the precipices



which rise in many places perpendicularly to the height of three hundred feet, exhibit very distinctly, as we pass them, the parallel disposition of the different beds of which they are made up. The precipice at French Cross, from its being accessible at low water, is perhaps as instructive as any. Here the lowest bed, which is about twenty feet thick, is a reddish amygdaloid, largely impregnated with spheroidal zeolites; the next is an amygdaloid of common appearance, and contains but few minerals in its composition, although it presents many cavities unoccupied. The third is rarely vesicular, and seems in fact to pass into amorphous trap. The fourth and last is composed of tabular and columnar trap rising in irregular columns to the top of the precipice. They all incline away at an angle of from five to ten degrees with the horizon, and are distinctly separated from each other throughout their whole course.

The stratified arrangement of these rocks is, we believe, an uncommon occurrence; at least, we do not remember to have seen it noticed but in a very few instances. Dr. McCulloch has recorded an instance of it in his interesting paper on the Island of Staffa,\* but there the precipice consisted entirely of the columnar rock, and the three beds composing it did not exhibit that peculiar relation of contact which distinguishes the one we have mentioned; nor did the precipice, compared with this, attain any thing like an equal altitude; and it would be much less difficult to assign the origin of *three* beds, which exhibit such similarity in structure, to one and the same epoch, than four which present great diversity in structure and mineral contents. They all *appear* to have been deposited at successive periods, and so long

\* Transactions of the Geological Society of London, Vol. II. p. 504.

after one another, as to have affected no intimate union. The sandstone, although it does not appear as a part of the section exhibited, is immediately subjacent to it, and may be observed at several places along the coast cropping out from beneath the trap; the amygdaloid, where it comes in contact with it, being of a reddish color, evidently the effect of a partial admixture of the two rocks. The sandstone, in some places, to which we shall have occasion to allude, enters largely into the composition of the trap breccia, as well as the amygdaloid, and shows evident traces of igneous action.

The amygdaloid near this precipice furnishes good specimens of laumontite and mesotype; but the most abundant mineral it contains is heulandite, which, from the beauty of its crystals, we shall here describe. It occupies the interior of veins of jasper, and is sometimes found lining the surfaces of botryoidal chalcody and geodiferous quartz. The crystals are in the form of right oblique-angled prisms with their obtuse solid angles replaced by triangular planes, and their acute edges replaced by one plane; they thus pass into hexahedral prisms. They are colorless and transparent. On cleavage parallel to the terminal plane of the prism, the laminæ present the brilliant pearly white appearance characteristic of this species, while the lateral planes often present a remarkable vitreous aspect. None of the heulandite however, from this locality, possesses the red color peculiar to that brought from the Tyrol. Specimens of it are frequently interspersed with stilbite in projecting bundles of crystals, which well show the characteristic difference between the two minerals. Analcime of a reddish color is also associated with it, and is probably that variety called sarcolite.

No further examination was made of this coast until we arrived at Cape Split. This bold promontory terminating the eastward limit of the North mountain range, projects into the Bay of Fundy, and the extremity of the cape, being broken into detached masses, has given rise to the appropriate name by which it is now known. In our former remarks on this cape, we stated, in accordance with the common opinion, that the detached masses referred to, had been suddenly separated, or split off, from the main cape by the undermining of the amygdaloid by the sea; but this opinion is evidently incorrect, as is shown by the present vertical or conformable position of their columnar masses to those of the main cape, in advance of which they are stationed; proving them to have been separated by the gradual degradation of the rock in situ. [See Plate II. of this volume.]\* This cape forms the southern boundary of the strait called by the inhabitants the "Gut," which connects the waters of the Bay of Fundy with the Basin of Mines. It presents, on either side, a mural precipice of about three hundred feet, and is fifteen miles from Cape Blomidon. The intervening coast consists of columnar trap resting on, and alternating with amygdaloid. These rocks occasionally rise to a great height, especially about half the dis-

\* This plate, from Des Barres' Chart, does not give so accurate a view of the present features of this singular spot as we could have wished, and the same may be said also of Plate I. taken from the same work. But we were unwilling to alter either of them very materially from mere recollection, and have therefore had them copied on stone very nearly as we found them. Notwithstanding the changes which the two places have undergone in the elapse of more than a half century, they yet convey a striking semblance of the peculiar physiognomy of either, and will instantly recall to the mind, the impressions that were previously fixed in it, while beholding, for the first time, the scenery which they are intended to portray.



tance towards Cape Blomidon, where they considerably exceed that of any other part of this coast, attaining an elevation, in one place, of four hundred and fifty feet, as was ascertained by the ingenious reflecting circle of Sir Howard Douglas, the late accomplished Lieutenant Governor of New Brunswick. At this place the amygdaloid is marked by numerous small and narrow veins of magnetic iron ore, coated over with grey oxide of manganese. The one is finely displayed in large and brilliant crystals that show the passage of the primary form into rhombic dodecahedrons. They are sometimes imbedded in red jasper and quartz, from which they may be taken out entire, so as to leave accurate moulds or impressions of their forms. Grounds of quartz crystals are often found sprinkled over with limpid crystals of analcime and calc-spar; the latter in acute rhomboids, some of which are hemitropes, and present deep striæ parallel to the natural joints of the primary crystal. Also apophyllite in massy specimens, that present on fracture, broad transparent folia of a high vitreous lustre, and in regular square prisms replaced on their solid angles, more than an inch in length. These crystals, colorless and transparent in their external laminæ, are occasionally found to enclose a smaller prism of uniform apple green color, which seems to have served as a nucleus, over which the colorless particles were subsequently deposited in parallel order; thus imitating the process by which a small crystal, some time after its formation, is converted into a larger one of the same figure. The distinct line of separation between the surfaces of the two, proves them not to have been formed at the same time; or points out at least a suspension in the process of crystallization. This is an interesting fact, which we do not remember to have seen noticed before.

We also met with interesting specimens of chalcedony, curiously marked by those regular stripes, or alternations of different shades of color, that are exhibited in the onyx agates of the lapidaries. They are sometimes arranged in little zones, which, if cut and polished, would resemble the stones sold under the name of "onyx eyes." The chalcedony is sometimes converted, apparently, by decomposition, into an adhesive cacholong, and is earthy and opaque. These minerals, like most of the others we shall mention, are obtained most conveniently among the loose masses of rock that skirt the shore; and it is fortunate for the collector of these objects, that he has thus at his ready command, treasures which would otherwise cost him great labor in obtaining, and for which, in clambering up the lofty precipices, he would besides expose himself to the no little danger of falling with the loose masses to which he may cling for support.

About one mile east of this locality, the amygdaloid abounds with analcime, in dodecahedral crystals transparent and colorless; but sometimes of an apple green color internally, and invested with an opaque white crust on their surfaces. But no separating line is seen between them as in the case of the apophyllite. Accompanying the analcime, we found a mineral resembling that variety of mesotype called needlestone. It occurs in tetrahedral prisms terminated by low pyramids, formed by four triangular planes resting on the terminal edges. One of the terminal planes is often extended at the expense of the others, which it sometimes nearly obliterates. It occurs in radiating and interwoven groups of crystals that proceed from a centre, which is sufficiently compact to yield a splintery fracture, and is white like ivory; they are transparent and colorless, have a remarkable vitreous lustre, and are sufficiently hard to scratch glass. They are often

beautifully interspersed with, and studded over the crystals of analcime, which they are never known to penetrate, but from which they receive impressions as if deposited at a later period. Accompanying the analcime and needlestone of this place, a mineral was met with in hexahedral prisms, which, agreeing in chemical and physical characters with no mineral described in the systems, will undoubtedly prove to be some new substance. It is identical with no species of the genus kouphone-spar of Professor Mohs, and the only minerals with which, from crystallographic characters, it can be supposed to be identical, are the colorless crystals of phosphate of lime from St. Gothard, and the sommite from Italy; from both of which, however, it is proved, beyond a doubt, to be distinct, by its very ready fusibility, its inferior hardness, and its unsusceptibility of dissolving or undergoing alteration when its smaller fragments are thrown into nitric acid. On comparing it with the Davyne, a mineral more recently discovered by Messrs. Monticelli and Covelli of Naples, and described in their *Prodromo della Mineralogia Vesuviana*,\* it appears to possess many characters in common with that substance, having the same fundamental form, of which it presents the same modifications, and observes nearly the same proportions between the height and breadth of the crystals, but especially resembles it in its color, transparency, specific gravity, and pyrognostic characters. In its hardness, however, it is inferior to the crystals of that mineral, as it leaves no trace on glass, being softer than phosphate of lime, as we have before observed; a character of some importance, opposing as it does the identity of the two substances. It yields to cleavage very indistinctly, and only in a direction par-

\* Page 405.



allel to the lateral primary planes of the crystals, though they present deep transverse striæ which seem to indicate an opposite cleavage, and which are not stated to have been observed in the crystals of that mineral; from which also it differs, in not being taken up in the smallest degree by nitric acid. The secondary planes of the crystals of this mineral, are usually more smooth and vitreous than the primary, which are roughened by striæ; and they disclose a perfectly transparent and homogeneous interior. These crystals are rarely three eighths of an inch in length. But we shall suspend any further remarks on this substance, until an accurate and careful analysis of it, now making by our friend, Mr. A. A. Hayes, is completed; as we may then be better able to show its identity with any partially known species, or set forth its claims to the title of one wholly unknown to the present catalogue of mineral substances. We were unwilling to pass on, without recording some notice of it, although we have not given a complete description of its characters, and have attempted only to identify it with some described species.

Hornstone, masses of agate, &c., occur scattered among the ruins of the trap rocks, which become entirely inaccessible as we approach Cape Blomidon. This cape forms an abrupt termination of the North mountains, or, as they are called in this district, the Cornwallis mountains, on the east. It presents us with a view of the outcropping of the sandstone, which here gives support to the trap rocks, and constitutes the chief part of the precipice, being more than three hundred feet high, and having the columnar trap resting upon, and scarcely attaining the elevation of an hundred feet above it. The sandstone forms a projection beyond the trap, which is called by the inhabitants of the country "the offset." This rock is regularly stratified, and dip-

ping at an angle of ten or fifteen degrees, passes beneath the trap, which it supports throughout the whole extent of the North mountains.

In our first short visit to this cape in 1827, we discovered in the sandstone no foreign remains, or veins of gypsum ; but since, by taking advantage of another landing-place where it gradually slopes down to the water's edge, we have met with numerous veins of the gypsum, some of which, the fibrous and granular varieties, were more than a foot thick, and had been severed away and broken into smaller masses, by the falling of the trap rocks from above. Many of these masses presented the delicate whiteness of pure snow, and were in striking contrast with the huge masses of trap that were lying among them ; others consisted of broad folia of transparent selenite. The only vegetable organic remains we observed, were a few indistinct casts of culmiferous plants highly carbonized ; they indicated to us the probable existence of bituminous coal in the vicinity, and afford very positive evidence of the igneous origin of the overlying trap rocks, in converting them into their present charred or coal-like state. We were not, however, so fortunate as to meet with any regular beds of coal in this sandstone, so near its junction with the trap ; a discovery, which would be of great practical value to the inhabitants, and which may yet be made. Nor were we enabled to remark in the two rocks any very decisive marks, evincing the former action of one upon the other, excepting that the distinct line of their junction was occasionally obscured by the passage of one into the other ; and angular masses of them both were united into a sort of breccia, which assumed, in its finer varieties, the character of genuine reddish amygdaloid, of a semi-vitrified appearance, and having its cavities filled, as usual, with zeolites.

This appearance is observed at almost every place where the two rocks come in contact. We find the sandstone and the shale that occurs with it, gradually putting on the appearance of amygdaloid by admixture with masses of the superinduced trap, effected by some disturbing force; and the amygdaloid, thus produced, exhibits the small scales of mica that previously to the union existed in the sandstone; but they are deprived of their lustre. Almost every locality furnishes those illustrative specimens, in which we detect these fragmentary ingredients, forming first a coarse, then a finer, and lastly a true vesicular amygdaloid, the color of which, as we have said, depends on the relative portions of its materials. These, with other no less interesting and instructive phenomena, to which we shall presently allude, give great support to the theory of the igneous origin of the trap; and if taken together, we believe they cannot be explained without having recourse to it.

Before describing the capes and islands of trap rocks which project into the Basin of Mines, or are scattered along its northern coast, forming the outskirts of the North mountain range, and the limits of this interesting formation, it will be necessary to give a brief account of the situation and extent of this sheet of water. The Basin of Mines is of a scalene triangular shape, and, having its longest side formed by the township of Parsborough and the district of Colchester on the north, is sixty miles in length. The next side, which is forty-five miles long, is formed by the county of Hants; and its shortest by the county of Kings, for the distance of twenty-five miles. The greatest breadth of this basin is from Windsor to Parsborough, thirty miles. It communicates with the Bay of Fundy by a narrow, but deep strait, called "the Gut," which passes between the majestic walls of Cape Split and Cape D'Or.



This basin will prove interesting to the traveller, not only on account of the delightful villages seated on the banks of some of the many rivers which empty their waters into it, the picturesque and imposing scenery of its borders, and the enormous tides which here rise to the height of sixty feet with fearful rapidity, but also for the remarkably fine illustrations of the geology of the country and the interesting relations of the different formations, which are here presented in an unusually distinct manner. The geologist will delight to circumnavigate the whole extent of its coast, and explore the connexions of the different series of rock formations, the highly curious and important junctions of the trap with the sandstone, shale, &c. The collector of specimens in natural history, will also be richly rewarded for the perils to which he may be exposed, by the acquisition of many of the rare and beautiful productions of the mineral kingdom.

The most eligible, and only efficient mode of exploring this coast, although not free from danger, is by means of a boat, not so large as to be incapable of being rowed in case of failure of wind; for, besides the difficulty of transporting specimens, the traveller is constantly in danger of being caught, beneath the insurmountable precipices, by the rapid influx of the tides. An accident of this kind having nearly happened to ourselves in examining the geology of Cape D'Or, where we were under the necessity of making our escape by clambering up a mural precipice three hundred feet high, which was effected with great risk of falling with the detached columns on which we depended for support, we think it our duty to warn our successors of such hazards, and to recommend a boat as the means of safety in such emergencies.

The trap rocks compose most of the islands that are scattered along the coast of the Basin of Mines, and most of the capes that make into it. We shall describe them, for convenience, nearly in the order in which they were examined; beginning with the Island situated about five miles off the coast of Cape D'Or, and proceeding thence to the eastward. This island from the great height of its rocky cliffs, which, as we are told by Des Barres, seem to overhang on its northwest side, has been appropriately designated by the French, *Isle Haute*. It presents phenomena of the most interesting character, and, in some respects, is unequalled by any other spot in Nova Scotia. In ascending the bay, it was the first object that opened upon our view; but it was seen only by the looming or refraction of its dark surface by the fog, in which it seemed suspended, and which completely obscured the real substance of the island, until we very nearly approached it. This beautiful appearance was also no less strikingly presented by the elevated parts of the neighbouring coast, and formed, by the illusion, one of the most curious spectacles we ever witnessed. We reached the island nearly at low water, a circumstance, we should observe, of great importance to all who may visit it, as from the great rapidity of the tides and conflicting currents, which here rise to the height of sixty feet, it is difficult and even dangerous to land at any other time. Like the neighbouring coast, it is composed entirely of amygdaloid and columnar trap, varying greatly in its features and altitude. On its western front, it rears itself boldly to the surges, in a cliff about three hundred feet high, and is considerably undermined at its base; while, towards the opposite shore, the surface of the Island inclines away in a regular escarpment, and terminates in a comparatively low cliff. Its features are also much less bold on its northern

shore ; but here the deficiency is fully supplied by the beautiful and conspicuous manner in which the shattered ridges and irregular colonnades of columnar trap are seen to rise from the water's edge, in shafts from fifty to an hundred feet high, and divided horizontally into blocks of variable height and proportions. These blocks are never more, and usually much less, than a foot in diameter. Their length is generally about three times their diameter, but they rest upon each other with perfectly flat surfaces. Some of them are curved or bent over in groups that strike the eye with singular interest ; appearing to have been pressed over into this posture, by some power that had acted upon them before they had completely consolidated, or while their particles were yet in a state of mobility. And it appeared to us, on viewing them, as if this happened while the mass of trap was passing into its solid form. Appearances analogous to them, we are aware, have been observed, doubtless in a more remarkable manner, if we are to judge from pictured representations of them, in other trapean districts ; but, even here, they form an interesting scene, and one, which, if taken in connexion with other facts, affords us some clue, at least, into their origin, and the nature of the agent by which it was attended. We are aware that a distinguished writer, Dr. M'Culloch, in some one of his papers, has said that it is useless to attempt the explanation of such columns, until we have something more rational to offer in regard to straight ones ; an observation certainly not to be overlooked, but one, perhaps, which could be made with much greater confidence ten years ago, than at the present time ; for it can hardly be supposed that the able investigations of Mr. Scrope, Professor Daubeny, and other writers on the continent, have not since thrown some new light on the origin of trap rocks, and the



anomalous and grotesque forms occasionally assumed by them. They refer us to the striking analogies subsisting between secondary trap rocks, and the more recent volcanic lavas, as exhibited in their columnar configuration and arrangement, their cellularity and texture; and, by these analogies, clearly deduce their origin from similar, though, it may be, very remote causes. It is obvious therefore, that the occasional incurvated appearance of the trap referred to, is explained as easily as the same thing when shown in the columns of lava, and is, in both cases, probably the mere effect of some lateral motion given to the mass at the time it was beginning to develop its columnar structure from its previous state of igneous fluidity. In mineralogy too, we meet with similar appearances, though on a smaller scale, as, for example, in the curved or bent up crystals of scapolite, sillimanite, sappare, and some others, which are not only curved, but are bent nearly double, and are sometimes even broken off at their centres, as if, in hardening, they had become too brittle to yield any further without separating at those points.

It is among the hexagonal masses of the trap composing this island, that we meet with those possessing the greatest symmetry of form. Some of them, indeed, have almost the symmetry of crystals; but they are not so smooth as the regular blocks of trap brought from Ireland, and, internally, they are of a coarser texture, resembling more nearly some of the masses brought from the Western Islands of Scotland. In their simple mechanical texture, they vary considerably, as might well be expected in reasoning from their origin; but this is a character which has little or no weight, from the very circumstance of its being so variable. The island presents many crystallized mineral substances that cannot fail to interest and enrich the traveller. But

as they agree with those we have already described, with some minuteness, and as the island, in respect to its minerals and structure, is marked by an identity of character with the neighbouring coast, with which it is doubtless coeval, we shall not enumerate them, or enter more at large upon the peculiar characteristics of its scenery, but take leave of it by remarking that it deserves the careful attention of naturalists, as well as lovers of the picturesque. Cape Chignecto we did not visit, but approached it so nearly as to ascertain its composition to be of trap, like the adjacent cape next to be described. It was personally examined by our friend Dr. Benjamin Lincoln, who has kindly communicated to us many interesting facts relating to the geology of the county of Cumberland.\*

The trap forming the extremity of Cape Chignecto extends back in the county of Cumberland nearly to Apple River, where it meets the sandstone hereafter to be described and terminates abruptly; the sandstone coming boldly in contact with the trap, and not dipping beneath it as usually happens. The strata of this rock are nearly horizontal, and Dr. Lincoln suggests the probability of a fault existing in the strata at this junction. This cape deserves a more attentive examination to determine if this be true, as it must have an important bearing on the theory of the origin of trap rocks, and would lead to the opinion that the weight of the superincumbent rock had caused the fragile sandstone to yield to its pressure, and thus accomplished the dislocation of the strata.

\* We are happy to have it in our power to state that Dr. Lincoln has obtained a large collection of the indigenous plants of Nova Scotia, of which it is to be hoped he will offer the public some account, as this interesting branch of the natural history of that country has hitherto been greatly overlooked.

Cape D'Or, situated at the mouth of the Basin of Mines, presents a mural precipice, attaining, in some places, an elevation of four hundred feet above the level of the sea; and is composed of amorphous and irregularly columnar trap, resting on amygdaloid and trap-tuff or breccia. From the yielding nature of the two last mentioned rocks, which form the base of the precipice, deep caverns and irregular arches have been formed beneath the superincumbent rock by the beating of the angry surges against its walls, while a shelving platform of trap-tuff remains below the surface of the water, and is left exposed only by remarkably low tides. This trap-tuff is a breccia composed of angular and irregularly rounded masses of compact trap, amygdaloid, and red sandstone, united by a softer cement of the same substances. The sandstone at this place makes up but a small proportion of the breccia. The crevices in this rock are frequently occupied by irregular masses of native copper, which generally are indented by the surrounding matrix. They are rarely arborescent, and never distinctly crystallized. Where exposed to the action of the waves, the copper is always bright, and may be seen for some distance beneath the water; but, where it is beyond their reach, it is usually coated with an incrustation of the carbonate or oxide of copper. The individual pieces seldom weigh more than one or two ounces, but masses are said to have been found lying detached among the fragments of rock, one of which weighed fifteen pounds. The name of this cape doubtless originated in the supposition that this metal was gold, and was bestowed by the French emigrants, who were the first Europeans that peopled Nova Scotia. The brilliancy and unusually yellow color of this copper might easily have caused this error, as it led us to suspect it might be an alloy of that or



some other metal; but on chemical examination, it was found to dissolve entirely in diluted nitric acid, and gave no precipitate when tested with muriate of soda, or when largely diluted with water, or when treated to excess of saturation with aqua ammonia. It does not contain, therefore, any gold, silver, antimony, or iron, the only metals suspected to be present. The copper is confined, exclusively, to the brecciated and amygdaloidal trap and never occurs in the superincumbent columnar rock. As it is never collected in any regular veins or beds, but is only scattered in small masses through the rock, it is probable that this metal will never be advantageously explored at this place; and as it occurs chiefly below the level of high water, the shafts would be liable to be filled at the periodical influx of the tide, if indeed the works were not entirely demolished by the violence of the currents. The sanguine expectations excited by the appearance of this metal, in a state of purity, must then be disappointed.

Masses of calcareous spar, and crystals of analcime, tinged green by the carbonate of copper, and having slender filaments of copper enclosed in them, occur in the cavities of the amygdaloid which rests on the trap-tuff.

On the eastern side of Cape D'Or, the precipice assumes a concave form, and has received the characteristic appellation of Horse-shoe Cove. Here the cavities in the amygdaloid are of greater dimensions, and are frequently occupied by crystals of transparent analcime, which are grouped together in congeries of large and small crystals.

Calcareous spar here occurs in long slender hexahedral prisms, projecting into and intersecting the cavities. They are curiously interwoven with each other, and are richly encrusted on their surfaces with small but perfect crystals of stilbite. The

specimens are very prepossessing in appearance, and would, from their resemblance, be mistaken for the crystallizations of sugar, which adorn the shops of confectioners.

The stilbite occurs, also, in radiating groups of crystals, forming beautiful stellæ, which are distributed through the enveloping masses of calcareous spar.

Many other minerals occur at Cape D'Or; but, since they are such as we have already mentioned as occurring at other places, we shall not here repeat the notice of them.

Leaving Cape D'Or, we pass Spencer's Island, which is situated about a mile from this cape. It is composed of columnar trap, and adds much to the picturesque appearance of this region, although it presents no objects of natural history worthy of description. The altitude of this island is nearly equal to the diameter of its base, and standing alone, like a tower in the midst of the waters, it breaks, in some degree, the violence of the surge, which rolls into the Basin of Mines from the Bay of Fundy.

Proceeding along the coast towards the east, up the basin, we pass the more tame scenery of the sandstone and shale districts to be described hereafter, and do not meet with the trap, until we arrive at Cape Sharp, which is fifteen miles from Cape D'Or, and about four from Cape Split on the opposite shore, with which it is shown in Plate II.\* The promontory of this cape is composed of the amorphous trap, which scarcely exhibits any traces of columnar arrangement. The trap forms

\* A nearer view of this cape, as it appears from the east and shows itself recumbent on red sandstone and shale, may be seen in Vol. XV. of Professor Silliman's "Journal of Science."

a precipice or "bluff" which exhibits a remarkable contrast to the low sandstone hills with which it is connected; and standing between them and the sea, serves to protect them from its ravages.

This cape will not furnish the collector with any mineral specimens of interest; but as this was the first place where the junction of the sandstone, shale, and trap was observed, it deserves to be mentioned on account of its geological interest. The sandstone and shale, which will be particularly described hereafter, are seen at this place to dip beneath the trap, at an angle of twenty or thirty degrees, and, in their passage, are observed to become singularly altered in appearance. The strata of these substances, before regular and distinctly parallel, are found altogether broken up and lying confusedly in various directions; the sandstone has changed to a dark red color, is more compact, and has become intimately blended with the shale, so that the eye with difficulty distinguishes the substance peculiar to each. The sharp angular fragments of the trap are next observed, and the whole becomes a distinct breccia, growing more compact as it dips beneath the superincumbent rock. The portion of the breccia in contact with the trap exhibited the small cavities of vesicular amygdaloid, as it passed into its dominion, and led us to believe that the shale and sandstone combined with the trap, and produced amygdaloid by their union. The numerous instances, in which this occurred, as it did in fact at every junction of these rocks in Nova Scotia, and the absence of trap-tuff and amygdaloid in places where this did not happen, or where, although the sandstone, &c. were not visible, it could fairly be inferred to exist beneath, led us irresistibly to this conclusion. That this process was attended by heat is inferred from numerous circum-



stances, a few of which may be mentioned here, and others in treating of the two great divisions of the country which remain to be described. The occurrence of native copper in the trap-tuff and amygdaloid, and the unreduced ore of this metal in the sandstone beyond the influence of trap, may be regarded as evidence in favor of this ; while the conversion of claystone into fine red jasper, as it entered the superincumbent trap, the cylindrical cavities in the amygdaloid at St. Croix Cove, and even the existence of vacant spheroidal cavities may be considered as internal evidence in support of the same theory. The change of color in the sandstone from grey to red, the compactness of the strata as they approach the trap, and the charred state of the vegetable remains in the contiguous strata, afford sufficient proof, that, during the formation of the secondary trap in Nova Scotia, there was considerable heat. The sharp fragments of the breccia, and the breaking up of the strata, also show, that the production of this rock, or rather its non-conformable position on the sandstone strata, was effected suddenly. Whether it was ejected from the inaccessible depths of the Basin of Mines, or was thrown directly up through the strata of sandstone, we cannot determine ; but the occurrence of the trap only on the borders of the basin would lead us to the belief that this cavity was the crater, if it may be so called, from which, in former times, the trap rocks issued ; while the North mountain range, with but little breadth compared with its length, and but once broken in its continuity, seems to have been thrown up by one sudden and violent eruption from the unfathomable depths of the bay of Fundy, which is now skirted by its ancient lava.

If we were biased in favor of any theory of the earth, when exploring these formations, it was for that of Werner ; and be-

coming satisfied of the insufficiency of the Neptunian method to account for the phenomena observed in the North mountains, and the appearances assumed by the neighbouring strata, we were induced to allow the superiority of the igneous theory, as taught by Hutton, Playfair, and Daubeny.

In treating of the South mountains we shall perceive the necessity of an amalgamation of both theories, to explain the relations of that range to the North mountains.

Partridge Island, situated near the village of Parsborough, and six miles from Cape Sharp, is the next place to be described. In crossing the Basin of Mines, after passing the majestic Blomidon, this island is the first elevated object that meets the eye. It consists of amygdaloid and columnar trap, which, on its southwest side, presents a precipitous and overhanging front about two hundred and fifty feet high, rendering precarious the situation of those who may pass beneath its brow. Stationed near the verge of this precipice, the visitor beholds beneath him rugged, insulated towers rising abruptly from the sea almost to a level with his own standing, which, having withstood the frequent commotions of the sea that during the stormy winter months is thrown among them in the most frightful billows, yet remain as firm and immovable barriers to resist the force of these repeated attacks, and prevent the more rapid decay of the island. Their summits are crowned with a thin but luxuriant soil, from which spring up a few scattered hemlocks and a low underbrush, that nearly obscure the face of the rock, but at the same time furnish the sea bird a safe retreat beyond the reach of any invader. But at low water the visitor, in addition to the wildness and picturesque beauty of the scene, will find before him a field so richly stocked with interesting minerals, that he will delight to linger on the spot and gather these objects of science. (See Plate III.)

Before alluding to these minerals, we would observe that the compact trap forming the highest parts of this island is rarely in masses which may strictly be called columnar, although they have a tendency to that form, and, in a few instances, affect the pentagonal shape of basalt. We were unable, however, to discover among them any appearance of articulation in their columnar arrangement. It contains but a small proportion of iron; and consequently the exposed surfaces of the rock are very slightly altered by the oxydation of this metal, which in other places is more sensibly observed.

Of the many interesting minerals to be found at this place, stilbite associated with calcareous spar is the most abundant. This mineral, forming numerous veins in the amygdaloid near the base of the precipice, presents, in the open interstices of the rock, beautiful projecting masses composed of long fasciculated crystals of a flesh-red, and sometimes straw-yellow color. When crystallized, it is in elongated, rectangular, four-sided prisms, terminated by tetrahedral pyramids.

The calcareous spar is curiously scattered over the surfaces of stilbite in acute rhomboids, which are often hemitropic, deeply striated upon the faces of cleavage, parallel to their horizontal diagonals, and of uncommon magnitude and beauty. These crystals, usually colorless and transparent, are in a few instances of a rich honey-yellow appearance. In breaking the various masses which are scattered along the shore, it is not unusual to meet with one, which, composed of yellow stilbite externally, contains within numerous crystals of calcareous spar lining its walls in rhomboids, which, having their faces deeply indented by the projecting pyramids of the stilbite on which they are implanted, were obviously deposited subsequently to the formation of that mineral.



Chabasie in rhombic crystals, transparent and colorless, also of a beautiful orange-yellow color, occurs at this place in the fissures of the amygdaloid. The crystals present brilliant glassy faces, and are very large, frequently measuring an inch across each rhombic plane.

Agates of various kinds, jasper and chalcedony, also botryoidal cacholong, exist in the columnar rock above the accessible base of the precipice: they may be picked up in imperfectly polished masses among the loose rocks on the shore. A vein of magnetic iron ore, about a foot wide, was also noticed entering the superincumbent rock.

On our return to this island and the neighbouring coast in 1829, the effects of the past winter were strikingly manifest; for many of the lofty mural precipices, which before constituted the most extraordinary and imposing features of this coast, were brought low, and reduced by their downfall to mere masses of *débris* heaped up on the sea shore. This was peculiarly the case on the west side of Partridge Island, from which the immense mass of rock had fallen, that before bulged out in the most terrific manner, and to a great height. But these catastrophes are common in this quarter, and are owing to the violence of the tides and currents in the Bay of Fundy, driven fiercely by the winter blasts.

The fallen masses on Partridge Island, besides presenting us with a rich variety of the minerals we have already described, disclosed one or two substances hitherto unobserved in Nova Scotia. They are phosphate of lime, semi-opal, and the variety of apophyllite, known as albin. The first is met with in very brilliant, transparent, hexahedral prisms, with their lateral and terminal edges, and sometimes solid angles, replaced; or in regu-

lar six-sided prisms, whose pyramidal terminations correspond very nearly with the lateral planes of the crystal. Though usually much smaller, they resemble in color the beautiful crystals of the asparagus stone from Spain; and as the *want* of phosphorescence is said to characterize that variety, they lay claim to the same title. But we find on trial, that phosphorescence is not confined to the common varieties of the calcareous phosphate, but is even possessed by some of the asparagus stone from Spain. The crystals at this locality, are imbedded in thin folia of siliceous sinter, that occasionally forms irregular shaped masses adhering to the veins of calcareous spar with which they have come down from the cliff. They are often interspersed with small shining scales, or tabular crystals, of specular iron.

The opal presents itself in specimens that are well characterized, of a wax-yellow color with a resinous lustre approaching that of pitchstone; it is translucent at some distance from its splintery edges; and in these respects it principally appears to differ from the jasper with which it is associated, and into which it evidently passes. Like the former, and the next substance to be mentioned, it is rare on this island, and has not been met with elsewhere in Nova Scotia. The albin, accompanying large and beautiful sheafs of yellow stilbite, is in opaque, nearly milk-white crystals, some of them resembling, in their modifications, the crystals of this mineral from Bohemia. The terminal edges of the primary right-square prisms are replaced by single planes, which, extending over the lateral planes of the crystals, produce two four-sided pyramids, and thus result in octahedrons with square bases. But usually these replacements do not greatly obscure the primary figure of the crystals. They present striæ parallel to their base, in which direction they readily

cleave. Some of them have gone through a spontaneous change, and separated into a powder, similar to that resulting from the disintegration of laumonite. But we should not omit to mention in this place, that the substance for which this island more than any other spot in the country has been celebrated, and in search of which it is visited by almost every traveller, is amethyst, in crystals of great beauty and brilliancy. They seem first to have drawn the attention of De Monts, one of the earliest French emigrants to this country, during the reign of Henry IV. It is said he was so struck with their appearance, that he took several specimens with him to Paris, where he had them appropriately set as jewels, and presented them to the King and Queen as tokens of his loyal attachment. They often form geodes in the amygdaloid, and are externally encrusted with chalcedony and cacholong that alternate with each other.

Pursuing the northern shore of the Basin of Mines eastwardly, the next place deserving of notice is the vicinity of the Two Islands, about six miles from Partridge Island. The intermediate coast, being composed of rocks of a different character from those which it is our object at present to describe, we shall leave, to notice it more particularly when we treat of that formation.

The Two Islands consist of amygdaloid and columnar trap rising on all sides abruptly from the sea; but, being accessible only at low water, they will not afford the visitor many interesting specimens. On the main land near Swan's Creek and opposite to these islands, he will be favored with a locality of uncommon interest. At this place we have also another example of the conversion of shale, red sandstone, and compact trap, first into a coarse breccia, consisting of loosely united masses of these



rocks, then into a more compact breccia, consisting of similar masses more closely united, though distinguishable from each other, and finally, by consecutive gradations, into a genuine, well characterized amygdaloid, in which the most critical eye would fail to distinguish its component ingredients. We have in our possession specimens from this place, which illustrate perfectly the changes of which we speak, and present these three rocks tending to the production of amygdaloid.

Having thus adverted to the character of this rock in particular, we shall notice more generally the appearance of the rocks at this place, and then describe the minerals before alluded to as occurring in them. The shore is fronted by a steep bank about one hundred feet high, from the base of which a slope of *débris*, detached by the frost, inclines down into the sea. One half of this bank consists of trap, and the other of red sandstone intermixed with red shale. Upon it rests a low ridge of columnar trap. These two rocks come boldly into contact with each other, and the sandstone with the shale, dipping beneath the trap at an angle of forty degrees, has the breccia and amygdaloid recumbent on, or more properly, inclining against it; thus presenting, when viewed from the sea, a section of the two rocks crowned with the columnar trap. The amygdaloid is vesicular, and furnishes most of the minerals which we are now to describe. They are chabasic, analcime, heulandite, calcareous spar, and siliceous sinter, all of which occur abundantly, and are often seen richly congregated in the same specimen, or included in the same cavity of the rock.

The chabasic, grouped with its associated minerals, is usually of a wine-yellow or flesh-red color; but in a few instances it is nearly colorless and transparent. The crystals, which are frequently three fourths of an inch in diameter, exhibit the form of

the primary obtuse rhomboid, sometimes so modified, as to assume the lenticular hemitropic form represented in Phillips's *Mineralogy*, p. 138. At other times, from the almost innumerable faces of composition, they become indescribably complex, or at least would require, for a precise crystallographic description, the consummate skill of a Haüy, a Mohs, or a Brooke. They are slightly striated, of a glistening vitreous lustre, and often hemitropically united. This chabasie agrees in all characters, excepting color and complexity of modification, with that from the Scottish Islands.

The analcime is in white, opaque crystals, exhibiting the passage of the primary cube into the trapezohedron, which it frequently completes, and thus forms crystals having twenty-four equal and similar trapeziums which entirely obscure the primary planes.

Over the analcime, the heulandite is thickly implanted in small, but extremely brilliant, pearly-white crystals, which are transparent or translucent, and usually in the primary form, sometimes slightly modified.

The calcareous spar is crystallized in very acute rhomboids, of which scarcely two can be found possessing similar angles. The crystals are likewise so modified, as to assume the form of the dodecahedron composed of two scalene six-sided pyramids, applied base to base. They are greatly elongated, and grouped in delicate stellæ, occupying the cavities of the amygdaloid.

Delicate prismatic crystals, but not of sufficient size to enable us to determine their form, resembling the Brewsterite from Scotland, occur scattered through the cavities of the trap-tuff and associated with perfect and distinct crystals of analcime, constituting interesting specimens.

The last of the minerals which we shall mention as occurring at this locality is siliceous sinter. This mineral is usually embraced in the amygdaloid, forming, in its spheroidal cavities, a flaky or lamellar crust, which, enveloping their entire inner surfaces, sometimes depends in stalactitic projections, on which may be observed small crystals of common limpid quartz. Its color, which is usually snowy-white, or greyish-white, is in a few instances of a beautiful amethystine tint. One or two geodes of this substance found in the breccia, on being broken, presented internally a bright coating of amethystine sinter with numerous crystals of wine-yellow chabasie implanted in and beautifully contrasted with it. Many of the specimens of this sinter resemble those of volcanic origin, brought to this country from the Azores by Dr. Webster.

The next place to be noticed along the northern shore of the Basin of Mines, is the Five Islands, and an eminence known as Tower Hill. Our description of these places will include all that remains to be said relative to the trap rocks, of Nova Scotia. These islands, grouped together in a narrow compass, are about ten miles from the locality last described; they rise very abruptly from the sea, and present, for the most part, lofty fronts of a picturesque character. Three of them consist almost entirely of trap and cannot well be examined except at low water. The other two are composed of red sandstone, with red and black shale, exhibiting the passage of these rocks into a vesicular and zeolitic amygdaloid, the color of which depends on the proportions in which the ingredients form a part of it; it is sometimes made quite black by the shale. The breccia, or trap-tuff, which is a constant attendant of this amygdaloid, and which seems as an intermediate form necessary to the constitution of the latter, is



here observed, as in other places of similar character, superincumbent on the amygdaloid. To plate IV. the reader is referred for a view of a part of these Islands taken at some distance; of which two are shown to consist of columnar trap, besides the steep sugar-loaf masses, provincially termed the "Pinnacles," that rise up in the rear, the highest of which is about one hundred feet, and is wholly inaccessible. The third, formed in part of sandstone (colored red on the plate), has been worn away on its west side, so as to exhibit a very fair sectional view of the junction of this rock with the trap; the two, at the very point of contact, becoming blended as usual into trap-tuff and amygdaloid. The trap is not strictly recumbent on the sandstone, at this place, but more properly rests inclined against it. The island most noticed of the five, is that which stands out considerably in advance of the others, and of which a few words only will convey as accurate an idea as a full drawn picture. It is composed of amorphous or indistinctly columnar trap, resting on a softer basis of amygdaloid, which has been so undermined as to leave the columnar rock hanging over from above, like a vast leaning tower, and seeming at every moment as if ready to fall into the sea. These islands, with the exception of Tower Hill, of which the trap forms the summit only, are the last places along the shore of the Basin of Mines, at which this rock is known to occur. Still farther east, the sandstone, interstratified with the shale, prevails to the exclusion of every other rock. They may be regarded therefore, as the most distant outskirts of the trap formation of Nova Scotia, which, stretching east and west to the distance of not less than one hundred and thirty miles, forms, as a deposit of trap-rock, one of the most extensive and fruitful fields for mineralogical and geological research that the known world presents.

Unlike most other extensive formations of this rock, its breadth is altogether disproportionate to its length, not exceeding in any place three miles, and in some places, where it has been worn away into deep ravines on the sea coast, scarcely exceeding a hundredth part of its extent in the opposite direction. If averaged, probably the breadth of the whole mass of the North mountains, including Digby neck, will not be found to exceed, at most one thirtieth part of its whole length. From this circumstance, we may regard it rather in the light of an immense dyke, thrown up from beneath the sandstone through some vast and continuous rent, produced by the sudden eruptive upheaving of its strata, which allowed it to spread out laterally only to a very limited extent; and if theory is to be admitted at all, we know not how the origin of such a singularly disproportioned mass can be accounted for in any other way. Its regularity of outline, its continuity, and especially its almost exact linear direction, are against the notion of its being the ejected matter of *successive* eruptions, and warrant the opinion we have above expressed as to its origin. It offers a very striking exception to the remark made by Professor Daubeny, though his ingenious reasoning is strictly applicable to it in other respects, that "the more ancient volcanic rocks seem to form continuous strata, spreading more uniformly on every side over a large extent of country;" which he says is the case with the basalt of the Giant's Causeway, the toadstones of Derbyshire, the porphyries of Edinburgh, and the trachytes of Mont d'Or.\* And we have reason to believe that, in the progress of discovery, this remark, although once apparently true, will meet with similar exceptions in other countries.

\* See Professor Daubeny's Description of Active and Extinct Volcanoes, page 407.

Having finished our account of the trap rocks of the country, comprising a complete description of that formation, with the more important and curious mineral productions which it includes, and having suggested what appears to us the most obvious theory of their origin, which, derived from remarkable peculiarities of color, structure, and other appearances of contiguous strata, appears to account for those phenomena in a more satisfactory manner than any other, we shall now pass to the neighbouring strata of sandstone and shale, forming the moderately elevated and rounded hills of the county of Cumberland, and part of the county of Hants, and part of the districts of Colchester and Pictou.

It becomes necessary to describe this formation before speaking of the South mountains on account of its intimate connexions with the trap, which we have previously alluded to in describing the capes which project into the Basin of Mines.

The sandstone, constituting so large a portion of the Province of Nova Scotia, is of various appearance, differing greatly at different places. In the immediate vicinity of the trap, as at Cape Chignecto, Cape Sharp, and Swan's Creek it is of a dark brick-red color, and consists of irregularly rounded grains of quartz, usually very small, rarely exceeding the size of a pepper-corn, accompanied by minute spangles of mica, and united by an argillaceous cement, containing a large proportion of peroxide of iron. When in connexion with the trap, as before observed, the sandstone passes insensibly into the shale, or rather, the two form a compound in which the eye can distinguish no line of division, so completely are they blended. The shale varies greatly in color, and generally, like the sandstone, becomes red in the presence of the trap rocks, where it assumes a bright tile-red color, and when



exposed to the action of the waves, it becomes polished on the surface. This rock consists of thin folia of argillaceous slate, sometimes including a little mica, and is generally colored by oxide of iron. Comparatively remote from the trap, the shale assumes a grey, brown, or bluish-black color: more rarely it is spotted with green.

Near Diligence River, the shale is almost black, and appears to be colored by carburet of iron. It here includes a large bed of compact limestone, a section of which has been formed by the encroachments of the waters of the Basin of Mines. A little beyond Fox River, towards Cape D'Or, the sandstone, of a grey color, is seen to alternate with the strata of greyish-black shale, both of which are filled with relics of the vegetable kingdom of a former world. They are carbonized remains of various culmiferous plants, which are converted into a compact bituminous lignite. Portions of ensiform leaves resembling those of the Iris, or blue-flag, were here observed, lying between, and included within, the strata of sandstone.

The whole northern coast of the Basin of Mines, with the exception of the capes and islands of trap, before described, is composed of strata of sandstone and shale, alternating with each other, and presenting to the sea the edges of their strata, which are finely exhibited by this natural section. They do not attain a great elevation, rarely exceeding one hundred feet; and where exposed to the waves, the strata have suffered much from their violence, and the shale is always worn away, exhibiting the bold ridges of sandstone strata, contrasted with the deep furrows occasioned by its decay. The strata of these rocks are from a foot to four feet in thickness, and are alternately stratified with each other in great regularity; no limit being found to this alternation, we are unable

to say which rock is finally subordinate to the other. Near the village of Parsborough, the red shale appears to predominate, and constitutes a bed more than one hundred yards thick, which is beautifully spotted with green, and contains occasionally scattered crystals of yellow iron pyrites. East of this bed the sandstone appears in more powerful strata, and more than compensates for the thickness of the shale just mentioned. It forms a junction with the trap of Swan's Creek, where it includes beds of the carbonate and sulphate of lime, and where these two salts, so opposite in their nature, are seen actually in contact. The limestone is fragile and slaty, and contains scattered portions of coal; it is also sometimes bituminous. The gypsum is of the laminated and fibrous kind, the laminæ being sometimes more than a foot in length, and of a delicate flesh-color. But the laminated and crystallized gypsum is not so much sought for exportation as the amorphous varieties. At Tower Hill, twelve miles east of Parsborough, the sandstone again meets the trap, which forms but a small part of the precipitous summit, and has no amygdaloid in connexion with it. The united sandstone and shale, however, exhibit a most singular appearance, and, becoming vesicular, affect a curious imitation of amygdaloid, the place of which it occupies in relation to the trap. These rocks, forming the base of the precipice, are of a fine texture, and contain a large proportion of argillaceous matter, colored with peroxide of iron.

Passing beneath the trap in its immediate vicinity, it abounds with compressed and flattened spheroidal cavities, which, instead of the zeolites, are, when occupied, filled with rounded masses of gypsum, the mineral which usually occurs in this rock. These facts obviously tend to establish our theory of the origin of trap-tuff and amygdaloid, and render probable the explanation of these

phenomena, — that the quantity of trap present was inadequate to complete the process at this locality.

Beds of gypsum, of practical value, occur near the head of the Basin of Mines, in the vicinity of the Subenacadie River, where also occur large beds of limestone, containing the relics and impressions of marine shells. It is of an ash-grey color, and not very compact. In one specimen, a few crystals of galena were observed, scattered through a mass of petrified shells, which resemble the lituities described in Parkinson's *Outlines of Oryctology*, p. 165, and portrayed in plate vi, fig. 7, of the same work. Much larger and more valuable beds of gypsum occur in the county of Hants, and were first explored in the vicinity of Windsor about thirty years ago. It there forms a precipitous wall rising from the River St. Croix, and extending along its course as shown on the map. It still continues to furnish immense quantities, the greater part of which is sent to the United States.\* This gypsum is of a bluish color, and is highly valued in the United States as a manure, although in its native country it does not appear to contribute in the least to the fertility of the soil; in fact, the hills entirely composed of gypsum, were not clothed with so luxuriant vegetation as those where this mineral was altogether wanting in the soil. The trap rocks by their decay furnish a far more productive soil, as is exhibited in the township of Cornwallis, justly entitled, the "Garden of Acadia," and along the whole extent of the base of the North mountains.

Gypsum also occurs abundantly in the county of Cumberland at the head of Chignecto Bay, and at several places along

\* It is stated in Mr. Halliburton's *History* that for the last few years nearly one hundred thousand tons of this valuable mineral have been annually shipped to different parts of the United States.



the coast of the Gulf of St. Lawrence. One of the most extensive beds is on the banks of the Maran River, where the gypsum is of a bluish color and equal to any in the province.

The gypsum in the vicinity of Windsor, abounds in those conical or inverted funnel-shaped cavities, supposed to have originated in the solution of rock-salt (chloride of sodium), which has been imagined once to have occupied those spaces, though it is hard to learn on what evidence such a notion can be founded, as no rock-salt, or even traces of its existence have been discovered in this part of the province, or nearer to it than the county of Cumberland. The absence indeed, of anhydrous gypsum, which, according to Mr. Bakewell, usually accompanies the deposits of rock-salt, would rather show that this mineral never did exist here. In one of these caverns, about ten or fifteen years since, the skeleton of a human being, supposed from the relics of arrows found with it to have been one of the aboriginal inhabitants, was discovered in opening a gypsum quarry. It is presumed that this unfortunate individual, while pursuing his occupation of the chase, was precipitated to the bottom of this frightful dungeon, and being confined by its inclined walls, was unable to escape. Thus incarcerated, he perished by hunger. His bones are still preserved at the College in Windsor, where they were politely shown to us by the Vice-President, the Rev. Mr. King, who gave the above account of them. No other remains, but those of this single human being, have been seen in these caverns, which, in truth, have excited little or no attention, and have never been examined with a view to determine whether, in some of them, the remains of animals both of living and *extinct* species, may not also have been entombed; if the former, by falling into them and perishing

from hunger, if the latter, perhaps by a more sudden extermination, like those mentioned by Professor Buckland. Had the bones referred to been found without the arrows, which afforded too true a history of their origin and the character of the lost individual to lead to further inquiry on the subject, it is probable that the discovery would have led to the thorough examination of the caves in search of other remains; and thus perhaps new facts might have been contributed to science, instead of which the caves, as we were told, are now covered with rubbish. It is a fact that the remains of animals whose living types are now unknown, have been found on Cape Breton, near the Wagamatcook River, where, we are told by Mr. Halliburton,\* an enormous skull has been found, with molar teeth measuring eight inches by four across the crown or grinding surface, which is furrowed or divided into two rows of processes ten in number; a peculiarity in their structure which proves them not to have belonged to a carnivorous animal, and tends obviously to identify them with the grinders of the mammoth or fossil elephant discovered by our naturalists in South Carolina and Kentucky. The spot however we have, as yet, been unable to visit; but it certainly merits attention, in order, to discover, if possible, the remaining parts of the skeleton; a relic too valuable to science to remain only partially exhumed, since it may disclose to us the huge proportions of an animal whose remains, common perhaps in some of the Middle and Southern States, have never yet been seen in any of the Northern, or in either of the Canadas, to our knowledge.

On the banks of a small but romantic stream which empties itself into the St. Croix, called Montague River, a remarkably

\* History of Nova Scotia, Vol. II. p. 243.

beautiful precipice of siliceous breccia passing into graywacke, presents itself to the traveller. It consists of angular fragments of quartz and felspar, rarely containing a few spangles of mica united without any apparent cement. The felspar, being of a flesh-red color, and forming a principal ingredient in the rock, gives it an appearance at a distance resembling red sandstone. The precipice is about sixty feet high, and rises from a base of the same rock making the bed of the stream, which has excavated numerous deep holes into the bottom, forming beautiful reservoirs of limpid water. The direction of the strata is N. E. and S. W. and the dip  $10^{\circ}$  to the northwest, forming a declivity down which the water rushes, and, falling from the broken strata, produces an agreeable effect. This place, adorned with overshadowing trees, is a favorite resort of the visitors of the Montague House, in its immediate vicinity.

We shall now advert to the sandstone of Cumberland, and describe the quarries of grindstones and the coal district of this region. The sandstone, where it emerges from beneath the trap at Cape D'Or, and where it comes in contact with it at Cape Chignecto, exhibits the red color noticed at other places in the vicinity of this rock, is more compact, and is destitute of organic remains. Leaving its Plutonic neighbour further up Cumberland Bay, it assumes a grey color. It alternates with, and passes into, a coarse conglomerate. At Apple River and the South Joggin it is quarried for grindstones and as a building material. This sandstone passes into the neighbouring Province of New Brunswick, forming the extensive grindstone quarries of Meringuin and Grindstone Islands, and is undoubtedly connected with the formation of this rock that includes the coal measures recently discovered on the Grand Lake in the interior parts of that province,



and has even been traced west of the River St. Johns. But no description of its characters, either fossil or mineral, has yet appeared; and as those places are beyond the limits of our observations, we must content ourselves with a brief notice of the quarries at the South Joggin and Apple River on the Nova Scotia shore.

At the former place the best grindstones are obtained, and wrought on the shore of Cumberland Bay. They are preferred when obtained at a considerable depth from the superficial strata, and are always taken at low water as deep as possible from the surface. Two or three layers are first removed which make inferior grindstones, and then the best ones are procured. In cutting the stones, the workmen frequently meet with hard rounded nodules which they call "bull's eyes," and which always condemn the stones as useless. They differ from the surrounding matrix only in being more compact and having less of the argillaceous basis, and breaking with a conchoidal fracture. The "bull's eyes" vary from one to ten inches in diameter, and sometimes they include a smaller spheroid as a nucleus within the larger.

Near the mouth of Apple River, grindstones are also quarried in the same manner as those of the South Joggin; they are not of so good a quality, but in other respects they are like those already described. The rock of which the grindstones are made consists of irregularly rounded grains of quartz, which are transparent and colorless or slightly tinged red, green, or blue, with a few spangles of mica and grains of felspar interspersed through the mass. The grains are usually minute, not often exceeding the size of a mustard seed. They are united by an argillaceous cement, which exists in a small proportion to the whole. This rock contains numerous remains of culmiferous plants, which

lie between the strata and are much compressed. They do not injure the grindstones unless many occur in the mass, which seldom happens, as they are mostly scattered diffusely through the strata. The fossils which occur in this sandstone, stamp it as a secondary rock, although it is evidently older than the trap rocks recumbent on it along the margin of the Basin of Mines.

A few miles southwest from the grindstone quarries at the South Joggin, a bed of bituminous coal exists in the sandstone, accompanied by shale. The bed is about five or six feet thick, and has been wrought to a small extent, but is now abandoned, and the shaft is filled with earth and rubbish. The coal contains an abundance of pyrites, which injures its quality as fuel. In the vicinity of this bed occur several smaller beds, one of which is covered by a stratum of bluish compact limestone, in the upper surface of which Dr. Lincoln observed fragments of shells resembling those of the common muscle (*Mytilus edulis*?). Many of the vegetable fossils so common in the rocks of the coal series in other countries are found in great abundance here, imbedded in the sandstone, which dips at an angle of thirty degrees from the horizon, and includes the coal. Specimens of the *phytolithus verrucosus* were found by Dr. Lincoln, which exactly resemble those represented in the drawings accompanying Mr. Steinhauer's article on these fossils in the "American Philosophical Transactions."\* Very good specimens of the fossil represented in Parkinson's "Organic Remains," (Vol. I. Pl. IX. fig. 1.) were also found. Substitutes of reeds and of plants resembling bamboos and rushes are likewise abundant. Some of the reeds are three or four inches in diameter and as many feet in length. They are

\* New Series, Vol. I. Plate IV. fig. 1, 2, and 4.

invariably found traversing one or more of the strata at right angles with its layers. Some, especially the larger, are cylindrical; others are flattened and are generally coated externally with a layer of coal; some are smooth, others striated longitudinally as represented in Parkinson's "Organic Remains," (Pl. III. fig. 3.) Near the principal coal bed, Dr. Lincoln saw one segment of a trunk two feet long and twenty-five inches in diameter, and another about one foot long and eighteen or twenty inches in diameter. The external appearance of this petrification had led the grindstone-cutters to believe it to have been a hemlock tree (*Pinus canadensis.*) They say that a few years ago a large part of the trunk was standing erect in the cliff, with some of its branches attached to it.

Lignites are very abundant. Some specimens appear to have been trunks of trees, or succulent plants, of an enormous size, and they are found, not traversing the strata of the rocks like the stony casts of the reeds, but lying between them.

The Isthmus connecting Nova Scotia with New Brunswick, situated between Cumberland Basin and Bay Verte, is but twelve or fourteen miles wide, and, being composed of a friable decomposed sandstone, opposes a feeble resistance to the rushing waves of Cumberland Bay, where the tides rise to the height of sixty feet; while on the shores of Bay Verte they scarcely attain the elevation of eight or ten feet. One would suppose such frail barriers would give way before the pressure and violence of the conflicting tides. It is, however, a remarkable fact, that the same waves which cause so much devastation along the rock-bound coast of the Bay of Fundy, undermining and tumbling in confusion the lofty trap rocks, roll harmless against these shores, protected by the bold promontories of Cape Chignecto and Meringuin, depositing their spoils, taken



from the opposing rocks, quietly on the shores of Cumberland Basin, and thus fortifying the isthmus in its weakest point. The inhabitants assist the process, securing by dykes the soil deposited on their lands, and profitably use the bounties heaped at their doors by the tumultuous sea.

From the shores of Chignecto Bay the sandstone and slate, forming the county of Cumberland, extend to the waters of the Gulf of St. Lawrence on the north, and, stretching eastwardly towards the county of Sidney, constitute a part of the districts of Colchester and Pictou, and include all the coal measures of these districts. The interior of Cumberland county was not examined by ourselves, but we were credibly informed by intelligent persons residing there, of the extent of the sandstone district as represented on the geological map accompanying this paper.\*

Salt springs have been found in various places near the shores of the Gulf of St. Lawrence. One of the most important exists near the river Philip. The brine of this spring contains a much larger proportion of salt than the water of the ocean, and it has been economically obtained by evaporation of the water. In the year 1811 large quantities were manufactured at this spring. A spring also occurs at Pictou, which was advantageously worked

\* For the more extended eastern boundaries of this rock, as exhibited on this improved map of the country, we acknowledge ourselves indebted to the observations of Messrs. Smith and Brown of Pictou. The structure of the eastern parts of the Province having also been examined by these gentlemen, we gladly avail ourselves of this opportunity of referring the reader to their remarks contained in Volume II. of Mr. Halliburton's History of "Nova Scotia." Our observations, in the few instances in which they relate to the same localities, will be found to agree, if to this remark we make a single exception, to be considered in a subsequent part of this paper.

for salt on an extensive scale for several years, but is now abandoned, from what cause we are not informed; another is said to have been found on the River Souiac. No rock-salt has ever been found in the vicinity of these springs, where, if in any place, some more palpable traces of it might be expected; nor has the rock any perceptible salt taste. We must therefore refer the origin and the occurrence of these salt springs to such unexplained phenomena as are assigned to those in the western part of the state of New York, so ably discussed by Professor Eaton in his "Geological and Agricultural Survey of the District adjoining the Erie Canal." \* The existence of salt springs in this formation indicates it to be identical with the Red Marle, or new red sandstone of Phillips and Conybeare, which includes the vast rock-salt mines of England and Poland; and also allies it to the saliferous rock of New York, described by Professor Eaton in the abovementioned "Geological Survey," and in the "American Journal of Science," † as existing on the banks of the Connecticut, and as supporting the Palisadoes on the Hudson river.

Pursuing this formation eastwardly in the direction of its strata, we meet with occasional beds of coal, not of any practical value, and offering no remarkable geological peculiarities. On the north bank of the West river, where the Kempt bridge crosses this stream, a bed of bituminous coal with lignites, about four or five inches wide, occurs in the cliff of sandstone, a section of which is formed by the bed of the river. At this place, which we mention on account of its vicinity to the road from Truro to Pictou, rendering it accessible to travellers, occur many of the relics of culmiferous plants before noticed at Cumberland mine.

\* Part I. p. 109 et seq.

† Vol. XIV. p. 148.

Carriboo river, in the township of New Philadelphia, seven miles north of the flourishing town of Pictou, presents a field of great interest both to the mineralogist and the miner. On the banks of this stream, two miles from where it empties into the Gulf of St. Lawrence, occurs a bed of copper ore, included between the strata of sandstone passing into coarse conglomerate. It is associated with lignites of enormous size, which generally lie over the copper ore. The conglomerate consists of smooth rounded masses of quartz of various colors, siliceous slate, clay slate, and felspar, varying in size from that of a filbert to three or four inches in diameter; they are united by an argillaceous cement. The sandstone differs only in the size of the component ingredients, which diminish until they are scarcely distinguishable by the naked eye. These rocks rise from the river to the height of fifteen or twenty feet above its level, and form precipitous banks. The direction of the strata is nearly east and west, and the dip is about ten degrees to the north. The lignites are black, and some of them resemble common charcoal so much as to be easily mistaken for that substance. Some are fibrous, and exhibit evident traces of the organized structure of plants; others have lost every trace of organization, are compact without any fibrous structure, break with a conchoidal fracture, have a pitchy black color, and thus form the true jet of commerce, or the *lignite piciforme jayet* of M. Brongniart. This last variety take a good polish, and would admit of being wrought into jet ornaments inferior in no respect to those brought to this country from France. The lignite forms thin layers over masses of the copper ore, which sometimes presents very perfect substitutions or casts of culmiferous plants resembling the stalks of Indian corn (*zea mays*.)

The lignite sometimes contains minute, flattened crystals of



red oxide of copper, which are translucent and of a crimson red color.

Green and blue carbonates of copper occur, investing some of the lignites ; and, filling interstices in the sandstone, they assume a botryoidal appearance. They also occur in delicate fibres, investing the masses of *vitreous copper ore* now to be described.

This valuable ore occurs in beds from two to four inches thick, which, covered with lignites, alternate with each other, the lowest bed being the thickest and most compact. It is of an iron-black color, with a slight tinge of lead-grey. It possesses a metallic lustre, and breaks with a conchoidal fracture. Some specimens are of a crystalline or granular structure, breaking so as to exhibit brilliant metalloidal surfaces ; others are very compact, and break with a smooth surface. The specific gravity of the most compact variety is 5.7 ; but the granular varieties, more open in their texture, seldom exceed 4.8 or 5. It is sectile, and readily impressed by a smooth, blunt steel instrument ; it therefore possesses a low degree of malleability, being extended under pressure without breaking. It receives a high polish, resembling in lustre and color the most highly polished steel, and retains this lustre unaltered by the action of the atmosphere. It is mixed occasionally with yellowish and a lighter grey pyrites, which is much harder and not sectile, and contains a smaller proportion of copper than of iron ; but no specimen of this ore gives any traces of arsenic or antimony, when examined before the blowpipe, or when dissolved in nitromuriatic acid and largely diluted with water. Nor does a solution in nitric acid give any precipitate when muriate of soda is added ; and sulphuric acid throws down no precipitate ; hence it does not contain any silver or lead. The nitric solution, tested

by aqua ammoniæ, became of a fine blue color, and, treated to excess of saturation, gave a brown precipitate of oxide of iron.

To determine the composition of the vitreous copper, similar trials were made, which discovered nothing but copper, sulphur, and iron. This ore was called by the miners from Cornwall, who were exploring the mine, grey-copper, (*fahlerz* of the Germans.) But according to an accurate analysis which we have made of this ore, it is to be considered as the vitreous copper (*kupferglanzerz*), which is more valuable than the grey-copper ore. We have taken for our model the analysis of the vitreous copper ore from Siberia, detailed in the celebrated *Essays of Klaproth*. As our results differ somewhat from those of this excellent analyst, and no source of fallacy can be discovered on repetition of the process, we shall give below an account of the method pursued, although it possesses no claim to originality, but was purposely conducted after the manner of this chemist. We are the more disposed to do this, as some of our readers may not have access to the work of Klaproth, which has become scarce, and may still wish to see the *modus operandi* exemplified.\*

\* ANALYSIS. — A specimen of the copper ore was selected, having the specific gravity 5.7. It was sectile, possessing on the cut surface a brilliant metallic lustre, resembling polished steel, but more of a lead-grey appearance. It was carefully freed from the surrounding matrix and envelope of lignite, and reduced to powder.

A. Two hundred grains of this powder were introduced into a matrass, and pure muriatic acid affused upon it, which dissolved nothing, even when heated to boiling; showing that the metals do not exist in the state of oxides, but in a metallic state.

B. To the contents of the matrass while boiling, hot concentrated nitric acid was added by drops, which at each addition occasioned a violent effervescence, with the extrication of red fumes. The acid was added until it ceased to produce action. A flocculent greyish-white precipitate had formed on the surface of the fluid,

The sandstone, continuing its eastward course through the district of Pictou, approximates to the slate of the South moun-

which was the sulphur extricated from the ore. When cool, the contents of the matrass, being diluted with pure water, and carefully washed from its surface, were thrown on a filter of known weight. The precipitate collected on its surface, washed with dilute nitric acid, and afterwards with water, being dried, was found to weigh thirty eight grains. This was ignited in a crucible of platinum over an alcohol lamp, and burned away, leaving two grains of a dark grey powder, which was a portion of the ore that had escaped decomposition. This was treated with nitromuriatic acid, and being dissolved by it, was added to the filtered solution. The sulphur then in two hundred grains amounts to thirty-six grains, or eighteen per cent.

C. The liquid which had passed the filter was of a bluish-green color, and transparent. It was divided into two equal quantities. In one portion a polished cylinder of iron was immersed, and in forty-eight hours the copper had precipitated upon it in a dendritic form. That it had entirely separated the copper was known by the solution ceasing to give a tarnish of copper to a polished steel instrument. The copper removed from the cylinder of iron, washed and dried rapidly to prevent oxidation, was found to weigh 79.5 grains.

D. The other half of the solution was treated with aqua ammoniæ to excess of saturation, when a muddy brown precipitate took place, which, when collected on a double filter of known weight, washed, dried, and ignited with a little wax in a platinum crucible, was reduced to the protoxide of iron attractable by the magnet, and weighed 3.4 grains, indicating 2.5 grains of metallic iron.

E. To determine whether the solution was equally divided, and to prove the correctness of the process C., the ammoniated solution was saturated and acidulated with sulphuric acid, and a plate of polished iron was immersed in it. The copper precipitated in a brilliant metallic coating, and when separated, washed, and dried, weighed with the loss of a trifling fraction, like the result of the former process, 79.5 grains.

This ore contains, then, in a hundred parts,

Copper,	- - - - -	(C)	79.5
Sulphur,	- - - - -	(B)	18.0
Iron,	- - - - -	(D)	2.5
			<hr/> 100.0



tain range, which it meets in the township of Egerton, near the sources of Middle and East rivers. In the village of New Glasgow, there occur important beds of bituminous coal near East river, included between the strata of sandstone, and overlaid by a decayed, blackish shale. It contains remarkably perfect stony casts of culmiferous plants, which were shown to us by Mr. Blanchard of Truro. The coal is of a jet-black color, has a glossy appearance, and is highly charged with bitumen. It burns with a bright flame, and smokes much when first kindled. It appears to melt and cake like the Newcastle coal, and when completely on fire, after the bituminous matter is dissipated, it burns like coke.

There have been five or six shafts sunk into the coal strata, in different places, under the direction of Mr. Carr, who resides at this place; but at the time we visited them, these openings were partially filled with water, which prevented us from making any accurate examination of the beds of coal, and the associated rocky strata. The coal that had been thrown out was of a soft, friable nature, and would be soon ground to dust by friction in transporting it to any considerable distance. But preparations were then making, under the direction of two very intelligent and practical gentlemen of Pictou, Messrs. Smith and Brown, to explore this coal on a larger scale. We are now informed that the mining operations are carried on very extensively, and that coal of the first quality is obtained. It is shipped to the United States, where it is found well adapted for all the purposes for which other bituminous coal is employed in the various manufactories of the country.

About twelve miles northeast from the coal mines of New Glasgow, and eighteen miles from the town of Pictou, the sand-

stone and shale meet the transition clay slate of the South mountain range. But the immediate junction of these rocks was not discovered on account of the deep, unbroken soil which overlaid and concealed from view their respective strata. It is evident that the strata unite near this place, from the fact that their lines of bearing here intersect each other at an acute angle; the bearing of the clay slate being north, sixty degrees east, while that of the sandstone is directly east. The clay slate dipping at an angle of fifty or sixty degrees to the northwest, while the sandstone dips at angles of only ten or fifteen degrees to the north, clearly indicates the former rock to be of greater antiquity than the latter, which was before proved to be secondary from the fossils it contains. It evidently lies over the clay slate, and we regret that we were unable to discover a single spot from which the soil and gravel had been removed, so as to exhibit the connexion of the two rocks. Future explorers by traversing the forest, may perhaps find an outcropping somewhere along the line of their union, which will repay the labor of research, by illustrating their relations and comparative age.

Near this place, on the estate of Mr. Grant, a bed of brown and red hematite was discovered about twenty feet in width. It exhibits all the varieties of imitative form usually observed in this ore, and resembles many of the specimens of the hematite brought from the Salisbury mines in Connecticut. It is associated with grey oxide of manganese; which forms a considerable proportion of the bed, and is usually disseminated through the geodes of the hematite, in sheafs of radiating acicular fibres, or in distinct concretions, of which however none of the individuals possess determinable crystalline faces. It is also in more compact globular masses, which are granular, but without any tendency to a

crystalline structure. Its color is between lead and steel-grey, and it possesses a high metallic brilliancy emulating that of antimony-glanz, and is not tarnished by exposure to air and moisture; while the hematite, with which it is blended, or sometimes alternates in successive botryoidal coatings, has often become very rusty on its surface. Its color is the same, whether exhibited by its streak or ground to powder.\*

The geodes in this hematite are also frequently occupied by crystals of arragonite, in six-sided prisms, and also sulphate of barytes in compressed or tabular crystals, usually of a pure white color, and but very loosely attached to the matrix; or they are sometimes completely isolated. Several masses of a foliated structure, composed entirely of this substance, were also found in the soil near "the brook." Whether the manganese, intermixed with this ore, will prove injurious to the iron in the operation of smelting it, is a question of importance to those who may be engaged in working it. It is certain that it must exert some injurious

\* The common grey oxide of manganese has recently been divided by Mr. Haidinger into two new species. (Edinburgh Royal Society Transactions, Vol. XI.) The mineral above referred to by us, is evidently his pyrolusite, with which it agrees in its characters of hardness, color, streak, &c. and, what must not be overlooked, in its being associated with precisely the same ore of iron; an ore to which it is almost exclusively attached in other countries. The other species, called by him manganite, which is much harder, is often in distinct prismatic crystals, that exhibit a brownish-red streak, and is said by him to have been found in Nova Scotia, has not yet come under our notice there. We have it from the neighbouring Province of New Brunswick, in elongated rhombic prisms deeply striated, and in druses of acicular crystals, answering well to the characters which, according to this acute observer, give it undoubted claims to be considered a new species. Is it not possible that his specimen may have come from that Province, since he does not cite its precise locality?



influence in the smelting furnace, whether it combines chemically with the iron or not; for in consequence of its existing in the state of a peroxide of the metal, a large portion of heat and carbon must be taken up in the formation of carbonic acid, or carbonic oxide, by the union of the carbon and oxygen, and the iron, by losing any portion of the carbon it had previously taken up from the charcoal, is rendered of an inferior quality. The preparatory process of burning the ore might perhaps be resorted to with advantage. A bed of buff-colored limestone occurs in the sandstone, near the hematite locality, and will prove a valuable fluxing material to the ore, should it be worked in this part of the country. The limestone also forms beds in the sandstone at several other places, among which may be cited the Shubenacadie River, Gay River, and Pictou Island, as shown on the map. At the two last named places, it contains small but well characterized remains of the *cornu ammonis*, with crystals of argentiferous galena, arseniate of lead in minute crystals, and carbonate of iron, the latter filling the cavities of the fossil ammonites. It is cavernous in some places; and, according to Mr. Halliburton, a kind of grotto has been discovered in it near the East river of Pictou, about one hundred feet in length, and beautifully decorated by numerous stalactites depending from its roof.

Four miles southeast of this place a very important and extensive bed of iron ore exists, in the clay slate of the South mountains, which we shall describe after noticing generally the whole transition clay-slate formation of Nova Scotia, commencing at the eastern extremity of the district of Pictou, and extending west southwest to the opposite shore of the Province. This rock presents a larger extent of surface, than any other in the Province, forming nearly one half of the whole face of the country. It pre-

sents every where a uniform geological character; and containing fossil organic remains, belonging to the marine world alone, and some of them of the oldest kind, it must obviously, according to the common geological division, be regarded as transition rock,\* and as having existed long before the neighbouring Plutonic rocks had emerged from the central regions of the earth. That this rock is older than the trap rocks we have additional evidence, derived from another source, which we shall state by and by, when our observations are directed more particularly to the iron-ore bed, which we have no hesitation in saying extends through the whole clay slate formation. That it is newer than the granite will appear evident from reasons to be assigned.

The direction of the strata composing this formation is uniformly north,  $60^{\circ}$  east, dipping at an angle of  $50^{\circ}$  or  $60^{\circ}$  from the horizon. The color of the rock, on fracture, is black, greyish, or bluish-black. Its structure is slaty or foliated, frequently separating by a gentle blow into broad sheets, which are sufficiently smooth and compact to be employed for writing-slate. This is the case at Rawdon, where it is obtained for this purpose, and also extensively quarried for roofing-slate. In other places being less distinctly foliated, its tendency is to break into huge rhomboidal fragments, as it has natural seams both in the direction of, and at right angles with its stratification. This renders it a valuable building material as it forms convenient shapes for rearing walls of houses, for which purpose it is employed in many places.

The soil resulting from, and lying over this formation, is much inferior to that produced by the disintegration of the trap rocks

The term *transition*, although objectionable in some respects, we have adopted for the want of a better; it certainly conveys what is very apparent, the *intermediate* character of the rock, to which it is applied in this paper.

of the North mountains, and the neighbouring sandstone; its vegetation being less luxuriant, and requiring for its culture greater labor from the husbandman. This is a fact which the traveler, in passing through the country, can scarcely fail to observe. The soil has been much improved of late years; and the present state of agriculture in Nova Scotia is much indebted to Mr. John Young, the author of a series of interesting and practical letters published in Halifax under the signature of "Agricola," to whose labors, we believe, the country is indebted also for many of its agricultural societies.

The continuity of the strata of this rock is interrupted in two places by dykes of trap porphyry, which, entering the rock nearly at right angles with its stratification, completely cut off or intercept the bed of iron ore, which is continuous and parallel with the strata. We shall notice these dykes more particularly in another place, as also the granite represented on the map in Annapolis county, which is undoubtedly subordinate to the clay slate, and all the other rocks in Nova Scotia.

The bed of iron ore alluded to, is apparently about sixteen feet wide, though, as it had not been explored at the time we visited it, we are unable to speak positively on this point. Its direction, like that of the strata in which it is included, is north  $60^{\circ}$  east; and it may be traced for some distance into the forest, until obscured by soil and under-brush. The ore on the surface, from which it may readily be detached, is usually of a compact structure, sometimes inclining to slaty. Its external color is brown and reddish-brown, but its streak and powder are deep red; consequently, it is in the state of peroxide of iron. It is destitute of magnetism and metallic brilliancy, and in these respects differs greatly from the ore in other parts of this bed, in another coun-



ty. Its specific gravity being 4.00 it contains by calculation according to Rinman's method, fifty per cent. of metal; a very near approximation to the truth, as proved on assaying the ore in a crucible, and duly allowing for the carbon combining with it in the process. It abounds with fossil remains; and some specimens, in which they are the most numerous, contain lime in the state of carbonate, readily effervescing with acids. It contains besides a portion of alumine and silex, which in smelting perform the function of a flux.

Among the fossils discovered in this ore, the most numerous are the tellenite, pectinite, and terebratulite. Those observed less frequently are small lenticular shells, resembling the nummulite, as figured in Parkinson's "Outlines of Oryctology," (Plate VI. fig. 5;) and also very distinct impressions of encrinites, which, instead of occurring in cylindrical columns as is ordinarily the case, are formed of a series of circular joints or vertebræ, that are smaller at one extremity than the other, so that the fossils assume a conical form. (See Parkinson's "Organic Remains," Vol. II. p. 164.) The old name of "Screw Stone" we found had been applied to these fossils by the people in the neighbourhood, who, struck with the singular appearance of these relics and those accompanying them, evincing, as they thought, a former life, had carefully preserved some of them, in the hope of perhaps learning something of their history. These fossils are not confined to the ore alone, but may be seen in almost every slate stone scattered through the adjoining fields; and should the ore at this place be explored to any extent, doubtless a far greater variety of these entombed relics will be brought to light, and furnish the collector with many rare productions of the ancient world.

Following the slate formation westerly, this ore-bed does not again show itself until it is seen on Nictau Mountain, in Annapolis county, as shown on the map; it being obscured between the two places by the unbroken forest, except that in a few spots fragments of it have been picked up, barely sufficient to prove its continuity from one locality to the other. At Nictau the width of the ore, at the surface, is but six feet and a few inches; but, increasing apparently as it deepens, it gives the promise of an immense supply of this valuable mineral. It is covered by a stratum of ferruginous soil about two feet thick, on removing which the surface of the ore-bed, being in some places quite smooth as if worn down by attrition, is seen curiously intersected by seams, some of which cross it transversely or nearly at right angles, and, when not open fissures, are filled up with a substance not unlike red ochre. They give the ore a tendency to separate into rhomboidal fragments, similar to those into which the slate itself often divides, and besides greatly facilitate the labor of raising it. The bed has been opened to the depth of eight or ten feet, and some hundred tons of the ore have been removed to the smelting furnace situated on the southern shore of Annapolis Basin.

The character of the ore at this place differs in some respects from that of the Pictou ore. From its very uniform slaty structure, it is more easily broken up; and it abounds to a much greater extent with the casts of marine shells, the calcareous parts of which, are sometimes still preserved. It also contains a larger proportion of iron, has a slight metallic lustre, and exerts magnetic influence upon the needle. But it is not a little singular that this ore-bed, although the grave of millions of once living shell-fish, the remains of which it exhibits in every part, should afford traces

of no other than bivalves, and of those belonging exclusively to the genus *Anomia*. This however is the fact so far as we have examined it. Like many substitutions of this character, they exhibit with great precision and beauty the original external figure of the living shells. The slate also, when in immediate contact with the ore, exhibits the same remains, and it is not unusual to find one half of a shell moulded in it, while the other is firmly attached to the ore, which is thus proved to have been of nearly contemporaneous origin with that rock; or at least, by its union with it, it is proved to have been deposited before the latter had entirely consolidated, or while it was yet in a plastic state. In no other way can this union be satisfactorily explained; for it disproves at once any hypothesis founded on the supposed greater antiquity of the slate, according to which the two bodies should lie only in contact, without showing any marks of intimate union. That they are nearly contemporaneous, we have besides the further evidence derived from the fact, that the fossil shells are precisely the same in both. Their more intimate union, in some parts, we doubt not, may have been assisted by the heat attending the production of the neighbouring trap rocks, the effects of which, we think, are very apparent in another part of this ore-bed, where it very nearly approaches the trap. But of this subject, involving again the igneous origin of the trap, we shall presently speak more at large.

On ascending the highlands south of the falls on Nictau River, a rock was observed of a granular structure, of a greenish-grey color, and containing imbedded concretions of white felspar. It is evidently a part of a dyke of porphyry, as we have represented it on the map, intercepting the strata of slate and the ore-bed accompanying it, both of which it must cross nearly at right an-



gles, if it continues to any extent. But we were unable to discover the precise spot where the ore is crossed by it ; a discovery, which, considering the nature of this dyke, might have disclosed some important facts. This spot, however, must be met with ere long by the miners, in the progress of opening the bed, as it is found most advantageous to remove the ore to the depth of but a few feet from the surface.

In the vicinity of this dyke, we observed several irregularly shaped masses of metalloidal diallage, which, when struck with the hammer, were sonorous, ringing with a sound not unlike that produced on striking a solid mass of metal. It is of a grey color, has an interwoven, laminated texture, and breaks with great difficulty into rough, splintery fragments, which reflect from the surfaces of their laminæ the metallic lustre peculiar to this sub-species. We also noticed several scattered masses of that variety of amygdaloid called toadstone, possessing the characteristic appearance of this rock from Derbyshire, and resembling that found at Brighton in Massachusetts by Godon, an accomplished French naturalist.\*

From whence came these boulders and those of common trap that are now extensively spread over the southern parts of this Province, so distant from any rock to which they bear the least resemblance ? We may venture to infer, without being chargeable with a disposition to support a mere visionary hypothesis, (for we believe it founded on data which must carry conviction to most minds,) that those of common trap and vesicular amygdaloid were derived from the trap-rock ledges of the North mountains, and transported hither by that great and sudden

\* See his paper on the structure of Boston and vicinity, in Vol. III. of the Academy's Memoirs, page 127.

catastrophe which has left similar, but often far more striking, traces of its violence in other countries. And they not only afford us proof of the diluvial flood; they lead us, further, to believe that the overwhelming torrent swept across this peninsula nearly in a north and south direction; such being always the direction of these detached and drifted *débris* from the distant and parent ledges with which they claim a common origin. The boulders of granite also afford additional evidence of the same fact; for they are never met with on the *North mountains*, which present nothing extraneous of any character, but are abundantly scattered about in the opposite direction. If natives of the country, as they appear to be, they also must have originated from some part of the South mountain range, where the granite is now in place and forms beds to a very considerable extent, as may be seen on the map.

In the "*Reliquiæ Diluvianæ*," of Professor Buckland, we find the granite boulders of Nova Scotia cited among the many other proofs he has ably and ingeniously brought forward in support of the diluvial current. If to these boulders of granite, we now add those of the trap unknown to this author, or not mentioned by his informant (Sir Alexander Croke), we may safely conclude, in his own language, "that the present position of these fragments can be accounted for only by supposing them to have been drifted from the nearest granite [and trap] districts, by the same rush of waters that transported those mentioned by Dr. Bigsby, in the districts of Lake Huron and Lake Erie."\* Of the other evidences mentioned by him, such as valleys of denudation, the furrows or parallel scratches upon the surfaces of rocks, and vast

\* See the work of Professor Buckland, page 217. Also Dr. Bigsby's article in the *Geological Transactions*, New Series, Vol. I.

accumulations of sand and gravel, Nova Scotia, as far as we know, affords none; though such may reasonably be expected in a country like this, where the boulders so fully attest the occurrence of that event, which the enlightened labors of Professor Buckland, Cuvier, and others have taught us to regard as no other than that so briefly narrated in the Mosaic history. There are those, however, who, with the greatest reverence for the Scriptures, confidently assert, that the phenomena, usually referred to the Deluge of Noah, had in reality nothing to do with it, and must be accounted for on entirely different grounds. Among these Dr. McCulloch holds a high rank. He refers these phenomena to causes which have operated before, as well as since, the Deluge, and which are even now in operation; such as the bursting of lakes, the action of rivers, and wearing away of mountains. In the currents produced by the sudden elevation of strata, he remarks, we shall probably find the true causes of such alluvia (boulders &c.) as cannot be attributed to rivers and other existing causes, and have so often been attributed to the Deluge, which, he believes, was inadequate to produce any one of the effects ascribed to it.\*

In the alluvium which forms the greater part of Aylesford township, and the valley between the two ranges of moun-

\* See Dr. McCulloch's recently published system of Geology, Vol. II. The opinions of an observer so cautious and experienced are deserving of high consideration; but whether, in the present instance, they will lessen the high authority of the "Reliquiæ Diluvianæ," which contains the observations and concurring testimonies of so many different writers, is a question, which we leave to be determined by those who are thoroughly conversant with the phenomena on which it has arisen. It is for geologists on this continent to examine the supposed cases of diluvian action, and to see whether they can be explained consistently with the principles laid down by Dr. McCulloch.



tains extending from Minas Basin to the Basin of Annapolis, there occur very extensive beds of argillaceous iron ore. These are about two feet thick, consisting of concretions known usually as "shot ore." It is of a spongy, or vesicular appearance, and presents, to a great extent, the resinous lustre exhibited by the best varieties of bog ore. But, in some places, it is intermixed with the earthy phosphate of iron, or the substance to which Bergman attributed the cold short quality of the metal in its malleable state. It is however proved inadequate to explain the cold short quality of iron, not only from the impossibility of the acid escaping decomposition in the smelting-furnace and refinery, but also from the fact that ores containing no phosphorus are as liable as any to yield a metal of this quality.

Leaving Nictau and the dyke of porphyry, the great bed of ore of the South mountain does not appear again, so far as the forest has been examined, until we reach the vicinity of Clement's, a distance of thirty miles. But the evidence of its intermediate continuity is such as to leave but little doubt on this point; for, in the bed of almost every brook or rivulet descending from the mountains, are to be found, to a greater or less extent, fragments of this ore, which contain the usual marine impressions, and which, at some time or other, must have been detached from the main body. Should the spirit of competition among iron manufacturers in Nova Scotia ever equal that which characterizes some quarters of the United States, it is believed that no part of this range will long remain unexplored, or fail to produce abundantly that article, on which depend so many other arts and manufactures.

Before alluding, particularly, to the iron mine at Clement's, we will offer some remarks on the granite formation of this country,

having already spoken of the boulders of this rock. This is the only rock in Nova Scotia having any claim to the title of primitive. It first appears along the South mountains, a few miles east from Bridgetown, generally in large detached masses, which are piled in confused heaps on their sides, or have been precipitated into the valley beneath. Between Bridgetown and the village of Annapolis, it occurs in place, and forms, for nearly the whole extent, the abrupt and barren mountains, which, having a rude outline, are contrasted with those composed entirely of slate, which present rounded and gently sloping sides. It also appears on the road from Annapolis to Clement's, in immense cubical blocks, which contain disseminated masses of chlorite and manganesian garnet. The latter is not distinctly crystallized, and being of a fragile nature, few interesting specimens were obtained. These are the only imbedded minerals known to exist in it, as it does not contain metalliferous compounds of any kind.

The component ingredients of this rock are not united in very uniform proportions; the mica, of a brilliant jet black, enters largely into its composition. The felspar is sometimes of a flesh-color, and the quartz concretions are translucent and vitreous. The rock has a brecciated appearance, and includes masses of granite of a different nature from itself. These masses appear frequently in patches of a finer grain and darker color, than the surrounding granite, from which they differ only in this respect. The felspar of this granite is exceedingly prone to decay, and decomposes rapidly, on the exposed surface of the rock, inso-much that large quantities of angular fragments of the quartz are profusely scattered around, and constitute, by this *débris*, the first rudiments of the soil. The protruding angular fragments of

quartz give this rock a rough, forbidding aspect; and becoming loose in a few weeks, they dislodge any lichens which may have clung to them for support, and thus preserve a barren surface, defying all vegetation. The internal structure of this granite is firm and compact. It has a dark appearance, derived from the color of the mica, which is uniformly distributed through the mass. This rock would form an excellent building material, if the felspar was less prone to decomposition. This prevents its use in buildings, which are intended to last for a long time. We have before suggested, that this granite was subordinate or inferior to the clay-slate of the South mountains, and to all other rocks discovered in the Province. It here exhibits itself, protruding through the clay-slate. The line of junction was not however observed, as the covering of soil and underwood concealed their union. That there does exist a point of contact near this place, we cannot doubt; for a person may, in a few steps, pass from one formation to the other. The granite exhibits no appearance of stratification, from which we could estimate its direction; but there can be no doubt of its age being greater than that of the clay-slate, which it evidently supports, throughout its whole extent. That the granite is older than the clay-slate, appears from its containing no relics of organized beings, which occur in the latter, and prove it to belong to the transition formation. We do not however consider this granite as belonging to the oldest primitive, from the absence of all those metalliferous compounds and minerals which characterize more ancient formations; from its brecciated structure, and from its being in contact with transition rock. It probably belongs to what Werner calls the newest granite formation; a formation which is supposed to have been derived in part from the spoils of one still more ancient.



Speculative geologists may perhaps consider the relations of the bed of iron ore to this granite, as of some value in accounting for the origin of veins and beds in transition rocks. They would doubtless regard the protrusion of the granite from the central regions of our globe, as the cause of the disruption of the strata of clay-slate, which was thus raised from the bottom of the sea, bearing with it the spoils of the ocean. The layers would thus be broken, and their edges thrown up at an angle; and by the contraction of the subordinate rocks, the superior strata being fixed, or the protrusion having carried the rocks so far as to poise the strata in a perpendicular position, a chasm would be formed, into which the ore of iron was afterwards poured from above by a second submersion. But however this may have been, it is evident, from the facts already stated, that the origin of the ore and slate must have been very nearly contemporaneous.

The granite might have been, nevertheless, much older than the clay-slate, and constituted the base upon which it was deposited in a horizontal manner. The formation of rocks beneath the granite, by oxidation of the metallic bases of the earths discovered by the illustrious Davy, according to the views of that excellent geologist, Professor Daubeny, (if we do not misconceive them,) may have caused this protrusion of the granite against and through the overlying transition slate, which was thus raised from its horizontal position. The Wernerian and Huttonian theories thus united and modified, appear to account for so many facts in geology, that we could not refrain from adverting to them on the present occasion, and suggesting their application to American geology.

The granite, as we have said, is the only primitive rock known to exist in Nova Scotia. Besides being found on the South moun-

tains, we are credibly informed of its occurrence in the southern parts of the province, which we did not visit, and have therefore left colorless on the geological map accompanying this paper. On the authority of Messrs. Smith and Brown, we also add, as another locality of this rock, Cobequid mountain in Cumberland county, where, it is apparent, it must hold nearly the same relation to the sandstone, as it does to the slate in Annapolis county. But we must beg leave to differ very widely from these gentlemen in regard to the character of the rock, which, in different parts of the country, occurs with the clay-slate, and to which we find they have applied the term *primitive trap*.\* We think that we shall be able to show that this rock cannot be considered as trap in any form, and that its mineral characters clearly identify it with the quartz rock of McCulloch. Future investigations must determine whether the ore bed of the South mountains is anywhere cut off by the granite, or whether it continues uninterruptedly in the more elevated parts of the range which pass to the southward of the patch shown on the map, as we are in fact authorized to conclude from the direction of the ore bed at Clement's.

In the vicinity of Paradise river, a few miles from Bridgetown, gigantic crystals of smoky quartz (Cairngorm or Scottish topaz) are found among the granite boulders imbedded in the alluvium which forms the banks of the Annapolis river. One of these, found on the estate of Mr. Longley, weighed, we were told, more than one hundred pounds, and was remarkable for its symmetry of external figure, as well as the beauty and varied tints of its internal substance. The mass, we are sorry to say, was soon broken

\* History of Nova Scotia, Vol. II. p. 417.

into fragments and disposed of, with the exception of a few of the smallest, which we had the good fortune to obtain. Some of these are nearly colorless and transparent, some are of a straw-yellow color, while others are of a smoky shade, passing into clove-brown. We were also fortunate enough to obtain from this place a perfect crystal, singular for its size and beauty, though smaller than the one just mentioned. Its weight is ninety pounds; it measures nineteen inches from the point of its pyramidal termination to its base, which is twelve inches in diameter, and has adhering to it grains of quartz and felspar, which indicate its former connexion with the granite, in a cavity of which it was probably formed. Its six lateral planes are nine inches in length to its acuminating planes, one of which, being unduly extended, nearly obliterates the two adjoining ones, and is twelve inches in length. This crystal presents, within, the richest shades of color, from light topaz and straw-yellow, through clove-brown, into a dark and almost opaque smoky color. It is covered externally by a thin incrustation of common quartz, which, on being cleaved off, lays open numerous dark and brilliant prisms of schorl, some of which do not exceed in diameter the thickness of a hair, and are nearly transparent, while others are the sixteenth of an inch in thickness and three inches long. These slender prisms lie upon the surface of the crystal, or penetrate deeply into its substance, and render it an object of still greater interest. This remarkable crystal, though ordinarily opaque, yet, under the influence of strong transmitted light, has its whole interior lit up into a beautifully transparent mass, reflecting the colors we have mentioned, and is altogether the noblest production which the country has afforded us; it is equalled only by the rarest of the rock-crystals found in the Alps and in Siberia.



Having thus far described the appearances and productions of the South mountains, we shall now advert to the ore-bed at Clement's, the last place along this range where it is known to appear. This bed is three miles from the mouth of Moose river; and, several extensive openings having been made into it, during the past season, from which many hundred tons of the ore have been removed, peculiar facilities are afforded for its examination. Its width considerably exceeds that of the Nictau bed, and perhaps ten feet may be assigned as its average; but from the intimate union of the ore with the contiguous slate, it is very difficult to discover the line of separation between the one and the other. In this respect it differs very materially from the ore of Nictau, where, to a much greater extent, the walls of the bed are distinctly presented. By the assistance of a compass, this ore may be traced for the distance of two miles, towards Bear river, so powerful is its magnetic influence on the needle. Indeed, land surveyors are more or less perplexed by its influence, while traversing the forests in different parts of this range, and these evidences are in support of the continuity of this bed from New Glasgow to Clement's.

This ore is compact or fine granular, of a bluish-grey or steel-grey color, and possesses a glistening metallic lustre. When reduced to powder, its color is similar. It is highly magnetic, strongly affecting the needle, as we have before observed, and is in fact the magnetic oxide of iron, or exists in the state of the protoxide of the metal, combined with lime, alumina, and silex. Its specific gravity is 4.5; exceeding that of the Pictou or Nictau ore, and it yields by fusion in the assay-furnace, sixty-five per cent. of soft cast-iron. But when reduced in the smelting-furnace, it has hitherto yielded less, owing to its ad-

mixture with the slate, from which it has been difficult to separate it. The cast iron obtained from this ore, is of good quality for strength and softness, while that of a harder nature, containing less carbon, is readily converted into malleable iron, which, to give it the praise it deserves, is equal to the best of this description made in the United States. The pure iron has also been converted into blistered steel, which, on trial, was found equally useful for the purposes to which the foreign article had been applied.\*

The fossil remains contained in this ore are not so numerous as at either of the localities before cited. But, besides their impressions, we have here presented more interesting traces of them, which strongly indicate the effects of heat both upon their fleshy and crustaceous parts, in decomposing and converting them into the substances which are now presented in the ore. But we shall allude to this more particularly, after stating the fossils which were recognised. They are terebratulites, ammonites, telenites, encrinites, and trilobites. Of the last curious and, in Nova Scotia, hitherto unobserved fossil, supposed to have been originally a crustaceous insect, we obtained the remains of one, two and a half inches in length. It presents a series of transverse joints, divided vertically into three lobes, the central one of which is more prominent than either of the other two, and has nearly the width of them both. They terminate at the lower part of the fossil, without showing the caudal projection observed in some species. The matrix, to which this fossil is attached, is a very compact mass of slate, passing on one side into magnetic iron

\* It is to be regretted that the Iron establishment erected in the vicinity of the iron mine at Clement's in 1826, has since ceased its operations, as the country is now obliged to look to other quarters for the supply of an article which her own hills would yield her in an abundance almost unknown to any other.

ore. It is probable that remains of this fossil, much larger than this, will yet be met with in the slate, or in its included beds of transition limestone; as rocks similar to these have hitherto furnished the most remarkable that have occurred in Europe, some of which, found in the slate rocks of France, are, according to Professor Bakewell, seven inches in length.\* They are found also of equal size and in great perfection at Trenton Falls; and it is remarked by Professor Silliman that "some of them seem almost looking out of the black limestone rock, as if still animated." † Those found in the Dudley limestone, according to Parkinson, rarely exceed three inches in length.

In breaking masses of this ore, the fracture frequently crosses the fossils, and lays open their inner surfaces, which are often covered by a very thin and brilliant, bluish-green, botryoidal crust of the phosphate of iron. They also present this substance crystallized, in beautiful divergent plates, or laminae, which are translucent and of a bluish-green color; also lamellar sulphate of lime shooting through the cavities from one side to the other. In some cases, the cavities, left in the ore by the decomposition of the internal part of the fossil, are entirely filled up with a yellow friable carbonate of iron, having, intermixed with it, a few bluish spots of the phosphate; at other times the crustaceous parts of the fossil are converted into carbonate of iron, which shows, distinctly, the original appearance of the shelly covering. In fact, in almost every fossil met with in this ore, we have one or both of these metallic salts, produced by the combination of its constituent principles, carbonic and phosphoric acids, with the

\* Introduction to Geology, p. 27.

† See note on page 48 of his "Outline," appended to his edition of Bakewell's Introduction.



surrounding iron, assisted, as we have before ventured to say, by heat.

The existence of the sulphate of lime in the ore, although it is no direct proof of the action of heat upon it, yet has a bearing on the case. For it can hardly be overlooked, that the sulphur, which was at first united with pyrites of which there are yet traces in the ore, has, by its decomposition and passage into sulphuric acid, united with the lime of the shells, and thus given rise to the sulphate under the form we have described; leaving the iron of the pyrites behind, as we find it, in a yellow oxide. This process, we are aware, might have taken place, as it does take place, without much heat; but all the attending phenomena are such, in the present case, as to leave but little doubt in our minds, that heat was the agent employed. But, in addition to these, we have other arguments in support of these views, which, to some, may appear of a more positive character than those already adduced. It is well known that iron is deposited from an aqueous solution only in the state of the peroxide, and that its ores, in such cases, are never of a great specific gravity, and always void of magnetism. Now the aqueous origin of the ore in question, is evinced by the presence of marine exuviae in every part of it; yet, in some places, even where the fossil remains are the most numerous, this ore has acquired the character of the magnetic oxide, and is no longer a peroxide. How then is this to be explained? how is it that the ore assumes such totally different characters in different parts of the same bed? that of Pictou being in the state of peroxide, as it was originally deposited from an aqueous solution, and that of Clement's in the state of the magnetic or protoxide. We conceive it undeniable, that this great change is to be ascribed to the heat attending the production of the trap rocks of the North moun-

tains, rendering the ore at Clement's, in their immediate vicinity, strongly magnetic by driving off a portion of its oxygen; while that at Pictou, more remotely situated, was not sensibly affected by its influence, but retains its full quantity of oxygen, is comparatively light, and is without magnetism. Besides, by this theory we are enabled to account for the existence of so large a quantity of carbonate of lime in the latter ore, the heat not having been sufficient to drive off the carbonic acid from the fossil shells contained in it. The superior compactness of the former, its greater specific gravity, and more intimate union with the adjoining slate, from which, in many places, it is difficult to discover any line of separation, are in confirmation of the theory which we venture to offer, thus supported, to the consideration of our readers; assured as we are, that should any of them be induced to pass over the same ground, and examine for themselves the evidences on which it is founded, they would not be disposed to differ much from us, if indeed they were not fully brought over to the same views. It affords new proof of the igneous origin of the trap rocks on which it wholly depends; and it is thus, we think, by amalgamating the rival theories of Werner and Hutton, that just conclusions can be formed, of the geological nature of this country, and the relation which the rocks of aqueous deposition bear to those of igneous origin.

The clay-slate forming the banks of Bear river, near its mouth, contains beds of iron pyrites, of a compact, amorphous character, well suited for the manufacture of copperas. In fact, where this mineral is freely exposed to air and moisture, the sulphate of iron forms spontaneously, and covers this rock with an efflorescent incrustation. The hepatic variety also occurs with it, and, extending through the rock to some distance from the

river, exhales in sultry weather, an odor, which cannot fail to apprise the inhabitants of its existence.

About four miles from Bear river, in the vicinity of a place known as "The Joggins," the clay-slate of the South mountains is intersected by another dyke of porphyry, which is here presented, forming the sides of a deep recess or valley, but a few yards from the main road to Digby. It enters the strata nearly at the same angle with the dyke, before mentioned, on Nictau mountain; and, like that, its actual connexion with the neighbouring slate being entirely hidden from observation, we were unable to determine its extent, or its more approximate relations to that rock. The base of this porphyry is a greyish-black trap, of a fine-grained texture, and compact. The imbedded granular concretions of felspar, of a pure white color, are very numerous. Though, for the most part, no regularity of form is discernible in them, sometimes distinct parallelograms of white felspar may be observed. The rock is thus rendered more distinctly porphyritic than that of Nictau.

We shall not attempt to discuss the origin of the dykes which thus intersect the strata of clay-slate; for the theory applied to all other dykes of similar character, is equally applicable to these. They are doubtless of an origin posterior to the clay-slate, and now occupy the immense fissures left by the contraction or solidification of the adjoining transition rock, including the great ore-bed; and have proceeded from, or are coeval with, the trap rocks of the neighbouring North mountains. Should the dyke at this place extend for any considerable distance into the high land, it will be found most probably to intersect the great ore-bed, which, from the direction of the latter near Bear river, must take place nearly two miles south of the valley. Whether the intersection does



actually take place, we are however unable to say ; as from the very imperfect examinations that have been made below Bear river, the ore has not yet been observed in place ; but from the magnetic needle being affected in this quarter as sensibly as between Clement's and Nictau, this supposition is rendered extremely probable, if, indeed, it is not confirmed by the discovery of masses of this ore in different parts of the high lands that stretch towards lake St. Mary's, which forms the western termination of the clay slate and the interstratified quartz rock. (See the map). Of the nature of the rock composing this cape we were in doubt, not having been able to visit it in 1827. For this reason, it was left uncolored on the map accompanying our remarks in Professor Silliman's "American Journal of Science," though we were correctly informed of the extent of the slate as far as it was exhibited by the coloring on that map. From a view given of it in Des Barres' "Atlantic Neptune," to which we have already referred the reader for several sketches of the scenery of Nova Scotia, we were led to expect the occurrence of columnar trap upon it ; and the opportunity which it might thus afford us of witnessing the actual juxtaposition of this rock with the transition slate, a phenomenon for which we had hitherto looked in vain, was one which we could not well pass over unimproved. But on approaching the cape, which is fronted by a cliff of only about eighty feet, we soon found ourselves deceived by Des Barres' sketch, which, indeed, bore so rude a resemblance to the actual appearance of this spot, that we were led to believe it had been intended to represent some other of far greater height and magnitude. For instead of the oblique and irregular lines, that would alone have given the dip or inclined stratification of the *slate* composing the cliff, we have vertical and horizontal lines, that, in

truth, represent nothing but a vast *façade* of columnar trap. It is possible that the cape, at the time this sketch of it was taken, was much higher than it is at present; a change, which, if we consider the lapse of sixty years, and take into account also the destructive action of the sea, which in other places effects changes as great in one twentieth part of that time, cannot certainly be thought very remarkable. But the exact features of the spot must then have been strangely overlooked by the artist; for if he had correctly copied them, his picture could have never led to the error of supposing its composition to be of trap instead of slate.

No trap rock, in any form, occurs on the southern shore of St. Mary's Bay; even the dykes that occasionally penetrate the slate of the South mountains, and the drifted masses strewed over their surface, are here entirely wanting; and, if we except these, no indications of it occur in any part of Nova Scotia beyond the confines of the North mountain range. Its occurrence on the Island of Cape Breton has been barely mentioned by Messrs. Smith and Brown; and we regret that these gentlemen have not been able to give us some details respecting it. It may indeed be looked for wherever the sandstone prevails, as these two rocks are commonly associated.

The coast, of which we are now speaking, consists of slate, occasionally presenting, among its water-worn cliffs, interesting sections of quartz rock and beds of transition limestone. But the quartz rock of this place has not the usual compact, homogeneous character of that (soon to be mentioned) around Halifax, where it appears in more powerful strata, and, from its power of more effectually resisting the elements, stands up above the slate in prominent ridges, suggesting to the observer the appearance of

basaltic walls. It seems here more properly a fine fragmentary rock, consisting of granular quartz and felspar, united with grains of serpentine of a dirty green color, and having a saponaceous feel. It is traversed by narrow seams of fibrous asbestos, a mineral hitherto unobserved in this Province. But in a few places, becoming finer grained and compact, it passes into the slate as at other localities. Although, in containing the serpentine, it differs from the quartz rock near Halifax (the effect of certain local and accidental causes), it possesses, in common with this, the general structure and composition of the quartz rock of Scotland, so ably illustrated by Dr. McCulloch, according to whom it is sometimes met with in the Highlands of Scotland in a fragmentary form similar to this. It is not however, in this country, geologically associated with those rocks of the primary series, with which, according to that writer, it traverses different parts of Scotland; but, as it is *mineralogically* the same rock as the Scottish aggregate, it is obvious that the same title should be applied to it, although, contrary to the systems, it [may place this rock among the formations of a later epoch, to which, in fact, the recent discoveries of distinguished geologists have shown it to belong; as, according to M. De la Beche, it occurs with argillaceous slate, containing fossils, in France; and it is even described, by Humboldt, as a secondary rock in the Andes of Peru, where it is extensively interposed in a formation of alpine limestone with fossil shells.\* Its occurrence, in Nova Scotia, in intimate connexion with slate, containing the remains of the trilobite, a crustaceous insect, hitherto found only in the oldest transition rocks, proves it a more recent formation, but allows us

\* Baron Humboldt's Essay on the Superposition of Rocks in both Hemispheres, p. 296.



to class it posterior only to the granite, on which it in fact immediately reposes, but with which it is never known to alternate. The slate and quartz rock were observed to extend round Cape St. Mary's for several miles towards Yarmouth; they probably form most of the coast from thence towards Cape Sable. We are, however, unable to speak positively on this point, from not having extended our examinations so far; but, from the information we have received, we are led to believe that it forms the whole western coast of the Province, interrupted only by the granite, which occasionally rises through it in the interior. The white banks, alluded to in Des Barres' work, are doubtless the quartz rock; and the white sand, also spoken of in the same work, is probably its disintegrated *débris*, formed and thrown up by the sea.\* But we choose to leave, for the present, this part of the geological map uncolored, in the hope of seeing it filled up by the observations of others, or our own, which may hereafter be renewed in this region and extended perhaps to some remoter parts of it.

With the exception of the limestone referred to, veins of quartz sometimes crystallized, and occasional disseminations of

\* Sable Island, which has proved so often a scene of shipwreck and desolation to mariners, is said to be formed wholly of this frail material, which is so light as to be carried about and drifted into new shoals by the wind and sea of almost every tempest. The island is very low; and, although but a little more than a mile wide, it is said to extend thirty miles in length. It is remarked by Mr. Halliburton, that "those who have not personally witnessed the effect of a storm upon this place, can form no adequate idea of its horrors. The reverberated thunder of the sea, when it strikes this attenuated line of sand, on a front of thirty miles, is truly appalling; and the vibration of the island under its mighty pressure, seems to indicate that it will separate and be borne away into the ocean." *History of Nova Scotia, Vol. 11. page 226.*

iron pyrites, this coast, so far as we have traced it, presents nothing of mineralogical interest; yet the lover of the picturesque will be delighted with its scenery, which, although wanting, it is true, the majestic outline of the opposite coast, is more agreeably diversified by the alternations of different rocks, the variable manner in which the strata of slate are seen to run, and the deep glens that have been formed by the sea between their protruding edges. Of one of these spots, we find a view in the "Atlantic Neptune," showing the limestone caverned out by the sea.

The quartz rock before alluded to, is the only rock in Nova Scotia, of which we have omitted to mention the mineralogical characters. It is represented on the map as alternating with the clay-slate, and constituting strata of great dimensions. This is not strictly true to nature, for it alternates so frequently, as to render it impossible to give an exact view of its arrangement; but the proportion of this rock to the slate is correctly shown, by thus collecting the numerous narrow beds of it into a few large divisions. It occupies but a small part of the country. It is composed, as its name indicates, of siliceous matter, or quartz, which is fine granular, but more frequently compact, and breaks, not unusually, with a conchoidal fracture. It is sometimes white, and its grains are transparent; but it generally has a greyish or bluish tint, arising, apparently, from admixture with the contiguous slate, with which it is doubtless coëval. It frequently passes into flinty or siliceous slate, and is sometimes so intimately blended with the argillite into which it passes, that the eye cannot distinguish where the one begins or the other terminates. The layers of siliceous slate are often separated by thin folia of argillaceous slate, while the true quartz rock possesses no stratified appearance, and never separates into layers like the slate.

But, in a few instances, it loses entirely its compact and homogeneous appearance, and becomes a fragmentary compound similar to that already mentioned on the shore of St. Mary's Bay, excepting that it wants the greenish serpentine observed only at that place. One of the beds of quartz rock runs fifteen miles north of Halifax; two cross Bedford Basin; and the fourth forms a part of the Peninsula included between Margaret's Bay and Halifax harbour, where it presents itself to the ocean, and opposes an unyielding barrier against its mighty waves. It is not known how far these beds extend into the interior; but it is probable that they are continuous with the strata of slate, and are connected with the quartz rock on the shore of St. Mary's Bay.

It will appear evident we think, even setting aside its mineral composition, which alone is sufficient to determine its true character, that this rock can have no claims to the title of trap, whether considered as secondary or primitive; for, by its stratification with and passage into the transition clay-slate, it is proved to be contemporaneous with that rock, the strata of which it is never known to cross in dykes, as is ordinarily the case with trap rocks. Certainly the term *primitive*, which we find applied to it in the work we have alluded to, is peculiarly unfortunate. We mention this, in the present instance, in order to set forth more plainly our reasons for having applied the term *quartz rock* to the aggregate in question, and, if possible, to avoid the charge of having mistaken its true character. These reasons, we trust, will be sufficient to excuse us, in the minds of the gentlemen who drew up those remarks, from any wish of calling in question, unnecessarily, the accuracy of their observations, as we assure them that truth on the subject is our only aim, even if it come from a source that should expose the fallacy of our own views. The quartz rock, as we



have said, occupies but a small part of the country, being met with principally in the township of Halifax, where it constitutes the dreary and barren hills which surround that city, and which have falsely been considered fair specimens of the soil of Nova Scotia. From the nature of this rock, that part of the country, in which it predominates, must for ages remain sterile; as this flinty aggregate obdurately resists the action of the elements, and will require a long period for a decomposition of sufficient soil to reward the labors of the agriculturist; and this soil, from its nature, will never advantageously compare with the rich loam of the valley of Annapolis, or the garden of Acadia, Cornwallis, which are more favored by nature in this respect. Halifax, fortunately, is not dependent upon her soil to "yield her bread"; but, situated at the head of one of the most beautiful harbours in the world, with the romantic Bedford Basin in the rear, she possesses commercial advantages, to which those of no other place in the country can be compared, and is fully compensated for the imperfection of her soil, which, collected in the valleys, suffices to produce the garden vegetables for the city.

The traveller proceeding from the United States to Halifax, who is desirous of studying the principal rock formations described in this paper, can easily arrange his route so as to examine the structure of the country. If he goes by the way of St. Johns, (N. B.) and takes the steam-boat to Annapolis, he may examine to advantage the trap rocks of the North mountains, and the clay-slate of the South mountains, in his journey along the valley of the Annapolis river, in which he will travel between these two ranges to Windsor; and then cross the South mountains, the border of the sandstone and the quartz rock formation, to Halifax. From Halifax, he may shape his course eastwardly to Pictou, and

comprise in his observations the coal, iron, and copper mines, with the other interesting localities of that district.\* Returning through Windsor, he may then take passage in one of the packets which stately ply between that place and St. Johns, in which he will pass beneath the lofty portals of Cape Blomidon and Cape D'Or, and within near view of the high and picturesque Island situated off that coast. The readiness evinced by the masters of these packets, to aid the objects of travellers, will enable them, on suitable occasions, to pass a short time in gathering up some of the many rare and beautiful productions that are scattered along this coast. But in order to bestow upon it the attention which it deserves, no method will be found so convenient and efficient, as that of chartering a vessel properly furnished for the tour, and large enough to admit of storing away the extensive collections of objects that may be obtained. This method was pursued by ourselves with great advantage in our last excursion to the Peninsula, and is one which our experience enables us to recommend to others as decidedly the easiest and most likely to be successful. A small boat, without sails, will also be found a useful auxiliary, by which access may be had to many places along the coast, where the water would be too shallow to allow a larger craft to ride in safety, or where such a vessel

\* At the Provincial Academy of Pictou, there has been collected, and scientifically arranged under the direction of Dr. McCulloch, the principal of the institution, a very fine museum of natural history, particularly of native birds and insects, in which department this country appears quite similar to the United States, if we except, perhaps, the greater number of aquatic birds. The collection was politely shown us by Dr. McKinlay, one of the trustees and lecturers of the institution, and a clergyman of the place, to whom, for this and other acts of kindness, we would here express our obligations.

would be in the greatest danger of being driven upon the shore by the sudden and violent gales that spring up in this region, or of being hurled among the broken ledges by the tides and currents that rush impetuously along the coast, and leave only here and there a spot of real security, sheltered by some bold projecting ridge of rock.

In treating of the Geology of this province we have perhaps exceeded the limits within which, it may be said, we should have confined ourselves. But as our object has been to describe facts as they exist in nature, and also to point out, in some instances, the *rationale* of the more remarkable phenomena observed, it was found impossible to shorten the paper materially, without omitting parts which either had a necessary connexion with the whole, or which, in themselves, seemed too important not to have some brief consideration. Our object, too, has been to describe the structure and productions of the country in such a manner as would be most useful to those who may succeed us in exploring it; and in doing this, we have often cited several localities of the same substance, as it presented itself under some new form or variety, and have thus been led occasionally into a minuteness of detail which, though it has lengthened out our remarks, has given greater completeness to the whole. Among the numerous localities of mineral substances particularized in this paper, probably few will be found to have lost much of their interest since they were examined by us, while many of them will doubtless be found to have acquired much new interest by the changes they may have suffered in the mean time, and by the substances which these changes may have brought to light.\*

\* It may be well to state as a curious fact in this place, that no traces of the mineral known as prehnite have appeared in our examinations of the trap rocks of



Theories which are generally known and adopted, we have merely alluded to *en passant*; but when appearances justified it, we have advanced opinions, some of which are perhaps novel, although they are the legitimate inferences from the facts discovered in our investigations, which were carefully made, and the results recorded on the spot where they were observed. Some errors will probably be found in our statements, such as must unavoidably occur in an account of the geology of an unexplored country, where there are but few of those conveniences, which abound in our own, to facilitate researches into its physical structure. In the main, however, we trust that they will be found correct, although some omissions will doubtless be discovered, and the boundaries of the rock formations may not always have been exactly portrayed. This was a necessary consequence of the obscurity occasioned by the uniform covering of soil which exists in the interior, and which, although it enriches the country in an agricultural point of view, greatly embarrasses researches into its geology. The sea-coast, denuded by the action of the waves, exhibits the most satisfactory views of its rock formations; and when defeated in our search for the outcroppings of strata in the interior, we scarcely ever failed in obtaining a view of them somewhere along the extensive coast of the Province. The simplicity and remarkable regularity in geological structure exhibited in Nova Scotia, cannot fail to excite the admiration of every

Nova Scotia; although this mineral, accompanied by nearly the same substances that have been described in this paper, is abundant in the trap rocks of most other regions, and is never, we believe, wholly absent from any of them, when they occur to any considerable extent. And we are far from believing that it will not yet be met with when the rocks of Nova Scotia shall have been more minutely explored in search of it, and add another species to the interesting suite of substances which this country has already afforded.

geologist, who may examine that region, how much so ever he may disagree with us in our theoretical deductions.

We have purposely omitted, as being entirely foreign to the object of this paper, any references to the history and geography of the country, excepting in a few cases, where they could hardly be avoided in designating particular localities, and in assisting the traveller in finding such as were the objects of our examination. For much valuable information in relation to these subjects, as well as to the general statistics and topography of the country, we take great pleasure in referring our readers to Mr. Halliburton's "History of Nova Scotia," published at Halifax in 1829.

*List of the Minerals of Nova Scotia, comprising such as are described in the preceding Paper, principally arranged, as to Species, Subspecies, and Varieties, according to the "Tabular View" in the System of Mineralogy by Professor Cleaveland.*

SPECIES.	SUBSPECIES.	VARIETIES.
Sulphate of Barytes.		lamellar and granular. compact and crystallized.
Carbonate of Lime.	Calcareous Spar.	crystallized and lamellar. Dog-tooth spar. Stalactite. hemitropic.
	granular magnesian	crystallized. Rhomb-spar.
	Brown Spar. bituminous	Calcareous Sinter.
Arragonite.		crystallized.
Phosphate of Lime.		Asparagus stone.
Sulphate of Lime.	Selenite.	massive. lamellar.
	Gypsum.	fibrous, granular, compact, snowy, and stellated.

SPECIES.	SUBSPECIES.	VARIETIES.
Quartz.	common crystallized	limpid, smoky (Cairngorm). yellow, irised, radiated.
	Amethyst.	red and purple
	ferruginous fetid	
	Chalcedony.	brown and green. Cacholong, Carnelian, Onyx. Agate, — ribbon, brecciated, fortification, and moss.
	Siliceous Sinter.	amethystine, and snow white.
	Heliotrope. Opal.	Semi-opal.
	Hornstone. Jasper.	common striped Agate-jasper. Ruin-jasper.
Siliceous Slate.		Basanite.
Mica.		laminated.
Schorl.		common black prismatic. acicular, in quartz.
Felspar.		common.
Garnet.	manganesian	
Stilbite.		yellow and white.
Laumonite Analcime		common, and red, or Sarcolite. cupreous green, a new variety.
Chabasie.		wine yellow. colorless.
Apophyllite.		green and white. Albin.
Heulandite.		red and white.
Thomsonite. Mesotype.		Mesolite or Needlestone. Skolezite. plumous and filamentous.
Asbestus.		fibrous.
Hornblende.		



SPECIES.	SUBSPECIES.	VARIETIES.
Hornblende.	common	massive.
Diallage.	metalloidal	
Serpentine.		common.
Chlorite.		common, crystallized.
Argillaceous Slate.	Green Earth.	Argillite. Roof Slate.
Graphite.		granular.
Coal.		common bituminous.
Lignite.		Jet. Pitchy lignite. Bituminous wood. Brown, earthy, and brittle.
Copper.		native metallic. arborescent.
Sulphuret of Copper, } or Vitreous Copper. }		compact massive.
Pyritous Copper.		common yellow.
Red Oxide of Copper.		crystallized.
Carbonate of Copper.	blue	
	green	fibrous.
Sulphuret of Iron.		fibrous, (Malachite.)
		common amorphous. hepatic. cubic.
	arsenical	
Magnetic Oxide of Iron.		compact, granular, and crystallized. earthy.
Specular Oxide of Iron.		crystallized.
Red Oxide of Iron	micaceous.	
		compact. pseudomorphous. Reddle.
Brown Oxide of Iron. (Hydrous oxide.)		fascicular, in quartz and amethyst crystals. Brown Hematite. botryoidal and staectitic.

SPECIES.	SUBSPECIES.	VARIETIES.
Argillaceous Oxide of Iron.		resinous granular. Shot ore. Bog ore.
Carbonate of Iron.		massive and crystallized.
Phosphate of Iron.		botryoidal and crystallized. earthy and pulverulent.
Sulphate of Iron.		efflorescent.
Sulphuret of Lead.		common.
Arseniate of Lead.	argentiferous	crystallized.
Oxide of Manganese, (Pyrolusite of Haidinger)	grey	radiated, compact, and acicular.
Chlorophæite.*		

\* This rare and curious mineral is not yet established as a distinct species. It has been supposed by a late distinguished mineralogist, W. Phillips, to be allied to the Sideroclepte of Saussure ; but neither of these minerals has been analyzed.

## X.

*Table showing the Present Value of the Right of Dower of a Married Woman in any Real Estate, provided she survives her Husband.*

BY J. INGERSOLL BOWDITCH.

*Communicated by the President of the Academy.*

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THE laws of Massachusetts, and of several other States, allow a right of dower to a married woman, provided she survives her husband, being a life-right in one third of all the real estate he at any time possesses.

In cases of insolvency, and in various other instances, it is desirable to ascertain the present value of this right. This may be done by the following table.

The table is to be entered at the top with the age of the husband, and at the side with the age of the wife; under the former and opposite to the latter is the present value of the dower right in an estate worth one hundred dollars.

Thus, if the age of the husband be 50 years, and that of the wife 32 years, the present value of the dower, in \$100, is \$6,70; so that if the estate be worth \$10,000, the present value of the dower right would be \$670.



TABLE, Showing the Present Value of the Right of Dower of a Married Woman

		Age of the Husband.																																			
		16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86
16	16	3.14	3.31	3.49	3.68	3.88	4.10	4.33	4.58	4.85	5.14	5.43	5.73	6.06	6.42	6.81	7.25	7.74	8.12	9.18	16																
	18	3.06	3.20	3.39	3.57	3.78	3.99	4.27	4.51	4.76	5.03	5.29	5.65	5.99	6.35	6.73	7.08	7.57	8.21	8.96	18																
20	20	2.97	3.11	3.26	3.45	3.66	3.88	4.15	4.38	4.64	4.92	5.15	5.49	5.86	6.22	6.60	6.90	7.38	8.00	8.74	20																
	22	2.88	3.02	3.16	3.33	3.53	3.77	4.02	4.25	4.46	4.74	5.00	5.33	5.69	6.03	6.43	6.72	7.19	7.79	8.52	22																
24	24	2.79	2.92	3.06	3.23	3.42	3.65	3.89	4.11	4.32	4.57	4.85	5.17	5.52	5.85	6.18	6.54	6.99	7.58	8.30	24																
	26	2.70	2.82	2.96	3.12	3.31	3.53	3.76	3.97	4.18	4.42	4.70	5.01	5.35	5.66	5.98	6.36	6.79	7.37	8.08	26																
28	28	2.61	2.72	2.86	3.01	3.20	3.41	3.63	3.83	4.03	4.26	4.54	4.84	5.17	5.47	5.78	6.17	6.59	7.15	7.85	28																
	30	2.52	2.62	2.75	2.90	3.08	3.28	3.50	3.69	3.88	4.10	4.38	4.66	4.99	5.28	5.58	5.96	6.38	6.93	7.61	30																
32	32	2.43	2.52	2.64	2.79	2.96	3.15	3.37	3.55	3.73	3.94	4.21	4.48	4.80	5.09	5.38	5.74	6.16	6.70	7.36	32																
	34	2.33	2.42	2.53	2.68	2.84	3.02	3.23	3.40	3.57	3.78	4.03	4.30	4.60	4.88	5.17	5.51	5.92	6.45	7.10	34																
36	36	2.23	2.32	2.42	2.56	2.72	2.89	3.09	3.25	3.41	3.61	3.85	4.11	4.40	4.66	4.94	5.26	5.66	6.18	6.83	36																
	38	2.13	2.21	2.31	2.44	2.59	2.76	2.95	3.10	3.25	3.44	3.67	3.92	4.19	4.44	4.70	5.00	5.39	5.90	6.53	38																
40	40	2.03	2.10	2.20	2.32	2.46	2.62	2.81	2.95	3.09	3.27	3.49	3.72	3.98	4.22	4.46	4.74	5.11	5.61	6.22	40																
	42	1.92	1.99	2.09	2.20	2.33	2.48	2.67	2.79	2.93	3.10	3.30	3.52	3.76	3.99	4.22	4.48	4.83	5.31	5.90	42																
44	44	1.82	1.88	1.98	2.07	2.20	2.34	2.52	2.63	2.76	2.92	3.11	3.32	3.54	3.75	3.98	4.22	4.55	4.99	5.57	44																
	46	1.71	1.77	1.87	1.94	2.06	2.21	2.37	2.47	2.59	2.73	2.92	3.12	3.32	3.50	3.71	3.96	4.26	4.67	5.22	46																
48	48	1.59	1.66	1.74	1.85	1.95	2.10	2.22	2.31	2.42	2.54	2.76	2.91	3.10	3.25	3.44	3.71	3.97	4.35	4.85	48																
	50	1.40	1.50	1.60	1.71	1.81	1.92	2.03	2.15	2.24	2.35	2.56	2.71	2.87	3.00	3.17	3.49	3.75	4.03	4.48	50																
52	52	1.28	1.35	1.45	1.54	1.64	1.74	1.84	1.95	2.06	2.18	2.31	2.45	2.60	2.76	2.90	3.18	3.46	3.78	4.12	52																
	54	1.20	1.29	1.33	1.40	1.49	1.58	1.67	1.77	1.87	1.97	2.08	2.21	2.34	2.48	2.63	2.81	3.05	3.37	3.77	54																
56	56	1.11	1.17	1.23	1.30	1.37	1.44	1.52	1.61	1.70	1.79	1.89	1.99	2.10	2.22	2.35	2.50	2.72	3.00	3.36	56																
	58	0.96	1.03	1.10	1.17	1.24	1.32	1.40	1.48	1.56	1.64	1.72	1.81	1.90	2.00	2.11	2.24	2.39	2.59	2.87	58																
60	60	0.82	0.89	0.96	1.03	1.10	1.17	1.24	1.32	1.40	1.48	1.56	1.65	1.74	1.84	1.95	2.07	2.20	2.35	2.57	60																
	62	0.73	0.79	0.85	0.91	0.97	1.03	1.09	1.16	1.23	1.30	1.37	1.45	1.54	1.63	1.73	1.85	1.99	2.17	2.38	62																
64	64	0.68	0.72	0.77	0.82	0.87	0.92	0.97	1.03	1.09	1.16	1.23	1.30	1.37	1.44	1.51	1.61	1.75	1.93	2.15	64																
	66	0.64	0.67	0.70	0.74	0.78	0.82	0.87	0.92	0.97	1.02	1.08	1.13	1.19	1.25	1.31	1.37	1.47	1.63	1.85	66																
68	68	0.53	0.57	0.61	0.65	0.69	0.73	0.78	0.82	0.86	0.91	0.96	1.01	1.06	1.10	1.15	1.20	1.25	1.36	1.54	68																
	70	0.42	0.46	0.50	0.54	0.58	0.62	0.66	0.70	0.74	0.78	0.83	0.87	0.91	0.97	1.02	1.07	1.12	1.17	1.27	70																
72	72	0.35	0.38	0.41	0.44	0.47	0.50	0.53	0.57	0.61	0.65	0.69	0.73	0.77	0.81	0.85	0.90	0.96	1.03	1.11	72																
	74	0.32	0.34	0.37	0.38	0.40	0.43	0.46	0.49	0.52	0.55	0.58	0.61	0.64	0.68	0.71	0.75	0.86	0.89	0.98	74																
76	76	0.30	0.32	0.33	0.35	0.36	0.38	0.40	0.42	0.45	0.48	0.51	0.53	0.56	0.58	0.60	0.63	0.67	0.73	0.82	76																
	78	0.25	0.26	0.28	0.30	0.32	0.34	0.36	0.38	0.40	0.43	0.45	0.47	0.49	0.50	0.52	0.53	0.55	0.60	0.68	78																
80	80	0.21	0.22	0.23	0.24	0.26	0.28	0.30	0.32	0.34	0.36	0.38	0.41	0.43	0.44	0.46	0.47	0.48	0.50	0.55	80																
	82	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.25	0.27	0.29	0.32	0.34	0.36	0.38	0.40	0.41	0.43	0.45	0.47	82																
84	84	0.15	0.15	0.16	0.17	0.17	0.18	0.19	0.21	0.23	0.24	0.25	0.27	0.29	0.30	0.32	0.34	0.37	0.40	0.42	84																
	86	0.13	0.13	0.14	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.25	0.26	0.27	0.29	0.32	0.36	86																
88	88	0.11	0.12	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22	0.23	0.24	0.26	0.30	88																
	90	0.10	0.10	0.11	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22	0.23	0.25	90																

in an Estate worth \$100, provided she survives her Husband; — by the Carlisle Tables.

		Age of the Husband.																			
		54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	
Age of the Wife.	16	9.93	10.69	11.62	12.48	13.20	13.86	14.67	15.63	16.62	17.74	18.53	19.27	19.93	20.78	21.36	22.10	22.79	23.28	23.79	16
	18	9.71	10.51	11.40	12.24	12.96	13.63	14.45	15.39	16.41	17.51	18.31	19.03	19.70	20.48	21.13	21.86	22.54	23.00	23.51	18
	20	9.49	10.30	11.18	12.03	12.72	13.40	14.22	15.15	16.18	17.26	18.08	18.78	19.45	20.18	20.89	21.62	22.28	22.72	23.24	20
	22	9.27	10.09	10.95	11.80	12.48	13.17	13.98	14.90	15.93	16.99	17.85	18.56	19.18	19.87	20.64	21.34	22.01	22.43	22.96	22
	24	9.05	9.86	10.71	11.56	12.23	12.94	13.73	14.63	15.66	16.74	17.60	18.25	18.89	19.57	20.37	21.05	21.72	22.13	22.66	24
	26	8.83	9.62	10.47	11.30	11.97	12.69	13.46	14.35	15.37	16.46	17.34	17.96	18.58	19.26	20.08	20.77	21.42	21.82	22.34	26
	28	8.60	9.37	10.22	11.03	11.70	12.42	13.18	14.05	15.06	16.15	17.06	17.66	18.25	18.96	19.76	20.47	21.10	21.49	22.01	28
	30	8.35	9.11	9.96	10.75	11.42	12.13	12.88	13.74	14.74	15.82	16.75	17.34	17.91	18.65	19.42	20.14	20.77	21.15	21.66	30
	32	8.08	8.84	9.69	10.46	11.13	11.82	12.57	13.42	14.41	15.48	16.40	17.00	17.56	18.32	19.05	19.78	20.42	20.80	21.30	32
	34	7.80	8.56	9.40	10.15	10.82	11.50	12.25	13.09	14.07	15.12	16.01	16.65	17.20	17.96	18.67	19.39	20.05	20.43	20.92	34
	36	7.51	8.26	9.08	9.82	10.49	11.16	11.92	12.75	13.71	14.74	15.62	16.28	16.84	17.57	18.27	19.00	19.67	20.05	20.52	36
	38	7.21	7.95	8.75	9.48	10.13	10.80	11.57	12.39	13.33	14.34	15.22	15.89	16.47	17.15	17.86	18.59	19.27	19.65	20.10	38
	40	6.89	7.62	8.41	9.13	9.76	10.42	11.19	12.00	12.93	13.93	14.80	15.47	16.07	16.72	17.44	18.16	18.85	19.23	19.67	40
	42	6.56	7.27	8.04	8.76	9.37	10.02	10.78	11.58	12.50	13.52	14.37	15.03	15.63	16.26	16.99	17.70	18.40	18.78	19.21	42
	44	6.21	6.91	7.65	8.37	8.96	9.60	10.34	11.13	12.04	13.08	13.92	14.56	15.15	15.76	16.51	17.22	17.92	18.29	18.71	44
	46	5.84	6.53	7.25	7.95	8.52	9.15	9.87	10.65	11.54	12.59	13.52	14.06	14.63	15.22	15.97	16.70	17.38	17.77	18.16	46
	48	5.45	6.10	6.84	7.49	8.04	8.66	9.37	10.15	11.00	12.03	12.72	13.50	14.07	14.65	15.36	16.10	16.74	17.20	17.57	48
	50	5.05	5.64	6.17	7.01	7.52	8.12	8.83	9.61	10.43	11.39	11.90	12.87	13.28	14.05	14.68	15.41	16.00	16.49	16.96	50
	52	4.63	5.22	5.66	6.22	6.97	7.54	8.24	9.02	9.82	10.68	11.27	12.16	12.68	13.32	13.94	14.63	15.16	15.75	16.33	52
	54	4.21	4.78	5.18	5.72	6.30	6.92	7.59	8.37	9.18	9.97	10.72	11.37	12.20	12.81	13.33	13.77	14.37	14.97	15.60	54
	56	3.80	4.30	4.81	5.33	5.85	6.37	6.89	7.68	8.48	9.26	9.62	10.50	11.30	12.01	12.62	13.12	13.53	14.00	14.61	56
	58	3.27	3.79	4.39	4.96	5.50	6.00	6.46	6.89	7.77	8.56	8.64	9.37	10.19	10.90	11.52	12.06	12.55	13.00	13.62	58
	60	2.89	3.31	3.83	4.41	4.95	5.47	5.98	6.48	6.98	7.85	8.08	8.69	9.33	9.99	10.63	11.23	11.77	12.23	12.59	60
	62	2.64	2.97	3.36	3.82	4.33	4.87	5.43	6.00	6.57	7.15	7.72	8.28	8.83	9.36	9.87	10.37	10.86	11.34	11.65	62
	64	2.41	2.70	3.03	3.39	3.78	4.22	4.71	5.25	5.84	6.47	7.14	7.76	8.33	8.84	9.30	9.70	10.05	10.37	10.80	64
	66	2.12	2.43	2.74	3.06	3.39	3.71	4.12	4.55	5.04	5.60	6.22	6.88	7.49	8.05	8.56	9.02	9.45	9.87	9.95	66
	68	1.79	2.09	2.44	2.77	3.07	3.38	3.69	4.02	4.39	4.82	5.32	5.89	6.51	7.08	7.61	8.08	8.50	8.89	9.15	68
	70	1.43	1.67	1.98	2.36	2.70	3.01	3.32	3.65	3.94	4.27	4.65	5.09	5.59	6.15	6.66	7.12	7.55	7.95	8.33	70
	72	1.22	1.36	1.57	1.85	2.17	2.50	2.84	3.18	3.53	3.88	4.24	4.61	4.99	5.38	5.77	6.23	6.69	7.15	7.47	72
	74	1.08	1.20	1.35	1.54	1.77	2.03	2.33	2.67	3.05	3.43	3.77	4.11	4.45	4.80	5.15	5.49	5.82	6.24	6.55	74
	76	0.94	1.09	1.25	1.42	1.59	1.76	1.94	2.16	2.43	2.76	3.15	3.60	4.00	4.35	4.70	5.03	5.34	5.64	5.93	76
	78	0.79	0.94	1.12	1.29	1.45	1.60	1.75	1.90	2.08	2.31	2.61	2.98	3.40	3.78	4.13	4.46	4.76	5.04	5.32	78
	80	0.64	0.77	0.94	1.10	1.26	1.41	1.56	1.71	1.87	2.06	2.28	2.54	2.85	3.20	3.53	3.85	4.16	4.46	4.75	80
	82	0.52	0.60	0.71	0.84	1.00	1.16	1.33	1.50	1.68	1.87	2.07	2.29	2.52	2.75	2.99	3.28	3.50	3.72	3.93	82
	84	0.45	0.50	0.58	0.68	0.79	0.90	1.03	1.18	1.36	1.57	1.81	2.04	2.25	2.45	2.63	2.80	2.97	3.14	3.30	84
	86	0.40	0.45	0.51	0.58	0.66	0.74	0.83	0.94	1.08	1.25	1.44	1.66	1.88	2.09	2.29	2.48	2.65	2.81	2.97	86
	88	0.35	0.41	0.48	0.55	0.62	0.69	0.76	0.83	0.92	1.04	1.29	1.39	1.59	1.79	1.98	2.17	2.35	2.53	2.71	88
	90	0.29	0.35	0.42	0.51	0.60	0.68	0.75	0.81	0.87	0.96	1.18	1.23	1.40	1.57	1.74	1.92	2.11	2.30	2.48	90
		54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	

## XI.

### *Description of a new Stand for a Reflecting Telescope.*

BY THE REV. JOHN PRINCE, LL. D., A. A. S.

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THE brass tube of the telescope, for which this stand was made, is 42 inches long and 6 inches in diameter. It was mounted originally in Europe on a triangular stand, and was very unsteady, being supported by a small brass pillar with a joint. The tremor made it very difficult to adjust the instrument to distinct vision. It is now mounted on a quadrangular stand, and an axis; and is very steady, having no tremulous motion when the hand is applied to the adjusting wire.

The stand is made wholly of wood, except the parts which give motion to the telescope; these are made of brass. The stand consists of two parts, which may be separated from each other. The upper part, on which the Telescope is fixed, has a mahogany board for a base, 15 inches square and 1 inch and  $\frac{1}{4}$  thick; having block-feet under it, to accommodate the axis of a circular board of the same thickness, which revolves on it. The circular board has 6 friction rollers under it and moves very steadily, being held down upon the base by a plate and screw on the lower end of the axis. To this circular board two upright pillars are fixed which support the Telescope on an axis. The axis is made of hard yellow wood; except the ends, which are brass, turning on brass sockets. The axis is 6 inches wide where the Telescope



rests on it ; and is made concave, so as to receive nearly the semi-diameter of the Telescope ; and makes a steady bed for it. The bed is lined with thin cloth to fit the Telescope more closely to it ; this lining also preserves the tube from scratches. It is drawn down tightly into the bed by a brass cross-bar let into the bed and screws, in the same manner in which Telescopes are commonly fixed on stands. The Telescope can therefore be taken off from the stand and kept in a box to prevent the mirrors being tarnished ; which is more necessary in this country, where it is difficult to get them perfectly well repolished. The pillars which support the Telescope are 15 inches high, 3 broad, spreading 6 inches at the base to increase their stability. They are so far apart as to allow an axis to be 15 inches, which gives more horizontal steadiness to the Telescope than it would have, if mounted on slender brass supporters, placed near the tube, as they generally are.

A semicircular brass plate is fixed to the under part of the circular board, projecting  $\frac{3}{4}$  of an inch from its edge. When the Telescope is brought nearly into the direction wanted for viewing the object, by a horizontal movement of the stand, it is fixed by a clamp on the circular plate ; and an accurate adjustment is made by a tangent screw ; in the same manner in which the index of the sextant is moved.

The vertical adjustment of the Telescope is by a double mahogany bar 1 inch and  $\frac{1}{4}$  square. It is made in two parts, one sliding on the other, through two brass collars, that hold them together ; the collars being attached to one part, the other sliding through them. To the sliding part is fixed a slip of brass, having teeth cut upon its edge. On the other part is fixed a pinion and nut to give motion to the sliding piece. One end of the part which has the pinion on it, is connected by a strong brass joint with the

top of a small pedestal, or pillar ; the other end is unconnected. This pedestal is placed on a square piece of hard wood, which slides on a brass plate between two parallel grooved rulers across the centre of the circular board ; and may be fixed at any part of the diameter when the Telescope is brought nearly to the elevation required. The pedestal is then fixed by a finger screw, seen in Plate V. fig. 2. The opposite end of the sliding part of the double bar is connected by a strong joint with the eye-end of the telescope ; and being movable in the collars, an accurate adjustment of the instrument is made by the rack-work.

For so large a telescope, I prefer the double bar to the brass sliding tubes commonly fixed to achromatic telescopes to give them steadiness ; and also the method here adopted of sliding across the circular board to give different elevations to the telescope, to that of fixing one end permanently, and shifting the other end to another place, as the sliding tubes are used. My Telescope is so placed on its axis that the centre of gravity is between the axis and the eye-end ; so that the tube rests on two supports, the axis and the double bar ; for the sliding part of the bar does not move so easily, but that it gives sufficient support to the end with which it is connected. And being permanently fixed to one place, more vertical steadiness is given to the Telescope than could be preserved by shifting it to another place nearer to the axis ; as is done with the sliding tubes, to give a greater elevation. When the pedestal is placed at the end of the rulers farthest from the eye-piece ; and the double bar is brought to its shortest dimensions, the Telescope has an elevation of  $65^{\circ}$  above the plane of the circular board. When the pedestal is placed at the end of the rulers, nearest to the eye-piece, and the sliding bar drawn out to its greatest extent, the object-end

of the Telescope is depressed below the horizontal line of the axis ; so that it may be used in viewing terrestrial objects.

The other part of the whole stand is a mahogany frame, 40 inches high ; 15 inches square at the top, and 24 at the bottom ; and cross-braced in every part where necessary, to make it steady. In two of the legs dovetail pieces are let in, which may be drawn out to any length necessary to accommodate the legs to uneven ground, and are fastened by screws.

All the supporting parts being made of hard wood, the unsteadiness arising from the elasticity of brass, which is so much used in mounting telescopes, is removed. And this stand appears to be as steady as a portable instrument, with these movements, can be made. I have never seen one so firm, though some more elegantly mounted ; but utility ought not to be sacrificed to elegance. Such a stand as this now described, for large telescopes, costs much less than one in which more brass work is used. The upper part of the stand can be taken from the frame, and used on a firm table, like any other telescope. It is fastened to the frame by two screws, going through the top rail ; one of which may be seen in Plate V. *fig. 1.* *Fig. 1.* shows the Telescope on the stand and frame. *Fig. 2.* *A* the square base of the stand ; *B* the circular board ; *C* the pedestal between the rulers ; *D* the tangent screw ; *E* the double sliding bar ; *F* the bed of the Telescope. *Fig. 3.* *A* shows the hollow bed in front, with the brass plate to which the Telescope is fastened by two screws ; *B* the parallel rulers ; *C* the tangent screw.

Such is the description of the stand of my Telescope, which I have thought might not be unacceptable to the Academy. It has been seen by several gentlemen who are well acquainted with telescopes, and much approved of by them. I made the brass work myself, and finished it on my birth-day, — 80 years old.



## XII.

### *Latitudes and Longitudes of Several Places in the United States, as determined by Observation.*

BY ROBERT T. PAINE, A. A. S.

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IN the autumn of 1831, being about to set out on a journey to some of the Southern States, it occurred to me that a favorable opportunity presented itself for attempting to determine the latitude and longitude of the places I might pass through, when the time and the weather would permit. I therefore provided myself with a sextant of the manufacture of Parkinson and Frodsham, graduated to 10", and the same that was used by me in an observation, at Monomoy Point Lighthouse, of the annular \* eclipse of February, 1831; an artificial horizon of mercury, the glasses in the skreen of which had been carefully examined; and a pocket chronometer made by Barraud, which was highly recommended for being but little affected by the motion of a carriage or of the body.

The result of the observations made on my journey with these instruments, I now have the pleasure of communicating.

It was quite impossible to measure, satisfactorily, a single

\* A memoir of this remarkable eclipse is in preparation and will appear in the ensuing volume.

altitude in the city of New York, at any hour of the day; and in Philadelphia the motion of vehicles permitted of the admeasurement of only one, when the sun was on, or very near, the meridian; in the afternoon, however, this difficulty was not often experienced there, so that, in general, observations for the error of the chronometer could easily be made.

The latitude of each place was deduced from each altitude; and the result thereof is stated. No observation was in any instance rejected. For the longitude, the rate of the chronometer was depended on, with one exception only, for not more than two days. The chronometer, as has already been mentioned, was but little affected by motion; when, however, it had been carried over the rough roads of Virginia, it exhibited a tendency to accelerate, but so uniformly as not to impair its usefulness; thus at Philadelphia, at Norfolk, and during the first week of my residence in Richmond, it gained one second daily; during the second week 1.5 second, while I was absent in the interior of Virginia 2.1 seconds; at Washington and Baltimore 2.7 seconds; and in Philadelphia, New York, and Providence, 3.1 seconds.

On account of the inclemency and tempestuousness of the weather after the 21st of November (the beginning of the winter), the number of observations I was enabled to make at Washington and Baltimore was smaller than was desired; nevertheless the results of them are now submitted, with the hope that future observations will show them to be close approximations to the truth.

It may be proper to remark, that Doctor Young's Refractions, corrected for the altitude of the barometer and thermometer, were used in the reductions.

OBSERVATIONS.

*At Philadelphia, at a place about 150 feet S. E. of Independence Hall, 1831, Oct. 14th, observed the meridian alt. of the Sun ;*

resulting latitude . . . . .	39° 56' 58.2"
Latitude of the Hall by this observation . . . . .	39 56 59

*At Norfolk, at a place about 50 feet south of the Farmer's Bank.*

For the Latitude.

*Oct. 31st, observed 18 altitudes of the Sun, upon or near the meridian ; resulting latitudes,*

36° 50' 32.5" ; 40.9" ; 38.7" ; 49.0" ; 39.4" ; 48.7" ; 45.4" ; 41.1" ; 40.3"	
" " 42.2 ; 39.1 ; 48.0 ; 58.7 ; 64.7 ; 72.5 ; 61.0 ; 71.1 ; 60.5	
Mean of the 18 observations . . . . .	36° 50' 49.6"
Therefore, the latitude of the Bank is . . . . .	36 50 50.

For the Longitude.

<i>Oct. 29th. Chronometer fast of mean time at Norfolk . . . . .</i>	h. m. sec.	0 18 48.8
" <i>26th. At Philadelphia, the Chronometer too fast for mean time 14' 14.6" ; adding the daily rate + 1.0" makes it too fast Oct. 29th, at Philadelphia, . . . . .</i>		0 14 17.6
Difference of meridians . . . . .		0 4 31.2
Longitude of Independence Hall, Philadelphia, . . . . .		5 0 43.9
Longitude of Farmer's Bank, Norfolk, . . . . .		5 5 15.1

*The long. of the Navy-yard at Gosport (1½ English miles S. 9° W.) was determined by observations of the beginning and end of the eclipse*

<i>of Feb. 12th 1831, to be . . . . .</i>	h. m. sec.	5 5 19.0
Therefore the longitude of Farmer's Bank by this eclipse is . . . . .		5 5 18.0

In the great map of the state of Virginia, the longitude of the "south end" of Norfolk is said to have been ascertained to be 44' 5" (2 56.3) east of the Capitol, at Washington, the position of which has been found, by observations on the annular eclipses of 1791, 1811, and 1831, to be . . . . .

	h. m. sec.	5 8 7.2
Therefore long. of the "south end" of Norfolk by the map . . . . .		5 5 10.9



At Richmond, at a place about 450 feet S. 25° E. of the Capitol.

For the Latitude.

1831, Nov. 3d. Observed 13 altitudes of the Sun upon or near the meridian; resulting latitudes,

37° 31' 87.4"; 72.5"; 72.7"; 76.5"; 75.5"; 71.0"; 66.8"; 65.3"; 80.4"

" " 79.5; 87.5; 59.4; 56.5. Mean of the 13 obs. 37° 32' 13.2"

Nov. 5th. Observed 18 altitudes of the Sun upon or near the meridian; resulting latitudes,

37° 32' 17.4"; 5.3"; 20.9"; 12.2"; 8.8"; 11.3"; 5.6"; 16.5"; 12.8"

" " 19.8; 21.9; 9.7; 17.5; 9.9; 14.2; 15.0; 13.6; 4.0

Mean of the 18 and of the 31 . . . . . 37° 32' 13.2"

The reduction to the Capitol is . . . . . + 3.8

Hence the latitude of the Capitol is . . . . . 37° 32' 17".

For the Longitude.

Nov. 2d. Chronometer fast of mean time at Richmond . . . . .	h. m. sec.
	0 23 27.0

" " Chronometer fast of mean time at Norfolk, same day, . . . . .	0 18 52.6
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Difference of meridians . . . . .	0 4 34.4
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Longitude of Norfolk, as above . . . . .	5 5 15.1
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Longitude of Richmond . . . . .	5 9 49.5
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2dly. Chron. fast of mean time at Richmond, Nov. 18th, . . . . .	0 23 35.7
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Chronometer fast of mean time at the Observatory of the University of Virginia, the same day, . . . . .	0 27 52.0
--	-----------

Difference of meridians . . . . .	0 4 16.3
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Long. of the Observatory by eclipses of 1791, 1811, and 1831, . . . . .	5 14 5.9
---	----------

Longitude of Richmond . . . . .	5 9 49.6
---------------------------------	----------

3dly. Chronometer fast of mean time at a house in F street, Washington, Dec. 8th, . . . . .	0 22 44.2
--	-----------

Chronometer fast of mean time at Richmond, the same day . . . . .	0 24 21.9
---	-----------

Difference of meridians . . . . .	0 1 37.7
-----------------------------------	----------

Longitude of the house in F street 5.1 <sup>sec.</sup> W. 28" N. of the Capitol . . . . .	5 8 12.3
--	----------

Longitude of Richmond . . . . .	5 9 50.0
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Mean of the three estimates, increased by the reduction to the

Capitol in Richmond ( $0.2^{\text{sec.}}$ ) is . . . . .  $\begin{matrix} \text{h.} & \text{m.} & \text{sec.} \\ 5 & 9 & 49.9 \end{matrix}$

In the table of geographical positions, on the map before mentioned, the difference of longitude of the two Capitols is said to be  $25' 54''$  ( $1^{\text{m.}} 43.6^{\text{sec.}}$ ) "as determined from astronomical observations." Hence the long. of the Capitol in Richmond is  $5^{\text{h.}} 8^{\text{m.}} 7.2^{\text{sec.}} + 1^{\text{m.}} 43.6^{\text{sec.}}$  or  $5^{\text{h.}} 9^{\text{m.}} 50.8^{\text{sec.}}$ , which differs but little from the preceding.

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*At the dwelling-house at Montpelier, the seat of James Madison, late President of the United States.*

For the Latitude.

1831, *Nov. 24th.* Observed 19 altitudes of the Sun upon or near the meridian; resulting latitudes,

$38^{\circ} 12' 54.8''$ ;  $57.5''$ ;  $66.0''$ ;  $55.2''$ ;  $56.8''$ ;  $62.5''$ ;  $47.2''$ ;  $36.0''$ ;  $53.7''$

$54.7$ ;  $60.5$ ;  $50.5$ ;  $43.5$ ;  $61.1$ ;  $63.9$ ;  $63.3$ ;  $67.6$ ;  $56.3$

$53.0$ ;

Mean of the 19 observations . . . . .  $38^{\circ} 12' 55.9''$

For the Longitude.

	<i>h.</i>	<i>m.</i>	<i>sec.</i>
<i>Nov. 24th.</i> Chronometer fast of mean time at Montpelier	0	27	1.9
Chronometer fast of mean time at the University of Virginia,			
the same day, . . . . .	0	28	6.7
Difference of meridians . . . . .	0	1	4.8
Longitude of the University Observatory . . . . .	5	14	5.9
Longitude of Montpelier . . . . .	5	13	1.1

---

*At Washington, at a house in F street, exactly east of the President's House.*

For the Latitude.

*Dec. 8th.* Observed 2 altitudes of the Sun upon or near the meridian; resulting latitudes,

$38^{\circ} 53' 22.5''$ ;  $21.1''$ . Mean of them  $38^{\circ} 53' 21.8''$  — reduction to the latitude of the Capitol = latitude of that building . . .  $38^{\circ} 52' 54''$

---

*At Baltimore, at a place about 100 feet S. S. W. of the Battle Monument.*

For the Latitude.

1831, <i>Dec. 23d.</i> Observed 10 altitudes of the Sun upon or near the meridian ; resulting latitudes,	
39° 16' 94.5'' ; 44.5'' ; 70.3'' ; 66.2'' ; 77.4'' ; 62.4'' ; 89.7'' ; 65.3''	
69.4 ; 73.7.	
Mean of the 10 observations . . . . .	39° 17' 11.3''
<i>Dec. 25th.</i> Observed Sun's meridional alt. ; resulting lat.	9.5
“ <i>26th.</i> Observed Sun's meridional alt. ; resulting lat.	24.1
Mean of the 12 observations . . . . .	39 17 12.3
Therefore, the latitude of the Battle Monument is . . . . .	39 17 13.

For the Longitude.

Chronometer fast of mean time at Baltimore, <i>Dec. 24th,</i>	h. m. sec.
Chron. fast of mean time in F street, Washington, same day,	0 21 47.7
Difference of meridians . . . . .	0 1 40.4
Longitude of the house in F street, Washington . . . . .	5 8 12.3
Longitude of Baltimore . . . . .	5 6 31.9
<i>2dly.</i> Chro. fast of mean time at Philadelphia, <i>Dec. 29th.</i>	0 16 13.4
Chronometer fast of mean time at Baltimore, the same day,	0 22 1.2
Difference of meridians . . . . .	0 5 47.8
Long. of Philadelphia (No. 102, Chesnut street, near 3d street)	5 0 43.0
Longitude of Baltimore . . . . .	5 6 30.8
The mean of the two (5h. 6' 31.3'') may be taken as the longitude of the Battle Monument.	

*At Brooklyn, 5000 feet South, 1 statute mile East, of the City Hall, New York.*

For the Longitude.

Chronometer fast of mean time by Transit clock, <i>Jan. 9, 1832,</i>	m. sec.
Chronometer fast of mean time at Philadelphia, the same day	12 2.5
Difference of meridians . . . . .	4 44.5



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Longitude of Philadelphia, as above . . . . .	h. m. sec.
	5 0 43.0
Longitude of Brooklyn . . . . .	4 55 58.5
By two observations on the eclipse of <i>Feb.</i> 12, 1831, . . . . .	4 55 57.2

*At Providence, at the Old College, Brown University.*

For the Latitude.

1832, *Jan.* 14th, Observed 47 altitudes of the Sun upon or near the meridian ; resulting latitudes,

41° 49' 26.0'' ; 20.1'' ; 20.4'' ; 26.9'' ; 23.3'' ; 23.6'' ; 29.3'' ; 35.1''
34.1 ; 34.7 ; 28.1 ; 34.6 ; 31.4 ; 27.4 ; 26.3 ; 35.0
34.6 ; 35.0 ; 35.5 ; 37.7 ; 36.0 ; 31.2 ; 27.5 ; 28.5
29.8 ; 20.3 ; 16.8 ; 7.0 ; 1.1 ; 3.4 ; 8.0 ; 3.3
23.1 ; 30.3 ; 28.0 ; 26.0 ; 23.5 ; 20.2 ; 18.9 ; 31.4
19.4 ; 25.2 ; 21.4 ; 23.4 ; 23.5 ; 27.1 ; 19.2.

Mean of the 47 observations . . . . . 41° 49' 25.0''

For the Longitude.

Chronometer fast of mean time at the College, <i>Jan.</i> 13, 1832,	h. m. sec.
	0 2 1.3
Chronometer fast of the transit clock at Brooklyn, same day,	0 12 15.5
Difference of meridians . . . . .	10 14.2
Longitude of Brooklyn, as above, . . . . .	4 55 58.5
Longitude of the Old College, Providence, . . . . .	4 45 44.3
<i>2dly.</i> Chron. fast of mean time, at Providence, <i>Jan.</i> 16th,	0 2 10.6
Chronometer fast of mean time at Boston, the same afternoon	0 0 41.6
Difference of meridians . . . . .	0 1 29.0
Longitude of the State-house in Boston . . . . .	4 44 16.6
Longitude of the Old College, Providence, . . . . .	4 45 45.6
By observations on the eclipse of <i>Feb.</i> 12, 1831, . . . . .	4 45 43.7
The mean of the three is . . . . .	4 45 44.5

### XIII.

*Tables exhibiting the Number of White Persons in the United States, at every Age, deduced from the last Census.*

BY J. INGERSOLL BOWDITCH.

*Communicated by the President of the Academy.*

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TABLE I. This table exhibits the number of white persons in the United States, in classes, as given by the last census.

TABLE II. The object of this table is to show the number of white persons living, at every age, in the United States. It is deduced from Table I, by interpolation for every 10 years from 20 to 100. Below 20 years the numbers are irregular, and we have therefore used the total number from birth to 19 years, without reference to the four classes into which it is divided. This irregularity renders it impossible to form a satisfactory table for these years; but if the present method of enumeration be continued with more minuteness in the ages below 20 years, we shall probably acquire sufficient data to form more accurate Tables of Mortality for this country, than any now extant.

From this table the expectation of life might be ascertained, provided the number of inhabitants did not vary; but it has been found from the enumerations made within 40 years, that there has been an annual increase of about three per cent. If we

apply to the numbers in Table II, above 20 years, a correction for this increase, the expectation of life will be nearly as follows :

Age.	Exp.	Age.	Exp.
20	36.32	60	15.79
30	32.20	70	9.52
40	28.21	80	4.96
50	21.77	90	2.34

which numbers agree nearly with the tables by Dr. Wigglesworth.

TABLE I. *Containing the Number of White Persons in the United States, according to the Census of 1830.*

Under	5	years of age		1,892,298
Of	5	and under	10	1,534,286
"	10	" "	15	1,310,751
"	15	" "	20	1,173,327
"	20	" "	30	1,868,564
"	30	" "	40	1,148,161
"	40	" "	50	724,795
"	50	" "	60	453,428
"	60	" "	70	265,776
"	70	" "	80	116,170
"	80	" "	90	33,517
"	90	" "	100	4,477
"	100	and upwards		508
				10,526,058



TABLE II. Exhibiting the Number of White Persons living, at every age, in the United States, deduced from the Census of 1830.

Age.	Number of living persons.	Age.	Number of living persons.	Age.	Number of living persons.	Age.	Number of living persons.	Age.	Number of living persons.
0	431,597	20	227,744	40	87,073	60	33,661	80	4,593
1	368,820	21	217,843	41	83,609	61	31,860	81	4,189
2	342,495	22	208,304	42	80,232	62	30,151	82	3,918
3	328,995	23	198,988	43	76,904	63	28,530	83	3,650
4	319,185	24	190,033	44	73,708	64	26,956	84	3,424
5	310,815	25	181,305	45	70,557	65	25,470	85	3,198
6	303,795	26	172,934	46	67,543	66	24,121	86	2,973
7	297,675	27	164,833	47	64,574	67	22,861	87	2,749
8	292,410	28	157,047	48	61,692	68	21,645	88	2,524
9	287,865	29	149,533	49	58,903	69	20,521	89	2,299
10	283,410	30	142,334	50	56,161	70	19,168	90	1,523
11	279,090	31	135,405	51	53,551	71	17,594	91	1,013
12	274,815	32	128,788	52	50,986	72	15,793	92	674
13	270,495	33	122,443	53	48,555	73	13,857	93	448
14	266,130	34	116,459	54	46,170	74	12,014	94	298
15	261,720	35	110,834	55	43,877	75	10,258	95	198
16	257,265	36	105,387	56	41,625	76	8,682	96	132
17	251,910	37	100,259	57	39,511	77	7,333	97	88
18	245,160	38	95,398	58	37,486	78	6,208	98	59
19	237,015	39	90,854	59	35,506	79	5,263	99	44
Of 100 years and upwards									508
Total number									10,526,058

## XIV.

### *Description of a Machine, called a Gypsey, for spinning Hemp and Flax.*

BY DANIEL TREADWELL, A. A. S.

---

IN all the methods of spinning cotton and wool, whether by the common wheel, or by more elaborate machinery, the material is subjected to a previous process of carding. The effect of this operation is to disengage the fibres from all entanglement with each other, and to leave them in a soft and uniform roll or roving. The spinning consists wholly in elongating these rolls or rovings, and binding the fibres together by a twist. Without the preparation by carding, or some preparation of like kind, it would be impossible to produce any thing like the evenness requisite to the formation of good yarns, by any known means of spinning.

The great length of the fibres of flax and more particularly those of hemp, prevents the possibility of subjecting either of these materials to the process of carding, and the common method of preparing them for spinning is by passing them through the hutchel. Prepared in this way, however, they are incapable of being drawn out in threads like carded cotton or wool, but the interposition of the fingers is constantly required to supply the proper number of fibres, which the spinner takes from a mass,

held about his waist, or upon a distaff. I here speak of flax and hemp in their ordinary state, or having their fibres unbroken; in which state very little success has attended the numerous attempts to form them into threads, by machines worked without the direct aid of human fingers.

To spin flax or hemp by machines of that kind, it has, hitherto, been found necessary to subject them to a process which shortens their fibres to the length of a few inches, bringing them at the same time into a state in which they resemble a roving of cotton. They are then spun by machines not differing in any essential degree from the water spinning-frame or throstle. It has not been found practicable to apply this method to the spinning of hemp for cordage or lines of any kind; the cost of the dressing and preparation, not to mention the loss of strength produced by the breaking up of the fibres, in forming the roving, being too great to bring it into successful competition with hand-work. It is however applied, to a considerable extent, for spinning flax, particularly for coarse cloths.

It will be understood, from the preceding statement, that in the spinning of flax or hemp by machinery, as hitherto practised, one machine alone is used which is peculiar to that manufacture, the machine by which their fibres are shortened and formed into a roving. This machine consists of a cylinder about the periphery of which are placed numerous steel points. Near this cylinder is a pair of strong rollers. The cylinder and the rollers are geared, and, when in motion, the face of the rollers has six or eight times the velocity of the cylinder. The flax, being supplied to the cylinder, and passed between the rollers, is drawn through the points as through a hatchel. Several of these rovings are then just put together, and the process is repeated until the fibres are sufficiently reduced for spinning.



To prepare the material for the machine which I am about to describe, it is formed into a large sliver or roving. This may be done by drawing it out lengthwise, by hand, or by a simple machine which it is not necessary to describe in this place. It is not requisite that the roving should be of equal size or smoothly formed. Thus made, it is passed into the machine, and lies in a hatchel, which is formed upon a belt, and every fibre is free to be moved in the direction of its length, without carrying any other fibres with it, whenever a proper force is applied for the purpose. The instruments by which this force is applied are a pair of rollers, which are moved with a constant velocity. Provision is made in the machine, that, whenever the number of fibres between the rollers is too small to form a yarn of the required size, the hatchel containing the roving shall advance and present a new supply of fibres to the drawing-rollers. This advance is made with a greater or less velocity, corresponding in some degree with the quantity of the supply required. When, by the supply thus given, the yarn has become of the required size, the hatchel ceases to advance, and further, if the supply has become too great, a small hatchel or comb is made to pass into the roving between the drawing-rollers and the hatchel-belt, and thus some of the fibres are broken off, and the advance of any loose fibres, that were drawn along by others in contact with them, is interrupted. When by this means the yarn has become of the proper size, the comb is made to rise from the roving, which may then be advanced as shall be required for the supply of the rollers.

With this view or general outline of the machine, I will proceed to describe it in detail, in connexion with the drawings hereto annexed. [See Plates VI., VII., VIII., and IX.] These were reduced from, and represent, a machine for spinning rope-

yarns. The size of the several parts of the drawings, is to that of the machine, as one is to eight. Machines for finer threads or linen yarns must necessarily be made smaller than that here given, in proportion to the fineness of the thread or yarn required. The machine may be considered as divided into two parts ; *figs.* 1, 2, 3, 4, and 5, representing the part by which a small filament is drawn from a column or roving, and which is called the *drawing-frame* ; *figs.* 14, 15, and 16, the part by which the filament is twisted and wound up, and which is called the *bobbin-frame*.

*Fig.* 1 represents, in elevation, a side view of the drawing-frame. *Fig.* 2 represents a plan of that part of the same frame, which is situated above the dotted line passing across *fig.* 1. *Fig.* 3 is a section of the same frame, the part above the dotted line being removed. This figure is a plan. *Fig.* 4 is an elevation of the drawing-frame as seen on the end where the filament is delivered from it.

*Fig.* 5 is an elevation as seen on the end where the hemp or roving enters the machine. *Figs.* 6, 7, 8, 9, 10, 11, 12, and 13, are parts as seen detached from the machine. The same letters and signs are used to mark the same part as seen in any of the figures.

I shall now proceed to describe the drawing-frame. *A A A* represent the wooden frame-work of the drawing-frame. Across the top of this frame pass two shafts, supported in proper boxes, to which *B B'* two pulleys are fixed, and about which the hatchel-belt *C C C* passes and by which it is carried. This belt is formed as follows. A number of rows of iron or steel points are made and riveted or screwed firmly into iron plates, called the *hatchel-plates* ; see *fig.* 6. Each row contains 7 points. There is moreover at each end of every row of points, a pin having a head at its top. These pins are somewhat longer than

the points. Before fixing the pins to the hatchel-plate, a second plate of iron, *x* *fig. 6*, and *fig. 8*, pierced with nine holes, at distances corresponding with the points and pins, is placed upon the points, the pins are then put in their place and riveted to the hatchel-plate. This plate *x* is called the *clearer* and can be moved freely up and down upon the points and pins, the pin-heads preventing it from falling off or being removed; it is longer than the hatchel-plate, over which its ends project, as seen in *fig. 8*. A strap of leather, or of strong webbing, three inches and a quarter wide, and long enough to form a belt about the pulleys *B B'*, is pierced with holes in rows crosswise, each row having five holes at distances equal to those of the five middle pins, *fig. 6*. The cross rows are distant from each other seven eighths of an inch, and the holes do not form perfect rows lengthwise, but they are arranged as seen at the white spots *C C C*, *fig. 2*. The strap thus pierced is passed between the clearer and the points, the clearer being raised as seen in *fig. 6*, and the points are inserted in a row of holes. This operation is repeated until all the holes are filled, and the strap is then pressed down upon the hatchel-plate. In filling the strap the rows of points are turned so that the wide space between the first and second points, *fig. 6*, shall be to the right and left alternately in the successive rows. Another strap, of like dimensions with that just described, but not pierced, is then laid upon a table, and the strap containing the rows of points is placed directly over it, the points being upwards. Two rivets are then fixed between every two rows of points, through both straps. The straps, with the points thus fixed to them, are then passed round the pulleys *B B'*, and, the ends being fastened together, they form the hatchel-belt as seen at *C C*, &c. As the hatchel-belt is liable to stretch by use, the binder pulley *D* is required to keep it to a



proper tension. To keep the hatchel-belt even upon the pulleys *B B'*, the guide, *fig. 7*, is fixed to the frame *A A*, the parts *E E* of the guide point downwards, and the hatchel-plates pass between them. *E, fig. 1*, shows the end of the guide in its place. Two cast iron rails *F F F'*, *figs. 1* and *2*, are fixed parallel to each other upon the top of the wooden frame *A A*, standing above it upon feet or pillars which are fixed to the frame. The distance between these rails is just equal to the length of the hatchel-plates, and their position is such that the hatchel-belt is between them. The end *F* of both rails is one quarter of an inch above the line of the top of the pulleys *B B'*, while from *F* to *F'* the rails incline upwards, so that the ends *F'* rise one inch above that line, and, passing by the ends of the pulley *B'*, at the right hand in *fig. 1*, they turn down in a curve, as seen in the figure. There is a projecting ledge on the inside of each rail about one inch wide, running in the line of the tops of the pulleys *B B'*; upon these ledges the ends of the hatchel-plates rest or slide, thus keeping the hatchel-belt straight. The ends of the clearers, which project over the hatchel-plates, rest or slide upon the tops of the rails *F F F'*. Two curved plates of iron *G G* are fastened by the wooden blocks *H H* to the frame *A A*, and are called the *forcing-plates*. The *figs. 1, 2*, and *5* will show the shape, place, and position of these plates. The pillars *I I*, &c. are fixed upon the rails *F F'* and form bearings for the gudgeons of the pulleys *J J*, &c., about which is passed the bobbin-belt *K K*, &c. This belt is made of a number of small wooden cylinders called *bobbins*. Every bobbin has a slit sawed in each of its ends. A number of bobbins are then laid parallel to each other at proper distances, and straps are passed into the saw-slits and fixed there. When a sufficient number are in this way put on the straps, they are passed round the pulleys *J J J*, &c.,

and the ends of the straps are fastened and form the bobbin-belt, as seen in the figures. A tin tunnel *L* is fixed between the forcing-plates *G G*, for the purpose of directing the roving or sliver of hemp *M* into the hatchel-belt. This tunnel runs in the direction of the dotted line, between the forcing-plates, until it nearly meets the bobbin-belt.

I have thus described that part of the drawing-frame, which holds or carries the hemp, and from which it is drawn to form a filament. I will next describe the apparatus by which it is drawn out. The roller-sill *N N*, of cast iron, is fixed to the wooden frame *A A*, running across the top, as seen in *fig. 4*. There are fixed upon the top of the roller-sill, the four pillars *O O P P*. *O O* are similar to each other; and the size, shape, and place of them will be seen in the *figs. 1, 2, and 4*. *P P*, which are likewise similar to each other, but different from *O O*, are not seen distinctly in those figures. I have therefore marked their shape in *fig. 9, P*, which is an elevation, as they would be seen on *fig. 1*, if they were not hidden by other parts. The levers *Q Q* are hung by pins forming fulcrums or axes in the pillars *P P*. These levers are connected together by the crooked iron bar *R*, so that one cannot rise or fall unless the other rises or falls with it. The steel rollers *S S*, called the *drawing-rollers*, are made to run, one, the lower, in the pillars *P P*, and the other, the upper, in the levers *Q Q*. *Fig. 9* shows the holes which form boxes for the gudgeons of the rollers. The drawing-rollers are coupled by the plates *T T* to the shafts *U U*, running in the pillars *O O*, and connected by the geer-wheels *V V*. The roller-sill has a projection on one side, passing towards the hatchel-belt. A piece of cast iron *W* is fixed upon this projection, and upon *W* is fixed the gatherer *X*. This is made of plates of iron in nearly the form of an unequal four-sided pyramid, with its open base

towards the hatchel points and its truncated apex opening between the drawing-rollers; being shaped so as to conform to those portions of the rollers which are situated against it. To prevent the end of the gatherer last described from being worn, two pieces of steel plate are screwed upon the inside of both sides, being shaped to conform to the rollers, as the sides of the gatherer are. The top of the gatherer passes off towards the bobbin-belt, and a piece of tin or thin iron plate is bent over it on each side, and passes down nearly to touch the hatchel-plates, inside of the hatchel-pins and outside of the hatchel-points. This is called the tail of the gatherer, and is seen at *Y*. The top of the gatherer has several slits cut through it, so that the teeth of the comb, *S b*, hereafter described, can pass through it. There is moreover in the gatherer a false bottom, hung by a joint at the end nearest the drawing-rollers, and capable of being swung upwards like a trap-door. This false bottom has slits across it, corresponding with those through the top. *a* is a fast pulley upon the shaft *b*, to which the power is applied, by means of a belt, to drive the machine. *a'* is a loose pulley on the same shaft *b*, on which the driving-belt may run when the machine is at rest. On the end of the shaft *b* is the pinion *c*, which drives the wheel *d d*, fixed on the shaft *U*, which is coupled to the lower drawing-roller *S*.

Let us now suppose a roving of hemp to be passed into the tunnel *L*, and the pulley *B* to be turned in the direction of the arrow; the bobbins lying between the rows of hatchel-teeth must be carried along with the hatchel-belt; and as, some of the bobbins, by their connexion, in forming the bobbin-belt, constantly pass out of the hatchel-belt on the right, so others constantly pass into it on the left. When, therefore, the roving of hemp, passing into the tunnel *L*, meets the hatchel-points, it is



pressed between them by the bobbins, and passes along in the hatchel-belt until it arrives near the end  $F'$  of the rails  $F F'$ . Now as the rails pass beyond the pulley  $B'$ , to the right, and as the clearers (see *fig. 6*), as has been before described, pass on the top of the rails, it is evident that they will be raised upwards, upon the hatchel-points; and as the roving of hemp is always above them, this also must be lifted out of those points. Suppose that the end of the roving be then passed through the gatherer  $X$ , and that it be made to enter between the drawing-rollers. If the drawing-rollers are now turned faster than the hatchel-belt carrying the roving, the roving must be drawn out through the hatchel-points by the rollers, forming a filament as much smaller than the original roving, as the rollers move faster than the hatchel-belt. If, however, the relative motions be constant, then these proportions will be true only when the mean size of the filament is compared with the mean size of the roving, for the roving is not supposed to be of equal size throughout, and moreover the ends of the fibres of hemp cannot be distributed at equal distances in it; hence more of these ends will be taken into the rollers together at some times than at others. Now when many ends meet the rollers together, many fibres must be drawn out of the hatchel together and the filament be made larger than at other places, where the ends of fibres, by being distributed in the roving at greater distances, meet the rollers less frequently. To prevent, as much as possible, this inequality in the filament, I use the apparatus now to be described, which I call the *regulator* and the *comb*. A small cast-iron frame  $e e e$ , &c. is fixed upon the wooden frame  $A A$ , as seen in the drawings. The shaft  $f f$  is made to run on proper centres, fixed in the frame  $e e$ , and there are placed upon it the wheels  $g g'$ . (The shaft  $f f$  with its connexions is drawn separate

from the frame in *fig. 10*). These wheels are bored with a round hole, and are capable of turning freely upon the shaft *ff*, except as hereinafter described, but are prevented by proper collars from slipping in the direction of the length of the shaft. A second shaft *hh* is made to run upon centres in the frame *ee*, parallel to *ff*. There are firmly fixed upon the shaft *hh* the wheels *iv*. The wheels *g* and *v* have fifty teeth each, the wheels *g'* and *i* have seventy teeth each, and the diameters of all the wheels are in proportion to the number of their teeth. The teeth of *g* play into those of *i*, and the teeth of *g'* play into those of *v*. There are two locking-pins or catches *kk'*, fixed upon the wheels *gg'*. *ll* are two clutch-boxes placed upon the shaft *ff*. These clutch-boxes are free to slide in the direction of the axis of the shaft; but in the shaft are fixed pins, which project into a groove, cut lengthwise, on the inside of each clutch-box, so that the boxes cannot turn round upon the shaft. Several parallel grooves are turned in the body of each clutch-box. The catches or locking-pins *mm'* are fixed upon the clutch-box *l'*, and the catch *n* is connected with the clutch-box *l* by a movable joint which permits its outer end to fall back towards the middle of the clutch-box; it is prevented, however, from falling back, except on the application of a slight force by a steel spring, which is fixed at one end to the clutch-box, while the other end presses upon the catch *n*. There is a stop screwed to the clutch-box to prevent the spring from forcing the catch *n* outwards beyond a certain distance. A slide-bar *oo* is placed in the frame *ee*, parallel with the shafts *ff* and *hh*, and is capable of being moved in the direction of its length, and in that direction only. Two arms *pp* are screwed upon the top of this slide-bar, and pass from it towards the shaft *ff*, and terminate directly over the clutch-boxes *ll*, that is, one arm over each clutch-box. There are fixed

to the under side of each arm *p p* metal blocks or boxes *q q*, which pass down to the clutch-boxes. The under sides of *q q* are formed in the shape of a portion of a hollow cylinder, and are grooved so as to embrace the clutch-boxes upon the grooves, before described upon them through about one third of their circumference. (Fig. 11 shows the slide-bar *o o*, and arms with the boxes *q q*, separated from the other work. The fig. represents the under side of these parts.) A long shaft, or axle *r r r*, passes horizontally from under the slide-bar *o o* to the right hand, as seen in the drawings until it projects beyond the frame *A A*, &c. (In *fig. 2* this shaft is supposed to be broken off under the drawing-rollers *S S*, and the left-hand part is removed.) *r r r* is hung in centres which are fixed in the iron bearing *s s*. This bearing is bolted to the frame *A A*, &c., and prevented from springing by the iron brace *G d*. The arm *t* passes horizontally from the right end of *r r*, and the arm *t'* rises vertically from its other end, directly under the slide-bar *o o*. A steel spring *u* is fixed upon the shaft *r r* near its middle. This spring runs along on the side of the shaft and turns upwards against the side of the arm *t'* until it reaches the top of *t'*, against which it presses with its whole elastic force. A connecting rod passes from a hook in the top of the spring *u* to another hook fixed in the under side of the slide-bar *o o*. *v* is a bent lever, its fulcrum being a pin which passes through its middle and unites it to the bearing *w*, which is fixed to the frame *A A*. The vertical arm of the lever *v* is united at its top, by a connecting rod, with a hook, which is fixed in the bottom of the slide-bar, and the horizontal arm of the same lever is connected with the weight *y*. These hooks and connecting rods will be found in their places in *fig. 5*, from the description, no letters of reference being thought necessary. (It will be seen in *fig. 1* that the shaft *r r*, and the bearing *s s*, are continued, in dot-



ted lines, behind a part of the frame  $AA$ ; the spring  $u$ , the weight  $y$ , and some other parts will likewise be found, in dotted lines, in the same figure. From the arm  $t$  of the shaft  $rr$ , there passes upwards the rod  $1a\ 1a$ , which is united with  $t$  by a moveable joint, to the cross-bar  $2a\ 2a$ . The rod  $1a$  passes through the middle of  $2a$  and receives a thumb-nut upon its top. The connecting rods  $3a\ 3a$  pass from the ends of the cross-bar  $2a$ , and are united by pins to the levers  $Q\ Q$ , one rod uniting to each lever.

In addition to the parts heretofore described as connected with the shaft  $ff$ , there is placed, upon that shaft, the star-wheel  $4a$ , a side view or elevation of which is given, detached, in *fig. 12*.  $5a\ 5a\ 5a\ 5a$  are plates of steel screwed upon the sides of the projecting points of the star-wheel, and the width of these plates is greater than the thickness of the points of the wheel, so that they project over the sides of the points. The star-wheel is fitted to the shaft  $ff$ , like the wheels  $g\ g'$ , the shaft passing through a round hole in its centre; and proper collars are fixed to the shaft, on each side of it, to prevent it from sliding in the direction of the length of the shaft. A wooden lever  $6a\ 6a$  passes from a point near the star-wheel, horizontally, to a point directly under the gatherer. A piece of brass is screwed upon the under side of this lever, near its middle, and a pin passes through this brass and through the cast-iron pillars  $7a\ 7a$ , which are fixed to the frame  $AA$ . This pin forms the fulcrum on which the lever turns. Two other pillars  $8a\ 8a$  rise from the frame  $AA$ , on the sides of the lever  $6a$ , to prevent it from having any lateral motion. A small piece of steel  $9a$ , which I call *the bob*, is united to the end of the lever  $6a$  by a pin passing through it, near its middle, and likewise through two knuckles standing out from a piece of brass,  $1b$ , fixed to the under side of the lever  $6a$ . The lower end of the bob  $9a$ , when the lever  $6a$  is in the position shown in the draw-

ings, is in the horizontal plane of the centre of the shaft *ff*; but so far from that shaft to the right, as seen in *figs. 1* and *3*, that the projections of the star-wheel *4a* are just capable of reaching it, and throwing it upwards whenever the star-wheel is turned round for the purpose. A stop *2b*, of iron, is screwed upon the top of the lever *6a*, and a slight spring *3b* tends to keep the top of the bob against the stop *2b*. A pall or click *4b*, having its lower end connected by a pin with the frame *ee*, passes upwards through a hole or slot in the slide-bar *oo*, by the side of the lever *6a*. The click *4b* can move on the pin which unites it with the frame *ee*, with which it forms a hinge-joint, so that its top may describe an arc in the direction of the length of the slide-bar. A spring is fixed to the frame *ee* (seen in dotted lines in *fig. 3*), which acts against the click *4b*, and tends to press it against the lever *6a*; so that whenever the end of that lever (at the left hand in *figs. 1* and *3*) is raised above the top of the click, then the click slips under a piece of steel which is fixed upon the corner of the lever, where the click meets it, and holds it up. But, as will be hereafter seen, it is required that the click should not remain under the lever, except when the clutch-box *l'* is carried by the slide-bar *oo*, so near the star-wheel, that the catch *m'* is engaged against one of the plates *4a*; therefore, to remove the click *4b* from the lever *6a*, except in the case before stated, a piece of iron, constituting a stop, is screwed over one side of the hole or slot in the slide-bar, so that whenever the slide-bar is moved so far to the right (as seen in *fig. 5*) as to disengage the catch *m'* from the star-wheel, then the stop, above described, shall press upon the side of the click *4b*, opposite to that against which the spring rests, and, bending the spring, disengage the click from under the lever. *5b* is a weight upon the left arm of the lever *6a*, tending to depress the arm to which it is attached.

To the top of the lever *6a*, near its right end, as seen in *figs.* 1 and 3, is united, by a hinge-joint, the cross-bar *6b*, to each end of which are fixed rods, *7b 7b*, which pass directly upwards through guide-holes in the piece of cast-iron *W*, each side of the gatherer, and on the outside of the same, and are fixed by their tops to the comb *8b*. The comb is formed of several rows of iron or steel teeth, riveted to an iron plate; the dots on the top of the plate in *fig.* 2, show the number and place of the teeth. The several rows of teeth are directly over the slits in the top of the gatherer, which have been before described; and, on the application of a proper force to depress the comb, the teeth pass through these slits into the roving of hemp which is in the gatherer. Two cast-iron pillars *9b* are fixed to the frame *A A*, &c., and rise upwards above the lever *6a* on each side of the same. A small lever *1c* is placed between the pillars *9b*, directly over the lever *6a*, and is hung upon a pin which passes through *9b 9b*, near their tops and through *1c*. This pin forms a fulcrum or axis on which *1c* turns. To the right end of *1c*, as seen in *figs.* 1 and 3, there is connected, by a movable joint, the rod *2c*, which passes directly upwards, through guide-holes in the piece of cast-iron *W*, and the bottom of the gatherer, before described. The left end of the lever *1c*, as seen in *figs.* 1 and 3, is connected with the lever *6a* by hooks. It will be readily perceived, by this description and the figures, that when the right end of the lever *6a* is depressed, the right end of *1c* will be elevated and will carry the rod *2c* upwards, which will lift the false bottom, before described, of the gatherer, the teeth of the comb passing at the same time through the slits, before described, made in the false bottom of the gatherer. Upon the shaft *b b* is fixed the pulley *3c*, from which a belt passes to and over the pulley *4c*, fixed upon the shaft *f f*. Upon the shaft *h h* is fixed the pulley *5c*; and from



the pulley *5c* a belt passes to and over the pulley *6c*, which is fixed upon the shaft *7c*, running in proper boxes in the upper part of the frame *A A*, &c. The shaft *7c* has the pinion *8c* fixed upon it, and this pinion drives a wheel *9c*, which is fixed upon the shaft *1d*, running in boxes upon the top of the frame *A A*, parallel to *7c*, and carrying, besides the wheel *9c*, the pinion *2d*. The pinion *2d* drives the wheel *3d*, which is fixed upon the shaft of the pulley *B*.

To understand the operation of the regulator, the comb, and other apparatus connected with and necessary to it, let us suppose the roving of hemp to have been passed through the tunnel *L*, and along the hatchel-belt, and its end to be between the drawing-rollers *S S*. Let us also suppose that a constant rotary motion be given to the rollers *S S*, in the direction required for drawing out the filament, through their connexion, by the shafts, wheels, pinion, &c., which have been before described, with the pulley *a*, which is driven by a belt carried by any sufficient power. The motion from the pulley *a* must likewise be communicated to the pulley *3c*, and from thence through the belt passing from *3c* to *4c*, by which the shaft *ff* must also be turned. Suppose, moreover, that the thumb-nut upon the top of the rod *1a* has been so fixed, that when the filament, between the rollers *S S*, is of the required size, the catches *m m' n* shall also be disengaged. In this state of things the motion of the shaft *ff* will not be communicated to the wheels *g g'*, nor to the star-wheel *4a*, but they will all remain at rest with the shaft *ff* revolving in them. As the hatchel-belt is, under this condition, stationary, the roving is not advanced to the drawing-rollers, and it must therefore soon happen that the filament will become too small; as soon as this is the case in a small degree, the upper drawing-roller, which presses upon and is supported by the filament beneath it, must

fall, and the ends of the levers  $Q Q$ , which pass from the rollers to the right in *figs.* 1 and 2 must be depressed, and the rods  $3a$ , the cross-bar  $2a$ , and the rod  $1a$  likewise must drop downwards. Now the weight  $y$ , acting, through the lever  $v$ , upon the slide-bar  $o o$ , tends constantly to draw the slide-bar to the right, as seen in *fig.* 5; but this tendency is, ordinarily, resisted by the connexion of the slide-bar with the spring  $u$ , fixed upon the shaft  $r r$ , the horizontal arm  $t$  of which shaft is united by a joint with the rod  $1a$ . When, however, the rod  $1a$  passes downwards, the arm  $t$ , no longer supported, cannot keep the shaft  $r r$  and the spring  $u$  in their former position, but it suffers the weight to carry the slide-bar to the right, the slide-bar carrying with it the top of the spring  $u$ , which at the same time rolls the shaft  $r r$ , depressing the arm  $t$ . When the slide-bar  $o o$  moves, as herein described, to the right, it carries the boxes  $q q$ , and likewise the clutch-boxes  $b b'$  with it. The clutch-boxes are, by reason of their connexion with the shaft  $f f$ , as before described, always constrained to revolve with the shaft  $f f$ , and the catches  $m$  and  $n$  are, of course, carried round with them. If, therefore, the clutch-boxes are carried far enough to the right, as seen in *fig.* 5, the catches  $m$  and  $n$  would strike the pins  $k'$  and  $k$  respectively; but as the pin  $k$  is longer than  $k'$ , and approaches more nearly to the circle described by  $n$ , than the pin  $k'$  approaches that described by  $m$ , the motion of the slide engages  $n$  against  $k$ , before  $m$  can strike  $k'$ . It will be at once perceived, that as soon as  $n$  is engaged against  $k$ , the wheel  $g$  will be made to revolve; this will drive the wheel  $i$ , by which the pulley  $5c$  must revolve, and the motion of  $5c$  will be communicated by its belt to the pulley  $6c$ , and from thence through the pinion  $8c$ , the wheel  $9c$ , the pinion  $2d$ , and the wheel  $3d$ , to the pulley  $B$ , by the revolution of which the hatchel-belt will be moved and the roving advanced towards the drawing-roll-

ers *S S*, with a certain velocity, which will be found by measuring the several pulleys, wheels, and pinions which are concerned in communicating and modifying the motion. If by the advance of the roving, with the velocity thus obtained, so many fibres of hemp are presented to the drawing-rollers as are required to increase the filament to its proper size, then the upper drawing-roller is raised by the filament, thus increased, and the slide-bar *o o*, by reason of its connexion with the upper roller (through the connecting rod and hooks, the spring *u*, the shaft *r r*, the arm *t*, the rod *1a*, the cross bar *2a*, the rod *3a*, and the levers *Q Q*), will be carried to the left, as seen in *fig. 5*, and the clutch-boxes will be moved with it, by which the catch *n* will be disengaged from the pin *k*, when the wheel *g* and the several pulleys and wheels and pinions by which it gave motion to the pulley *B* must come to a state of rest, and the farther advance of the roving to the drawing-rollers will cease.

Let us suppose, however, that when *n* and *k* are engaged, and the roving advancing, as heretofore described, the size of the filament does not increase; but that, from the smallness of the roving, the fibres are presented to the drawing-rollers so unfrequently that the filament diminishes yet more in size. In this case the upper roller will continue to fall, and the slide *o o*, connected with it by the apparatus before described, will continue to move to the right, as seen in *fig. 5*, until the catch *m* engages the pin *k'*, upon the wheel *g'*, and carries it round with it. Now it will be seen that the wheel *g'* is larger than the wheel *g*, while the wheel *i'* is smaller than the wheel *i*. In this new connexion, therefore, the shaft *h* and the pulley *5c* will be driven faster than they were when their motion was derived from the wheel *g*; and, the greater velocity of the pulley *5c* being communicated by the belt, pulley, wheels, and pinions, as has been



before described, to the hatchel-belt, the roving of hemp must be advanced more rapidly to the drawing-rollers *SS*, and by this the filament receive a greater accession of fibres in a given time. When by this accession of fibres the filament is increased to the proper size, the top roller will rise and the clutch-boxes will be carried to the left, the catch *m* be disengaged from the pin *k'*, and the hatchel-belt and roving will rest. It will be seen that while the wheel *i'* is driven by the wheel *g'*, the wheel *g* must be driven by the wheel *i*; in this state of things the pin *k* will make more revolutions in a given time than the catch *n*, and as they come in contact with each other it is necessary that *k* should pass *n* without a permanent locking. Now when *k* strikes *n* in this way, the contact is upon the sides opposite to those which were struck when *k* was driven by *n*; and to let them pass each other, the sides or corners of both *n* and *k*, which would otherwise catch and interrupt the motion, are taken off, and the end of the pin and the edge of the catch form inclined planes, which sliding upon each other, the catch is forced backwards against the resistance of the spring heretofore described, and thus *k* passes by *n*; the spring always causing *n* to return to its former position after *k* has passed it. Figure 13 shows the form of *n* and *k*. *4d 4d* are the faces which strike when *k* is driven by *n*; and *5d 5d* are the inclined planes which meet when the wheel *g* is driven by the wheel *i*.

Let us now consider the operation when the filament is too large. Suppose that the advancement of the roving, as before described, brings so great a number of the ends of fibres in contact with the drawing-rollers, that the filament not only attains a sufficient size, but becomes too large. In this case the upper roller, supported upon the filament, is elevated above its ordinary place; and by means of the connexions heretofore described, the

arm *t* is carried upwards, the shaft *r* rolling back ; the top of the spring *u* is carried to the left, and the slide *o o*, and the clutch-boxes also, from their connexions, before described, must be carried to the left. This brings the face of the catch *m'* into contact with the projections of one of the plates *5a*, and, from this engagement, the star-wheel *4a* is made to revolve with the shaft *ff*. As soon as this revolution commences, one of the plates *5a*, upon one of the points of the star-wheel, must strike the bob *9a*, and throw the end of the lever *6a*, to which it is attached, upwards, which will be caught and held by the pall or click *4b*. The length of the pall or click *4b* is such, that it catches the lever *6a* when it is carried to the highest point to which the star-wheel can carry it ; consequently, when it is so caught, the points of the star-wheel do not, by their continued revolution, strike with much force, if they strike at all, upon the bob. It will be at once perceived, by an inspection of the drawings, that when the left end of the lever *6a*, to which the bob is attached, is thrown upwards, the right end must be depressed, and the comb *8b* be carried downwards ; at the same time the right end of the lever *1c* must, from the connexion of that lever, as before described, with the lever *6a*, be carried upwards, and, its motion being communicated by the rod *2c* to the false bottom of the gatherer, that will be carried upwards. These motions of the comb and of the false bottom of the gatherer, will cause the teeth of the comb to be passed into the column of roving which is in the gatherer. This will prevent the free passage of the fibres, of which the roving is made up, to the drawing-rollers ; while some of the fibres, the ends of which are already in the drawing-rollers, will be broken off, and thus the size of the filament will be speedily reduced to its proper dimensions. It may happen on the passage of a lock of tow, or a knot of entangled fibres, through the rollers,

that they will be separated to a considerable distance. In this case when the clutch-boxes on the shaft *ff* are brought against the collars of the wheels *g* and *4a*, so that the slide *oo* cannot pass any further to the left, the spring *u* yields as the arm *t* rises, on the separation of the rollers; and as soon as the tow or other matter has passed, and the upper roller falls, the spring *u* returns by its elasticity to its former state. When the filament has been reduced to the proper size, the upper roller must, consequently, fall to the place which that size of filament determines. This motion being communicated to and modified by the various parts connecting the upper roller with the slide *oo*, as heretofore described, the slide-bar must move to the right, as seen in *fig. 5*, and the pall or click *4b*, being, by the action of the stop, fixed, as heretofore described, upon the top of the slide-bar, carried from under the corner of the lever *6a*, the weight *5b* will cause the arm of the lever, to which it is attached, to fall, by which the comb will be raised, and the false bottom of the gatherer will be depressed; and thus no further interruption will be offered to the passage of the roving to the drawing-rollers.

The only parts of the drawing-frame remaining to be described are the cone-pulley *7d* upon the shaft *b*; the shaft *8d*, and the pulleys *9d* and *1e*, upon the same; and the stopping-guide *2e 2e*. But as these parts are connected in their use with the bobbin-frame, I shall notice them as may be necessary hereafter.

Having then described the construction and mode of operation of the principal parts of the drawing-frame, I shall proceed to describe the second part of the *Gypsey*, viz. the bobbin-frame by which the filament is twisted and wound up. *Fig. 14* represents an elevation of this frame in its position, as connected with the drawing-frame. *Fig. 15* is a plan of the bobbin-frame, and *fig. 16* an elevation, as seen in the end next the drawing-



frame. *Figs.* 14 and 15 may appear as continuations of *figs.* 1 and 2. I have however marked them as distinct figures in accordance with the division adopted for describing the whole machine. The wooden frame of the bobbin-frame is represented at *6e 6e 6e*, &c. Across this, near its bottom, passes the shaft *7e*, having its ends, placed in proper boxes, upon the frame *6e 6e*, &c. Upon the shaft *7e* is fixed the cone-pulley *8e*, which is driven by a cross-belt running from the cone-pulley *7d* upon the drawing-frame. There is, moreover, upon the shaft *7e* the bevel-gear wheel *9e*. The flyer is shown at *1f 1f*, &c., its gudgeons, both of which are hollow, running in proper boxes in the frame *6e*, &c. *2f 2f* are sheaves or pulleys over which the yarn runs to be wound upon the bobbin. The bobbin-spindle *3f* runs in a box upon the frame *6e 6e*, and in a bar, marked *4f*, which is placed upon the bars of the flyer, and crosses from one side to the other of the same, and is capable of sliding upon those bars in the direction of their length. It will be understood that the spindle passes through the hollow centre of the right gudgeon of the flyer, as seen in *fig.* 14; the hole through the gudgeon being somewhat larger than the spindle. *5f* is the bobbin placed upon the spindle and kept in place by a pin which passes through an ear, or small piece of iron, which is fixed to the bobbin, and likewise through the spindle. The pulley *6f* is fixed to the bobbin-spindle, and the pulley *7f* is fixed to the flyer. The drum *9f* has its gudgeons placed in proper boxes fixed to the frame *6e 6e*. The bevel-wheel *1g* is fixed upon the shaft of this drum, and being driven by the bevel-wheel *9e*, causes the drum to revolve. A belt passes from the drum *9f* to the pulley *6f*, and another belt from the same drum, to the pulley *7f*. The binder-pulley *2g* rests upon the belt which passes from the drum to the pulley *6f*, for the purpose of keeping that belt at a proper degree of

tension, which may be regulated by weights placed upon the frame in which the pulley revolves, which frame, as will be seen in the figures, is hung by gudgeons that move in the frame 6e, &c.

From what has now been specified, it will be seen that motion being given, as heretofore described, to the drawing-frame, such motion must be communicated from the pulley 7d, on that frame, by the belt, to the pulley 8e on the bobbin-frame, and from thence, by the bevel-wheels 9e and 1g to the drum 9f. It must, moreover, be evident that the pulleys 6f and 7f will, at the same time, be made to revolve, as they are connected by belts with the drum 9f. The filament, therefore, as delivered from the drawing-rollers, being passed through the hollow gudgeon on the left end of the flyer, *fig. 14*, and over the pulleys 2f 2f to the bobbin, to which its end is fastened, must, by the revolutions of the flyer and bobbin, be twisted. In order, however, that it may be wound up on the bobbin, it is necessary that the bobbin and flyer should not make an equal number of revolutions in the same time. Now it will be seen that the end of the drum 9f, from which the belt passes to the pulley 7f, is larger than the other part of the same drum, while the pulleys 6f and 7f are nearly equal in size. Hence the flyer will make a greater number of revolutions in a given time, than the bobbin. The tendency therefore will be, to wind up the yarn upon the bobbin with a rapidity proportional to the difference between the speed of the bobbin and that of the flyer; that is, whenever the flyer shall have passed through one revolution more than the bobbin, then one turn of yarn must be wound up on the bobbin. But the bobbin increases in size as the yarn is wound upon it, and, consequently, the turns of yarn, as the circumference of the bobbin increases, become longer. It is necessary, therefore, that, as the bobbin fills,

it should approach more nearly, in its revolutions, to those made by the flyer. Now the flyer is driven with a uniform velocity, and the filament also is delivered from the drawing-rollers with a uniform velocity. Suppose, then, that the circumference of the bobbin, when naked, be one foot, and that the surface of the drawing-rollers moves through one foot in two seconds, and that the flyer makes twenty revolutions in two seconds. Then, that the yarn may be wound up, the bobbin must make nineteen revolutions in two seconds. When, however, the bobbin, by being filled with yarn, has a circumference of two feet, it is evident that it must make nineteen revolutions and a half in two seconds, that the same object may be accomplished, the velocities of the drawing-rollers and the flyer remaining constant. To provide for the required increase of velocity in the bobbin it is only necessary that the belt which passes from the drum 9*f* to the pulley 6*f* shall be of so slight tension that it may be made to slip, in some degree, by the pulling of the yarn itself upon the bobbin, from the constant tendency, by the flyer, to wind it up.

For the purpose of spreading the yarn over the whole surface of the bobbin it is necessary that the bobbin should be moved, alternately, through a space equal to its length, in the direction of its axis. To accomplish this a collar is placed upon the spindle at 3*g*. This collar runs in a stud 4*g*, which stands upon the slide 5*g*; which slide can be moved in the direction of its length, its right end resting in a proper box on the frame 6*e*. Two chains or straps pass from buckles, on the slide 5*g*, seen in *fig. 14*, over the top of the pulley 6*g*, in opposite directions, and are fastened to the periphery of the pulley on different sides of the same. Two other chains or straps, similar to those above described, pass from buckles on the slide or rod 7*g*, and are connected with the small pulley 8*g*. The pulleys 6*g* and 8*g* are



upon the same shaft *9g*, the gudgeons of which run in boxes in the frame *6e*. The arrangement of chains or straps, connecting the slide *5g* with the pulley *6g*, and the slide or rod *7g* with the pulley *8g*, will be recognised as similar to that often used for moving the pistons of pumps or fire-engines. Upon the shaft *1h*, which runs in boxes on the frame *6e 6e*, is fixed the heart-wheel *2h*. Two pins *3h 3h* are fixed to the slide or rod *7g*, so that their sides are in contact with the heart-wheel on opposite sides of the same. Upon the shaft *1h*, is fixed the pulley *4h*, from which a belt passes to the pulley *5h* upon the shaft *6h*. Upon the same shaft *6h*, is fixed the pulley *7h*, from which a belt passes to the pulley *8h*, upon the shaft *9h*; upon which shaft *9h* is fixed the pulley *1k*. The shafts *6h* and *9h* turn in boxes fixed to the frame *6e 6e*. The pulley *1k* is connected by a belt with the pulley *1e*, heretofore referred to, upon the drawing-frame. It will be seen that there is upon the same shaft with *1e* the pulley *9d*. From this pulley *9d*, a belt passes to and round the shaft *b*.

To understand the effect of the parts last described, in giving an endwise motion to the bobbin, suppose the shaft *b*, of the drawing-frame, to revolve; its motion will be communicated by the belt to the pulley *9d*, which will turn the pulley *1e* upon the same shaft with it. The rotation of *1e* will give motion to *1k*, whence, as will be at once perceived, the pulleys *8h*, *7h*, *5h*, and *4h*, together with the heart-wheel *2h*, must all revolve. The revolution of the heart-wheel gives a rectilinear alternating motion to the rod or slide *7g*. This rod or slide, from its connexion with the pulley *8g*, communicates a circular alternating motion to that pulley, which motion must likewise be common to the pulley *6g*; and *6* must communicate a rectilinear alternating motion to the slide *5g*. It is evident that the motion of *5g* will be communicated

to the spindle *3f*, the bobbin *5f*, the pulley *6f*, and the bar *4f*, which forms one of the boxes in which the spindle revolves. The belt which passes from the pulley *6f* to the drum *9f*, will, during this endwise or rectilinear alternating motion of the bobbin, pass along over the bodies of the drum *9f*, and the binder-pulley *2g*. To persons acquainted with spinning-machinery, there will probably appear an unnecessary minuteness of detail in this and some other parts of the description of operations, which are similar to those of the common spinning-frame. My excuse must be, that a mere indication of parts and motions would not enable one unacquainted with the common process of spinning to understand this machine.

There remains to be described only the apparatus by which the motion of the machine is destroyed whenever the thread or yarn is from any cause broken. The first part of this is called the stopping-guide, and is seen on the drawing-frame marked *2e* *2e*, in *figs.* 1 and 2. It is a rod of iron, hung by a hinge-joint at one end to the frame *AA*, &c. From the end which forms the joint, the rod passes horizontally towards the bobbin-frame; when it reaches nearly to that frame, it is bent so as to pass directly under the filament or yarn, where it is under the operation of twisting; from this it is again bent upwards so as to form a sort of hook which lies against the side of the yarn, as seen in *fig.* 1. Upon one side of the rod thus described is riveted a piece of iron, forming a forked guide, as seen in *fig.* 2; and through this fork, as here seen, the main belt, by which the machine is driven, passes from a drum above, to the pulley *a*. To the end of the stopping-guide, next to the bobbin-frame, is fixed a cord which passes from it to and over the sheave or pulley *4e* placed upon the bobbin-frame, seen in *fig.* 16; and to the end of this cord a small weight is attached.

To understand the operation of this apparatus, let us suppose the main belt to be running upon the fixed pulley *a*, by which the machine must be kept in motion. Under this condition, if the yarn be forming, and whole, and attached to the bobbin, it will be drawn in a right line from the drawing-rollers to the axis of the flyer. At the same time the weight, attached to the cord which passes from the stopping-guide, as before described, tends constantly to draw the end of the stopping-guide towards the pulley *4e*; but as the end of the stopping-guide passes upwards by the side of the yarn, it cannot move towards the pulley *4e* without carrying the yarn before it, and in this it is resisted by the whole tension of the yarn. Under these conditions, therefore, the main belt will continue to run on the pulley *a*. When, however, the yarn breaks, the force which kept the stopping-guide in its place is destroyed, and it is moved at once, by the action of the weight upon the cord, towards the pulley *4e*, and by this motion the main belt is carried, by the forked guide, over to the loose pulley *a'*, and, consequently, the motion of the machine will no longer be maintained.

It is not necessary that I should speak of the utility of the machine which I have now described. I may however say, that a sufficient number are in operation, at the single mill of the Boston Hemp Company, for the annual manufacture of one thousand tons of hemp into rope-yarns. The yarns thus made, are found to possess greater evenness and greater strength than those made in the ordinary way. They are, moreover, made at less cost; which, in manufacturing, is, other things being equal, the universal and only true measure of utility.



## XV.

*A Dictionary of the Abnaki Language, in North America; by  
Father SEBASTIAN RASLES. With an Introductory Me-  
moir and Notes,*

By JOHN PICKERING, A. A. S.

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### INTRODUCTORY MEMOIR.

THE impûse which has been lately given by our distinguished American scholar, Mr. Du Ponceau, to the study of the Indian Languages of America, has been already attended with the most important advantages to the science of Philology. His profound learning and untiring zeal have irresistibly drawn the attention of the learned in Europe and America to this extraordinary, but long neglected class of languages, and have been the means of not only inciting our students in the pursuit, but also of bringing to light, and preserving, various dictionaries and grammars, particularly manuscripts, which, but for his interest in the subject, might have perished for ever.

The learned have been already informed, by his admirable Report on the Indian Languages (published in the Transactions of the Historical and Literary Committee of the American Philosophical Society at Philadelphia\*), that several Grammars, Vocabularies, copious Dictionaries, and other manuscript works on the Indian Languages have been collected, and are now deposited in the Library of that Society; one of which, the invaluable Grammar of the *Lenni-Lenápe*, or Delaware Language, written in German, by the Rev. David Zeisberger, has with great labor

\* Vol. I. p. xvii. Philad., 1819.

been translated by Mr. Du Ponceau himself, and enriched with an able and interesting Preface and Notes by the translator.\*

In consequence of the great interest which was thus excited by that learned writer in the study of these languages, my own attention was drawn to the subject; and I began to make inquiries, in this part of our country, for such memorials of them as were still to be found among us; hoping that I might render some small service, by collecting and preserving these valuable materials for the use of those persons, whose leisure and ability would enable them to employ them more advantageously, than it was in my power to do, for the benefit of philological science.

The printed books relating to these languages are well known to readers in general. Among them, the wonderful work of Eliot, "the Apostle," I mean his entire translation of the Old and New Testaments, and his Grammar of the Massachusetts Indian Language, are in every respect the most remarkable.

But of all the memorials of the aboriginal languages in the Northern Atlantic portion of America, the following Dictionary of the *Abnaki* language (or *Abenaqui*, as it is often called, after the French writers,) is now among the most important. In order, however, that its value may be justly appreciated by those who have never directed their attention to this subject, it may be necessary to make a few general remarks upon the dialects of this continent.

According to Mr. Du Ponceau, whose opinion is adopted by other American philologists, the various Indian dialects on the Northern Atlantic side of America may be classed under four principal stocks or families: 1. The Karalit, or language of Greenland and the Esquimaux; 2. The Iroquois, called by some of the early French writers the *Huron*; 3. The Lenni-Lenápe, called

\* Published in the Transactions of the American Philosophical Society, Vol. III., New Series, 1827.

by the French Canadians, Lénôpé, and by us, the Delaware;  
4. The Floridian, or Southern stock.

The Lenápe is the most widely extended of the languages spoken eastward of the Mississippi. It is found, in various dialects, throughout Canada from the coast of Labrador to the mouth of Albany River, which falls into Hudson's Bay, and from thence to the Lake of the Woods. All the Indians, indeed, who now inhabit this portion of the continent (with the exception of the Iroquois, who are by far the least numerous, and are mostly within the limits of Canada,) speak dialects of the Lenápe. When the Europeans arrived in America, these Indians were in possession of the *eastern* coast of this continent, from Virginia to Nova Scotia; and hence, as we are informed, they were called *Wapanachki*, or *Abenakis*, that is, *Men of the East*, or *Eastlanders*.\* By La Hontan and some other writers they were called *Algonkins*, or as more usually written by the French travellers and historians, *Algonquins*.

The generic name, *Abeniqui*, or, as the author of the following Dictionary writes it, *Abnaki*, has not been used by Europeans in the extended sense above mentioned, — comprehending the whole of the Atlantic coast, — but has been restricted to the principal tribes or nations which inhabited a part of Canada, Nova Scotia, and the adjoining northeastern territory of the United States, now called the State of Maine.

The principal residence or settlement of those *Abnakies*, who inhabited that part of the United states, appears to have been the village of *Narrantsouack* (as the name is written by the author of this Dictionary), which was on the river *Kennebec*, near its confluence with the Sandy River, and about two hundred miles east of Boston. The Indian appellation is still preserved in our corrupted American name, *Norridgewock*, sometimes writ-

\* Heckewelder's Historical Account of the Indian Nations, p. 107.



ten *Norridgewalk*, now an important and flourishing town on the same spot where the Abnaki settlement formerly was. The natural situation of the place is described, by an American writer, as “one of those beautiful prairies or spots of alluvial ground, to which nature seems to have invited the residence of man, as if to free him from toil, and to lavish upon him all the goods which spring from fertility, and all the pleasure which conversation with the finest scenes of a romantic solitude can afford. Above, the rapid of the Kennebec gave the unceasing music of a waterfall; little islands below, studded the expanse at the confluence of the streams; and the horizon around rested on a gently waving line of hills. To Quebec was a distance of more than five days of painful travel, and it was a journey of two days to the dwellings of the English. The country around in every direction was a wilderness inhabited only by savages.” \*

In that village the author of this Dictionary, Father Sebastian *Rasles*, or *Râle* (for the name is written in both ways), a French Catholic missionary of the order of the Jesuits, took up his residence. He began his work in the year 1691, after he had resided a year among the Indians, as appears by his memorandum prefixed to the Dictionary. His talents, learning, and commanding influence over the natives, made him a formidable adversary to our ancestors; and his character has accordingly been portrayed by our earlier historians, with all the strong coloring of religious and political prejudice. He has, however, in our own time, found a candid and learned biographer, and of the Protestant faith, who has endeavoured to rescue his memory from the imputations of his contemporaries, and to do justice to his merits. I allude to the interesting memoir of his Life, written by the Rev. Dr. Harris, and published in the “Collections of the Massachusetts Histori-

\* Gov. Lincoln's Papers, published in the Collections of the Maine Historical Society, Vol. I. p. 331.

cal Society." \* To that Memoir, in which will be found all the most material facts and authorities in relation to his eventful history, I beg leave to refer for more particular information on that subject.

So copious a Dictionary of an aboriginal American dialect, written by a man of acknowledged talents and learning, who possessed an extraordinary facility in the acquisition of languages, † and had resided upwards of thirty years among the natives, is, as I have already remarked, one of the most important memorials in the history of the North American Languages.

The learned will now be in possession of authentic historical documents, of different periods of time, in relation to the most important and widely spread native language on the Atlantic side of America, from Virginia to Nova Scotia and Canada, — an extent comprehending a large part of North America. The documents, to which I allude, are, the works of the Rev. Mr. Zeisberger, and the Rev. Mr. Heckewelder, for the *southern* portion of that tract of country; the Bible, Grammar, and other works of Eliot and Cotton, for the Massachusetts, or *middle* region; and the present Dictionary of Father Rasles for the *northern* part.

It is not my intention, at this time, to enter upon a consideration of the use which may be made of this collection of philological materials. The object of this communication is merely to give some account of the present Dictionary, and of the dialect preserved in it; together with a few very general comparative views of kindred dialects. But as these objects involve details not necessarily connected with each other, I have reserved them for the *Supplementary Notes and Observations*, which will be found at the end of the Dictionary, and to which the reader is referred.

\* Massachusetts Historical Collections, Vol. VIII. p. 250; Second Series.

† Lettres Édifiantes, Vol. XVII. p. 333.

A  
DICTIONARY  
OF THE  
ABNAKI LANGUAGE,  
IN  
NORTH AMERICA.

BY FATHER SEBASTIAN RASLES.

PUBLISHED FROM THE ORIGINAL MANUSCRIPT OF THE AUTHOR.

WITH AN

INTRODUCTORY MEMOIR AND NOTES

BY JOHN PICKERING, A. A. S.



ABBREVIATIONS USED IN RASLES' DICTIONARY.

abs'tum	absolutum	pl's	plusieurs
b'p	beaucoup	q'	que
cab.	cabane	q'q'	quelque
co'e, cōe,	comme	q'q' ch.	quelque chose
d'r	dicitur	R.	Réponse
ē	est	tō, to'	tout
id. ē	idem est, id est.	t'rs	toujours
ign.	ignobilis <i>or</i> ignoble ; mean- ing the <i>inanimate</i> form of nouns and verbs.	t'tum	tantum
		t'te	toute
imp.	impératif	v'bis	verbis
m.	mon	vō, vo'	vous
m̄da	mānda, not, no.	v.	vel, Latin conjunct.
me'e	même	v. g.	verbi gratiā
nob.	nobilis <i>or</i> noble ; meaning the <i>animate</i> form of nouns and verbs.	3 (as 3. s̄é)	the 3d person of the verbs ; as, under <i>Esprit</i> , the first per- son, j'ai de l'esprit, is n̄s̄é- sāñdam ; and the 3d is 3. s̄é., that is, s̄ésāñdam.
nō <i>or</i> no'	nous		
Part.	Particulæ, the title of the list of Particles, at the end of the <i>French</i> part of the Dic- tionary.		

IL y a un an que je suis parmi les sauvages, je commence à mettre en ordre en forme de dictionnaire les mots que j'apprens.

## ABA

## [1.] [ABANDONNER.]

J'abandonne, je laisse, cela, v. g. viande, cabane, robbe, &c. *nenegatemen*, *sios*, *sigšam*, &c. imper. *negāti*; *nedáktse-nank*, j'en prens la moitié v. partie, pour emporter, laissant les autres, &c., ig. *nedakstsémenar skamsnar*; v. *nenegatenäi*, *nenssenäik penak namessak*, &c. en aiant porté ma charge je laisse les autres pour les venir quérir; ig. *nenssenemenar skamsnar*.

J'abandonne, v. g. poisson, oiseaux, &c. pour emporter les autres, venant ensuite pour le quérir, ne pouvant tout emporter, *nenegatenäi names*, *sipsis*, &c.

J'e l'abandonne à lui-même, le laisse faire à sa tête &c. *nectsighi'tasañ*, ig. *nenegatsihadn*.

Je l'abandonne, je le quitte, *nenegárañ* v. *nenegatsilarañ*. ign. *nenegátemen*. imper. *negāti*.

J'abandonne mon corps à la mort, *nemétanaskérdamen* v. *nemétérdamen nhaghé* v. *nemedérsi*; item, *nemeghen nhaghé*.

J'abandonne mon fils, v. g. le laissant aller en guerre, je le regarde comme si je n'en avois plus, *nekisérmañ nenémañ*; v. *neméteremañ*.

J'abandonne cela pour ne le plus reprendre, *nebaghitamen*.

J'avois abandonné cela, mais je le reprens parce qu'il est beau, je l'agrée, &c. *nedabañtsi* v. *tsin*, *is*, nob. *nedabañtsinasäi*, 3. *sdab.*; v. les autres l'avoient abandonné, *mitssangan* v. *kikkann*. Je lui souhaite ce qui est beau, bon, &c. *nedabañtsin*, 3. *sdabañtsinar*; *nedabañtsinéma*, *ked.*, *keda-*

## ABR

*bañtsinañ*, *sdabañtsinañ*; *sdabañtsinañ sderémañ* *nikksañbi pemañssits ssañmi srigs*; *piššisi kedabañtsinañ nhaghé*, *srahamsi spemkik nsrighi*.

J'abandonne, hōem v. mulierem cum quo v. quâ, &c. *nebaghírañ*.

Je l'abandonne le jettant, *neksañsakkain*.

J'abandonne ma prière, *nebaghitamen éri pañbá tamañneban*.

Je l'abandonne, v. g. étant blessé à la bataille pour ne, &c. *nenegadzaráñ*, 3. *sn*.

J'abandonne mon champ, v. g. *nedé'ksikina-men nedakkikain*.

## [ABATTRE.]

J'abbas un arbre, securi, *nekašhámen*, nob. *nekašhañ*, v. g. *añgmaks*, 3. *ak*, v. *nekastéhemen*.

Je me laisse abattre par une médisance v. g. *nenauésañsitéha*, 3. *nané -*.

## [ABJET.]

Cela est abjet, méprisable, *keneskérmegšat*.

Je suis abjet, méprisab., *nekeneskérmegssi*.

## [ABSTENIR, ABSTINENT.]

Je suis abstinent au manger, *netagasi'ppi*, 3. *tag*.

— au boir, *netágastesemi*.

Je m'abstiens de manger, no. *nedsdasahasébena*.

— de la viande, *nedsdosahasé*.

— de manger de quolibet, *nedéksi'tamen*, nob. *nedé'kšipan*, &c.

## [ABRI.]

A l'abri, *añbagasisi*.

Je suis à l'abri du soleil, *añbagašatek* v. *añgasatek nedapin*; d'un arbre, *añgasaksók nedapin*.

— du vent, *añbagašramsék nedapin*.

[2, 3.]

*Añbagasisi*, faits [?] . . . qu'on le mette à l'abris du vent; *añbagasañki*, faits [?] qu'on le mette à l'abris d'un coteau, petit couteau; *añbagsanké pan*, il y avait un petit couteau qui se [?] mettoit à l'abri, v. g. . . . *añbagasatéhansits*, . . . qu'on le mette à l'abri du soleil.

— du feu, d'être chauffé, j'en suis éloigné, *nedañbagasapi*; *kedañbagasapi-tasi*, tu m'empêches de me chauffer, tu es devant moi.

Je le mets à l'abri, *nedañbagahstsn*, nob. *hsrañ*.

— du soleil, mettant couverte, écorce, afinque, &c. *nedañbagasatéhemen*, 3. *sd*, nob. *-hemañ*.

Je m'y mets, *nedañbagasatéhema*, nob. *nedañbagasatéhemasoñ*, je le mets à l'abris dormant, v. g. un malade; parasol, *añbagasatéigan*; son, *sdañb*.

[ABSOUTRE.]

J'absous, je délie, *nedañbeksnoé*.

Je l'absous, *nedañbeksnoñ*; *nedañbenesi*, je me délie, scil. la ceinture.

[ACHERETER.]

Je vais acheter quelq<sup>e</sup> chose, etc. *nenañ-taññks'ra*.

Je l'ai après l'avoir acheté, *nedañbañks'ra*.

J'ai des marchandises pour qu'on les achète, *nensdaññks'ra*.

J'achète, je traite, *netatoñsé*, 3. *at*; cela, *netatañséttsn*; *keta'tañmer*, j'achète de toi; *sghik*, étañsésghik; *netatansébañk*, *nema'terak*, je traite mes castors.

— de lui, *netatañmañ*, 3. *sdat*; pour lui, *nemanshms'sañ*.

— pour lui, *netatañsesé* v. *nenañtatañ-sésañ*.

— cela, *nemanshsmen*, 3. *ama*.

— cela de toi, *kemanshmsren* v. *nedañvasanshsmanghen*; achat, traitement, *atasésañgan*; *nemanshsmanghi*; avec cela, *nemanshighétsn*, v. *netátasétsn*, *is étañsé-tasu*; c'est avec quoi on l'achète, cela, *ni manshighé'tsmek* v. *étañsétsmek*; on l'achète avec cela, *manshighétañss*, v.

*atañsétañss*; *nedañrasanshsmen*; *piñsñ-ads* v. *tagassañsads*; *masañrañsads*, *ssañ-mañsads*; *kedagassanshsmen*, nob. *nshañ*; *tañni arañsads?* *ni étañsadik*; *tañne sa serañkadín*, chemise v. *ni éransadik* *pezeksñkeni étañsad* . . . (?) qu'ils (?) aient le même prix; ig. *pezeksñkeni étañsadik*.

— v. g. un esclave, *nemanshañ*, *asakan*, de lui, *-hsmasañ*; j'achète de toi cela, *kemanshmsren*.

— avec cela, *nemanshighé'tsn*, nob. *nemanshighéhañ*; tu l'as trop acheté, *kssañmimesañranshsmen*, nob. *hshan*; il se vend moins, *tatañgassañsads*; combien s'est acheté cela, *tañni cdsdañsadsssa?* un castor, 2. castor, *negsdsñskša-šdsn*, *nissmskšasšdsn*; il s'achète, *menshañss*; & beaucoup, *mesañranshañss*.

J'achète pour moi, *nenatatañsési*.

Je m'achète, *nemanshssi* n. *nekisanshssi*; je traite, *netatañmesi* . . . v. *nemanshsmasñsi*.

[ACCOUCHER.]

[4, 5.]

J'accouche, *nsnit-añni*, 3. *snit-añns* v. *-nsio*.

— d'un garçon v. &c. *nsnit-añni sçli-nsssis* v. &c.; je n'ai fait que des garçons, *usskinssssotsasa sibisi* v. *nsskinsssit sighiha sibisi*; je n'ai fait que des filles, *nañkskséssistsasa* v. *sighiha*; j'ai fait 2. enfans, *netakšéssistsasa*, 3. *takšéssistsasé*; les jumaux, *taksésisok*.

J'ai accouché d'un garçon et puis d'une fille &c. & sic, *nekekéréketsasa*.

J'accouche, *neuighihé* v. *nenitsé* dicitur etiam de añlib. [animalibus.]

Elle est prête d'accoucher, *kadási neghíhé*. Elle ē [est] sur le point d'accoucher, *kadási métsiné*.

J'accouche de lui, *neuighihañ*; j'en viens, *nemetsiskssi*, *nedañbimetsiskssi*; je vas, *nenañtsimetsiskssi*.

[ACCOMMODER.]

J'accommode lui, le, avec cela, *nsrihise'tsn*, *nsrihssi*; je me pare avec cela, *nsrihssi'tsn*.



J'accorde cela, *nsri'tsn*, nob. *nsrihañ*.  
 — en paquet, *nsisasaitsi* v. *negagsé-sasaitsi*; natte, sac, &c. *nšisašncmen*; item, lettre la pliant, *nsisašnemen asizi-gan*; l'ayant accommodé je le mets quelque part, *nšisasa'tsn*.

## [ACCOMPAGNER.]

J'accompagne pour peu de tems celui qui s'en va, *nemetsiskasañ*.

Je l'accompagne par honneur, v. &c., je vais avec lui, je me joins à lui, *nesitsi'rémañ*; *tikékamasiks*, accompagnez moi, par honneur, allant où est ma femme.

— *nesitsisañ*, 3. *asit*.

## [ACCORDER.]

Je lui accorde, *nsrésdamasañ* &c. v. *ncsi-gañdamasañ*.

[ACCOUCHER. Vide supra.]

## [ACCOUPLER.]

J'accouple, je mets 2 ch. [chiens ?] ensemble, *nenissañbikké*; lie avec deux colliers l'un aux épaules, l'autre à la tête, *nenisañbe*.

## [ACCOUDER.]

Je m'accoude, *netéskésšin*, 3. *téskésšin*.

— sur lui, *netéskésšin arcnañbek*, v. *abasik*, sur un arbre.

## [6, 7.] [ACCROCHER.]

Je l'accroche, je le pens, *nenañbittetsn*, 3. *sn*, *nenañbittrañ nepedinek kouksis*, v. g. je le pens à mon bras, *nañbitsin*.

Je m'accroche à un bois, v. g. *nenañbitsin*, 3. *nañbitsin*; vide entortillé.

## [ACCROUPIR.]

Je m'accroupe à terre sans natte, *nemitsi-kapi* 3. *ts*, *nepañgšikapi* v. *nepapañgsikapi*.

## [ACCUSER.]

Je l'accuse, *nepitigarañ*; *nepitigarsé*.

Je m'accuse, *nepitigaresi*.

Je l'accuse, le décèle, *nemsskenañ*; ne me décèle pas, *mssak msskeni'kan*.

## [ACHETER.]

J'achète. Vid. *superiùs*.

## [ACHEVER.]

J'achève quelq<sup>e</sup> chose, nob. *nekisihañ*, *nki-*

*si'tsn*, 3. *akis*, v. *nemétanaski'tsn*, nob. *nemétanaskihañ* v. g. *ps'ksañbi*.

J'achève de parler, *neméttañtsemi*, 3. *mét*.

— d'écrire cela, *nekisasi'çamen*, 3. *akis*.

## [ACRE.]

Acre, amer, aigre, *sssaghipšgšat*; nob. *psgsss*.

[ADMIRER. Vid. infra.]

## [ADONNÉ.]

Il est addonné à tte [toute] sorte de vices, *nipskenasákess*; I<sup>a</sup>. *nenipskenasak*.

## [ADOUCIR.]

[8, 9.]

Je l'adoucis, appaise, de parole, *nedasighimañ*, 3. *sdasi*.

Je l'adoucis l'appaise par quelq<sup>e</sup> chose, *nedasighihañ*.

Je l'adoucis, l'appaise pour lui, *nedasighi'tasañ nedasighitasésañ*, ign. *nedasighisátsn*.

Je l'appaise pour lui, v. *nedasigšésañ*, 3. *sdas*.

## [ADMIRER.]

J'admire, *añsagherdaminañgšat*, nob. *gess*; *nedañsakérdam*, 3. *sdañ*.

— cela, *nedañsakghérdámen*.

— le voiant, *nedañsakinamen* v. *nedañsaghi*, &c.

— lui *nedañsakérmañ*; lui le voiant, *nedañsaghinasañ*.

J'admire l'écoutant, *nedansaghitam*.

Je l'admire l'écoutant, *nedañsaghi'tamen*.

— lui l'écoutant, *nedañsaghi'tasan*.

Je suis admiré, *nedañsaghérmegssi*.

Je suis admiré & écouté, *nedañsaghitaiñ-gssi*, 3. *añs*.

Cela est admirable, *añsakérmegšat*; il, *gsss*; *mañrchinañgšat is* v. *mañrchighen*, on n'a rien rien de semblable tant il é [est] beau.

— a voir, *añsaghinañgšat*, il, *gsss*; *nedañsaghinámén*; je le vois avec admiration; nob. *nedañsaghinasañ*.

Je le fais, rends, admirable, *nedañsaghi'tsn*; nob. *nedañsaghihañ*.

## [AJOUTER.]

J'ajoute cela, je mêle &c. *neks'radénemen*, nob. *démañ*, 3. *aks*; en contant de l'or &c., *neksradéghimañk* v. g. *ssriañk*.

## [10, 11.] [ADOPTER.]

Je l'adopte pour mon fils, *nsnémañxañ* v. *nsnitzañxañ*, pour fils ou fille, sub. *nia sénémañkañia*; pour ma fille, *nsdsskañ*; je l'ai pour fille d'adoption, *nsdsskésañ*.

Je t'adopte, *nsnémañnin khaghe*; pour parents, *nederaiñgsmxañ*, sub. *nia érañgsmxañia*, 2<sup>a</sup> *ian*, 3. *aüt*.

## [ADROIT.]

Un homme que n'est point adroit pour tuer des bêtes, &c. *matsighenañbao*; une femme *q'* ne scait pas travailler, &c. *matsigssksao*; un homme v. femme *q'* travaille trs. [toujours] *sañsañbao*.

## [AFFAIRE.]

J'ai affaire, je suis occupé, *nsdamarókké*.

— de cela, j'en profite, *nsdañbédamen*; lui, *nsdañbémañ*, 3. *sd*.

Cela est ma principale affaire, *nemeseghikSérdámen*, v. *nemesérdámen*, 3. *ann*.

## [AFFAISSER.]

Ce sac v. g. étoit plein de petun, et maintenant il ne l'est pas, c'est q'il s'est affessé, pressé, *nákarak sdamañk*; cela l'est, *na'ka'ré*.

## [AFFERMIR.]

Il faut affermir la cabane, v. g. par des fourchettes, *tsi' tsitsañss*.

Je l'affermis, &c. *netsi' tsitshsmen*.

## [AFFILER.]

J'affile couteau, hache, &c. *nekittadsn*, 3. *akitt*, v. *nekittadassi*, 3. *kitt*; j'ai éguisé, *neksitudassi*; pierre à affiler, *kittadañgan*.

## [AFFLIGER.]

Je suis affligé, 3. *gag*, v. *nssikerdam*.

Je l'afflige v. *nssikérdamañ*; 3. *nssikerdamitchañsi*, j'ai des pensées affligeantes; cela m'afflige, *nssikérdameskañgoun*; mon cœur est affligé, *ssikté nerésañgan*; *nssighérdamihssi*, je m'afflige.

## [AFFREUX.]

Cela est affreux à voir, *tsibaghnañgšat*, il, *gsss*; il me paroit affreux, *netsibaghinañmen*, nob. *nasañ*, *netsibaghimatsenasakesi*, *tsibaghitañgšat*, des nouvelles affreuses.

## [AFFUT.]

Je suis à l'affut, à l'attente du chevreux, &c. lorsqu'on va un peu loin pour cela, *nedasks'pema sipsak nsrkak*, &c.; j'y ais, *nenaiñsiskšpema*, v. *mélius*, *nenaiñš kspema*.

[Pages 12, 13, 14, of the MS. are blank.]

## [AGE.]

Quel âge as tu? *kekéssigadémenasa*; 2. ans, 3. ans, *nenissigademé*, *nenessigademé*; 4. ans, 9. ans, *neiesigademé*, *nenaiñigademé*; 6. ans, *nekdansnekkéssigademé*, &c.; 11. ans, *neksdañkao nekkéssigademé*; 20 ans, *nisiniské nekkéssigademé*; elle est en âge, v. g. d'être mariée, &c. *kisšgs*; je suis de même age *q'* lui, *netaiñérghirébena*, *ktañ*, &c., *aiñérghirsk*; celui-là est plus âgé, *sa mešairigademé*; je suis à la fleur de mon âge, (ait vir,) *nenéranšubai*, 3. *nér*; j'y suis, (ait mulier,) *nenéranšskšai*.

## [AGRÉER.]

Je l'aggrée de pensée, *nsrérdamen*, nob. *nsrérmañ*, 3. *sr*.

— de veüe, *nsighinamen*, *-nasañ*, *nsri-namen*.

—, il vit bien, &c. *nsritebñnasañ*.

## [AIDER.]

J'aide cela, *nsitokkédamen*, v. g. sa prière, &c. nob. *nsitokkémañ*, je l'aide soit de . . . soit d'effet donnant quelq' ch.

[chose.]

—, *nedarenemassi*.

— à faire quelq' chose, *nedarenemásañ*; deus in adiutorium meum intendé, *ikanssmsi*, *-arañbami*.

—, le prens pour laider, aide-moi à me lever, *sanañgheni*, 1<sup>a</sup> *nesanañghenañ*.

Je ne le peu étant malade; aide-moi à me lever étant chargé, *animikeni*, 1<sup>a</sup> *nedañmikenañ*.

Aide-moi, lève-moi ma charge étant à terre, l'autre debout.

[15.]

[AIGLE. Vid. ANIMAUX.]

[AIGRE.]

Cela est aigre, *sssaghipsg̃sat*, nob. *psgsss*.

[AIGU.]

Cela est aigu, *kesighir<sup>c</sup>s*, ils, ig. *kesighirsar*, ils, nob. *-rsak*.

[AIGUISER.]

Je l'aiguise, *nekittadsn*, 3. *ak*; — pour lui, *nekittadásaï*; pierre à aiguiser, *kittataïgan*.

[AILE.]

A l'aile d'oiseau, *srgsanigns*; il a des ailes, *srgsanšo*; ils, *gsnak*.

[16, 17.]

[AIMER.]

Je l'aime, ign. & nob. *nemssaïtzin*.

Je l'aime, *nemssaïraï*; fere tantum usurpatur in passivo, v. g. *nemssaïriks*, &c.

Je l'aime avec affection, *nemssaïtziéhaïmanä*, ig. *tchaïdamen*.

Je l'aime de tō [tout] mon cœur, *nenekstsiras<sup>c</sup>assaïtzin*, 3. *sn*; je suis cœc [comme] rempli de son am. [amour] ig. *nebégšasérđamen*.

Je l'aime avec attache, *nekesaïtzin*, ignob. *nekessaïtekaï'damen*, *kikkaïñ*, v. *neckakésaïtkandam*, 3. *kakésaïtkandam*, *nekesaïtekaïdamen*; *ki*, je t'aime avec attache; *šnasa é<sup>c</sup>to kederšasänsinäk kenitzaïmsaïñ*, est-ce donc ainsi q<sup>r</sup> vō [vous] aimez vos enfans? si tu n'étois pas si aimable, &c. *saédasanregssiané mdahaba kederghiksasaïrerssn*, &c.

Je ne l'aime point, je ne le trouve point à mon gré, *nebégšaséremaï* v. *nepiršéremaï*; illum eperditè amo, *nedatsšémaï*, ign. *dāmen*; item, il me fait du bien v. mal, & je lui en fais davantage, &c., *nederaïbirasāmaï*, *séhaï*.

AIR. Aer, *sékissks*; dans l'air, *pisskisksé*; au delà de l'air, dans le ciel, *asassekisksé*; je le prens en l'air en passant, *nenitspetsy*, 3. *sn*, nob. *nenitsphaï*, *sipsis*, v. g.; air d'un chant, *araraïms<sup>c</sup>taïss*, ni *craraïms<sup>c</sup>tamek*; un bel air, *sraraïms<sup>c</sup>taïss*; il est différent, *piršaraïms<sup>c</sup>taïss*.

AIRAIN, cuivre rouge, *šisaï<sup>c</sup>sa<sup>c</sup>raks*.

AIS, planche, *psikasks*.

[AJUSTER.]

Cela ne s'ajuste pas, trop gros, v. g., *ésse-rivé io*, 1<sup>a</sup> plur. *nederaïbaïnsibena*.

[ALLER.]

Allons à son t<sup>r</sup>beau [tombeau] &c., *nemaï<sup>c</sup>kederaïbaïnsibena* v. *aranbaïnsida éresik*; ni *eribst kesérmegssitsik*, *pa<sup>c</sup>triaïnskéké téhaïrasi metsinésa*.

Je ne veux pas aller là, *nda nemaï nekadasi aiaï*. Vid. Je vas.

Je pense à aller là v. là, v. g. pour peu de tems dans les terres [?], *nekisitéhaïsi*.

Je vai absolument là sans biaiser, détourner, &c., c'est où je souhaite aller, *nédaïtssossé*.

On ne peut aller deux, le chemin ē [est] trop étroit, v. g. on ne vas qu'un, *nda kisini-ssssésn*, *neksitsssaïñ*, *neksitssséks*, &c. ni *araïbaïnsiks*, allez l'un après l'autre, ○ ○ ○ ○, v. g. *tekahaïbansin*; on va l'un après l'autre, ○ ○ ○ ○; *neksnaïtsi é<sup>c</sup>to*, est-ce qu'il y a long tems q<sup>r</sup> je m'en étois allé? *ké<sup>c</sup>seta pstsakaïnsik*, ne *ké<sup>c</sup>seta araïbaïnsin*, autant qu'il y a de galerie, v. g., on y va, &c.

[P. 18 of the MS. blank.]

[ALLONGER.]

Je l'allonge, une courroie, couverte, *neksnaïbéghenemen*, 3. *ak*; *nesasagaïbéghenemen nesiptaghemen*; *ksnaïbéghénaïss*, &c.

[19.]

[ALLUMETTE.]

Allumette seu feuilles, paille, bois pourri pour allumer, *peténigaim*, *ar*.

Allumette v. g. de souffre, v. un bois mince, &c., *tsatsekesaïsé<sup>c</sup>tšmeghir*; ce avec quoi on allume, *tsekesaïsaïnganar*.

[ALLUMER.]

J'allume une chandelle, *netza<sup>c</sup>kesemen sas-sénemaïgan*, 3. *stz*.

Allume-la, *tseksé*, *netsa<sup>c</sup>kesaï*, calumet, oiseau, bête, &c.

[AMANDE.]

Amandes, *pagaim*, *nar*.



## [AMASSER.]

Je les amasse, mets, *nedāngséhéménar*, 3. *sd.*; *nemañsāngséhéménar*.

Je fais amas de vivres, v. g. *nemaēads* v. *dsn*, faites, &c. *maēadsks*; il seroit bon d'en faire, *srighenba maēadsmeghé*.

Je vais chercher, amasser glands et autres fruits, *nemasiné*.

J'amasse beaucoup de choses, *nemes<sup>c</sup> airi<sup>c</sup> tsu kégsi*.

## [AMENER.]

Je l'amène de là ici, *na<sup>c</sup> xs<sup>c</sup> rañ*, *na<sup>c</sup> ksdksa-rañ*, v. *nená<sup>c</sup> srañ*; (sine notá p'snali [personali] *nc.*)

——, *nepédssadsn*, 3. *aped*; nob. *nepédss-sarañ*, 3. *apé*.

—— à lui, *nepétasañ*, 3. *apét*.

—— par eau, cela, *nepé<sup>é</sup>sdn*, nob. *nepé-ésrañ*.

—— à la voile, *nepédékssi*, 3. *péd*. nob. *nepédékssemañ*.

——, *nepétsiphañ*.

Tu m'as amené ici, seu tu es cause, q<sup>e</sup> je suis venu, *kmesihssari*; cōponitur ex verbo *nederssarañ*, &c. *nemcsitésarañ*.

## [20, 21.] [AMBASSADEUR.]

Les ambassadeurs, seu ceux qui viennent, vont, faire la paix, l'alliance, *nañdāngsda-ghik*.

Je vais en ambassade, *nenañdāngsdam*.

## [AMER.]

Cela est amer, *sssaghipsgsat*.

Je le trouve amer de, *nsssaghi<sup>c</sup> tamcn*, de or [?].

## [AMEÇON, p. HAMEÇON.]

Ameçon, *maghi<sup>c</sup> kañ* v. *tasapsnigañ*; je pêche à l'ameçon, *nedāñmé*, 3. *añmé*; *de-dañbañmé*, je vieus; j'y mets un amorce, appâs, *nedasānghé*; l'amorce, *aśañgan*; de quel appâs te sers tu? &c. *kégsi ésañ-ghétasan?* d'un peu de chair, *siossis nedasānghé<sup>c</sup> tts*.

## [AMORCE. Vid. AMEÇON.]

## [ANCIEN.]

Les anciens du tems passé, *negañni arenāñ-bak*; chose ancienne, vieille coutume, *ne-*

*gañnié*; si c'étoit une ancienne coutume, *negañniāñsighé*.

## [ÂNE. Vid. ANIMAUX.]

## [ANÉANTIR.]

Cela est annéanti, *anališ*.

J'annéantis dans lui son péché, *nedāñn-tasañ éri saaghiarasékāñsisa*.

J'anneantis cela, *nedanetsn*.

[ANGUILLE, *nahañms*, *msak*.

—— salée, *nahañms-sañrañsciéigan*.

—— sèche, *agsañm*, *nak*; les crevilles, *sraghesiar*; le fiel, *sisi*; une clef pour prendre des anguilles, *nésañgañm*, *nar*; je la fais cuire dans les cendres, *nedabi-gañdésé*.

## [ANIMAL. Vid. ANIMAUX.]

## [ANIMER.]

Je l'anime, le pousse, &c. *nemerkitéhañmañ*.

—— de parole, *nemerki<sup>m</sup>mañ*.

—— l'exhortant, *nekakésmañ*.

## [ANIMAUX.]

[22, 23.]

Les animaux, *asaasak*; les petits animaux di<sup>r</sup>. *nañbékiks*, *sksékiks*, du mâle & femelle.

Âne, *españnihahassis*, v. *mémagañraghesess*.

Bœuf, *káss*,\* *ssk*; mâle, *nañb*, &c.

Cheval, *ahassks*, *ssak*; m. *nañbéssem*, &c. les petits, *nsssédksks*, *nsssédksksak*.

Chevreuil, *norké*, *ak*; le mâle, *aiañbe*, fem. *hé<sup>c</sup>rar*.

Cerf, *mañr<sup>ss</sup>*, *ssk*, m. *aiañbé*, &c.

Loup-cervier, *mañrsem*, *msk*, v. *msak*; le mâle, *nañbéssem*, *msk*, la femelle, *skséssem*, *msk*; *asé<sup>c</sup> hañmedo*, *dsak*, bête féroce, quæcumq<sup>e</sup> sit.

Loup marin, *akiks*, *ksak*; le mâle, *nañbaákiks*, la femelle, *ksaákiks*.

Renard, *ksañksses*, *sak*; *ksañkssset*, renard.

Espèce de lion, *pi<sup>c</sup> tañrs*, *rsak*; mâle, *nañbéssem*, f. *skséssem*.

Lièvre, *mattegsésss*, *ssak*; le mâle, *nañbéssem*, &c. *pezs*. . . .

[\* Probably from the English word *cow*; as some of the southern Indians adopted the Spanish word *vaca*, corrupted to *wak-kuh*. EDIT.]

Original, *mss*,\* *msssk*; le mâle, *aiãbe*, f. *hêrar*.  
 Ours, *aséssss*, *ssak*; le mâle, *naïssask*, la femelle, *atsésks*.  
 Porc-épi, *maïdasess*; le mâle, *naïbaaïks*, la fem. *atsaaïks*.  
 Castor, *tema<sup>c</sup>ksé*; mâle, *atsimesks*, f. *nssémesks*; castor qui a des petit dans le ventre, *nssémesks nssaidé*; le mâle, *naïbémeks*, fem. *skémesks*.  
 Loutre, *skšckiks*, *naïbékiks*, sic dī'r item de la marte; *kisnighé*; *pagamké*, presq<sup>c</sup> cōe [comme] une loutre, mais q<sup>c</sup> *maskimaïgss*.  
 Marte, *hépana<sup>c</sup>hesss*.  
 Rat musqué, *msskséss*, le rat musqué, *mssseséss*, cōe [comme] le castor; † cōe [comme] un rat musqué, *mssbéss*.  
*Anikšess*, suisse.  
*Naïssen skssen*.  
*Mi<sup>c</sup>ksé*, écureuil.  
*Sagséss*, espèce d'hermine, v. *saïbigs*.  
*Préniks*, *mesaïks*; ces 2 ont un beau poil.  
*Ségaïks*, bête puante. ‡  
*Mssbéss*, autre bête puante.  
*Pékané*.  
 Tortue, *tsrebé*, son ec. [écaille] *amikenaks*; tortue, *naïbékinaks*, *skšckknaks*.  
*Aketsabaïrass*, limaçon.  
*Aréskané*, grand cōe [comme] un chien.  
 Singe, *tsé<sup>c</sup>kanébes*.  
*Tsaïghé*, *gak*, écrivisse.  
*Tsegšares*, -*sak*, grenouille, &c.  
*Sigsksé*, grillet, petite bête; lézard, *keka-taïraïgs*; *traïres*, -*sak*, sauterelles; *tsrebé*, -*bak*, tortue.  
*Bábis*, ciron dans les mains, &c.  
*Maringsin*, *tsé<sup>c</sup>ssé*, *stsésé*, *sak*, mouche.  
*Brûleaux*, *pekssisak*, sing. *pekssit aïmšsé tasan*.  
*Pess*, *érigss*, *sak*, fourmi.

[\* In English orthography, *moose*. EDIT.]

[† Hence the popular name of this animal in the New England States, *musquash*. EDIT.]

[‡ Hence the American name of this animal, *skunk*. EDIT.]

Taupe, *mémcransskanašéss*.  
 Souris, *saïbigsséss*.  
 Aragnée, *mémessrabikké*.  
*Maskké*, crapeau.  
*Ps<sup>c</sup>ksé*, *ksâk*, vers q<sup>c</sup> sont dans la chair sur viands.  
 Parties animalis:  
*step*, la tête.  
*manšé*, la joue.  
*mssi<sup>c</sup>ttan*, le muffle.  
*spíghé*, *gak*, plat côté, *msssispíghé*, d'original; *nsrkaspíghé*, de chevreuil.  
*ssskšéses*, *sak*, la chair de l'épaule.  
*sder*, l'épaule.  
*sikšé*, la cuisse; *sikšaésaks*, la chair de la cuisse.  
*asinásaghé*, la panse de l'original, v. chevreux, c'est où est 1<sup>o</sup> sa mangeaille; *sraghesté*, où est 2<sup>o</sup> son manger.  
*stsršak*, *mstsršak*, où est la graisse.  
*spának*, la fressure, seu le foie.  
*šssksm*, *nar*, v. *sssksnagsr*, le dur q<sup>c</sup> ressemble un peu à la fressure.

#### [OISEAUX.]

Les oiseaux, *sipsak*.  
*sašangán*, aigle.  
*tarégai*, pl. *ñk*, grue.  
*sigšérré*, cigne.  
*mkasés*, courbeau.  
*saïptégsé*, *ak*, outardes.  
*nahame*, pls. *mak*, coq d'Inde.  
*matsiresss*, perdrix.  
*metéhširé*, huart.  
*pipigss*, oiseau de proie.  
*asé<sup>c</sup>rérak*, oies [?!].  
*ksskass*, le coucou.  
*séraïñé*, le hiboux.  
*tataïgs*, q<sup>c</sup> est tō [tout] blanc, c'est pretre des mores [?!].  
*préss*, *préssak*, des tourtes.  
*kssksimess*, canard.  
*arentegsiress*, cane, espèce de canard.  
*kara<sup>c</sup>kara<sup>c</sup>mess*, corneille.  
*ahaïsséss*, . . . . .  
*sagšanes*. . . . .

*sañsattasass, tssgheresks, tssgheresksak, étourneau.*

*ksaïssé. . . . .*

*sañsathasass. . . . .*

*mekšimins, sak, oiseau tout rouge et les ailes noirs.*

*sésibairégsané. . . . .*

*sésésss. . . . .*

*añdsairé. . . . .*

*kask. . . . .*

*pitampksé. . . . .*

*amskameness, oiseau q<sup>o</sup> regarde le soleil.*

*kaáks v. kaiaks. . . . .*

*arentigsiresss. . . . .*

*ssidakss. . . . .*

*kakesoksésss. . . . .*

*kakesiketši<sup>o</sup>ré. . . . .*

*sisisss. . . . .*

*meretséss. . . . .*

*meshigañdaghi<sup>o</sup>ré. . . . .*

*eshsadadésss. . . . .*

*tsirirésss. . . . .*

*tarégak. . . . .*

*añbitsiraksak. . . . .*

*sanbighiraksak. . . . .*

*tsitséss. . . . .*

*tseskeségésss. . . . .*

*nenétass. . . . .*

[24, 25.] *Anahsgak, asahassak, il n'y en a point, &c. Nen<sup>o</sup>itassm, mon animal domestique, soit chien, oiseau, &c.*

*M<sup>o</sup>tassak, on les aprivoise, ils sont aaux [animaux] domestiques.*

[ANNONCER.]

J'annonce publiquement, *nsdksémi, 3. sds<sup>o</sup>kséms; ni sékšémia, 3. sdsksémidé.*

J'annonce publiquement, je fais le cris, *nebañbañghen, nebañbañghimañk, nebañbañk, v. banbank, imperf. nebañbangšhsban, ni édtsi, bañbañga, bañbañgañneban; ni éri bañga ni édtsi<sup>o</sup>bañga, voila cõe [comme] je peu crier, &c.*

[ANCRE.]

Ancre de navire, *tásapenañpskšāngan; je le mouille, netsašpénañmpskšé.*

Ancre [encre] à écrire, *ašixiganüé, v. ési-ghighétsmek.*

[ANGE.]

Ange, mon ange, *angéri,\* ak; nedañgérin, nedañgérimi.*

[ANNÉE.]

Année, 1, *nekstsigaden; 2, nissigaden; 3, tsigaden; 4, iesigaden; 5, nañnigaden; 6, negsdans késsigaden; 11, negsdañtkao késsigaden, &c.; 20, nissiniské késsigaden, &c. c'bien y a-t-il d'années? &c. késsigaden, &c.; c'bien y en a-t-il q<sup>o</sup> tu es ici? kekéssigadenépiñnasa? il y a 2 ans, nmissigadenépin.*

C'bien y en a-t-il que tu es allé bien loin? *kekéssiganésé?*

[APPAISER.]

J'appaise, *nedasighihsé, nedasighighémi.*

J'appaise avec cela, *nedasighi<sup>o</sup>ta, 3. asighi<sup>o</sup>tañ, ni éri asighitañia.*

Je l'appaise de parole, *nedasighimañ.*

Je l'appaise, actione, *nedasighihañ.*

Je l'appaise pour lui, *nedasighisésañ, nedasighitasésañ, je ne puis l'appaiser p<sup>r</sup> lui.*

Je l'appaise se querellant, *netsighiharañ, 3. st, item l'enfant q<sup>o</sup> pleure.*

Je m'appaise, *nedé<sup>o</sup>ksimsskérdam v. nedé<sup>o</sup>ksinškarrā.*

*Nedasighi<sup>o</sup>tasañ, je ne puis l'appaiser, quoiq<sup>o</sup> je lui fasse, &c.*

[P. 26 of the MS. blank.]

[APPAROITRE.]

[27.]

J'apparais après ma mort, *nenamihigssi.*

Voilà comme je fais, apparais, *nederihisin, 3. sd.*

C'est ainsi q<sup>o</sup> je parois, voilà cõe [comme] il paroit, *ni sderinañgssin.*

Voilà cõe [comme] le diab. [diable] apparoit, *ni érinañgssit matsiniséks.*

Cela paroit, *namihigšat, &c.*

[\* Corrupted from the French ange. EDIT.]



## [APPARTENIR.]

Cela m'appartient, *ustzaänemen*, nob. *ustzaünaän*.

## [APPÂT.]

Appâs pour l'ameçon, *asaügan*; il y en a, *asaügaüss*; de quel appâs te sers-tu? *kégsi, ésaüghé'tasan*? R. [Réponse] *siössis nedasaüghé'ts*.

APOSTUME, *pemšé* v. *meri*; il y en a dans cette enfleure, j'en ai dans le corps, &c. *aps nhaghek pemšé*.

## [APPELER.]

J'appelle, fais un cri, *nebaübaük, nebaübaüghén*; 3 *baübaük*.

Je l'appelle de loin avec un cri, *nebaübaükmaän*, 3. *abaän*; je l'appelle par un signe de visage, *nšikšigšaimaän*.

Je m'appelle, *nederisisi*, 3. *arisiss*.

J'appelle cela N., seu nomino, *nederisittamen* N., v. *nenedohamen*.

Je l'appelle N., nomino, *nederisi'raän*, v. *nenedohaän*; 3. *sd*.

Je t'appelle, &c. *kenedohsren*.

Cela s'appelle N., *io arisi'taüss*; q<sup>r</sup> personne ne m'appelle plus N., *msak asemi arisirikits* N.

Il s'appelloit (de mortuo) *érisisitbána* v. *arisissbána*; *kégsi éhérisissanigak*, &c. *éhérisissbanigak*.

## [APPÉTIT.]

J'ai appétit, *nekads'ppi*, 3. *kads'pps*; de cela, *nekado'tamen*, nob. *nekado'pari*, *kekado'psr*, &c. *kekado'pi*, de moi.

## [APPÉTISSE.]

J'appétisse cela, *nepiši'tsn*.

## [28, 29.] [APLANIR.]

J'applanis, v. g. le chemin, où il y a, v. g. monticules, *ucséssnakéhémen*.

——, j'égale le terrain, &c. *uctécbakkéhémen*.

—— la terre, *nsrkéhíghé*, v. *nskkéhémen*.

## [APLATIR.]

J'applatir q<sup>r</sup>q<sup>r</sup> ch. [quelque chose] pour l'aggrandir, v. g. bale, &c. *nesibiksakté'hémen*.

## [APPLIQUER.]

J'applique la terre grasse, *neda'sshaän mazarsnes*.

## [APPORTER.]

J'apporte cela, *nepétsn*, 3. *ap*.

—— de ce lieu-là, *usdsn*.

Il l'apporte de là, *stskassadsn, stskašssadaüss*; on ô [est] en chemin pour l'apporter.

J'apporte cela pour lui, *nepétasaän*, v. *nepédssadasaän, nepétasaän sar*, j'apporte une peau de chevreuil pour lui, v. *nepetasänar*, ils *nepétasaäna*; 3. *ap*; *kepétasi*, tu m'a, *kepétsn*, je te.

Je l'apporte, nob. *nepéssaän*.

## [MONTRER.]

Je lui montre, &c. *nesésittraän, v. nenamittraän*.

## [APPRIVOISER.]

J'apprivoise, v. g. un ours, *nenegatsihaän, ašssss, v. nsrritassmin*, &c.; *nitassak*, on les, &c.

## [APPROCHER.]

Approche-toi, *pésssdssé*, 1<sup>a</sup>. *nepésssdssé*.

J'approche de cela, *nepéssssskámen*, nob. *-kasáän*, hōe [homme], v. g.

J'approche q<sup>r</sup>q<sup>r</sup> ch. [quelque chose], seu, je le mets auprès le tenant toujours par la main, *nedasitnemen*, nob. *nedasitenáän*.

## [APPUYER.]

Je m'appuie sur q<sup>r</sup>q<sup>r</sup> ch. [quelque chose] en marchant, *nedaübadéhssi*.

Contre q<sup>r</sup>q<sup>r</sup> ch. [quelque chose], etiam sur un hōc [homme], *nedaübadáškassin*.

Appuie cela c'tre q<sup>r</sup>q<sup>r</sup> ch. [contre quelque chose] *aübadéttts*, 1<sup>a</sup>. *nedaübadétttsn*.

J'appuie un enfant, *nedaübadé'raän asaüsis*; *nekrékekámen ndassé*, v. g. je me couche sur ma couverte, je m'accoude, ma robbe étant dessus mon coude, qui m'empêche de me lever.

## [ARAIGNÉE.]

Aragnée, *némessrabikké*.

—— fait sa toile, *tararabikké*; elle a fait cela, *arabikéssa*; sa toile seu les filets, *sdarabi'kaügan*; *sda'rabar, sdarabessak*, simpliciter *r'hab*.

[30, 31.] **ARBRE**, *abási*; ar. [arbre] coupé, *asassn*; dir [dicatur] etiam d'un debout.  
 Arbre sec, *messaks abási*; verd, *q'* ne peut bruler, *aresksaks*.  
 Bois blanc, *sighebimisi*.  
 Bouleau, *maskémssi*.  
 Cèdre, *manrañdaks*; les, *sedlak*, *mañradugsk* v. *mañrañdaksañdagsk*.  
 Cèdre rouge, *kšassághess*.  
 Chêne qui porte des glands, *anaskamcsi*.  
 Cerisier, qui porte cœ [comme] des cerises, *maskšésiminsi*.  
 Érable, *ssenais*.  
 Épinette rouge, *kessihssk*.  
 Épinette, *menshsk*.  
 Frêne, *añgmaks*, *agasz*.  
 Hêtre, *satsšimisi*.  
 De l'orme *anibi*.  
 De l'aune dont le charbon sert à piquer, *sdoppi*.  
 Merisier, *sigšésk*, v. *messain*.  
 Noier, *pagainssi*; noix, *pagan*.  
 Pin, *kšé*; sa pomme, *kšsi*; rouge, *messkask*.  
 Bois puant pour faire vomir, *sasañsbémaks*; *satsirémessi*, pour faire vomir; *ma'ksain*, bon à manger.  
 Plaine, *aksirémissi*.  
 Sapin, *pspskainks*, *ikšak*, les *sedlak*.  
 Arbre, en terre, où il y a une fente qui fait paroître qu'il est creux, *si'néskat*, v. *abikšéghen*; arbre creux dedans, mais ne paroît pas, *assigšéghen* v. nob. *apikšégs*.  
*Sañbsdégghen*, il y a un trou au haut de l'arbre, & à terre; *sañbsdeneskat*, idem.  
*Psketsanaks*, souche.  
 Arbre pourri, *adssagšio*, v. *adssaks*.  
*Seskibar*, suseaux [suzeau ou sureau].  
*Ma'ri'ksk*, lieu où il n'y a *q'* du bois franc, seu, où il n'y a point de sapinage.  
*Aroñmakisks* v. *abasi'ks* v. *kekakš'i'ks* v. *sikšakšikek*, *kéghe*, lieu où il y a des arbres, seu forest.  
*Néteks*, lieu de bois franc, il y en a, *néte-gš'i'ké*, *nétigš'i'ksk is sikhúda*.  
 Le chemin est plein d'arbres, *nekšksitsa-ghí*.

Plaine, lieu où il n'y a point d'arbres, *babar-sksdái*.  
 Le chemin est plein d'arbres renversés v. sur terre v. dans l'eau, *kakpessaghírré*.  
 Je passe la rivière sur un arbre, *ncpikagas-ságsé*.  
 Les arbres reverdissent, *sañghibágat*.  
 ——— fleurissent, *ni aneghi kédasi sañghibágat*.  
 Leurs feuilles s't [sont] de la g'deur [grandeur] qu'elles doivent être, *sémibágat*.  
 J'abas un arbre pour m'en servir, v. pour me chauffer, *nekašhamen* v. *nekaštéhemen*; il le faut abattre, *kasahañss*.  
*Pskañtksnsr*, les branches, soit gros soit petites d'un arbre; *pskahakšat*, v. *pskañtksn*, il ē [est] branchu; *mesáiri*, *pskañtksnsio*, il ē [est] bien branchu.  
 ARC, *tañbi*, *ak*; mon, *nedatañbi*; sa corde, *nañptañ*; flèche sans tête, *arss*, *sar*; à tête, *pa'ksé*, *kšar*; *kañkskarss*, flèche où il y a des plumes, &c.; je bande l'arc, *nsikšañkañ*, 3. *asi*, *-ñr*; je décoche, *ne-psnté*; contre *q'q'* ch. [quelque chose] *ncpemsdámén*, nob. *ncpemañ*.  
 ARC-EN-CIEL, *managšain*, *nar*.  
 ARGENT, *mañni*,\* *ak*; *mañnié*, *mañniañr*, qui est d'argent.  
 ARMÉE, bataille, on se bat, *aššidin*.  
 [ARME, ARMER.]  
 Je lui donne des armes, de quoi se battre, *neñssañks'tañ*, 3. *sn*.  
 Je m'arme, *nesañkssi*, v. *nesañksbresí*.  
 Ses armes, *snasañkssanar*; mes, *neñsañkssanar*.  
 [ARRACHER.] [32, 33.]  
 J'arrache un arbre de terre, v. &c., *nekét-képtsn*, nob. *ni'kétkásan*; nob. *nekétké-nañ*, *nekétkéncmen*, v. *nekétkesadsnar*, in plur. etiam.  
 Je l'arrache, je le prens avec la main, *nemanenemen*, *nemanescmen*; j'ôte, je coupe ce qui est méchant.

[\* From the English word, *money*. EDIT.]

J'arrache avec les dents, *nekédadâmen*.  
 J'arrache *q'q'* ch. [quelque chose] bois, v. &c. *nepskatsi'ptsu* v. *nekétkâmen*, *kétkaïsits*, nob. *nepskatsiphâñ*, v. g. *pekâhâñ*.  
 Je lui arrache les mammelles, *neteminssâï-ganéphañ*.  
 Je lui arrache la langue, *netemirašéphañ*; *kétenâñss*, on l'arrache, v. *kétkañss*, 1<sup>a</sup> *nekétenmen*, *nekétkâmen*.  
 Je lui arrache, les cheveux, poil, item de *âñli* [animali], *nepskasaharâñ*.  
 Je lui arrache les poils de la barbe, *nepskšitšaharâñ*.  
 [ARRÊTER.]  
 Je m'arrête faisant voiage, en *q'q'* lieu, *netzansssé*.  
 Je ne m'arrête pas là, je vas plus loin, *nekskamssé*.  
 Je m'arrête marchant auparavant, *netsani-gañbasi* v. *peranesakké*.  
 Je m'arrête voulant m'en aller, &c. *nederabi*, 3. *arabs*.  
 Je l'arrête allant en guerre, v. g. voulant faire voiage, *nekalérhâñ*.  
 La boisson m'arrête, *neksaütssémi*, 3. *kes*.  
 Je suis arrêté par le froid, *neksitañsregs*, 3. *kstañsreks*; *neksaütcsgs*, je suis arrêté par le vent.  
 Arrête de poisson, *namesipigahigan*, *nar*, v. *namesipighé*; je suis étranglé par une, *nedarshî*, 3. *arshs*.  
 [ARRIÈRE.]  
 Je me retire en arrière, *nedasañgañbasiasi*, 3. *asañ*.  
 [ARRIVER.]  
 Je arrive par terre, *neba*, 3. *baïé*; par eau, *nemesag'rra*; je n'arrive pas, *nensda'ra*; j'arrive, &c. *nesémi'ra*; je viens de loin en canot, *nepétsipié*, 3. *pét*.  
 Nous n'arriverons pas auj'd'hui, nous demeurerons en deçà, &c. *kensdarâñbena*; ils arriveront aujour'd'hui ici, *isgatsinikksmbi érmekizegak*, *amessagaharedinañ*; c'est bien s't[combien sont] ils arrivé de canots? *késsskansk méssagarâñtsik*? c'est bien

êtes-vous arrivé de canots? *kekéssskameba* v. *kekésssréba*? un, *nensgstsrebena*; 2, *nenissrrébena*; dans le lieu ou je demeure ordinairement; j'arrive par terre sans rien porter, *nepétsi'ra*; j'arrive par terre v. par eau portant le bagage, &c. *nepédsdé*; j'arrive où je souhaitois, *nemesk'mighe-nem*; à peine arrive-je où je souhaitois, *asakañtsi nemes*, &c.

C'est bien êtes vous qui arrivé par terre? *kekés-* [34, 35.] *ssssébanasa*? 2, *nenissssébena*; 3, *nensssssébena*; 4, *niéssssébena*; 5, *nenâñssssébena*; 6, *neksdans nekessssébena*; 11, *neksdañtkao nekessssébena*; 16, *neksdañnsaïnkao nek.*, &c.; 17, *tañbasâñnsaïnkao nek.*, &c.; 18, *tzañcksâñnkao nek.*; 19, *nsrisitzañnkao nek.*; 20, *nisineské nek.*; 60, *negsdañtineské nek.*; 70, *tañbasâñtineské nek.*, &c.; nous arriverons demain où nous prétendons, *nsémirañbena*; j'y arrive, *nsémi'ra*; nous coucherons 2 nuits, *kenissgnsdébenatsi*, 1<sup>a</sup> *nenissgnsdé*; cela arrive, hoc accidit, *arâi*, *arâighesa*, *arâigheban*; cela n'est pas encore arrivé, *éssema io arâisi*; sub. *arâighé*; mg. *mda. arâinskké*.

[ARRONDIR.]

Je l'arrondis, peau, v. étoffe, v. couverte, *nesañsiañéghissemen*, *nsañsiéghissemen*, 3. *asañ*, *nerañsiañaksssemen*, une planche, &c.

[ARROSER.]

Je l'arrose versant, *nessgnebañsadsa*, 3. *ss*, v. *nessgnebañlâmen*, nob. *nessgnebañrañ*; dans le blé entier, v. *nebi nederissgahadsa*; nob. *srañbsass*, *srañbsaté kesâñbs*, &c. cela assaisonne bien la sagamité, v. fait bon potage.

ASSAISONNEMENT, *pebihigaññ*, v. *segšahigaññ*.

[ASSAISONNER.]

J'assaisonne, *nedapebihé* v. *nedapebihighé*, de lui, nob. *nedapebihâñ*, *nedapebihéhañ*, 3. *sdap*, v. *nedapebihighéhañ*, ign. *nedapebihétsn*, *pebihighé is*, assaisonné de cela,



Je fais chaud sans assaisonnement, *nepañ-gsbihé*, 3. *poñ*.

[ASSEZ.]

C'est assez, *tébat*; il est assez bon pour faire cela, *sdereghikksi kesunñsin*.

C'est assé, *tébat*; c'est assé à un homme de 10 chats, v. g. pour une robbe, *tébágs*; de nobili.

Il a assez d'un chevreuil pour se couvrir, *stébagšinar sar*.

Il a assé d'une couverture, *stébagšin moskesé*.

[ASSEMBLER.]

On s'assemble, *maiéssañ*.

J'assemble les hommes, *nemaëghimañk arc-nañbak*.

Je les assemble, *nemañséssadšnar*, ils le s't [sont], *kisi mañserrak*, no' [nous], *nemañ-sétañbena*, *nesitsimaërra*.

[36, 37.] [ASSEOIR]

Je suis assis, *nedápi*, 3. *aps*.

Je suis assis les piés devant, *nemámékéssi*; sur les talons, *nedasitegsakébi*.

—— à terre, *mtsisi nedápi*, v. *nemitsikapi*, 3. *mit*.

Je suis assis auprès de lui, *nedapittasñ*; de cela, *nedapittamen*, v. *neksanepitasñ*, 3. *sd*.

Je suis assis à mon aise, *nsreképi nsrkéssin*, je suis couché à mon aise; nous sommes assis tous d'un côté, *nedisiganapibena*, 3. *isiganapšak*.

Je suis assis sur un ban v. haut, *nsskidapi*, 3. *skidaps*.

Je suis assis bas, *netabesabi*.

Je suis assis haut, *nedáspabi* v. *nemšspabi*; trop haut, *nssañmi msspabi*.

Voilà qu'on s'assoit, *ni apšredin*; *sipkis-kañn*, on est debout long temps.

[ASSISTER.]

Je n'y ai pas assisté à la prière.

J'assiste v. à la prière, guerre, &c. *nesitsi-rañn*, v. *ra pañbabi meghi*, &c.

J'assiste à une cérémonie, *nesésisi*, v. g. ....*dimrghé*; item, je vais à la cabane de celui qui doit mourir. Je n'assiste pas à sa mort, *nsskešsi*; à quelq<sup>e</sup> assemblée,

c'bat [combat], messe, . . . .; ils sont assemblés, *maëssak*.

[ASSOMMER.]

Je l'assomme, *nedañmusitéhañ*, 3. *adwñ*.

[ATTACHER.]

Je m'attache à q<sup>q</sup> ch. [quelque chose], *nekironñbitsi*.

—— à lui, je suis de son parti, *nekirañ-batsi tasan* v. *nekironñbátsi šbaghek*.

J'attache, *nekerabisi*, cela, *nekeraberemen*.

Je l'attache bien, *nedussamaberemen*, nob. *-mabi<sup>c</sup>ran*.

J'attache l'esclave, *nchabédagšabi<sup>c</sup>rañ*.

—— au poteau, *nedassidabi<sup>c</sup>rañ abasik*.

Je suis attache à lui avec attrait, *nemé<sup>c</sup>tañ-dérmañ*.

J'attache v. g. peau de chevreuil à la porte p'r empêcher le vent, *ssé nekébégabirañ*, ign. *nekebégaberemen*.

*Nedañkékabisi*; cela, *nedañkékaberemen*.

J'attache, lie, mets linge, couverture, depuis la ceinture en bas, seu cōe [comme] le braiet des femmes Iroquoises.

J'ai de l'attache p'r cela, je l'aime avec attache, *nekesañlérdámen*, nob. *déremañ*.

J'ai de l'attache pour cette terre, v. g. *neka-késañtekañdamen iskki*; pour lui, *neka-késantekañ*.

Je lui attache à son corps une pierre p'r le jeter dans la rivière, *nekedaskaharañ*.

*asakañtsi kerami<sup>c</sup>ré* v. *kerams step*, à peine sa tête tient elle, &c.

J'attache q<sup>q</sup> [quelque] chose, *nederégabere-men*, nob. *nederégabiran nederéktsn*, *añts-réañséghen*, je mets un linge sur mes épaules, v. g. l'amict.

[ATTAQUER.]

Je l'attaque, *nsneñhan*, v. *negaghixian*.

Un fort attaqué, *ntañss* v. *ntañssé*.

Nous l'attaquons, *nenitsnénasé*.

[ATTEINDRE.]

Je l'atteins de la main, *nenaskañnemen*, nob. *nenaskañ*, sans le prendre, v. g. étant dans un trou, *nai*, 8. *snas*.

Je ne puis l'avoir, *nenaskañneman*, 3. *snas* v. . . . .

Je suis cruellement atteint, souffre, &c.,  
*nssighiné.*

[ATTENDRE.]

J'attens, *nedaskasañbi.*

Je l'attens, *nedaskasi'ttsn*, nob. *nedaskasi-hañ*, v. g. *ketsragsr*, item, *pañbatamsaingan*, qu'on prie; attens-le, *skasihé*; moi, *skasihî*; attens un peu, *pera menni.*

Je l'attens il y a long temps & ne vient point, je suis las de l'attendre, *nesisskasi-hañ*, abs. *nesisskusañbi*, je suis las, &c.

Je l'attens ici où il doit passer, venir, & je lui parlerai, *nedaskshairañ.*

[38, 39.] [ATTENTIF.]

Je suis attentif, seu, j'écoute, *nekiktam*; imper. *ki'ta*, ils, *ki'tamsks.*

[ATTIRER.]

La terre grasse, v. g. attire l'huile, v. écorce, elle l'attire, *sripekšuni're.*

[ATTRISTER.]

Je m'attriste, *nssighérdamité'hañsi*, 3. *gag*, v. *nssikérdam*; cela m'attriste, *negaghisañdérdamkañgsn*, 3. *aga*; *métsinédu amat-séssu namitasainé.*

Je l'attriste, *nssikérdamihañ*, 3. *ss.*

[ATTRAIT.]

Je trouve en cela des attrait, *nemé'taëndérdamen*; je demeure avec lui avec attrait, *nemé'taëndéрмаñ.*

[ATTRAPER.]

Je l'attrappe en marchant, je le joins, *nedatemi'kasai*, 3. *sdat.*

Je l'attrappe fuyant soit *q'* je le tue v. l'amène, *nedatemi'kasai*; Gabriel, v. g. a bien-tôt rattrapé le ciel, *snaptékkamen spemki*; 1<sup>a</sup>. *nenapté'kamen*, j'ai bientôt attrapé cela, arrivé, &c.

Attrape, *kerahigan*, *nekerha*, j'y attrape lac courant, *piainn*, j'en fais, *nederitsnar*, &c. ils, *nak*; j'en fais, *nedapianiké*, v. *nederihan piainn*; j'ens des attrapes pour les chevreuils, *nepsnañbena*, 1<sup>a</sup>. *nepsna*, imper. *psna*, ils, *psnamks.*

J'en prens, *nebiθa*; je m'y prens, *nepiθsgs*, 3. *peθgša*; je l'y prens, *nepiθamen*; attrape aux ours, *kerahigan*; aux castors, *cōe*

[comme] des fermoirs de fer, *arenaragšik-kerahigan.*

Je lui fais une attrappe pour le prendre, *nekerhiganikésañ.*

J'ai bientôt attrapé ce lieu, j'y suis bientôt arrivé, *nenabté'kamen.*

Je l'attrappe fuyant, v. g. *nedatemi'kasai*; je prens une marte, v. g. dans l'attrappe, *nekérrañ*; étant prise, *kerahsté*; il ē [est] pris, *kerahsks*, ils, *kerahsgsk*; *māda* [*mānda*] *kerahsgsiak*, point pris; je prens à l'attrape, *nekerha*; appât pour l'attrappe; Vid. Appât. Je suis pris dans l'attrappe, *nekerhsgs.*

[AVALER.]

J'avale, *nemesihada*, v. *ds*, v. *nekssihada*, v. *ds*; nob. *neksssi'harai.*

Je l'avale, *neksssihadsn*, v. *ds.*

Je ne puis l'avaler, il demeure au gosier, *nepesri.*

Je ne puis l'avaler, je suis trop malade, *nedairasikssihada*, *ssainni nssagahapagsn.*

Je ne puis avaler à c'se [cause] d'un os *q'* j'ai dans le gosier, *nedarshi*, 3. *arshs.*

Je me sers de la langue pour détacher l'hostie, v. g. qui est attachée dans la bouche et pour l'avaler, *nepskšadarappañ*, 3. *aps.*

[AVANCER.]

J'avance la bouche, pour recevoir *q'q'* ch. [quelque chose] *nenitstamen*, l'hostie, v. g. *neni'ts'pañ*, *hostisin.\**

Avancez-vous de ce côté-là, assoiez vo' [vous] plus avant, *manšépiks nemanari* v. *nšépiks.*

Retirez-vous en deça, *sdasamépiks.*

[AVARE. Vid. infra.]

[AVANTAGEUX.]

J'en tire du profit, *nemasékéké*; *kégsi baghi*, *domghé manasékkañ*, on le prend, on en profite.

[AVENTURE.]

J'ai une bonne aventure, *nsirit*, 3. *svirit*; *nsiritébena*; *ks.*, *ksiritéba.*

[\*From the French. EDIT.]

[40, 41.]

J'ai une bonne aventure ; de malh'x [malheureux] *q'* j'étois, je suis devenu heureux, *nedaskámesi*, 3. *skámess* ; je lui procure, &c. *nsripegšatasañ* ; cela me procure une heureuse aventure, *nsripegšatañgsu* ; j'ai une bonne aventure, *nsririten*, v. *nsririt*, imper. *sririti*, ils, *sriritsks*.

## [AVARE.]

Je suis avare, eu égard aux habits, meubles, *nesa<sup>c</sup>ksatsessé*, 3. *sak*.

## [AVENTURE. Vide supra.]

## [AVERSION.]

J'ai aversion de cela, *netsésrdamen*, de lui, *netsésrmañ*.

## [AVERTIR.]

Je l'avertis, le fais souvenir, *nemi<sup>c</sup>kémañ*.

## [AVEUGLE.]

Je suis cœ [comme] aveugle de la fumée, *nepekesi*.

Je suis aveugle, *nensrmesssi*, 3. *nsmesssio* ; à l'aveugle, *nsrmisi* ; je marche à l'aveugle, *nensrmssé* ; 3. *nsr* ; je marche dans un lieu obscur, v. *nepegssé*, 3. *sseg*.

Je suis aveugle de ce qu'il deviendra, je ne sçai quel sera son sort, *nensrmérmañ*.

Le soleil m'aveugle, *nedagadassi*, 3. *agad* ; la neige, *nedagádassi*.

## [AVILIR.]

J'estime cela, je ne le donne pas ; je l'avilis, seu employant *q'q'* ch. [quelque chose] *q'* j'estime à un usage vile, *nessasainérdamen*, *kenessa*.

J'avilis ma psœ [personne], *nessasainérdamañ nhaghé*.

[42, 43.] AUJOURD'HUI, v. *érmekizegak*, pendant le jour, *kikizekakeban*, avant midi.

AVIRON, le mien, tien, sien, *s<sup>c</sup>tahagan*, *ns<sup>c</sup>tahañgan*, *ks*, *st* ; *nsθamen*, je nage p'r détourner le canot, &c. ; j'en fais, *ns<sup>c</sup>thañganikké*, 3. *st* ; pour lui, *nsthañganikkésañ* ; je me sers de cela, cœ [comme] &c., *nsθaiañganighé<sup>c</sup>tsn*.

## [AUMÔNE.]

Je d'de [demande] l'aumonne, seu p'r manger, *nekisighé* v. *nekisineskasainbésé*, v. *nekisañsi* ; à lui, *nenikésainmañ*.

AVOIR ; j'ai cela, *nstsainemen*, nob. *nstsainnañ*.

J'ai du petun, v. g. *sdamañmi*, *kss*. ; *añdmanmšio*.

J'ai des vivres, *nsmitssañgani*, 3. *amit*, *nsio*.

Il y a de l'eau, vin, v. *q'q'* [quelque] liqueur, *tašbé* v. *tašlé*.

J'ai un chien, *ustémisi*, 3. *stémis*.

Y a-t-il b'p [beaucoup] d'originaux ? *mesai-roknusa sdainañ msssk* ? il n'y en a point, *mañda sdainnañ*.

*Išba arghi<sup>c</sup>kšghé*, si j'en avois, v. g. autant *q'* cela, aussi grand, gros *q'* cela.

*Kaikutak ni éri tagšañghighé*, il y a 3 ans ; s'il n'y en [ a ? ] *q'* 2 on dit, *ni éri tagšañghighé*.

## [AVOUE.]

J'avoue, *nenanañbésé* ; cela, *nenanañbésain*, 3. *nanañbésé*.

J'avoue ce qu'il me dit, *nena<sup>c</sup>nañbémañ*.

J'avoue, je dis *hé*, *nneskshsm*, v. *nneskshsmasi*, 3. *nneskshsm*, *nnesksmebena*, *keneskskshmsr*, *keneskskshmasi*, *neskshañss*, v. *srañmsedañss*, v. *kitañss*.

## [AUTANT.]

Donne moi autant de petun *q'* cela, *ni aksnišsin sdamañ kemiri*.

Je te donne autant de viande *q'* cela, *ni arghikkšn sios kemirer*.

Je te donne autant de bâles *q'* tu me donneras de sous m. [marqués], *nañacks-tañsadšarskaronsksr*, *ssmarkinak*,\* *nekstañsado*, &c.

## [AUTOMNE.]

L'autonne où l'on est, *tagsañgs*, v. *tagsañgsio*, c'est l'autonne ; le prochain, *tagsañghighé* ; le passé, *tagsañgsé* ; tous les autannes, *ésitégsañghighi* ; sur la fin de l'autonne, *méta<sup>c</sup>kkši*, seu, il n'y a plus de feuilles ; il y a un cet autonne, *ni éri tagšañghighé*, *ni*.

## [AUTOUR.]

Autour, à l'entour de *q'q'* ch. [quelque chose], *sisisuisi* v. *sa<sup>c</sup>kañsi* ; je suis t'rs [toujours] entourré d'eux, un père, v. g.

[\* From the French *sou marqué*. EDIT.]



de ses enfans, ils y sont t'rs [toujours] où *q'* j'aïlle, *nšišnérskkandängsé*; no' [nous] sommes t'rs [toujours] autour de lui, *nšišnérskkadasaïna*.

AUTRE, *ketak*, les autres, *ketaghik*, ig. *kedaghîr*; c'est une autre ch. [chose], *pirsié*, nob. *piršís*; cela paroît tout autre, *piršinaňgat*, nob. *gsss*; je le prens pour un autre, *nebišé*; v. g. croiaut tuer un orignal, je tue un hōe [homme].

Je te tue, fais [?] *q'q'* p'r un autre, *kebi'thr*, *irsé*; tu me, *kebi'thi*, v. *kebittéhi*.

[Pages 46 and 47 of the MS. are blank.]

## B.

[48, 49.] [BAILLER.]

Je baaille, *nenebaniššōnk*, 3. nob. 3. sub. *nenebaniššōnkeghé*.

Je baaille tant j'ai sommeil, *nenebaniššōnké*, *épegšotsi érhikkksi kudoxia*; 1<sup>a</sup>. *nenebaniššōnka* 3. *nenebaniššōnk*, *nenebaniššōnkeghēban* nia *nenebaniššōnkaiñeban*; *maghi nenebaniššōnka, kudoxiainé*, je baaille t'rs [toujours] quand j'ai sommeil.

[BABILLARD.]

Je suis babillard, . . . . 3. *nap*.

BABICHE, courroie, *sršghes*, *sar*, la bache, qui attache la couverture devant et aux épaules, *aneskamaiñ*.

[BADINER.]

Je badine, *nepa'pi*, *saïsan*, *nsnemihaiñ*.

Je badine avec lui, j'en fais mon joüet, *nepa'piaiñ* v. *nepa'piaiñ*; le chat, v. g. badine avec la souris, il en fait son joüet, *apapi'çaiñ*, ign. *nepa'pitsn*; ils badinent c'tinuellement, ils font les fous, *kaňghégahaiñk ni érahaiñhadit*; *kégs sétsi tarahaiñégs*, p'rquoi faites vo' [vous] là les fous, &c.

BAGAGE, *matsésssm*, *matséssšar*, v. *kégsi-aiñssr*; mon bagage, *nematséssšmar*; j'en ai, *nsmatséssšmi*, 3. *am*, *-ssms*, v. *nskégšaiñssmi*, 3. *ak*, *-ssms*.

BAGUE, *sakiriššchn*, *nar*; j'en ai, je la mets à mon doit, *nesakiriššchsi*; je la retire, *neghédenemen*; je ne puis la faire

Je prens une cab [cabane] p'r une autre, *nebitsíghé*; tu me prens p'r un autre, *kepitsi'phi*, *kepitsinnasi* v. *kepitérmi*; je le prens p'r un autre, *nepitsinenusaï* v. *nepitsi'phaï*, *nepitéremaï*; je te, *kepitsi'pher*; tu me prens p'r un autre, *kebé-gšasimi*, &c.; je le prens p'r un autre, *nebé-gšassimaï*; *keššōsr ersé*, j'ai falli a te tuer, sci't [scilicet] il a tiré sans voir psōe [personne] & après avoir tiré il voit *q'q'* [quelqu'un] à l'endroit où il a tiré; *nepitéhoïñ*, je ne pretendois pas lui faire le mal *q'* je lui ai fait.

entrer, *nssi'ré*, v. *nsté neretsi*.

[BAIGNER.]

Je me baigne, *nedakássemi*; 3. *tek*.

[BAILLER. Vide supra.]

BAISER, *satzémedsōňgan* v. *satzidsōňgan*; il paroît v. g. où j'ai baisé, *namihigsat nstšémšésōňgaï*; je le baise, *nstšédamen*, 3. *st*; *nstšémaï*; baise ta main, *satséda keretsi*.

[BALAYER.]

Je balaie la cab. [cabane] *netsikékéhémén šigšam*; \* nob. *tebaniššé'çaiñ*; je balaie avec cela, *is netsikékéhighé'tsu*.

[BALAI.] Balet, *tsikkéhígan*.

BALANCE, *tebañbé'çigan*, *tebañbé'çaiñss*, *netebañbé'çamen*, nob. *bé'çaiñ*, ign.

[BALLE.]

Bâle à fusil, *skaronsks*, *ksr*; grosse bâle, *ketsisasaï*, *nar*; petite bâle, *tsšanesié*, pl. *šaiñ*.

BALEINE, g'd [grand] poisson, *psdébé*, *bak*.

[BALUSTRE.]

Le balustre de la chapelle, seu, où l'on communie, *ahadari communiššredimek*.†

BANC, *tasapšdi*, *ar*.

[50, 51.]

[BANDER.]

*Nedagšaraňgšébi*, j'ai le visage couvert v. pres*q'* couvert de ma couverture.

[\* Written by the English, *vigicam*. EDIT.]

[† From the French. EDIT.]

J'ai les yeux bandés, *nedasssgšébi*, 3. ass, v. . . . .

Je les lui bande, *nedasssgšébirāñ*; la face, le visage, *nedagšarañgsébi'rañ*, 3. sda.

[BAPTISER. Vid. infra, p 52, 53.]

BARBE, *mi'tsar*; je me la fais, *nebesksitšéhssi*, v. *netsikitšéhssi*; à lui, *nebesksitšéhhañ*; je me l'arrache, *nebesksitšéhavesi*; il n'en a point, *māda* [*manda*] *asitsisi*; j'ai de la barbe, *nšitši*, 3 subj. neg. *māda* [*mañda*] *asitšikkšé*; *nī auoghi sañghitšāūt mitšar*, sa barbe commence à croître; *nesañghitšéhssi*, je m'en procure; barbe qui est aux branches de certains arbres, *a'sá'ksak*.

[BARRIQUE.] Barrique, *māñrikkiré*, ak.\*

BARQUE, *sañrspešrags*.

BARRIÈRE, *kebakstéhigan*, *kebcnañss*, il ē [est] barré, il y a barrière de castor; barrière de castor, *ssekításé*.

—— d'un champ, v. d'un fort, *sakañrs-senahigan*; j'en fais une de pierre, v. de bois, *nekebenemen* v. *nekebakstéhemen*; je la romps, *neberhámen*, v. *neberhíghé*.

BAR, poisson, *magáhaghé*.

BARBUES, poissons, *sañssesak*.

BAS, à terre, *mtsisi*.

[BATTRE.]

Je me bas, *nemiga'ké*; je le veux battre, *nekadasipenarāñ*; je me veux battre, *nekadasipenasi*.

Je le bas, v. *nebañktéhañ*, 3. *abañk*; v. *nekistéhañ*, v. *nematsirañsañ*, 3. *amat*; souvent, *nekañghéktéhañ*, 3. *akañ*.

Je le bas rudement, lui casse bras v. jambe, &c. *nesañghitéhañ*; légèrement, *nssañmtéhañ*.

Je le bas, lapide, *pnapesks nedagamañ*.

Nous no' [nous] bâtons, *nedasđibena*, ils se b. [battent], *asđsak*.

Je le bas à le faire pleurer, *nesésenañ*.

Je bas à faire pleurer, *nesésenakké*; sa *gakke éts nsañdamitéhañ*, je prétens le

faire sage en le battant & au contraire je le rends fou.

Je veux me battre, &c., *nekadasipenasi*. [52, 53.]

Je me bas, *nemigakké*.

J'ai coutume de me battre, ait puer, *netsiriñ*; j'ai coutume de me battre, ait puella, *netsirskšā*; defens toi, bas toi, v. g. c'tre [contre] le démon, un homme a à combattre tant q'il est vivant, *kia atsi kessada kemerkossani kšéni pemañssit aronañbé*, *nī aksnipenasin*; ne te laisse pas vaincre par le démon. *nssak sinihigskkan matsks*.

*Kedarhitéhi*, tu te laisse battre par moi, *māda* [*mañda*] *kedarsdsrs*, tu ne te revenge . . . . *māda* [*mañda*] *kedarsdasi*; *kedarhitéhsr*, je me laisse battre par toi; *nedarhitéhsks*, je le laisse battre par lui, &c. *nedarhitéhañ*, il me, &c. *nedarhitéhsghé*.

Je le bas à lui causer un mal de tête, *nepas-kšétéhañ*.

Je le bas à le faire mourir des coups que je lui donne, *nekšaskstéhañ* v. *nesšés-sañmtéhañ*, v. *nemétsimétehañ* v. *nedaskamitéhañ*.

Je cherche q'q' [quelque] sujet p'r me battre, je cherche querelle d'Allemands; ait vir, *netsiriñ*; mulier, *netsirskšā*.

Je me bas avec lui, *nedaisđsañmañ*.

Combien vous êtes qui me battez, *kemesāiro-kasiba*, *késsskasiégs?*

On se bat vigoureusement, *pi'ta sañgripenaredin*.

Ils me battoient, étant tout seul, p'r &c. *nemañskañghé*.

BAS, chaussure, *kenéssn* v. *neghikenéssn*, *nar*; je les mets, *nekikenéssnhsderesi* v. *nsrikenéssnuhsderesin*, v. *nsrtsu nekenéssnar*; je les ôte, *nekétsikenéssnénesi*; j'en fais de cela, *nekikenéssnzaññ*; j'en fais de cela, *nstsikenéssnzaññ is*.

BÂTARD, *narásasañs*, tu es, *kenarasasañsšši*.

[BÂTTE-FEU.] Bate-feu, *sagahañ*; mon bate-feu, *nesa'zañ*, 3. *ssa'zañr*; la pierre, *sagahañapesks*.

J'en bas, *nepeséha*, bas en, *peséha*; p'r moi,

[\* Corrupted from the French word. EDIT.]

*peséhémasi* ; 1<sup>a</sup>. *nepeséhémasañ* ; il fait du feu, il ē [est] bon, *pesâîrê* v. *kesipesairé*.

[BAPTISER.]

Je batise, *nessgnebaürsé*.

Je suis batisé, *nekisissgnebaüsi*.

Je le batise, *nessgnebaürañ* ; je supplée les cérémonies, &c. *nepaüba'tamasésañ arc-naübé kisissgnebaüsssá, mäda* [mända] *paüba'tamasésañsissa ssgnebaüredé* ; on te suppléra les cérémonies, &c. *kepanba'tamasésghé éri ssgnebaüsiása stsi*.

BÂTON, *añdabéhsn, nar* ; court, *taada'kšat*, long, *ksna'kkšat* ; mon, *nedañbadéhsn* ; *nedañbadéhsni*, je vais avec bâton.

[BATTRE. Vide supra.]

[BAVER.]

Tu baves, *nekebégat kedsn* v. *kemesâirisescgsé*.

[BEAU.]

Je suis beau, *nsrighi*, 3. *srigs* ; beauté, *srighisaügan*.

Je le fais beau, *nsritsn*, nob. *nsrihañ*.

Je trouve cela beau de veue, *nsrinamen*, nob. *nsrinasañ* ; tout ce que j'ai est beau, *nsasratséssé*, 3. *sasr* ; cela est beau à voir, *srigangšat*, nob. *gsss* ; cela est beau, bon, *srighen, srighensr*, &c.

[54, 55.] BEAUCOUP, *pesaügsi*.

Beaucoup, pl's. ch. [plusieurs choses], *mesâiredsr* ; pl's. ho'es [plusieurs hommes], v. g. *mesâirok*.

Y a-t-il b'p [beaucoup] de viande, *mesâiret é'to sios* ?

B'p [beaucoup] de blé, *mesâiredsr skamsnar*. J'en ai beaucoup, *nemessi'tsnar*, 3. *am* ; *nemisitsn messisikégsi*.

[BÉGAYER.]

Je bégaie, *neghegheritañ'dšé*.

BELLEMENT, *menni, néssaüma*.

BERCEAU, de bois, *tekinäügan*.

[BERCER.]

Je le berce, étant attaché, *nederaübéghips-rañ* ; 3. *sd* ; je le berce sans être attaché, *nenénemenañ* ; berce le, *arañbéghipsré*.

[BESOIN.]

J'ai besoin de cela, j'en profite, *nstaübédamen*, 3. *sdañ* ; nob. *nstañbémañ*.

J'ai besoin de ce q' j'ai donné, *éskasana mégañneban*.

J'ai oublié de couteau p'r faire q'q' ch. [quelque chose], *nsnitéhañdamen nenetséksaks, nsnitéhañdamené nenetséksaksé* v. *nsnitéhañsi* ; je n'en ai qu'un, *nenekstsišiamen* ; j'ai besoin, *nenetséksaks* ; ce dont on a profité, &c. *staübédamsaügan* ; de 2 couteaux v. g., l'un donné, celui qui me reste se rompt, c'est p'rquoi je regrette le donné, *éskasana méga* v. *sékasssia, éskasanamégan*, &c. 3. *méghek*, j'ai besoin de ce q' je donne v. q' j'ai oublié.

BÊTE, *ašahass, sak* ; bête feroce, *quæc'q' [quæcunque] sit, asé'hännedo, dsak*.

Bête qui müe. Vid. MÜER.

Je vais chercher, soit bêtes, soit oiseaux, *nepipema* ; on y est allé, *bipemañ*.

On me donne la bête qu'on a tuée ou une partie, *nenekstkšé* ; 3. *nekst*.

Je vais quérir la bête qu'on a tuée, *nedañmbekshsghé pirisande, naürakamigsiak*.

Je vas accommoder la bête sur le lieu, faire sécher, &c. *nenañtkadssa*.

Les divers parties de la bête. Vid. ANIMAL.

Je lui donne la bête tuée v. une partie, *nedañbekshañ* ; on me, *nedañbekshsghé sa aübekshst*.

BEURE, *merenaksssipemi* ; du lait, *merená-ks*.

[BIAIS.]

De biaux, *añsëighen*, nob. *añsëigs*, advr. *añsëisi*.

[BIEN.]

Je travaille bien, *nsrarokké*, v. *nenitaüsa-* [56, 57.] *rokké*, 3. *tañsarrokké*, 3. *sr*, v. *usa'srarokké*, 3. *sa'sr*.

Je suis attaché au bien, j'ai de l'attache p'r les richesses, *nsigatséssé*.

Je lui fais du bien dans sa nécessité, *nena-batsihoñ* 3. *sn* ; v. 3. *sdar* ; abst. [absent ?] *nenabatsihšé*, j'en fais, v. *nenabatsi'tsn*.

Je te fais du bien, *kemess'ren*, à lui, *nemess-rañ*.



Il cesse de me faire du bien à cause q<sup>d</sup> je l'ai offensé, *nebarirascháñ*; je lui fais du bien, *nsritebihañ*; je m'en fais, *nsritebihssi*.

**BIENTÔT**, *tébné, tébnétsi*.

[BIGARRER.]

Je bigarre, mets diverses couleurs, *nederat-segšairíghé*, 3. *ara, ara'tegšairígáñ v. mesaira'tegšairígáñ*.

[BIGLE.]

Je suis bigle, je vois de travers, *nebimañra-ghígsa*, 3. *bi*.

[BLANC.]

Cela est blanc, *sañbighen io, sañbighensr, nob. sañbigs*.

Je le fais blanc, *nsañbítsn*, 3. *asañ, nob. nsañbihañ*.

J'ai les mains blanches, *nsasañbíretsa*; cela n'est pas bien blanc, v. g. chemise, cela ē [est] un peu noir, aiant séché à la fumée, *pesenégghí'ré*.

Je blanchis, du linge, v. g. Vid. LAVER.

[BLÂMER.]

Je blâme, j'improove, *nedañnéstam*, 3. *añnes, ig. -nestamen, nob. tásañ*, l'entendant.

Je blâme cela, *nedaññainamen*; dans lui absent, *nedaññainamasañ v. nematscnamasañ*.

Je le blâme de pensée, *nedañnéрмаñ*, 3. *sd*;

—— de paroles, *nedaññimañ*, 3. *sd*;

—— l'écoutant, *nedañnéstasañ*, 3. *sd*.

[58, 59.] [BLÉ.]

Blé d'Inde, *skamsn, nar*; blé entier qui n'est pas pilé, *mesikstar*.

—— blanc, *sañbighensr skamsnar, v. sañbcmenar*.

—— rouge, *mesksbéssšiminar, mesksbés-sšar*.

—— noir, *tseghiminar*.

—— jaune, *šissmenar, tarégšmenar, cōe e'scril [comme écureuil?], un rang, d'une couleur, un autre, &c.*

Épi de blé cōe [comme] une main, *sretsšimin, pl's, minak*.

Épi de blé, *mesasks, ksr*; *mesasks ksr*, épi de blé qui est entouré de ses feuilles.

Blé qui vient vite, *nenabiminar*.

—— d'une rougeur & d'autres couleurs, *ksrbiminar*.

Blé qui est si plein, si fourni, qu'on ne voit point le tron. [tronçon], *sékšaiñmin-kañss*.

Ancien blé de 2 v. 3 ans, v. &c. *kateni-minar*.

Petit blé, *abañ nar*.

Gros blé, *skigsémenar v. peksiganar*.

Blé lesivé, *kétarahaghésiganar, peksana-skesiganar*; j'en lesive, *peksanaskesšiganar néderi'ts*; fais m'en, *aritasš peksa, &c.*

Feuille de blé, *saresks, ksr*.

Ils sont tressés, *arañbégnañšar*; je le mets en tresse, *nederañbégníghé, abañ-sksr*; une tresse, *negsdañbéghenañšar, v. negsdañbéghí'rar, &c.* 2. *nisañbéghenañšar, &c.*

Sac de blé, *negstskénar, 2. nisšskénar, 3. tssskénar, &c.*

Je bêche la terre p'r semer, *nsañrké*; hoüe, *arakéhígan*; une fosse, *msnañgan, -nar*.

Je le sème, *neda'kikké*; il pousse, paroît, *sañkeki'rar*.

Il est grand, *spi'rré*.

Je le rehausse, *nenikakssiíghé; nežaksí-hígáñ*, le rehaussement; *nežaksíghé meghé, nežaksañss*.

Le tige, item, fuseau, *sipskanañgan*; j'en suce, *nedasipskané*.

Il est tendre, *merígsé'ké, merígsédšmenar v. mcraskr*.

Il ē [est] ferme, *bašasedé*; j'en ôte les herbes, *nemaséskeníghé*.

Il commence à être bon, bientôt meur, *bañbañsigšet, nsrmapekséré, il ē [est] meur*.

Il ē [est] propre à manger, *nitsigset*.

Je le cueille, *kasaksníxdin, nekasaksní-ghé*; je l'arrache les herbes, *nemasés-skeníghé*.

Je le fais sécher au soleil, *nesiphiminé; sisañtéminar*, qui est séché au feu.

Il sèche à loisir, *kesspasantssar*.  
 Je l'étens sur l'écorce, v. &c. avec la main . . . . .  
 La chaleur l'a gaté, *nañde*, pl. *nañdar*; le froid les a gaté, *kasadé*, pl. *kasadensr*; la pluie . . . . .  
 Je le mets en monceau v. porte au canot, *nedésadasksé*.  
 Sucez de blé d'Inde, *sipskamañgan*, je le suce, *nedassipskané*.  
 Je le porte à la cab. [cabane], *nemañt-sésaré*, *nemañtsésadassi*; je l'apporte soit en canot, soit &c., *nemañdésadassi*, je le vais quérir sur la grève, &c.  
*nepétésadassi*, je viens apportant charge de blé, de la graine, &c.  
*nesipliminé*, je le fais sécher au soleil.  
*nesibigšaghpsdsn*, j'étens l'écorce; abs. [?] *nesibigšaghpsstíghé*.  
*nesibéranñkeníghé*, j'étens le blé avec la main.  
*nedangšéiminé*, je l'amasse p'r le mettre dans le sac.  
*nepesedamsnké*, je fais du *pesedamsn*; p'r lui, *nepesedamsnkésan*.  
*nemamégtéighé*, je fais cõe [comme] du gru.  
*séma'ksañssar kikkannar*, on ne les a pas encore rechaussés.  
*sisiktéiganar* v. *sisikíganar*, blé qu'on met dans les cendres qu'on remue cõe [comme] *abiminannar*, qui est gros blé, et accommodé de la sorte, c'est cõe [comme] petit blé.  
*nedakadsssiméne*, je le fais sécher dans la cab. [cabane] le mettant sur un petit grenier.  
*ps'kšiminkañss*, épi qui n'est pas bien fourni.  
*vi'sañtéminar*, qu'on seigne au feu, &c.  
*nedabañnké*, je fais bouillir des épis de blé pour faire du petit blé.  
*sigškkéniñganñ*, où il y a un champ, *miri kesigškkéniñgan*.  
*tsikškeniñganñ*, on arrache les fuseaux de blé; *tsikškeniñganñ*.

*netsikškeniñg*, *tsikeni'çedin*, . . . . *sañrkaññ*, . . . . *kikkedin*, on sème; *arakkéni'çedin*, pl's [?] faisant un nouveau champ.  
*dassredin pspstkahádasin*, on met le blé dans les fosses.  
*nepepstkabádassi* . . . . .  
*nekéššshads*, voilà c'bien [combien] j'en mets.  
*meraks'kahúdasin*, on remet la terre dessus le blé, on le recouvre.  
*nemerakšakahatassi*, je le re. [recouvre].  
*merakškahadassrediks*, d'*assredin* . . . . .  
*maséskeniñganñ*, on ôte les herbes, *masške-niçedin*.  
*nskikéhiñganñ*, *nskéhi'çedin*, on gratte la terre, on bêche par tout.  
*nenskkéhiñghé* . . . . .  
*tkakšigaññ*, *tkakšičedin*, on rehausse.  
*nenikakšighé*, &c. . . . .  
*kisi sañkké're*, il pousse, on le voit, *mss-pi're*, un peu grand, *spiré*.  
*agsidedañssar*, on met tremper dans l'eau le blé de semence p'r le faire germer [60, 61.] v. d'abord [?] germer.  
*kisi agšidensr skamminar* v. *kisi agšitse-skaniminañ*, ils trempent, &c.; 1<sup>a</sup> *neda-gšiteskaniminé*.  
*ssañks'kañnak sdamañk*, 1<sup>a</sup> *nesañks'kañ-nak*, *sdamañk*, *ssañks'kañnar éskitameghir*, item *sa'sasar*, on accommode les grains de petun p'r les faire germer, idem di'r [dicitur] des grains de melon & de citrouilles.  
 Je le bas, *nebagkhéhiminé*.  
 Je l'égraine, *nepsksigséhiñghé*, *kšigšéhemskš*, égrainé, &c.  
*niédtsi apaskšasit*, je fais rôtir un épi; *nedapskša'si*, p'r lui, *nedapskša'rañ*, blé goulé, pilé, *pesédamsn*, blé goulé, pilé, où on mêle des bluets pilés, *sa'té-téigan*.  
 J'en groule, *nedabiminé*, v. *nedabimisi*.  
 Je le vanne étant goulé, *nessiadiminé*.  
 Je trie les grains, étant goulé, *nemghe-nási*.

Blé groulé, *abiminañnar*, il est fleuri, *péskess*, *ssak*, il ne fleurit point, *māda* [*mānda*] *péskessisi*.

Je pile du blé, v. dans la pile, v. entre 2 pierres, *nedaksasi*.

Épi dont on a ôté le blé, seu le tronçon, *amitegśaksem*.

Blé pilé comme du gru, *maméstéigan* v. *maméssetsé'téigan*.

As-tu b'p [beaucoup] de blé? *kemesairs-tsits é'to?*

Est-il beau ton blé? *srighensr é'to keda-skamsmar?*

Il y a peu de blé dans mon champ, *manét nedakkikkaññ*.

Blé François, *igriskarnar*.\*

[BLESSER.]

Je le blesse . . . . ; *nekisstéönsi*, je suis blessé d'une épée.

Je suis blessé d'une bale v. flèche, *nemess-dañsi*, 3. *messdañss*, v. *mesañ*.

Je le blesse, cultro, ense, &c. *nedéstéhan*, 3. *st*.

Je le blesse, *nsssaghitéhañ*, 3. *asss*, v. *nssa-ghí'kasañ*.

Il est blessé, *mess*, étant blessé, *méssdé*, les blessés, *messstisik*.

Un blessé qui doit bientôt mourir de sa blessure, *mañmañ*, 1<sup>a</sup>. *nemáñmaa*.

Je suis blessé de la sorte, *nemañmaa*.

Je suis blessé, sed ò [?] mortaliter, *nedam-sítéañsi*.

Je me blesse en t'bant [tombant] . . . . *néktéssin*, 3. *sék*.

Où l'as-tu blessé, *tañni értéhat?* R. [réponse?] *stepék nedertéhañ*.

BLUETS, frais, *sa'tar*, in sing. *sa'té*, lorsqu'ils sont secs, *sikisa'tar*.

[BOIS.]

Bois qui n'est pas sec, *ska'ksr*.

Bois, petits planches de cèdre, p'r faire . . . . &c. *kañksak*.

Bois pourri, *adsssaks*, v. *adsssagšio*, bois vieux, mort, *negañsaks*; bois fourchu, *skahañgan*.

Méchant bois tortu, *nikdasa'kšat*.

Bois, bûche p'r brûler, *asassn*, *nar*; di'r [dicitur] etiam de arbore qui est sur pié mais sec; *srigšak asasñnak*, bon bois à brûler lorsqu' les bûches s't [sont] de bon frêne v. *q'q'* [quelque] autre bon bois, ils le sont, nob.; le bois tire comme coup de fusil, *pés'kedé*, *pé'kédé*, nob. *péskess*.

Bois forest, *abasikkek* v. *kekaksi'ksk*, etiam [62, 63.] broussailles, *si'kšakšikck*.

Je fais du bois p'r brûler, je bûche, *neman-essé*, 3. *ma*.

*Kenañtsesé é'to?* dit on à une p'sõe [personne] qui porte un collier, seu, vas tu quérir une charge de bois?

*Kemanessé é'to?* à celui qui porte collier & hache, vas-tu faire du bois p'r en apporter une charge?

*Kedañbanessé ito?* viens tu de faire du bois?

*Nemanessé*, je vais faire du bois, lorsqu'on sort de sa cab. [cabane]; mais lorsqu'on est dans une autre cab. un peu éloigné & qu'on sort p'r faire du bois p'r sa cab. on dit, *nemañtsimanessé*.

*Mámanessésitégšéba ési ménsaégšis sa'sakésis-sar pétasiégšé*, *atsegaba mesairedsr nedassnar*.

*Nepsuesé*, v. *nematstasé*, je fais du feu, j'y mets du bois; *kematstasésr*, j'en mets p'r toi, &c.

*Arokkšéhédits sérnañbak*, *q'* les ho'es [hommes] abbatent du bois, &c. 1<sup>a</sup>. *nederekšéhi*.

*Ésatséséhédits ghâinemsk*, *q'* les femmes l'allent quérir, seil. *asasonar*, 1<sup>a</sup>. *nedésat-sesé*.

Voilà tout le reste de mon bois *q'* je mets au feu, je n'en ai plus, *nemétsasi*.

Lieu de bois frans, *néteks*, où il y en a *nitégšiké*; *nétekšis'ksk is sikhida*, cabanons, &c.

*Pañgšissenañsiks*, il n'y a *q'* de l'érable.

[\* *Quere*, if a corruption of *English corn*? EDIT.]





## [BOUCHE.]

Une petite bouche, *pskedsné*; g'de [grande] bouche, *kessckairakaksdsné*; tu as, &c. *kekesskairakaksdsna*.

Ma bouche, ta, sa, *nedsn, ke. sd.*; dans la b. [bouche] *sdsnek*; je l'ouvre, *nemi'kdsnési*, 3. *mikdsnés*; ouvre la, *mikdsnési*; je la ferme, *nekepedsnési*, 3. *kep*.

Je prens q'q' ch. [quelque chose] avec la bouche, *nenimadámen*, nob. *nenimamañ*; je jette ce qui y est, *nepsnadámen*, 3. *aps.*, v. *ness'karátamen*; id ē [est] *nedá'ksike-radámen*, nob. *ness'kara'pañ*; *nekssitañ-gani'ké*, je conserve ma bouche pour cōier [communier] v. g., ne mangeant, ne buvant, ne fumant point; *messisi sdsnek tsi'tama'té*, il faut q' cela soit serré à la bouche, qu'il n'en sorte aucune haleine.

## [BOUCHER.]

Je bouche cela, avec &c. bois &c., *nekephámen*, 3. *akep.*, *kebahñss*.

— avec la main, *nekepenemen*, 3. *ak*; en mettant, *nekepetsn*, 3. *ak*; *kepatañss*, un trou, v. g.

J'ai le gosier bouché, *nepessri*, 3. *peppers*.

J'ai les oreilles bouchées, *negaghé'pessa*, 3. *gaghépressé*.

Je me les bouche des mains v. g. &c., *negaghépsénesi*.

BOUCHON, *kepahigan*.

Bouchon co'e [comme] de baril, de corne de boitte à poudre, &c. *kepeskšagá'igan*; d'une quaisse, &c. *asskséigan*.

BOUCLIER, *añgšian*; . . . di'r item de deo.

BOUE, *asesks*, il y en a, *asesksio*, à ma robe, *asesksio nedassé*.

BOUEUX, *psazeské*.

[Page 68 of the MS. blank.]

[69.] BOUILLON de chair, *kesañbs* v. *šiossañbs*.

— de poisson, *naméssañbs*; chaud, *kesebitté*, froid, *tekebi*.

— d'oiseau, *sipsañbs*, &c.; nob. *nekesebéssañ*; je le rechauffe, *nekesebéssemen*, 3. *ake*, v. *nsskebéstsn*.

Je lui donne du bouillon, *nedá'siañbsharañ*; j'en bois, hume, *nekesañbšé*, 3. *kes*; *nekesañbšé'tsn*, avec cela je bois bouillon.

## [BOUILLIR.]

Je le fais bouillir, *nssemen*, 3. *ss.*, nob. *ussañ*, 3. *ssañ*.

Il bout, *sdái*, nob. *sss*.

BOULANGER, celui qui fait du pain, *nsda-bañnkét* v. . . . .

BOULE, qui ē [est] rond, de bois v. de fer, *petegšighen*, nob. *petegšigs*; de pierre, *petegšapské*.

BOURBEUX, il y a de la boue, *psazeské*.

BOURGEONS, *sremesks, ksr*; les arbres bourgeonnent, *sdatsni'rar abasian*.

## [BOUT.]

Au bout de l'autel v. g. *atsitsisi*.

Le bout, au bout, *sanaskšisi, sanaskšire-maskk*.

— de l'arbre, *sanaskšensskk*; du canot, *ssksšañ*.

— du doit, *sanaskširetsi*; du né, *sanaskšittan*.

— de la queue, *sanaskšañrs*; de l'épi, *sanaskšimin*.

Je suis au bout du chemin, *nemé'tanaskámen añsdi*.

Je viens à bout de cela, *nekisi'tsn*, 3. *sn*.

Je n'en puis venir à bout, *nedáñrasittsn*, 3. *sdañ*.

Je ne sçaurois venir à bout de q'q' ch. [quelque chose], *nedatzérittsn kégsi*, v. *nedatzéri'tsn*.

Je ne sçaurois venir à bout de porter mon paquet, *nedáñrašaré*, 3. *añ*.

Je le mets à bout, il ne peut me répondre, *nsraiméhañ*.

[Page 70 of the MS. blank.]

BOUTEILLE, *potaññé*.\*

BRACELET, *kĩnskébi, ar*, mon bracelet. . . .

Je les ôte, *nedá'ksikie*; je les mets, *nekikin-skebi*.

[\* Corrupted from the French *bouteille*; the sound of *n* being substituted for *l*, which is wanting in this dialect. ENR.]

[71.]

—— j'en ai, *nekikinskébi*, 3. *aki*.

BRAIET, *meréghé* v. *ékstsik*, ton, *ahéksrat*, son, *ahéksrsk*, *é'ksrañsir* v. *ksaksskšida-bit*, v. *-ritsir*.

—— j'en ai un, *nsréghéhem*, du moins ai ton braiet, *kinañgši sréghéhi*.

BRANCHE, *peskahaksn*, *peskohañtknsr*.

—— de sapin, *sedí*, *sedíak*, di'r [dicitur] etiam de ramis; j'en vais quérir, chercher, *nenstsihañk sedíak*, v. *nemañmañdá-gšé*; *nedara'kasinak sedíak*; je les mets, range a terre p'r servir de natte, *nedanakké*; je l'ébranche, avec la main, mon petit bois, *nenesañtkšnénemen*.

[BRANLER.]

Je le braule, arbre, *nemañmañghén skipšdsn*, nob. *pšrañ*.

Je branle la paille, *nemamañdénskénemen*, 3. *am*.

Je branle les jambes, *nenénemesitéási*.

La terre branle, *nenémképsdé ki*.

Cela branle (d'une chose qui est debout), *éhégañbáo*; il ne b. [branle], *m̄da [mañda] éhégañbasisi*.

BRAS, *pedin*, droit, *arcnakaisi*, gauche, *pañtsisi*; mon bras, *nepedin*, droit, *nedarcnakaisi*, gauche, *nedapañtsi*; j'ai le bras droit cassé, *pssketéhañss nepedin*, mon bras droit, *nedarcnakaisan*; j'ai le bras gauche cassé, *nedapañtsisan*; je l'étens, *ncsasaghipedinési*, 3. *sasa*, *-nés*; je le plie, *nepikasipedinési*, 3. *pik*; je le branle, *nemamañtsineskáhasi*, 3. *mañ*.

[72, 73.] [BRASSE.]

Une brasse, *nekstañiganét*, v. *nekstañigáné*; 2, *nissañganét*, v. *-é*; 3, *ntsañigáné* v. *-net*, 4, *iesañigáné*, v. *net*; 5, *nañnañgané*, 6, *ncgsdañs késsañigáné*; de c'bion [combien] de brasses est ton canot? *késsabsn-skañtnasa ketsr* v. *késsañiganét ketsr*? il ē [est] d'une brasse, *ncgstañiganéss*, de 2, *nissabsnkañt*, de 3, *tsabsnkañt* v. *tsañiganét*, &c.

[BRAVE.]

Je suis brave, généreux, &c. *nekinañbái*.

Il est brave p'r battre les hommes, mais non pas l'ennemi, *arcnañba sibisi kinañbañtasé*, *ascnntsá sa'ra m̄da [mañda] akinañbañtasánsia*, 1<sup>a</sup>. *nekinañbañtasa*.

BRETEL, pour porter, &c. *narápekšain*, 1<sup>a</sup>. *ncnarapa'ksañn*.

[BRISER.]

*Segsskipšdé*, cela ē [est] brisé dans le sac v. sur le trañne.

*Segsskipšdar meskikšar* v. g. la paille se brise lorsqu'on &c. en fait de semelle seu chaugon, v. sur les sacs, &c.

[BRILLANT.]

*Nañnañmkizckipsdé*, co'e [comme] un ciel brillant, &c.

BROCHE françoise à tourner le rôti, *abi'rrésañgan*; broche des sauvages, seu bâton au bout duquel ils mettent, &c. *psakšabésañna'tteks*, *nepessagšabañn*; je le fais rôtir devant le feu avec broche sauvage.

Je tourne la broche, *nekšakšércbenemci*, 3. *akša*.

[BRONCHER.]

Je bronche, peu s'en faut q' je ne t'be [tombe], *éršé nšéktšsin*.

BROUILLARD, *ašanis*, il faisoit brouillard, *asansppan*, *paskasaghé nemantsi*; je m'en vas lorsqu' le brouillard sera ôté.

—— sur la rivière, *ašancbégat*.

[BRUIT.]

Chose qui fait du bruit, qui resonance, v. g. *pañsché*, *kedsšitsšan* v. *kedsšctšsañ*; le vent en fait, *kedsrañmpsen*; on entend bruit comme marcher, grat'r [gratter], *mañskskšéss*; une planche, écorce, &c.; les chiens v. g., v. bêtes entendants q'q' [?] chose font bruit comme murmure, &c. *nikimsredšak*.

[BRÛLER.]

Je brûle, *ncmétkazési*, 3. *mét*.

Je brûle cela, *ncmétkazésenen*, 3. *am*; il est brûlé, *métkéde* v. *métkazéde*.

Je brûle, ma cab. [cabane] brûle, *netzakesi*, nous sommes, &c. *netzakesšbena*.

[74, 75.]





Je met le feu à *q'q'* ch. [quelque ch.], je l'allume, *netzakesemen*, 3. *st.*  
 Je mets devant lui une branche un *sedi*, de peur qu'il ne se brûle, *nedakskrsrañ*, mets moi, &c. *akskrsri*.  
 Je souffre beaucoup par le supplice du feu, *nssagheskstásé*, 3. *ssag*.  
 Je me suis brûlé la langue mangeant trop chaud, *nirars métkazédé*.  
 Je brûle un desert, *nepekésighé*, v. *netsákesañ*, 3. *pesakkésighé*; on brûle les champs, *tsekedar kikkanañ* v. *tskesañssar*, on, &c. *tskesañhsédin*, *tskasiphedin*.  
 Il est brûlé, *mtkédé*, v. *métkazédé*.  
 J'ai les mains brûlées, *nssaghirtsékazési*, 3. *sss*.  
*Nsskssitsi*, feu t'be [tombe] sur mes piés qui me brûle; les piés, *nssaghesitékazési*, 3. *ss*; les jambes, *nssaghagañdési*, 3. *ss*; un peu brûlés les tenant devant le feu; les bras, *nssaghapedinési*; l'épaule, *nssaghideremañkanékazési*; la face, *nssaghigšékazési*.  
 Je suis trop brûlé, je n'y retourne plus, je ne m'expose plus à être brûlé, *nemesasakazési*.  
 On ne voit point où j'ai été brûlé, le feu ne me fait rien, *netsirkazési* v. *nepegšakazési* v. *nepegšakazési*, v. *m̄da* [mañda] *tsirighenšinhaghé*.  
*Tsirighen*, *sretsí*, lorsqu'il eut été brûlé.  
 Je suis cause *q'* ce qui cuisait est brûlé,

*nepekkēsema*; *pekikēsak penak*, s't [sont] brûlés, cela l'est, *pekikédé*, nob. *pekikēs*, v. *sairadé*, &c. *sipsis*, &c.  
 Ce bois n'est brûlé *q'* de long tems, il dure long temps au feu, *sipkakédé*, pls. *dar*; nob. *sipkakēs*; vite, *nabakédé*, *dar*, nob. *nabakēs*; *sarakédé dar*, nob. *sarakēs*; *abémeghé kañdak*, p'r ce qu'on rôtit brûle bien, *sipkedé*, nob. *sipkēs*, il n'est de long temps cuit; *nabadé*, nob. *nabēs*, il est bientôt cuit; *msak*, *métkazéziégats*, *nemesksé*, ne brûle pas mes robes; 1<sup>a</sup> *nemétkazézan nemeskre*; qu'on brûle tout autour du fort de peur *q'* l'égl. [l'église] ne brûle dans *q'q'* [quelque] tems le feu viendra de loin, et qu'on garde le feu, 1<sup>a</sup> *nemét kazércan maskesé*, *sésisnikedts pekšatsema' kañrszené neba sésí m̄da* [mañda] *tschedénsks pañbesigšañm nañkakkétsi pétsikédé sésisnisi messisi*, *nénasérdañsits skstāi*.  
*Arakazézšé peks pañpēsks*, la pierre, cendre chaude brûle; *nederkazézin peks*, *pañpēsks*, je m'en suis brûlé; v. *nedabapskesi pañpēsks*, je me suis brûlé d'une pierre chaude.  
 [BÛCHETTE.]  
 Les bûchettes pour conter, &c. *abasiar*.  
 Je les porte pour le festin, *nckissadsnar abasiar*, *skamsnar*.

[Pages 76 and 77 of the MS. are blank.]

## C.

[78, 79.] CABANE, maison, *sigšam*,\* *mar*; ma cab. [cabane] *nsigšam*, &c.  
 — grande, *ketsisigšam*; petite, *sigšam-sis*; ronde, *petegšigšam* †   
 — ronde par le haut †  *sañghenigan*; en dos d'âne, *keskañktéigan*.

[\* Hence the English *wigwam*. EDIT.]

[† In the MS. the author has placed after this word a rude figure like that in the text; apparently, to explain the meaning of the term. EDIT.]

[‡ After this word also in the MS. the author has the figure in the text, by way of explanation. EDIT.]

Il y en a une, *negstsigak*, v. *nekstsigahégak*; 2, *nisigak*; 4, *iésigak*, &c.  
 Nous sommes 2 cabanes, *nissigébena*; 3, *nnessigébena*.  
 C'est bien êtes vo' de cab. [combien êtes vous de cabanes] *késsigaknasa*, 4, *iésigak*.  
 Je fais la cab. [cabane], *nšiké*, 3. *šik*; p'r lui, *nšikkésañ*. Les fourches, *skahañganak*; les bois qu'on mets sur les écorces p'r les tenir, &c. *spahiganar*.

Je vais chercher des perches p'r la cab. [pour la cabane], *nemänhakêê*, v. *nemänhabasié*; les perches, *abasiaksr*.

Voilà la g'deur [grandeur] de la cab., *ni éri ksnek*.

C'est assez, elle est autant g'de [grande] qu'il faut, *tébsghiksu sigsam*; elle est bien haute, *spigäüns*.

Je mets les écorces, *nsrigsagheníghé*, v. *nderigdsagheníghé*.

Je l'accommode, *nsrigsaghenemen sigsam*; avance, seu espèce de pare-vent au côté de la porte, *kereskaü*, seu, *eréskaiü*.

Je la garde, *ukessenasighé*.

J'ôte les écorces, *nepaskighéhdé*, 3. *bask*.; au fond de la caba. [cabane], seu, c'tre les écorces, *kikemak* v. *kikisi*.

La cab. [cabane] est froide, il y fait froid, *tkâigamígat*.

Je la quitte, l'abandonne, *nenegatemen sigsam*.

Cab. [cabane] abandonnée, *stsigäü*, *nar*.

Nous débarquons p'r cabaner ensemb. [ensemble], *nsisgäümsmed bona*; où il est couché, v. g. il n'y a ni cabane, ni rien qui le mette à couvert, *béburkiskak nsighibna*.

Ça cabanons, *tsé s'ighida*.

Nous cabanons ici, *istsi ns'ighinéna*.

Je vais cabaner où é [est] l'originaü, v. chevreuil, *nenäntkadssa*, 3. *noüt*.

Nous sommes cabanés ensemble, *nsitsisighibena*.

Où aviez vo' [vous] cabané, couché, *tañmenasa édsskäämihédiégssa*.

N. a cabané là, &c. *édsskähadissa N*.

Cabanage, seu, cab. [cabane] abandonnée *stsigäü*, 1<sup>a</sup>. *nedé'ksigäñé*, seu, *nekssi*.

Quand quitterons no' [nous] ce cabanage, *tsighétsenusa kedéksigöüména*.

Je le quitte, je vais cabaner ailleurs, je change de cabanage, *nekssi*.

Il y a 2 jours qu'il étoit là cabané, *nisssgnagat é'to s'ighinéna*.

Cab. [cabane] emportée par le vent, *paskighérampsen*.

La natte relevée par des bois & planche, seu, les planches élevées sur lesquelles est la natte, *tâi'sa'ksabsnar*.

J'en fais, *netâi'sa'ksabsnhâmen*; faites en, *tâi'só'ksabsnhamsks*.

Je fais une petite cab. [cabane], dit un enfant, *nsighesi*.

Je fais une cabane . . . . *nsikkási*, v. *nsikke*; item, une vieille qui . . . .

Cabane qui est basse, qu'on n'y peut être debout, *tsatsighen*, v. *tabassigäüns*; voilà de c'bien [combien], *ni tépsigäünik*; elle est haute, *spigäüns*; voilà de c'bien [combien], *ni épsigäünik*.

Ils sont cabané une seule cab. [cabane], *spigöümissga*, *nekstsighégak*.

*Köbikkaüss*, on fait le pignon de la cabane. *Nekébikkaüss*, je le fais.

*Sikkaüss*, elle est couverte, v. *apa'ksäüss*.

*Kesi'kélhänsänk sghik*, vo' vo' [vous vous] servirez de les grosses écorces pour couvrir.

*Agšitsimégšé*, si vo' [vous] les faites tremper dans l'eau, &c., 1<sup>a</sup>. *nedagsitsimäñ*.

*Tèmesä'tar sigsäñmar*, le fort est rempli de cabanes, toutes les cab. qui y peuvent être y sont.

Il n'y a qu'une cabane, *nekstsighégak*; 2, *nissighégak*; 3, *tsighégak*; 4, *iésighégak*, &c.

On fait le plancher de dessous v. dessus de la maison, cabane, *assagahaüss*.

Cabane logette pour le bois de chauffage, *ts'saänn*, 1<sup>a</sup>. *nedats'saänn*, 3. *sdats'saänn*.

Cabane de pieux, à la françoise, *mesagsigamigs*.

[CACHE.]

Espèce d'armoire dans un arbre, v. &c., p'r mettre qq' ch. [quelque ch.], *tasanakšigan*, v. *sabksaügan*, *nedasaba'ksaänn* . . . .

Cache faite de bois en manière de coffre, etiam. faite dans un creux de rocher, *arsagahígan*.

Je mets dans la cache, *nedags*, 3. *ags*.

Cache dans la terre, *ágsné*; je cache qq' ch. [quelque ch.], *nedagsnar*, &c. v. *nakpo* . . . .

[80, 81.]

Je vais la lèver, je la lève, *nemanágs*; je viens de la lever, *nedañbanágs*.

Je suis empêché, occupé trop à la lever, *nsdamimanágs*, *nsdamañbanágs*, la . . . . di'r [dicitur].

Cache dans un arbre, *tasanaksígan*.

Je vais la lever, *nemanesábeksé*.

Je viens de la lever, *nedañbanasabaksé*.

Je fais cache, v. mets *q'q'* [quelque] part, *metsisi*, *nedassabákkšé*.

J'y mets *q'q'* [quelque] chose p'r, &c. manger quand, &c., *nedasaba'ksaïn*, 3. *sd*.

Je mets une marque p'r me la faire connaître, *nekikins'rásin*.

Je prends une cache p'r une autre, *nepitsipekahágs*.

On a visité ma cache, on y a pris *q'q'* ch. [quelque chose], *stenañssa*; on me l'a levée, je ne l'ai pas trouvée; je cache, je mets en cache v. quelque part p'r qu'on ne le trouve pas, &c., *neda'saba'ksaïn*, *neda'saba'ksaïnébanir*, &c. *asaba'kšésa-anik areañbak tirsaxiganar*, &c.

#### [CACHER.]

Je me cache de lui, *nekšasñims'tasañ*; *ka-ksañsims'tasi*, tu te cache de moi.

Je me cache, *nekañresi*, 3. *kañ*; ou cache, *kondañsadin*.

Je me cache de lui, je le fuis, par la peur *q'* j'en ai, *neksañsrañ*.

Je le lui cache, je ne veux pas qu'il le voit, *nekañ'tasañ*, 3. *akañ*.

Je le lui cache, le mets *q'q'* [quelque] part qu'il ne puisse le trouver, *nekañ stasañ*.

Je le cache dans le sein, *nessim'srin*, 3. *abi*.

Je cache cela, *nekañdsn*, 3. *ak.*, nob. *nekañ-rañ*.

Je lui cache, ôte *q'q'* ch. [quelque chose] qui me déplaît, v. *nssighirasémañ*; *nema-anikañ*, dit v. g. celui qui va t'rs [toujours] emprunter et qu'on lui refuse; je loge *q'q'* un qui me déplaît, qui ne travaille point, &c., ne fait rien, *nemanihsks*.

#### [CACHETTE.]

En cachette, *kimisi*.

#### [CADET.]

Mon cadet, *ne'o'f'kanis*, 3. *sdokkanar*.

Je suis le cadet de tous, posito q'd nullus alius sit, *nemedéssañsi*.

CADRAN, *tebaikizssañgan*, v. *kissšši teba-sksdígan*.

[CAILLOU. Vide infra.]

CAISSE, coffre, &c. *arsagaigan*; caisse, [82, 83.] tonne, d'écorce, *sañsiantšenigan*, il ē [est] nob.

Je l'apporte, *nepéssañ*.

CAJEUX, *sansr*, j'en fais, *nedasansrké*.

Je passe la rivière sur un cajeux, *neda'sansrham*.

Étant fait je dis à celui qui veut, &c. *tse kepssiban*.

#### [CALME.]

Il fait calme sur la rivière, *ašiben*.

#### [CALOMNIER.]

Je calomnie, *nepišsañkskighémi*, lui, *nepišsañkskimañ*.

Je le décalomnie, je nie, &c. *nedighésamoñ*.

Je me laisse calomnier, je ne lui dis non [?], *nedarhiméks*, seu, *māda* [mañda] *nenesks-temañ* v. *néksmañsi*, *nedarhimañ*, seu, *māda* [mañda] *nesksmigši*.

CALUMET, *sdamañgan*, le mien est beau, *srigs nsdamañgan*; il est capable, &c. *peskañss*, il tient peu, *manéss*; son bâton, v. *sdamañganakšem*; je le charge, j'y mets du petun, *nepitsetuñ*; pour lui, *nebitscañsañ*; charge le p'r moi, *bitscañsi*; je le vuide, tire ce qui y est, *neghétsiket-séhañ*, je fume to' [tout] ce qui y ē [est], *nesikabarañ*; je fume, *nebeskrépa*, seu, fais sortir la fumée; je fais sortir la fumée par le né, etiam, je l'avale, *neda'sáhara*.

Remplis-moi mon calumet, *negsdesenéhi*, *sasan*, *satsšsemasi*.

Je te le remplis, *kenegsdasenéhsr*; j'allume le calumet, *netsakesañ*; pour lui, *netsakesaïmasaïmar*; p'r toi, *ketsakesemsren*; je petune, *nsdama*, 3. *sdané*.

Le calumet est a moitié, *nérañšsañghé*; il y



en a peu, bien près du manche, *ketsésañghé* ; il y en a peu dans un sac, v. g. *ketsé'tar*.

Le calumet est plein, *pesañnsañghé*, v. *mitsebs*.

Une calumée, seu, une fois le calumet plein, *nekstsenágat* ; 2, *níssssenágat* ; 3, *tsssenágat* ; 4, *iésssenágat* ; 5, *nañnsssenágat* ; 6, *negsdañs ké'ssssenágat*, &c. ; je ne tire qu'une soufflée du calumet, *nepeskšáma* v. *nepeskré'pa*, v. *pézeksda nepeskšáma* ; je le tiens avec les dents, *nekerámañ* ; *neda-sítáwrátanen*, je fais entrer mon souffle dans le calumet, v. *chalumeau*, &c.

CAILLOU, *nimañgan*, *nar*.

[CAMARADE.]

Mon camarade, *netzses*, v. *nitsié*. Vid. Compagnon.

[CANOT.]

Canot, *agsiden*, *nsr* ; mon canot, *nedagsiden*, v. *netsr*

Canot de bois, *amassr*, *amassrar*.

Racines à canot, *sadabak*, écorce, *masssí-gšé*, *gšar*.

Bois, petits planches de cédre p'r faire &c. *k'ñkskak*.

J'en fais un, *nedatt'sri*.

J'en fais mieux un q' toi, *nia srahami neni'tanstsri*.

Le bois qui est au bout en dedans, qui est debout, *snighéss* ; *ssskšáñra'kšem*, le bois [?] qu'on cout au rebours, [?] &c.

Les maîtres du canot, *sibodañgan*, *nak*.

Les barres, *pemitsemen*, *nak* ; les varangues, *sañghinañ*, *nañk*.

Les lisses, *ánakan*, *nak*, *anákanak* v. *pikté-higan*, *nak*.

Le bout, *ssksañr* ; la couture en long, *pepahudañgan*.

Les coutures de travers, seu, les coupures, *nekenañganat*.

[84, 85.] J'en ai un, *nsd'sri*, 3. *sd'sri* ; il y a un canot, *negtsrugat* ; 2, *nissragátsr* ; 5, *nañnsragatsr*, &c.

Il est trop chargé, *kedahan*.

Il est trop chargé devant, *atsítašmitsebs*, *ketsrna* ; trop derrière, *keratsiéñen*.

Nous chargeons trop sur le devant, *kedatsítašksšékáñmañbena* ; trop sur le derrière, *kegheratsiékañmañbena*.

La 1<sup>re</sup> & dern. place du canot, *ap'sdi*.

La 2<sup>de</sup> ensuite de chaq' coté, *nañsragšé*.

Celui q' est dans une place devant moi, *ašassraghi*.

Le maillet dont on pousse les varangues, *tagšasrañgan*.

Je la pousse, *nedak'sri*.

Je suis devant, *nenikañké* ; sois y, *nikañké*.

Je gouverne derrière, *nstsitsiké* ; gouverne, *stsitsiké*.

Il fait eau, *ssebái* ; j'en jette l'eau, *neda-šighe*, v. *nedakhíghé* ; jette-la, *kahíghé*.

*Nessincbé'zámen*, je presse avec couteau, v. bois, &c. l'eau qui ē [est] dans couverte vel peau, p'r la faire sortir,

Je le porte dans les terres, *nekipssadsn*, v. *nekipenigahadsn* v. *nighépesn*, v. *neksöñscnigahadsn*.

Canot emporté, *mani'tan*, pls. *manitansr* ; par le vent, *manerampseñé* ; par la glace, *maneregšé*.

Je traîne le canot dans le rapide, *nederañsgads*.

Je tourne en canot, *negsskañsé*.

Je le cache, *nekundsn agsiden*.

Je le décharge, *nekipésadási*.

Ôtez q'q' ch. [quelque ch.], il ē trop chargé, *stsígabáñncmsks kégsssar*, 1<sup>a</sup>. *nstsígabáññemen*.

Je le traîne dans la rivière, *nederañsgads*, v. *dsn*.

Je le porte moi seul ou avec un autre, *nsnighé* v. *neghipenigahadsn*.

Je le prens par le bout, *nesaghesksañréñemen*.

Je le mets à terre, *nepsñheníghé*.

Le canot est échoué, *kerikassen agsiden*.

Je le mets à terre sur son assiette, seu, [86, 87.] la gueule en haut, *nedénatsi'ntsn* ; la gueule en bas, *agsiden nedapemé'tsn*.

J'y mets de la gomme, *nepekské* ; en dedans, *nedarañmikšukíghé*.

Le canot est rompu, *temi'rré agsiden*.

Je le tire de l'eau sans le porter sur les épaules, *nenaüdagahaüdaüsi' tsu.*  
 Je décharge le canot, *negapaümenen*, 3. *ag. tsrpsésé*, il va en canot, il se sert d'un canot, ne s'embarq' pas dans un autre, &c.  
 Je l'atteins en canot, *nensshési.*  
 Je le rencontre en canot, *nsnaskshési.*  
 Je vais chercher en canot, etiam, par terre, *neksirašsésé*, 3. *kši.*  
 Gouverne au large, *mssk ariraüda*, v. *msskkik.*  
 Tire de ce côté-la, gouverne le canot, p'r aller de ce côté-là, *sdékka arskšäü-ráhads.*  
 Où tire-tu ? &c. *taüdékka érskšäüraháda-san ?* 1<sup>a</sup>. *nedersksäürahadsn* ; *pisandsét-sik* dicunt, *sdékka arokkšéhi.*  
 Je le porte sur la grève, *nedébésada'si* ; de la grève je le mets dans le canot, *nemataübésada'si nrsragata'si.*  
 Je le mets dans le canot, *neteptsn.*  
 Porte cela à la grève, *mutaübésada'io* 1<sup>a</sup>. *nemataübésadsn*, pls. *-dsk.*  
*Nedakstéhem*, je moule à la perche, v. *neda'ksté.*  
 Je députe un canot, v. je mes députe, &c. *nedäüššahsršé* ; à lui, *-hšran.*  
 Allons à terre, *naüdagaraüda* ; 1<sup>a</sup>. *nenaü-doga'ra.*  
 Je marche en canot vent devant, *nedapet-sigšéhem* ; vent de côté, *pemtsinercampsen* ; vent arrière, *usréri* ; 3. *srérs* ; avec la marée descend., *nsriaregs* ; contre marée, *nedapetsitssané* v. *nenikaükké.*  
 Je perche en canot, *nedaksté* ; perche, *aksté kibaümkšésn.*  
 La perche dont on se sert, *kibaümkšésn.*  
 C'bien s't [combien sont] ils en canot ? *késsskamsk ?*  
 C'bien [combien] y a-t-il de place dans ton canot ? *késsistsibissnasa ketsr ?*  
 Il y en a 5, *naünnsak pemitsmenak.*  
 Le canot est rompu, *taraktéssen.*  
 La voile du canot, *tsibéghihigan.*  
 Je vas à la voile, *nesibéghihima.*

Je la hisse, *nenimék'highé* ; hisse-là, *nimé'kihíghé*, v. *nimékhamaüda.*  
 Je l'abbas, *neneséghihadi'ghé* ; imp. *nesé-ghihadaüda.*  
 Je la mets, *nesibéghihíghé* ; je l'ôte, *nene-séghihadsn.*  
 Le mat, *tsibéghihibanaksem* ; le hissa, *siks-éghiadigan.*

[CAP.]

[88, 89.]

Cap de terre, *kssaüsaüaükké.*Cap dans un lac, *kšésaüsaüaügamék.*Cap dans une rivière, *kšésaüsaüaümmék* ; *ssaüsaüaümmé*, la rivière qui détourne depuis le cap.CAPITAINE, *saügmäü, ük* ; mon, *nesaügmän* : n're [notre], *nesaügmäümmena.*———— je le suis, *nesaügmäü.*

———— je le fais, je le nomme p'r cap.

[pour capitaine], *nesaügmäüsi'ron.*———— voilà celui q' j'ai p'r cap. [que j'ai pour capitaine], *sa sésaügmäümmü.*Capitaine de guerre, je le suis, *nemanaüsé*, v. di'r [dicitur] *saügmäüsi'žess*, il se fait, melius, *saügmäüsi'žess.*CAPOT, *pskšanasse* ; j'en ai un, *nedapksša-nessé.*

[SALUER.]

Je le salue, *nedarami'kasau* ; ign. *nedarami'kamen.*CARPE, *ki'kaümkšé, ksär.*CARQUOIS, *pi'daraünn, nar.*

[CASSER.]

———— je, *nepskesemen*, 3. *apes*, di'r [dicitur] de fune v. quid simile.Je le casse, romps avec la main, *nepssks-nemen* : nob. *nepssksaü, nepsskstéhem* v. *nepsskskamen, kasoü*, je le casse, brise, marchant dessus.———— bois, &c., avec les piés, item, avec la main, *nepsskskamen*, nob. *nepsskskasau, pkskaüss.*———— avec les dents, *nepssgšadämen*, nob. *nepssksamaü.*———— avec instrument, *nepsskssemen.*Je me suis cassé le bras en t'bant [tombant], *nepssksipetiné'tessin*, 3. *ps.*

Je le lui casse, *nepssksipetinéttéhañ*.

Je lui casse les doigts, *nepssksširitsénañ*;

—— la mâchoire, *nepssksaïbikainéttéhañ*.

[90, 91.] [CATÉCHISME.]

Je fais le catéchisme aux enfans, *nekakéki-maïk asañsi'sak*; p'rquoi [pourquoi] n'y es-tu pas venu? *kégs stsi māda [mānda] sītsirañsassa kékékimeghé?*

[CASTOR.]

Castor vivant, *tema'ksé, ksak*; petit, *tema'ksésis*, v. *snitzañnesis*.

—— petit, *piasésis*.

Paquet de castor, *negstkébis'sak*.

Castor d'hivers, *pepsnemcsks*; d'été, *nipenemesks*.

Castor sans tête, *temīgšé*.

Dent de castor, *sipit*; *tema'ksaïñpitar*.

Queue, *ssegsné*; il bat avec sa queue, *mé-tébtshkhit tema'ksé*, v. *édarebéktéssit sse-gsuc*.

*Mssks*, il lève sa tête hors de l'eau, idem de alliis; *kamegs*, il la retire, se cache, &c.

Sa cabane, *sasessé*; le trou de sa cab. [cabane], *sda'kaïñ*, où il d'mre [de-meure].

Je la romps, *nensktéhemen*, v. *neseqsskitéhemen*, v. *neseqsskitéhemen*.

La chaussée q' fait le castor p'r [pour] retenir l'eau, *ssseghitasé*; *aképhighétsu*, il arrête l'eau, 1<sup>a</sup>. *nkephighé'tsu*.

Je chasse aux castors, q' je trouve par hasard, *nensdemeskšé*.

Attrape aux castors, *kerahigan tema'kséigan*.

J'en prens aux attrapes, *nekerha*, id. de *āalib*. [animalibus].

Peau de castor, *mata'rré, rak*.

*Kemésks*, grand castor, seu, la peau; *keme-skšésé baremesks*, du 2<sup>e</sup> rang de g'deur [grandeur]; *baremesksšésé piase*, du 3<sup>e</sup>; *snitzañnesis* du 4<sup>e</sup>; rognons de castor, *asisenaïk*.

Chien à castor, *tema'ksékks*.

Je vais chercher du castor, &c. *nemasadiéri*, v. *nenadiéri*.

J'en viens, *nedañbadiéri*, 3. *abaiñ*.

[CAVE.]

—— je creuse, j'en fais, *nšairké*.

CAVERNE, antre de rocher, *arañmapesks*; caverne dans la terre, *pekša'kamiks*.

[CAUSE.]

Je suis cause, en bien, *nemessršé*.

*Nemessrañ*, je suis cause qu'on ne le bat pas, v. g.

Je suis cause de ce qui lui arrive, &c. de bouo, &c. *nemessrañ*; de malo, *nemesihañ*, v. *nedasihañ*.

Je te cause cela, *kemesihšren*.

Je me cause à moi-même, *nemesihssi*.

Je suis cause de cela, *nepegšatsn*.

Je lui cause cela, *nepegšatasañ*.

Je lui fait du bien à cause d'un autre, *nemessitéhañdamasañ*.

Je fais du bien p'r [pour] le respect q' j'ai p'r [pour] ton père, *kemessitéhañdamsren kemi'taïgss*.

Tu es cause, c'est à cause de toi, q' je viens, *kia stsi pétsirañia*.

À cause de quoi crois-tu? *kégs sétsi srañmpsedáman?*

CENDRE, *pekks*.

Le jour des cendres, *pañba'tami pekkšdin*.

*Niksanbi epksahsdimek messisi peksraghinangsnets*.

J'en reçois, *nepañba'tamipekšhšghé, ni sétsi pañba'tami peksšraghinañgs*.

Je cuis dans les cendres, *nedatsitegšadabaññ* v. *nedabaññ*.

Les choses cuites dans les cendres, *éssé-meghik*, v. *ébipenémeghik*, v. *abipenañ-nuk*.

[CEINDRE.]

Je me ceins, *nepetegšabisi*, lui, *-birañ*; je l'ôte, *nedañpkšiareši*.

CEINTURE, *pedegšabissn*; de porc-épi, *kañsiañbi-pedegšabissn*; n'as-tu point de ceinture? *mādanasa [māñdanasa] kspetegšabissni?* je mets entre ma ceinture & ma robbe, hache, sac à petun, &c., *nedé dabañhakssin*.

CEMETIÈRE, *dari psskenedimek*.

[Page 94 of the MS. is blank.]



- [95.] CERCLE, rond, *šänsiänghen*; de bois, p'r [pour] couvercle, &c., *sänsiänkskäüss*, d'ouragan, *sraüganakksem*.  
 CERISE, *cérisar*.  
 CERVELLE, *asirítcan*.  
 [CESSER.]  
 Je cesse, v. g. de manger, *nedé'ksippi*; de faire qq' ch. [quelque chose], *nedé'ksit-tsn*; d'être malade, *nedé'ksamarsi*.  
 [CHAGRIN.]  
 Je suis chagrin, *nssikerdam*.  
 [CHAGRINER.]  
 Je le chagrine, *nssikérdamihäü*.  
 [CHAÎNE.]  
 Chaîne de fer, *arenarakšäübi*, ar.\*  
 CHAIR, *šios*, fraîche, crue, *skésaks* (ce qui est cru, *skié*) *skiäü*; pls. *skiäür*.  
 Chair cuite, *kissedé*; boucanée, *kesgaté*.  
 Chair grasse, *si'kasio*, maigre, qui ne vaut rien, *matésagss*; maigre qui est bonne, *kakésags*; il n'y a point d'os, *paü-gšésags*, di'r de o'i [dicitur de omni] etiam de carne piscium; ma chair, *nsios-sem*; je lui enlève des morceaux, lambeaux de chair, *neppekšésän*; elle se détache facilem't [facilement] des os, étant bien cuite, v. g. *kékítsiganaüdé*, nob. *kékítsiganaüss*.  
 CHALOUPE, *saraspésrags*.†  
 [96, 97.] CHAMP. Vid. *inferiüs*.  
 [CHANCELER.]  
 Je chancelle, de maladie, de faim, de crainte, *nenänghiganapési*.  
 Lui étant ivre, v. malade, faim, *kisikibi'ré*, I<sup>a</sup> *nekikibi'ka*.  
 Je le fais chanceler dans le dessein qu'il avoit par tout ce q' je dis, de mourir p'r [pour] Jésus v. g. *nenanekširasémaü*.  
 CHANDELLE, cierge, fallot d'écorce, &c. *sassénemaügan*, nar.  
 [CHANGER.]  
 Je change de pensée, *nepiršitéhäüsi* v. *pirsié nederitähäüsi*.  
 [\* *Quære*, if from the the English word *iron*?  
 EDIT.]  
 [† Formed from the French word *chaloupe*. EDIT.]
- Je change de sentiment, je pense de moi, je retourne en arrière, *nssésérnesi*.  
 Je le fais presq' changer de desscin qu'il avoit, &c. Vid. *Chancellor*.  
 Je lui change . . . . seu, le cœur; de bien qu'il étoit je le rend [?] méchant, *nepiršitéhénaü*.  
 Je change cela, *nepiršittsn*.  
 On les change de place, cela est mis à la place de l'autre, *ésša'tté*.  
 Changeons, troquons, *éssnemaüsadida*, v. *ésšadaütida* v. *csšimírédida*, *srir*.  
 Je change, troq' [troque] avec lui, *nedé-ssüemasäü ketéssnmsr*, *ketéssnmasi*.  
 Je change cela, *nedésssnemen*, 3. *sdésssnemen*.  
 CHAMP, *ki'käün*; mon champ, *nedá kikäün*.  
 Champ en friche, *sigškkéügan*.  
 Je défriche, *nebírcké*, 3. *bir*; j'applanis, *nederekéhighé*, 3. ar.  
 Je casse les gaçons, &c. v. *nepaské'hadsn*, v. *nepasakétéhemen*.  
 Si vo' [vous] vouliez bien, &c. *pasakéhadaségšéba*.  
 Il les faut casser, *pasakéhadaüss* v. *pasakétéhäüss*; unde, *nepaségghihadsn* v. *nebasihadsn*, je secoue la poussière, v. g. d'un habit, &c.; secoue-la, *basihads*.  
 Il la faut, &c. *páségghihadaüss*, v. *basihadaüss*.  
 Je prens un champ v. partie, où je n'ai pas travaillé, *nemancké*, v. *negherké*.  
 Je dis q' j'y ai travaillé, &c.  
 Je le prens à lui, &c. *nemanckémaü*, v. *negherkémaü*.  
 Ce champ, cette terre est las, ne peut plus porter, *sasighen*.  
 Étant las on la brûle p'r, &c. *sagsíkeghé ni tsekesaüss*.  
 On voit un champ qu'on a semé, *namihigšat érkikkémighesa*.  
 Je brûle un désert p'r [pour] un champ *nepskésighé*, 3. *pes*.  
 Je le bêche, *nedererké'hemen*, 3. *sd*.  
 J'agrandis mon champ, *netsitakénighé*, v. *nedäntkäskénighé*.  
 Je nettoie, j'arrache, *nemasésskeníghé*

*Netsikskénigbé*, j'arrache la, v. les tiges du blé qui ont resté après la recolte, p'r [pour] semer [?].

Le long du champ, *ksa<sup>r</sup>rkikaïné*, *éssenstkik-kaïné*.

J'abbas les arbres p'r en faire un, *nemasa-kšigbé*, v. *nekasahaksé*.

Voilà la longueur de mon champ, *ni kšéntek* v. *ni kšénaübaïsit nedakkikan*.

Voilà la largeur, *ni késkték* v. *ni késkaübaïsit*.

D'ici jusqu'à cet arbre, *ns stsi iéari abasi sékkék*.

As-tu ici ton champ? *isnasa kededara-ki<sup>r</sup>kaïn*.

Faites des champs q' vo' [que vous] aiez du blé p'r un an, *tsšerdamsks ktsikikkaïnar naïnegstsigátégbé mé<sup>r</sup>tsi<sup>r</sup>raïghir* v. *naïnekstsigaden né<sup>r</sup>raïghir*.

On a mangé mon champ, *ketaïssé nedak-kikkau*, *neketamen*, je le gâte, &c. mangéant.

[98, 99.] Il y a des herbes, &c., *sanaskšé*, *sanaskšégar kikkaïnegar*; qu'on les arrache, &c. *séneskšéghir kikkaïnar sritshsdits*.

Ce q' je fais à mon champ le rendra beau, *nsrekámen*.

Après qu'on a semé q'q' [quelque] tems après on ôte les herbes, on le nettoie entièrement, &c. *ns<sup>r</sup>kekéaïss*.

*Nens<sup>r</sup>keké'ghé*, j'ôte les herbes, &c. avec hoïe, &c. je le nettoie, &c. *nens<sup>r</sup>keké<sup>r</sup>hémen nedakkikkaïn*, je nettoie, &c.

*Kiskikkéaïss*, on l'a semé, *kikkaüdaïss*, *nedakkikkaüdamen*.

*Nekasaksuemen ki<sup>r</sup>kaïn*, je cueille le blé, &c.

*Kasaksnaïss*, il le faut, &c.

*Kasaksnemsk nedakkikkaïn*, *égsami phainemsk nisskamsbsdits*, *pebsdshsdits*, *isari sa<sup>r</sup>kaïrsren skamsnar nemaï ara isdari kederaresksnemenaïr késaksnigátégs*.

*Nederaresksnemen*, j'en arrache les feuilles qui sont autour.

*Ka<sup>r</sup>kšigaïn*, le rehaussement, *ka<sup>r</sup>ksaïss*, il le faut, &c.

*Maséskenigáïn*, on ôte les herbes; *maséskenáïss*, on les ôte; *nemaséskenigbé*, je les ôte.

CHANSON, *kisadsaïgan*, de la pière [prière], *paüba<sup>r</sup>tamintoaïgan*, *nar*, v. *paüba<sup>r</sup>tamikisadoaïgan*.

Chanson de mort, je la chante, *nemétsitsints*.

CHANTER.]

Je chante vite, *nenabaraïms<sup>r</sup>tamen*, lentem't, *neménaraïms<sup>r</sup>tamen ménnaraïms<sup>r</sup>tamsks dakki*.

Ne dites pas cet air vite, *mssak nabaraïmstams<sup>r</sup>kéks*.

Je chante, *nekisahads*, 3. *kisahads*; pour faire danser, *nenasadšé*; 3. *nas*, *knasadséksr*, *nenasadš<sup>r</sup>haï*.

Je chante bien, *nsrinto*; mal, *nematsints*, v. *rematsaïndšé*.

— trop haut, *nsssaïmaïndšé*; trop bas, *nsssaïmipisaïndšé*.

Voilà où l'on commence à chanter, *ni édtsi arintšmek*, v. *manenintšmek*, initium cantus.

Je chante le premier, *nenitamints*, v. *nenikaïmints*.

Je chante le dessus, *nepisaïndšé*; la basse, *nemessaïndšé*.

C'est ainsi qu'on le chante, voilà le ton, *ni éraráïms<sup>r</sup>tamek*, *pézeksn éraráïms<sup>r</sup>tamek*.

Je prens le ton, je dis l'air, *nederaraïms<sup>r</sup>tamen*, *s<sup>r</sup>raráïms<sup>r</sup>taïss*, *m<sup>r</sup>da* [m<sup>r</sup>äüda] *s<sup>r</sup>raráïms<sup>r</sup>taïssisi*.

Je ne sçais pas chanter, *nedasaïnérdámen*.

Je chante p'r [pour] endormir, appaiser l'enfant, *nedattšmaïsi*, *neda<sup>r</sup>tšmaï*, lui.

Je chante en dormant, *nenipaïnto*.

Chantons ensemble, *maïsintšda* v. *éhésšintšda*, par tour.

Chantez haut, *pessaïngšintsks*.

Ils chantent des chansons déshon-nêtes], *nipskintšak*, 1<sup>a</sup> *nenipskints*.

Je chante en Iroquois, *nenégšaints*; en Algonkin, *nssaüghenaints*.

Je chante en répondant au chant, seu, no' no' [nous nous] répondons, *netšsskénétšbena*, v. *nedéhésšintšbena*.

Je chante, je guène, je dis hé hé, *nedatsinham*.

Guenez, faites hé hé, &c. *tsinhamsks*; p'r moi pendant q' je chante, *tsinhamasiks ncskañsahé*.

Chante p'r qu'on guène, *skañsahé*. 1<sup>a</sup> *nencskañsahé*.

[100, 101.] CHAPELET, *paüba<sup>c</sup>tami saübaübiar*, vulgo, *aïamihéaüganar*.

Je le mets à ma ceinture, *nedékhdsnar nepetgesabitsñek paüba<sup>c</sup>tamisaübaübiar*.

CHAPELLE, *paüba<sup>c</sup>tamisig<sup>s</sup>aäm*, où sera-t-elle? *taümi é<sup>c</sup>to kadasi é<sup>c</sup>tek?*

Où sera-t-elle en long? *taümi é<sup>c</sup>to kadasi é<sup>c</sup>rtck paüba<sup>c</sup>tami sig<sup>s</sup>am?*

Où sera l'endroit p'r [pour] dire la messe? *taümi kadasi érag<sup>s</sup>atch édari éraméssikémek*.\*

Il faut q' l'autel soit au levant, *sétsi néhiraüt arakstets, édari éraméssikémek*; & au couchant la porte, *ari keraüganétäüts éri neki<sup>c</sup>rant*.

CHARBON, éteint, *mkasé, sar*; ardent, *mkaséskstai, dar*.

[CHARGE.]

Je porte une charge, *nñihi* v. *ninñihin*.

*Nem<sup>c</sup>tsáman*, je porte l'enfant sur le dos sans collier.

Je charge qq'un [quelqu'un], seu, je le porte v. g. l'enfant, *nñihsmäü* v. *nenanhsmaü*; porte-le, *sihsmé*.

*Nñihsderañ*, je lui mets sur les épaules & le collier à la tête.

*Nñihsdéresi*, je porte l'enfant sur les épaules & le collier à ma tête.

Je porte cela, *nená<sup>c</sup>damen*; sur le dos, 3. *sna<sup>c</sup>damen*.

Je le puis porter, il n'est pas au dessus de mes forces, *nepegsaüumptsn* v. *nepegsaüsa<sup>c</sup>dámen*.

Je vas quérir sur le dos, sur le cou. Vid. Quérir.

*Nemañtsénighé*, je m'en vas avec ma charge sur le cou.

*Bísderi*, aide-moi à me charger, à lever ma charge.

*Ncsi<sup>c</sup>sderañ*, je l'aide, &c.

Je le décharge, *nepsnhémaü*.

Une charge, *mamañsts*.

*Nemamanstsn*, j'assemble, &c.

Vas quérir une charge, *mañsagsats, nañtssaré*, 1<sup>a</sup> *neuañtssaté* v. *mañsags<sup>s</sup>attsk*.

C'est la charge d'un, *ni ké<sup>c</sup>s<sup>c</sup>arét pézek*.

Je viens avec ma charge, *nepéts<sup>c</sup>aré*, 3. *pét*.

Je le vas quérir, *nenañtssaré*, 3. *nañ*.

Je m'en vas avec ma charge, *nemañtsésaré*.

Je la mets bas, je la quitte, *nepsnhi*, v. *ninepsnhin*, 3. *psn*.

Je n'en puis venir à bout, *nedañra<sup>c</sup>aré*, 3. *añ*.

Aide-moi à me charger, *nañsasi, nenañsasañ*.

Tu charges trop, *lssañm<sup>c</sup>aré*.

Je charge beaucoup, *nemérksaré*.

Ne charge plus tant, *mssak mina tekig<sup>c</sup>arékkan*.

Je porte une grosse charge, je vas bien chargé sur le dos, *netekig<sup>c</sup>sara*, v. *nedakig<sup>c</sup>aré*.

CHARIOT, v. g. traîne qui roule, *sdaübanahask k<sup>s</sup>aksrbip<sup>c</sup>dék srighenba arit<sup>c</sup>meghé sdaübanahasksr ksa<sup>c</sup>ksr bip<sup>c</sup>déghir*.

[CHARPIE.]

Je fais du charpie, *nisétaghiádsn*, 3. *nisétaghiads*.

[CHARMER.]

Je le charme, donne maléfice, *ncbasínárañ*, v. *nederip<sup>c</sup>narañ*.

CHASSE, [CHASSER, CHASSEUR.] *pipemaügan*.

Je vais à la chasse, de l'ours, porc-épi, orignal, *nedabamssé*, 3. *abañ*; j'en viens, *nedañbabañmssé*.

— p'r long tems, du castor, *nmat<sup>c</sup>iéri*, 3. *nat*.

Je vais à la chasse du castor dans q'q' [quelque] rivière proche, *nesib<sup>c</sup>kké*.

Je vais à celle de l'ours p'r q'q' [quelque] tems, tout proche, *asessss neksirasahañ*; de l'orignal proche, *neksirs<sup>c</sup>nékkasa*.

[\* Formed from the French word *messe*. EDIT.]



— du porc-épi, *nenasasäi'gšé*.

Il est bon chasseur, *netäisi'radebs*, 1<sup>a</sup>. *netäisi'n'radebi*.

Ils vont ensemble p'r [pour] attrapper et entourer les chevreuils, &c. *tsikskasak* v. *tsikskasédšak* v. *tsikskamsgak*.

*Netsikskasäbena k. ketsikskasäiba*, &c.

*Nenasadskké*, 3. *nasatekse*, je vas à la chasse avec les chiens.

[102, 103.] Je vais à la chasse, soit p'r [pour] avoir des vivres, soit p'r avoir de quoi acheter des hardes, *nekadsnadsn légsi*, &c.

*Nsrañ'kša*, je vais à la chasse du castor p'r peu de tems et c'est en canot.

*Nensdemeskšé*, j'y vais par terre p'r q'q' [pour quelque] tems.

*Nepipema*, je vais à la chasse du chevreuil v. oiseaux, item de cæteris o d'ir [omnibus dicitur].

Je tue oiseaux et tout petit gibier, je ne les mange pas, &c. *nenitääsrami'ghé*.

Je vois l'original, je l'approche, l'ai trouvé, &c., *nsskasiméssé*, 3. *ssk*.

Je vais à la chasse de l'original p'r [pour] long tems, et loin pendant l'hiver, *nemšs-skké*.

Je quitte la bête, il est méchant il vient c'tre [contre] moi, &c., *neksitääs'regs*, 3. *kstääs'reks*.

Je vais à la chasse, je vais chercher, &c. des oiseaux, castors, m'embarquant, *nsrañ'kša*, 3. *srañkšé*.

Je vais chercher, soit bêtes, soit oiseaux, *nebipema*.

Je vais chercher de la mangeaille, soit castor, soit &c., *unatabi'ka*.

Je le chasse honteusem't [honteusement], &c., *nemisagutsihaü*.

Je le chasse de q'q' [quelque] lieu, v. je le fais chasser, sortir, v. *nemimisiaraü*.

*Nemimisia'tsn maussängan*, v. g. &c. je chasse, bannis [?], &c.

Je le chasse, le fais sortir, *nensdésaraü*, 3. *nsdes*.

Chasse le chien, mets-le dehors, *nsdétéhé sa arcms*, *nensdétéhaü*, 1<sup>a</sup>. *nensdétéhaü*, porte envie . . . . [?]

[CHASSIEUX.]

Je suis chassieux, *nesasini'gša*.

J'ai q'q' eh. q'q' saleté cõc apostume [quelque chose, quelque saleté, comme apostume] au coin de l'œil, *nemameri'gša*.

[CHASTETÉ.]

Les mariés qui garde [gardent] la chasteté, *nénasérdšak*.

— la pureté, *nénasérdssaunik*.

CHAT, *pessis,\* sak*; chat-hsant, *'kkskass*.

Chat sauvage, *ésscbancs, sak*.

La peau, *ésscbauésé, sak*.

Une robe de peaux de chat sauv. [sauvage], *mäisak*; ma robe, &c., *nemäisak*.

[CHATOUILLER.]

Je le chatouille, *nektseghenaü*.

[CHAUD. Vide infra.]

[CHAUSSON.]

Chauçon, nippes, pièces de d'étoffe qu'on met dans les souliers, *asigan, nar*.

[CHAUD.]

Il fait chaud, *sraüdé*, lorsqu'il fait chaud, *sraüdéghé*.

Il fait très chaud, *sésésäümeräüdé*; tant il fait chaud, *arghiksraüdé*.

Cela est chaud, *kesabedé* v. *kesidé*, nob. *kesábess*, subj. *kesábesit*.

La peau de chat, v. g. est chaude, tient chaud, *kisšégs, mda [mända] kisšéghisi*.

J'ai chaud, *nedañbsési*; aux mains, *nedañbséretsési*.

J'ai extrême chaud, *nesäñkstési*, 3. *säñ*.

Je suis percé de chaud, *nebas'kazési*, 3. *basa'kazéss*.

Il fait bien chaud, *keseraüdé*.

*Téba'täi kizsssti* v. *kizsi stébassemen*, il y fait bien chaud, &c., le soleil s'y réfléchit v. g. dans une vallée, &c.

J'ai extrême'm't [extrêmement] chaud, *nesäñkstäikazési*.

[\*Probably corrupted from the familiar English word *puss* or *pussy*; as, in the Massachusetts dialect, *poohpohs* was formed from the English *poor puss*. See Cotton's Vocabulary of the Massachusetts or Natick Dialect, published in the Massachusetts Historical Collections, vol. ii., p. 156; Third Series, 1829. EDIT.]

Je bois chaud, *nekisirasésési*.  
 Cela est trop chaud, *ssaïmbetté*.  
 Mangeant trop chaud, je tourne le manger dans ma bouche, *netskarakskésési*.  
 Je m'enveloppe chaudem't [chaudement], &c., *nekisšabisi*.  
 Cela tient chaud, *kisšéghen is*, v. *kisšé*, nob. *kisšégs*.  
 Tu verras c'bien [combien] cela tient chaud, *kepiba éri kisšéghék*.  
 La cabane est chaude, il y fait chaud, *kisšiganigat*, v. *kisšatâi*.  
 Je suis chaudem't [chaudement], *nekissés*, 3. *kissssin*.  
 J'ai une robbe qui tient chaud, je suis habillé chaud, *nekissasésé*.  
 Sers toi v. g. de cendres chaudes, *kesaïmkedé peks*.  
 Fer chaud, item, four, v. g. &c., *kesaraghedé, kesaraghešsa ksks*.  
 Pierre chaude, *kesapskedé*.  
 Bois chaud, *kesákské*.  
 [CHAUDIÈRE. Vide infr.]  
 [CHAUFFER.]  
 Je chauffe v. g. linge, &c. *nekesabéghisemen* v. *nekesghisemen*, 3. *ake*, &c.  
 Je me chauffe, *nedasási*, 3. *asáss*.  
 Je me chauffe assez, *nšemasási*, 3. *sé*.  
 Je me chauffe trop, je me brûle, *nssaïmka-zési*, 3. *ss*; les piés, *nedapisitési*, 3. *aps*.; les mains, *nedabiretsési*, 3. *abi*.  
 Je me chauffe le dos étant couché, *netsikkási*.  
 Je l'échauffe dans le sein et entre mes mains, *nekissnaï*.  
 Je fais chauffer, v. g. de l'eau, *nekesebcsēmen*.  
 Vide Échauffer suo loco, in litterâ E.  
 Je me chauffe le corps, *nekesabēšemen nhaghé*.  
 CHAUDIÈRE, *ksks*, pl. *ksksak*; \* rouge, *pkšaiñks*; à pié, *kañtksks*; blanche, *saiñbañks*; la mouvette p'r [pour] la remuer,

[ \* Probably corrupted from the English word *cook*; as has happened in other Indian languages. EDIT.]

*arbékhi'gan*; elle coule, *ssebâi*; elle est sans eau, *sikbéššs nekebéššs*; elle bout, *šdâi*.  
 Je fais chaudière, *nebagastañsi*; de cela, *nebagastsn*.  
 Je fais chaudière de chevreuil, v. g. *nebagassema usrké*, &c.; je la pens, *nedék-* [106, 107.] *hsrañ*; je l'élève, *nedá'spékhsrañ*; je l'abaisse, *nedapsékhsrañ*, 3. *sd*. -*hsrañr*.  
 J'y mets q'q' ch. [quelque chose] *nepstsihadsn*, nob. *nepstsiharañ*; de l'eau, *neteghesstaiñksé*, 3. *teg*.; mets de l'eau dans la chaudière, *teghessem ksks*, v. *teghessemé* 1<sup>re</sup> *neteghessemâñ*; je la fais bouillir, il faut qu'elle bouille, *ussemem*, 3. *ss*. Vid. Bouillir.  
 Je la partage, je dresse, v. *nedaghenasé*, 3. *aghenasé*, je dresse mets dans les plats, *nesskhamen*; p'r lui, *nesskhamasañ*.  
 Je l'épuise l'ayant partagée, *nemtaghenasé*, 3. *met*.  
 Je n'en ai pas assez p'r [pour] donner à manger à tous, *nensda'cra*, 3. *nsda'rré*.  
 Je donne les plats à tous, *nedaknasé*.  
*Nensda'rraïñ*, je n'ai [en ?] ai pas assez.  
 Qui est-ce qui fait la chaud. [chaudière] de guerre, *asēñni sékkañt*?  
 Je fais chaudière de guerre, *nesá'kara*, 3. *ská'ré*.  
 Je la vuide buvant tout le bouillon, *nesi'kka-haïñsé*, 3. *sik*.  
 Je la dépens, mets à terre, *nekasanaïksé*.  
*Nesecerdamen aharañksemek*, *tanni edaran-ksemek*, *ni édaraiñksemek*; la chaudière est cuite, seu, je l'ai fais cuire autant qu'il faut p'r la manger, *ni nekisaïñksaïñ* v. *kšé* v. *nekisemen*.  
 J'abbas la chaudière p'r [pour] dresser, *nekasanaïkšé* v. *kšaïñ*.  
 Je mets un peu de farine dans la chaudière p'r la faire vite bouillir, *nederihadásaim* v. *nedaiñgšahadásain*; dans l'eau p'r [pour] la faire bouillir, *nederihadsn*.  
 Elle a coutume de faire la chaudière, c'est la cuisinière, *sa né'tasaïñšet*, 1<sup>re</sup> *nenitasaïñ kšé*.

*Mishañkšäñss*, *mishañkšémeghébasa*, il faut mettre une pièce à cette chaudière.

*Nemishañkšé*, j'en mets une à la chaudière, *nemishañksäñ*.

[CHAUSSER.]

Je me chausse, *nedasémi*; je le ch. [chausse], *nsdasémañ*.

[CHAUSSON. Vide supra, p. 102, 103.]

[CHAUVE.]

Je suis chauve, *nebabarasañ'deba*, 3. *abara-sañdébé*.

CHAUVE-SOURIS, *pépagamatéss*, *ssak*.

[CIEZ.]

Chez mon père, v. g. *nemi'taügssghé*; chez n're [notre] père, *kemi'taügssuskké*.

CHEMIN, *añsdi*; beau, *srighen*, v. *srañstsesen*; méchant, *matsighen añsdi* v. *matsañstsesenna*; un chemin qui monte, *teksañkañstsesen*; qui descend, *penañkañstsesen*; qui croise, *pekagañstsesen*; chemin en serpentant, *pañbébetgañstsesen*; *pañbébetghisi*, en serpentant; *sasaghisi*, tout droit; je coupe chemin qui va en serpentant, *netsagssé*; *spemki aharasiçanss ssanksk pémadenck edari saagandasésémek*, *edari ahañdañbatsimck*, *edari sisiksañbatsimck nansikansisiké ariteksankessen*, *satsésandosémek*, *meriksani kandanss spemki*; au milieu du chemin, *nañsisi*; au bord, *agañmañsdié*; chemin long, *ksañstsen*; eh. [chemin] dans la neige qui ne paroît plus parce que la neige est fondue, *sani'té*.

Le chemin est fermé, barré, *kepessaghi'rré*.

Je fais le chemin, *nedañsdikké*, 3. *añ*; p'r lui, *ned.-kkésañ*.

Je suis le chemin, *nenañbamé añsdik*.

Je vais hors du chemin, *nepeskéssé*, 3. *pes*.

Le chemin est plein d'eau, v. il y en a par-ci par-là, soit de pluie, soit de neige fondue, *nespebahñsskéssen*.

[108, 109.] Je sçais le chemin, *nesesérdamen añsdi*, v. *nesésidsn*.

Je suis au bout du chemin, *neméttanákekámen añsdi*.

Je le perds, *nepeské'ra*, 3. *peské'ré*, v. *nepeskéssé*.

Je le cherche, *neksirasattsn añsdi*, 3. *ak*.

Je le coupe, traverse, *nedañsskamen*, 3. *sd*.

id. é [idem est] vel *añssisi nededsdssé*.

*Añsdié séghé*, il y avoit là un chemin.

Y a-t-il un ch. [chemin]? *añsdišionasa?*

Non, &c., *m̄da [mañda] añsdi*.

Le vent a couvert le chemin de neige, *sanañbañtsen*.

Où conduit ce chemin? en le montrant, *taiñi érakšañstsesck añsdi?*

Je perds le chemin, je m'en détourne, *neki-sañsi*, 3. *kis*.

Je l'en détourne, &c. *nekisañsimañ*, *neki-sañssarañ*.

Je prie en chemin faisant, *nenasatsipañba'tam*.

Faites le chemin, et après q' vo' [que vous] l'aurez fait no' [nous] changerons de cabanage, *añsdikéks* v. *añsdi aritsks*, *kis'añsdikaégsé kekssibena*.

Chemin, vel potius, terrain égal, uni, *tétebakamíghé*; dans, *ghék*.

Où il y a montée et descente, *pa'paimadeniké*; méchant, *matsakamíghé*.

Il est en chemin, il vient, *stschakéssé*; 1<sup>a</sup>. *ns-tschakéssé*.

J'entre dans le chemin, &c., *nederinañbamé*.

Je suis le chemin, je n'en sors pas, &c., *nenañbamé*.

Je le joins en chemin, *nedatémí'kasañ*.

Je le conduis dans le chemin, *nenañbauésárañ*.

Je passe dans le chemin, j'y marche, la terre faisant un peu de bruit, *neti'késé*.

J'y marche vite, je fais du bruit sur la terre en marchant, on entend q'q'un qui marche, *neti'ké'ra*.

Je lui coupe chemin, il va dans un chemin et j'en prens un plus court p'r lui parler v. &c., v. *nenitspenarañ nenits'kasañ*; 3. *sri*.

CHEMINÉE, *ketsímeri*,\* *ar*.

Je la nettoie, ôte la suie, *nekassibadékekaha-*

[\* *Quare*, if from the English chimney? EDIT.]



men; on la nettoie, *kassibsdékahañss*; la suie, *piratâi*, il y en a, *piratâio*.

CHEMISE, *aütsréhañsé, sak*.

J'en ai une, seu, ma chemise, *nedaütsréhañsé*, mes, *sak*; je la blanchis, *neksestaghenañ, 3. akc*.

[CHÉNE. Vide infr. p. III.]

[CHER. Vid. infr. p. III.]

[CHERCHER.]

Je cherche, *nekširasäñbi, nekisadasäñbi*, par tout.

Je le cherche, *neksirasa<sup>t</sup>tsu*, nob. *neksirasahañ, 3. ak*; de pensée, *nekširasárdam, 3. ksi*; cela, *nek.-damcn*; de veüe, *nekširasäñbámañ, 3. ksi*; cela, *nek.-badámen*; les yeux clos, à tâtons, manu, *nsrmisi neksirsñemen, neksirsñemen*, nob. *nekširsnañ*; avec le pié, *nekširskámen*.

Je le cherche dans l'eau, *neksirsbéghenemen; nañ, nob*.

*Netzatzérkasi*, je vais dans une autre cabane, v. g. q'a n. ċ. [quia non est] locus in mea.

Je le cherche sans le trouver, *neséssemadsnahañ, ig. neséssemadsnatsn*.

Je te cherchois sans te trouver, *keséssemadsnahrshsbán*.

Je cherche à boire, *nenatšhsbé, v. nekširšhsbé*.

Je cherche ce q' je ferai, *neksirasitêhañdamen, éritasa*.

Je le cherche dans sac, coffre, *nemi<sup>t</sup>kskámen*.

Je le cherche là, *nederadsnatsn v. nederi-ksširasatsn, nob. nederadsnahañ*.

Je le cherche par tout, *nekisadsnahañ*.

Je le cherche absolument [absolument], seu, p'r q' je le trouve absolument, *nedatsšadsnahañ*.

Je cherche par tout, *messisi nederikassin*.

Je cherche sans trouver, *neséssemadsnassi*; lui, *neséssemadsnahañ*; cela, *neséssemadsna<sup>t</sup>tsn*.

Je le cherche dans la terre creusant, *nekširskké<sup>t</sup>hémén, imper. širsškké<sup>t</sup>hémšks*.

On le cherche, *širsškkébäñss*.

[CHEVAL. Vide infr. p. III.]

[Page 110 of the MS. is blank.]

CHEVREUIL, *nsrké, kak*, sa peau avec le [III.] poil, *ssé v. kákaben*; hoc etiam di'r de o'i a'li [dicitur de omni animali]; *ssé* p'prem't c'est lorsqu'elle est un peu passée, seu, d'un côté; lorsqu'on a ôté le poil, *pañgšékhañsé, di'r* [dicitur] du chevreuil.

J'ai tué un chevreuil, v. original, *nemessighé*.

Il en a tué 2, *nišssskrasé; 3, tšssskrasé*; di'r item de l'original.

J'apporte un chevreuil, *nepésssañ nsrké*.

Chevreuil en chair, *mesahañ, hañk*.

[CHER.]

Cela est trop cher, *ssañmañsado*.

Cela n'est pas trop cher, *máda [mañda] ssañmañsadiš*.

CHEVAL, *ahasss*; \* j'y monte, *nedé<sup>t</sup>šikdañ*; j'en descens, *nenesikdañ ahasssktsi*; j'y vais, *nenahsmeghé v. nenahsmšks ahasss*.

[CHÉNE.]

Chesne qui porte des glands, *anaskamesi*; gland, *anaskemen, nar*.

CHEVET, *ps<sup>t</sup>ksésimsn*.

*Ncdaps<sup>t</sup>ksésinen is*, j'en fais un de cela, seu, je me sers de cela p'r chevet.

[CHEVELURE.]

Chevelure qu'on ôte et qu'on remet, seu, *perruq<sup>t</sup>, piršäñretsks*.

Chevelure d'ennemis, *masskšäñ, masskksäñnegak*.

J'ai la chevelure enlevée, qu'on lève, *nemass<sup>t</sup>ksäñsi, 3. masskksäñss*.

Je lève la chevelure, *nemasšksé, 3. mass<sup>t</sup>ksé* subj. *psinksn v. nepesinkšé*.

J'apporte 4 chevelures, *iénsr nepets níhagšé<sup>t</sup>ksar*.

Je lui enlève la chev. [chevelure], je lui écorche la tête, *nepškanaskañtébétêhañ, 3. ap*.

Chevelure qui est enlevée, *mhaghéks*.

[CHEVEU.]

Mes cheveux, *ncpiéssmar, 3. apiés*; je les ai longs, *nekañrečša; 3. kešäñrečšé*;

[\* *Quere*, if from the English horse? EDIT.]

—— courts, *nematsänraksa*, —— frisés, *nsé'tstcsaündeba*, 3. *sé't*.

Je les lie avec rassade os [?], &c. à lui; *nedassskébiräi*.

[112, 113.] Je les prens par les cheveux, *nesakskategsi-paüssak*.

Mes cheveux croissent, *mañséghensr* v. *nesaü'kasa*; je me les coupe, *nemssssi*; —— à lui, *nemssaü*; je les tresse, *nedereskanasaim nopiéssm*.

CHIEN, *atié, atiak; aremss, sak*; mon ch. [chien], *netémis*, 3. *stémisar*; il jappe, *sghikké*; c'tre *q'q'*un [contre quelqu'un], *sghiränr nsghireks*, c'tre [contre] moi.

—— j'en ai un, *nstémisi*, 3. *st.*; terme p'r le chasser, *kesse*.

Chienne, *skéssem*; il dérobe, prend *q'q'* ch. [quelque chose], *manadam, ménadak, dághé*.

CHIQUENAUDE, *paügdäsangan*.

Je lui en donne une, *nepaügamäi*, 3. *sp.*

J'en donne, *nepaüganäsi*.

[CHOISIR.]

Je le agrée, *nsighinamen*; nob. *nsighinamäi*; choisi celui *q'* tu voudras, *twäni s'ighinaman si'ksn*.

Je le choisis de veüe, *nedéhérasaübadämen*, 3. *sd.*

Je choisis les meilleurs morceaux, *nedéhé-rasi'ppi*, 3. *éhér.*; choux, *kabits,\* tsak*.

Je le choisis par dessus les autres, *nedéhé-rašnaü*.

CHRÉTIEN, *Jcssssi-ki'tamsinns*.

CIGNE oiseau, *sigšérré, rak*.

CIERGE, chandelle, fallot d'écorce, *sassé-nemaügan*; je l'allume, *netzakesemen*, 3. *st.*; allume le v. les cierges, *tskesé sassén*, &c.; je l'éteins, *nenikaséhémen*; éteins-le, *nekaséhé*.

[CIEL.]

Le ciel, *kizsks*; item, l'air; dans le ciel, seu, dans l'air, qui est au de-là, &c. *asas-skisskšé*; toi qui es dans le ciel, &c., *easassekisskšéian*, &c.

Le ciel est clair, *šasé'ksat* v. *mšksat*.

*Kakasé'ksat*, il n'y a pas une seule nuée v. *baburusé'ksat*.

—— couvert, *ass'ksat*; quand to' [tout] d'un coup il se couvre et menace de pluie, etiam, qu'il pleut, *pepkeneksi'ré*.

Il est clair pendant la nuit, étoillé, *kakasé-kšitebi'kat*.

CISEAUX, *temespanéhsnar*.

CITROUILLE, *sú'sasé, sak*; j'ôte les [114, 115.] herbes *q'* s't [qui sont] parmi les citrouilles, *nemaséskenemenar sú'sasar*.

L'écorce de la citrouille, *amikenaks*, 1. *ami-kenakšio*, elle a, &c.; je la lève, l'ôte, *nepksanipenésighé*; graines de citrouille, *sasasésksr ssaükskaümar sa'sasésksr*, item *škitameghir*; on les mets p'r les faire germer, 1<sup>re</sup> *nesaükskaümar*.

*Peskšasasar, sa'sasar*, bientôt les citrouilles sont en fleur; *ni édtsi peskšasasek*, voici le tems auquel elle s't [sont] &c.; *peskš-asaséghé*, seu, *kégaü mesoghiksghé*, &c.

J'en fais cuire dans les cendres, *nedabas-sasésé*; elle y est cuite, *abassasésaü*.

[CLAIR.]

*šasséghen* v. *pešéghen pessénaüšat*, il est clair à travers ces arbres, il faut qu'il y ait là une rivière, lac, prairie, &c.

CLEF, *peksšagahigan*.

[CLIGNER.]

Je cligne les yeux, *nepeskigšahasi*.

CLOCHE, *sasaüksšéhigan*; je la sonne, *nedasasaüksšéhíghé*, 3. *as*; v. *nederipédsn asaüksšéhigan*, je remue la cloche; la corde est rompüe, *pesighirésaané*.

[CLOCHER, v.]

Je cloche, claudico, *nedihisagšé'ra*, 3. *ihi-sagšérré*.

Je saute à cloche-pié, *nenaparegaüdé'ksmi*, 3. *nap*.

[CLOUER.]

Je le cloüe, seu, frappe p'r faire entrer, &c. *netsi'tatéhémen* v. *netsi'taübé'hemen*.

*Sitsaktéhaüšsar sretsjar psikaksr*, v. &c., ses mains s't [sont] clouées.

[\* From the English word *cabbage*. EDIT.]

*Sitsaktéhañsak peksahäk*, les grosses écorces s't [sont] clouées.

CLOU, *tsirsaigan*; je le cloue, *nedassida-kstéhémen*, 3. *sd.*

[CLOUER.]

Il le faut clouer, cheviller, &c., *keresaghitéhémen*.

Je le cloie, cheville, *nekeresaghitéhémen*.

[CLOUER. Vid. supra.]

COCHON, *pikess*,\* *piksak*.

[CŒUR.]

Mon cœur, *nerésaigan*, 3. *sr.*; 1<sup>o</sup> *nenemeskē-nemen*, j'ôte ce qui est en dedans, &c.; je te découvre mon cœur, *nerésaigan kenemeskriemšren*; je parle du cœur, *nerésaiganek*, *ndsaiñsi*; je lui tourne le cœur, je l'émus par tout ce que je lui dis, *nepegšaiñrasémañ*; voilà co'e [comme] mon cœur est fait, *ni éri srésaigana*; voilà co'e [comme] ton cœur est fait, *ni éri srésaiganan*.

[116, 117.] J'ai le cœur bien fait, *srighen*, *nerésaigan*.

J'ai le cœur mal fait, *matsighen*.

Le cœur me bat, *mamañtsi'ré nerésaigan*.

Marie conservoit dans son cœur les paroles de son fils, *Marie snémañuar aketsaigan nénasirasaiñdamenéban*.

Je le conserve dans mon cœur, *nenenasirasaiñlamen*.

À contre cœur, malgré moi, *tsigañsisi*, v. *tsigañsi*.

Mon cœur est triste, *ssiktai nerésaigan*.

J'ai mal au cœur, *nssagapáhagsn nerésaigan*.

J'ai le cœur content, *nsiaghirasétéhañsi*.

Mon cœur bat, remüe, signe de *q'q'* ch.

[quelque chose], *ma'mañtsi'ré nerésaigan*; *neka'kérhamañgs nerésaigan*, il m'empêche co'e [comme] s'il me disoit, ne fais pas cela, tu mouras, v. t'arrivera *q'q'* ch. [quelque ch.] &c., 3. *kakérhamañks*.

J'ai le cœur ferme, *nesaigritéhañsi*.

Je pénètre son cœur, *nedaisañbamañ*, 3. *sd.*

Je pénètre, je vois à travers *q'q'* ch. [quelque

chose], v. g. bouteille de verre, *nedaisañbada-men*, 3. *sd.*; *aisañbamañ adamañgan*, on voit à travers le calumet.

Je le demande de pensée dans mon cœur, *nsiksšermañ*.

Mon cœur s'y oppose, *m̄da [mānda] nšigañsaderdams*, &c.

Fais connoître à mon cœur ce que tu désires de moi, *m'ksrasémi éri tssañdamasian*.

Mon cœur est foible, *nenanésañsitéha* v. *nepsš*, &c.

J'ai un cœur foib. [foible], facile à vaincre, *nepsškeritéha*.

Mon cœur revient, &c., *sési'ré nerésaigan* v. *sésañdami'ré*.

Je reprends l'esprit, je reviens avec esp. [esprit], *ursésitéhañsi*.

Mon cœur me dit qu'il arrivera *q'q'* [quelque] chose de nouveau, des gens qui arrivent, v. l'ennemi, &c., *nedamatam*.

Je lui change le cœur, sive in bonum, sive in malum, *nepirsitéhenañ*.

Je l'avertis, l'exhorte, le fortifie dans le cœur, *nekakéssmañšitéhékasañ*.

COFFRE, *arsagahigan*.

[COLÈRE]

Je suis en colère, je suis fâché, *nemssksér-dam*, 3. *mss.*; bien fort, *nesésésañmirasé'ra*, 3. *st.*; je suis en colère contre lui, *nemssksérmañ*, 3. *am.*

Je le mets en colère, *nemssksiraséhañ*.

Je le fais mettre en colère lui parlant, *nemssksirasémañ*.

Je le fais mettre en colère le battant, *nemssksirasétéhañ*.

Je lui ai ôté cela en colère, . . . .

Je lui parle en colère, *neneskañghéršrañ*.

COLLE, *agsaṅšcigan*.

[COLLER.]

Il est collé, *agsaṅšsésaṅss*.

Je le colle, *nepesagšagsaṅšséhémen*, 3. *ap.*

[COLLETER.]

Je me collette avec lui, *neméménašdibena*.

Ils se collettent, *méménašdšak*.

Je le collette, le surmonte, *nesinihañ, nemañ-meri.kitasañ*.

[From the English *pigs*. EDIT.]

[118, 119.]



COLLET, ce que l'on met autour du coup [cou], *keskšébi*; j'en mets, *nekikeskšébi*, 3. *kike*, &c.; unde, les prêtres, *sañbskšé-siañtsik*.

[COLLIER.]

Collier de porcelaine, *skšañs*; collier qu'on met autour du cou, *pešsiksššənar*; j'en ai un, *nepešksi*, *nepešiksššənar*.

Collier p'r porter une charge, *ššskšäñbi*, *biar*, *piršand*, *ps'ksäñbi*, *ak*.

[COMBAT, COMBATTRE.]

Combat, la guerre, *ma'tañbėks aišdin*.

Je combas, *nemi'ka'kė*, 3. *mi'k*; contre lui, *nedaisdėbna*, 3. *an*.

Ils combattent, *aišdšak*.

Je combas contre le diable, contre ses actions, *nedasdañdamen aišsañgan matsks*.

Je combas contre lui, *nedasdšäñmäñ*.

[COMBIEN.]

Ô combien d'hommes! *paghé areñuñbes tañni!*

Ô c'bien [combien] de poissons! *paghé namessis tañni!*

C'bien [combien] y a-t-il de ces choses? *kėssensrnasa?* v. *kėssensar kėssensgar*.

C'bien [combien] sont ils? *kėssaknasa* v. *tañni kėssšihidit*.

Voilà c'bien ils s't [combien ils sont], *ni kėssihidit*.

C'bien sommes no' [combien sommes nous]? *kekėssšibena* v. *tañni kėsssiogs?*

En c'bien de villages s't ils [combien de villages sont ils]? *kėssitšebdėnahaknasa* v. *kėssdėnahaknasa?*

C'bien êtes vo' [combien êtes vous] de cahanes? *kėssigaknasa?*

C'bien de poires de terre, v. g. *kė'sihidit penak*.

Voilà tout, voilà t'tes [toutes] les poires de terre, voilà reste [?], *ni akė'sinañ*.

[COMBLE.]

Je le mets comble, surabondant, le remplis à comble, *nepėbañsitamka'tsn*, nob. *nepėbañsitamka'rañ*; qu'il soit soit comble, surabondant, *pėbañsitamkatėts*; il l'est, *pėbañsitamka'tė*.

*Kskšamka'tar skamsnar*, le blé est comble, il est rempli surabondamment de blé. *Kskšamka'tak ėssak*, il l'est de coquillage.

[Page 120 of the MS. is blank.]

[COMMANDER. Vid. infr.]

[COMME. Vid. infr.]

[COMMENCEMENT.]

Au commencement, *sėtsitasi*.

[121.]

[COMMENCER.]

Je commence par cela, *ustsimanenit'sn*, v. *is sėtsi manenit'tasa*; je fais cela finalem't [finalement], je finis par-là, *nemėtanaskit'sn*.

Je commence v. g. à manger, *ni aneghi mitsessia*.

Je commence v. g. à manger, *sibisi mitsėssia*.

[COMMENT. Vid. infr.]

[COMMANDER.]

Je commande, gouverne, *nedaro'kemi*.

Je commande, donne commission, je louė, *nedarokkėmi*.

Je lui donne commission, &c. *nedarokkėrañ*, 3. *arok*.

[COMMISSION.]

Commission, *arokkėmsañgan*.

[COMME.]

Je te ferai comme tu me feras, *ni arihianė netse*, *nañbi kederihšren*.

Je lui montre comme il fera, *nekikimäñ ėrittäñgs* 3. *akikiman ėrit'srit*.

[COMMENT.]

Comment mentirois-je? *kėgstba sėtsi pišš-aiššėmia?*

Comment sçais tu q' Dieu a dit? *kėgs pegsa sėtsi sėšėrdaman*, *tañni idághesa ketsinišėšks*.

[COMMUNIQUER.]

Je lui communique en secret q'q' ch. q'.

[quelque chose que] je lui raconte, *neki-mändokkesañ*, 3. *kim*.

Je lui communique c'se [cause] du mal, *nemesihaiñ*.

Le mal se communique, *mesihšdin*; il ne se, &c., *mada [mānda] mesihšdisn*.

Comme si Marie communiquoit avec no' [nous] la haine q' Adam no' [nous] a attiré, &c. ! *sa pegšaba é'to Marie asitkamighessañghémìn !*

[COMMUNIER.]

Je communie, usus nunc invaluit, *necommuniési.\**

J'ai co'ié [communie], seu, Jésus ma visité, *nstsihigs Jesss.*

[Page 122 of the MS. is blank.]

[123.] [COMPAGNON.]

Mon compagnon, *netsšes, v. nitsš; 3. stsšésar;* mes compagnons, *netsšésak, &c.;* où est ton compagnon ? *tañnenasa ketsšésa?* mes compagnons, in imperat., *netsšésedskš;* je suis avec eux de c'pagnie, *nekšsssaññéna.*

COMPAGNE, idem.

[COMPARER.]

Je pense en quel tems est arrivé, &c., *netétebeskasitčhañdamen.*

Je compare cela, je l'estime comme, *netétebéšdamen.*

COMPAS, *tebakšnigan.*

[COMPASSION.]

Je suis digne de compssion, *neketemañghérmegssi.*

J'ai c'passion [compassion] de lui, *neketemañghérmañ v. nssšéremañ, 3. aket.*

P'sonne n'a c'passion [personne n'a compassion] de moi, *ñda [mañda] ascnuir neketemañghérmegs.*

Je le rends digne de c'passion [compassion], *nssikkarañ v. neketemañghihai.*

Je parle d'une manière pitoiable, *neketemañgšési.*

Je regarde cela avec c'pass. [compassion], en pitié, *neketemañganbadamen, lui, -bamañ.*

J'en ai c'passion à cause de lui, *neketemañghérdamaséañ.*

Je suis dur, non compassif, *nekikanérdam, 3. kan, v. neketemañghihisé.*

[COMPRENDRE.]

[CONCEVOIR.]

Je me comprends, *neséštañši.*

Je conçois, je comprends cela, *nséštamén.*

Conçois-tu ce q' je te dis ? *kšéstasinasa ?*

Je te conçois, je comprends ce q' tu dis, *kšéstsr.*

Je le conçois, *nšéstasañ, il me conçoit, mšéstaiñgs.*

Je suis conceu, je commence à être, *nenitsirassi.*

[CONCLURE.]

Je conclus, je termine cela, *nemé'térdamen,* seu, *ñda [mañda] mina nemi'kšitčhañdamssn.*

[CONDUIRE.]

Je conduis, je montre, *nekikinssarsšé, 3. ki- [124, 125.] nss.*

Je le conduis bien, j'ai soin de lui en chemin, q' rien ne lui manque, *nsañsrss-sarañ.*

Je le conduis, montre v. g. le chemin, *nekikinssarañ.*

Conduis moi où il est, *kinssari tañni épit.*

Je le conduis, je le meine, *nederssarañ, ign. nederssadsn;* malgré lui, *netsigañsarañ.*

Je le conduis par eau, *nederhšrañ, 3. sder, 3. ar.*

Je le conduis par la main, *nekišisakinskénañ, 3. kis.*

Je lui dis de le mettre d'un autre côté, le redressant, *neté'kamssaran, ig. nete'kamsssa'dsn.*

Je le c'duis [conduis] v. par la main, v. par un bâton, v. corde, v. g. aveugle, v. &c., *nemañtsaañbéghenañ.*

Je l'ameine, j'arrive où je le c'duisois ainsi, *nepétañbéghenañ.*

[CONFESSER.]

Je me confesse, (usus invaluit,) *neconfessési.\**

[CONFIANCE.]

J'ai confiance en lui qu'il m'assistera dans mes besoins, *nsiaséšsessañmañ.*

J'ai c'fiance [confiance] qu'il m'assistera

[ \* From the French verb. EDIT.]

[ \* Formed from the French verb. EDIT.]

dans le besoin q' j'ai de mangeaille, *neni-késaimaï*.

[CONFUS.]  
Je le rends confus par mes réponses, il ne me peut pas répondre un mot, il n'a pas le mot à dire, *nesékšahámasaï*, 3. *asé*.

[CONNOISSANCE.]  
[CONNOÎTRE.]  
Je connois cela de pensée, *nšésérdámen*; lui, *mšésérmaï*, 3. *sé*.

Je le connois distinctem't de pensée, *msésité-haï'damen*, 3. *asé*.

Je te connois, seu, je vois q' tu me veux prendre ce q' j'ai, *kesésri*; lui, *nesésraï*.

Je le connois de veüe étant présent, *ncšésinamen*, 3. *asé*; lui de veüe, *nesésinasáï*.

Je connois parfaitem't cela, *ncpébétérdámen*.  
Je ne le connois qu'obscurem't, *nensremérdámen*, *nensreméremaï*.

Je ne le connois pas, je ne le pénètre pas, je le méconnois, *nedasaïnéremaï* v. *nensrémémaï*, ign. *nedasaïnérdámen*.

Fais connoître à mon cœur ce qui tu souhaites de moi, *mikrasémi éri tssaüdama-sian*.

Je suis connoissable, *nesésinaïngssi*.

Je n'ai pas la moindre connoissance d'un ho'e [homme], tant je suis pure, vierge, *ncdasainéremaï*.

Je le fais connoître, déclare, *nesésiharaï*, *nesésaïndokkaïraï*.

Tu as beau nier, v. g. on connoît assez à tes manières, visage, que c'est toi, tu es assez reconnoissable, *ksésikšénaïngssikki* v. *kšésinaïngssikki* v. *ksésaïnbamegssikki*.

Je le connois p'r être sage, liberal, brave, &c., v. je dis qu'il est sage, &c., (le terme est avantageux,) *nemaïmetsimaï*.

Je le connois p'r être méchant, je dis qu'il est, &c., (le terme est désavantageux,) *ncda'kšéremaï* v. *ncdahakšéremaï*.

*Piršínass*, di'r [dicitur] de puero qui méconnoît les hommes, 1<sup>a</sup> *ncpiršínassi* v. *ncdaïnsaghínassi*.

Je suis connu p'r avoir fait cela, *ncsési'ra*, 3. *sési'ré*, v. *ncsésisi*.

[CONSEIL.]  
Nous tenons conseil, *nekersredíbena*, *netepšébcna*.

Vous tenez c. [conseil], ils tiennent c. [conseil], *keghersredíba*, *ghersredšak*.

Je lui donne conseil, *nekekékímaï*.

[CONSENTEMENT.]  
Je lui donne mon c'sentem't [consentement], *nensksšmasaï*.

[CONSENTIR.]  
Je consens à cela, *nensksšmen*.

[Page 126 of the MS. is blank.]

[CONSÉQUENCE.] [127.]  
Cela est de conséquence, *saagat*, v. *peskásat*.  
Je suis de conséquence, *nsdsérsi*.

[CONSERVER.]  
Je le conserve, *nenénasérdámen*, 3. *snén*, nob. *nenénasérman*; de veüe, *nenasaïbadámen*, 3. *snéna*.

[CONSIDÉRER.]  
Je le considère, j'en cherche t'tes [toutes] les circonstances, *netebínamen*, 3. *steb*.

Je le considère, j'ai de la complaisance p'r lui, *nsrérmaï*.

Je le rends considérab. [considérable], *nesaïngmaïsihaï*.

Je suis considérable, *nekesermégssi*.

Je suis celui p'r qui on a de g'des c'sidéraons [grandes considérations] de g'ds [grandes] égards, *nesaaghérmégssi*.

Cela est considérab. [considérable], *kesérme-gšat*; q' vo' [que vous] êtes aussi g'd [grand], ô Dieu, *kededsérmégssi*.

[CONSOLER.]  
Je console, *nedasighihsé*.

Je le console, d'effet, *nedasighihaï*, 3. *sda*.

Je le console v'bo [verbo], v. *nedasighimaï*.

[CONSTIPER.]  
Il est constipé, *kebess*, 1<sup>a</sup> *nekebesi*.

[CONSUMER.]  
Je lui gagne tout ce qu'il a, *nené'kaïtemahaï*, 3. *né'k*; je le consume, di'r t'tùm [dicitur tantùm] de cibo, *neketamen*; abs'tum [absolutum], *neketamaï*, nob. *neketamaï*; je



le donne tout ce *q'* j'ai de vivre, *nemétsar*,  
 3. *mét.*; en traittant, *nemé'tatañsé*; 3. *mét.*  
 CONTE, fable. Vid. Fable.  
 [CONTER.]  
 [128, 129.] Je conte, *nedaghísi*, 3. *aghíss*, *ni sibi*  
*éghisit.*  
 Je me trompe en contant, *nskašaghísi.*  
 On ne peut conter c'bien ils s't d'hôes tant  
 le n'bre est g'd [combien ils sont d'hom-  
 mes, tant le nombre est grand], *akikesisn*  
*arcnañbé.*  
 Je conte, *nedaghísi.*  
 Je le conte, *nedaghídamen*, nob. *nedoghí-*  
*mañ.*  
 ConteZ nous ensemb. [ensemble], melez no'  
 [nous] avec &c., *ks'radéneñiné.*  
 Je le conte de pensée, *nedaghenc'téhañdamen*,  
 3. *sdag.*  
 [CONTENTEMENT, CONTENTER.]  
 Je lui donne contentem't [contentement],  
*nsrérdamíhañ*, 3. *sr.*  
 J'en suis content p'r lui de ce qu'on lui  
 donne v. g. *nsrérdamásañ.*  
 Cela me contente, m'est utile, cette robbe  
 me sied bien v. g., *nsrekañgsn*, 3. *sr.*  
 CONTINUELLEM'T [continuellement],  
*kañghéga* v. *nénekemañtsisi.*  
 [CONTRAINdre.]  
 Je le contrains v'bo [verbo], *netsatzégañmañ*,  
 3. *tza.*  
 Je le contrains à m'obéir, à peine m'obeit-  
 il, *asakañtsin nekiktañgs.*  
 Je le contrains à m'obeir, *neksitañmañ*, seu,  
*tssiméghé nekiktañgs.*  
 [CONTRAIRE.]  
 Au contraire, *šaiśa'ra* v. *sa'ra.*  
 [CONTRARIER.]  
 Il me contrarie, faisant autrement que je ne  
 dis, &c., *nebañmskémañ*, v. *nesañsasémañ.*  
 Tu me c'traries, *kebañmskémer*; je te, *ke-*  
*bañmskémi.*  
 [CONTRE.]  
 Contre les écorces de la cabane, v. contre  
*q'q'* chose co'e [quelque chose comme]  
 un paroi, *kikemek* v. *kikisi.*

[CONTREFAIRE.]

Je contrefais, je dis co'e [comme] lui, avec  
 lui, *nemañma'sksrs'tasañ*, 3. *mañ.*Le contrefais au dire, v. *nenañberstasañ ne-*  
*pébéterstasañ.*Je le contrefais en ses façons, *nekakékerasañ.*

[CONVAINCRE.]

Je le convains, il a beau se défendre, *nšé-*  
*ksāhāmasañ*, je le convains.

[COPIER.]

Je copie l'écriture, *nekikinasañbādamen.*COQ, poule, *ékéms*, *msak.*Coq d'Inde, *néhémé*, *mak.*

[Page 130 of the MS. is blank.]

COQUILLE, *és*, *éssak.*J'amasse coquillage p'r manger, *nemanésé*; [131.]  
 on en ramasse, *manésañ.*CORBEAU, *mkazes.*

[CORDE.]

Corde Française, *rabañbi*, *ar.\**Corde sauv. [sauvage], babiche, *sréghés*,  
*sar.*Corde sauv. [sauvage] faite avec des  
 écorces ou des herbes, *pi'kann.*CORNE, *asisir.*Corne d'original, de chevreuil, de cerf, et  
 de bœuf, *sdasisi'ra.*Il en a, *asisiršio*; il n'en a point, *māda*  
 [*mañda*] *asisirisí.*Elles croissent, *nitsisi'ré*, elles t'bent [tom-  
 bent], *pekskasé.*Corne à poudre, *ahañren*; † ma corne, *neda-*  
*hañrenem*; 3. *sdahañrenemar.*CORNEILLE, *kara'kara'mess.*

[CORPS.]

Mon, ton, son corps, *nhaghé*, *khaghé*, *shaghé*;  
 no's [notres], *nhagéna*; vo's [votres],  
*khaghésañ*, 3. *shaghésañ*; n're, n're et  
 v're, v're, [notre, notre et votre, votre,]  
 leur corps, *nhaghéna*, *khaghéna*, *khaghé-*  
*sañ*, *shaghésañ*; je l'ai gros, *nemesa'kssi,*
[\* *Quere*, if from the French word *ruban*? EDIT.][† *Quere*, if from the English word *horn*? EDIT.]

3. *mes.*; je l'ai menu, *nepisakssessi*, 3. *bis*; j'ai un corps, *nshagai*.  
 Je lui fais un corps, *nshagaihésaï*; on me fait un corps, *nshagaihésks*; on lui en fait, *shagaihésaï*; j'ai un me'e [même] corps avec lui, *nšiθagaémaï*.  
 Corps mort, *kétañss*.

[Page 132 of the MS. is blank.

[133.] Les parties du corps humain.

*Mtep*, tête; *netep*, ma t. [tête]; 3. *step*.  
*Manañsksañtep*, le dessus de la tête.  
*Meskátegsé*, front; *neskátegsé*, m. f. [mon front]; 3. *sk*.  
*Nesisscgsk*, ma face; *ss*.  
*Tsiseks*, œil, *tsisegsr*, les yeux, *nets.*, &c. m. [mon.]  
*Mañmañmak*, *nemañmañnak*, les sourcils, en sing., *mañmañ*, *nemañmañ mañsi're*, va, marche, sigue de saluta'on [salutation] &c.  
*Ki'tan*, né; *neki'tan*, m. né [mon nez.]  
*Manšé*, joue; *nanšé*, m. j. [ma joue]; 3. *sansé*.  
*Nedsn*, ma bouche, mes lèvres, 3. *sdsn*.  
*Nipit*, ma dent; *sipit*.  
*Mirars*, la langue; *nirars*, m. l. [ma langue], *sirars*.  
*Nkši*, mon menton; 3. *sksi*.  
*Mtasaks*, oreille; *netasaks*, m. o. [mon oreille], 3. *stasaks*.  
*Agaiñgañghem*, devant du cou; *negañgañghem*, m. [mon d.]; *ncdabsks'kšé*, m. cou derr. [mon cou derrière], 3. *sdabsks'ksar*; *mekstañgan*, gosier, *neksdañgan*, 3. *aksdangan*; *mctabsks'kšé*, le derr. et les 2 côtés du cou.  
*Pesksan*, le milieu des épaules, le dos.  
*Nederemañgan*, mon épaule; *sd*.  
*Nañhigan*, mon épine du dos; *sañhigan*.  
*Nsdsreké*, ma poitrine; *sd*.  
*Nemighigan*, mon estomac.  
*Nañigan*, ventre.

*Brésañgan*, cœur.

*Biri*, nombril, le boieau qui y est attaché en naissant, *annikitañgan*.

*Mhadé*, gros ventre (malè sonat); *nhadé*, *khadé*, *sadé*, *nhaghés tañni*, quel gros ventre! (ô [omnino] malè sonat illud verbum,) *nhaghés*, *khaghés*, *shaghés*.

*Nepigañgan*, ma côte, mon côté; *sp*.

*Nregši*, mon aisselle; *sr.*; j'y mets, *nedétsiregšan*.

*Pedin*, bras; *nepedin*, mon bras.

*Nesksân*, mon coude; *ssksanar*.

*Neretsi*, ma main; *sretsjar*. Vid. les doigts, suo loco.

*Nekañt*, *kek.*, &c., di'r gn'rice [dicitur genericé] depuis le pié inclusive, jusqu'au dessus de la hanche.

*Ni'kšé*, le haut (la cuisse), *nebsksskan*, le bas; *nerañn*, le gras; 3. *srañnar*; *nessskšigan*, *nessskšigan*, le devant, l'os; *neghotsk*, l'os qui est à la jointure.

*Nescpskiršgan*, ce qui tient attaché le haut de la cuisse.

*Nekedeks*, mon genou.

*Nesit*, mon pié; 3. *ssitar*; talon, *magšan*; m. [mon], *nagšan*.

*Sigšat*, un os.

*Meghikšésit*, le gros arteil [orteil]; m. [mon], *neghikšésit*.

*Pskésidañnar*, les autres arteils [orteils], seu, les fourches, &c.

*Virilia*, *siraghé* v. *sétzañnek*, v. *sdaséhañgan*; semen, *stikša*; testiculi, *sresša* v. *apenakesksma*; muliebria, *stseski* v. *sétzañnek* v. *sdaséhañgan*; ventrem exonerero, *nemeskedi* v. *nensdésé*; materia, *mitsegan*; fundamentum, *snesekedi* v. *sastsi péskaghir*, v. *nsdésésit*; les fesses, *manšétcti*, *manšé*; mingo, *neseghi*, v. *nessgnebé* v. *nensdésé* — substantivum, *segsdi*, 3. *ssegsdi*; pedo, *nebigheti*; aiunt nunc, *nepeskam*, 3. *pe-skaghé*, &c., — substantivum, *abighetsañgan*, *nar*; *nenssinbena*, *nissinsda*, *nissinsk*, nous couchons 2 ensemble, [134, 135.]

de 2 viris non malè audit de viro et  
feminâ malè.

[CÔTÉ.]

À mon côté droit, *nedarenakaisi*, 3. *sdar*.

À mon côté gauche, *nedâ'paütsisi*, 3. *sd*.

*Aüsaüsi*, d'un côté, vid. Particulas; \* *aüsaüsi*  
*kstiçssaüntsé*, on le racle d'un côté, tu  
le racle des 2 côtés, *ketitasaiçssaünn*.

À l'un & l'autre côté, des 2 côtés, *itasisi*.

De quel côté? *taüdékka aragçisi*? de ce  
coté-là, *aragçisi*.

De quel côté est-il allé? *taüni éragssset*?

De ce coté-là, *sdékka arsgçisi*.

D'un [côté] et puis de [l'autre], *éhésskké*, de  
travers.

Cela est à côté, il n'est pas à l'égalité de  
l'autre, *aüssätté*; qu'il y soit, *aüssättetsis*.

Nous sommes assis d'un côté, *nedisikanapi-*  
*bena*; 3. *isiganapçak*.

Je suis tondu d'un côté, *nedisiganeskâma*,  
3. *isiganeskâmé*.

De quel côté? *taüdékka*?

Il regarde du côté qu'il ne faut pas, seu, où  
regarde-t-il? *taünedâ sa éraübit*?

De l'autre côté de la montagne, *agaümmâdené*;  
— du fleuve, *agaümmek*.

COTTON, *cattenté*; † pelotton de cotton,  
*petegçitaçdigan*.

Je le mets en pelotton, j'en fais, &c., *nepe-*  
*teksitaçdigaim*.

[COU.]

Mon cou, *nedabsksksé*, 3. *sdabsksksar*, &c.

J'y pends qq'q' ch. [quelque chose], *nepesks-*  
*sin*, *io*.

Je lui pens v. g. pierre au cou p'r qu'il  
baisse la tête en devant, *nenasaskçébirâñ*,  
v. *nedatsi'taskkçébirâñ*.

[COUCHER.]

Je le couche, le fais coucher, *nederesims'çañ*.

Étant couché, assis, (adverbe) *téssenisi*,  
*skâñsahé téssenisi*.

Je me couche sans dormir, *nederesin*; 3.  
*arcsin*; p'r dormir, *nedâ'téssin*, 3. *téssin*.

Je me couche aiant la pensée q' je me  
leverai bientôt p'r prier v. g., et je dors  
toujours, *nekéspekssi*.

Je suis couché à mon aise, *usressin*, 3. *sr*;  
mal, *nematsekéssin*, 3. *mat*.

Je vais coucher dehors, je vais là passer la  
nuit, *nededszeksâm*.

J'ameine ceux-ci p'r coucher dans ta cab.  
[cabane], *adssksaümmshsdits* v. *pedasighé-*  
*hedits kçigçsaümmek*; si unus t'tum di'r  
[tantum dicitur], *adssksaünts* v. *pedasi-*  
*ghets*.

Je couche dans une autre cab. [cabane],  
*nenâñsekçam*, *naüksaümmçangan mda* [mañ-  
da] *srighansi*.

*Netsssksm*, je suis couché sur le dos.

[136, 137.]

*Nsrmiké'sin*, je suis couché sur le ventre.

*Nedapemé'sin*, sur le côté droit v. gauche.

*Netsikkâsi*, le dos au feu.

*Skstâik nedereskadé'sin*, le ventre du côté  
du feu.

*Nemémâsaghesin*, je suis couché nud.

Je couche ici, *is nededsksçsaümm*, *édssksçsaüma*,  
3. *édssksçsaüñk*; impf. 3. *taüni édssksçsaünghe-*  
*sâ*? imper. *adssseksa*, pls. *adssksçsaümmks*  
*mâda* [mânda] *nededsksçsaümmçsi*, *mâda* [mañ-  
da] *sdedsksçsaümmçsn*.

Je vais coucher avec lui, *nenâñskçsâñ*.

Je viens coucher avec toi, *kenâñksr*.

Je couche auprès du feu, *netsikkasi*.

Je suis trop couvert étant couché, *nekishçsin*.

Nous couchâmes à terre sans cabane, &c.,  
*nenitebañsébena*.

Je le couche d'assis v. debout qu'il est,  
*neghîpenâñ*.

[COUDE, ACCOUDER.]

Mon coude, *neskçan*, 3. *ssksâünnar*.

Je m'accoude, *netsinusskçanébi*, 3. *tsi*.

Je le frappe du coude, *nekçagçssksçsanâñmañ*,  
3. *agsa*.

[COUDRE.]

Je cous chemise, *nedâskçsâñ*.

Je cous avec cela, *nedaskçsaüñsé'tsn*.

Il la faut coudre, *sksçsâñ*.

*Tagçakçstañsits*, qu'on couse cela entre 2

[\* At the end of this Dictionary. EDIT.]

[† From the English word. EDIT.]



bâton, bois, &c., *netagsakstsnar abasiar*,  
un de chaq<sup>e</sup> côté, v. *netéitasakstsnar*.  
Je couds, *nedaskaätsé* v. *nederikšassi*, 3.  
*sksaätsé*, il faut, &c., *sksaändañss* v. *ari-*  
*kšaändañss* v. *sksaäñssksaäñsits*.  
Je le couds, v. g. canot, item vestem, &c.,  
*nedaskšámen*, 3. *sdas.*, v. g. *agšiden* ;  
minus aptum est, *nedaskšahsri*, je coups  
[couds] le canot.  
J'achève de coudre, *kégañ nekisikšamen*,  
3. *akisi* ; de plusieurs couleurs, *maïmañ-*  
*righen*, nob. *maïmañrigs* v. *maïmañra-*  
*žañss* ; cousus ensemble, *mañsiksañss*.  
Je le recouds, *neminasiškšámen*.  
Je le découds, *nskañsamen* ; découds-le,  
*kañsemé*.  
Il le faut découdre, *skañsañss*.  
[COULER.]  
Il coule, v. g. le sang, *aritsšáñ*.  
Coule, cela coule, *ari'tssañ* ; vite, *kesitssañ*  
v. *kisi'tañ*.  
Vois si cela coule, applique ta bouche p'r  
[pour] voir, &c., *ksdára'ta*, 1<sup>a</sup>. *neksda-*  
*ra'tamen*.  
Il ne coule pas, il ne sort point de vent,  
*m̄da* [*mañda*] *sibési* v. *m̄da sdaratañsisi* v.  
*m̄da aranañragatši*.  
COULEUR. Vid. Peinture.  
[COUP.]  
Tout d'un coup, *sara'kkisi*.  
Je lui donne des coups de poing, *neseksske-*  
*sidété'kasañ*.  
*Nedakeskásañ*, je lui donne un coup de pié.  
*Nedagámañ*, je le frappe.  
Je lui en donne sur les yeux, *neseségšéhañ*.  
J'évite le coup, *nedábasi* ; cela v. le coup,  
*nedabasi'tamen*. Vid. Je pare.  
En 2 coups je le tuai, *nenissagamañ ni amé-*  
*tsinañ*.  
J'ai retenu mon coup, *kisi mēsaka asakañsi*  
*netsanipetsn*.  
Les Iroquois ont fait coup, *megšak n'rikkak*.  
On a fait coup sur nous, *neni'reghébena*.  
Je vais faire coup, *nenañsipa*, 3. *nañsiphé*,  
no' [nous], *nenañsipañ'bena*.

## COUPER.]

Je me suis coupé, *nšéksšsi* ; je le, *nšéghesañ*,  
d'un couteau, d'une hache, *nšéktéhssi*,  
*nšéghitsi*, d'une . . . . épée, bois, &c.  
Je le coupe, *netemesemen*, *netcmessñ*, 3. *št.* ;  
coupe-le, *temesé* ; — bien juste, *nsre-*  
*semen*, nob. *nsresañ* ; — en rond,  
*nesañsiañéghisemen*, 3. *asan*, v. *nšañsianse-*  
*men*.  
En coupant je le fens, *nepesigañbésemen*, *ap.* ;  
le doit v. g., coupé, v. écorce d'un arbre  
coupée repret, *éniighen*, ne &c. *m̄da* [*mañ-*  
*da*] *éniighensi* [?].  
Je ne le puis couper, *nedañrašsamen*.  
Je me suis coupé avec un couteau, *nšéksšsi*  
*nepitsssi*, 3. *ptsesss*.  
Je coupe la peau, *neseksskañbésemen* ; [138, 139.]  
— en long, *nebessikessemen*.  
Je lui coupe un morceau de peau, v. g.  
*nebakéghismasañ*, 3. *apaké.*, &c.  
Coupe m'en un morceau, *pekéghismasi*.  
Je coupe en petits morceaux, v. g. viande,  
&c. Vide Morceaux.  
Je coupe autrement qu'il ne faut, *nepitssese-*  
*men*.  
Je coupe de la viande, *netemesemen* v. *nede-*  
*resemen*.  
— p'r la faire boucaner, *nederésšighé*.  
Je coupe en morceau la graisse, chair, v. g.  
p'r la fondre, *nescksssemen* ; *sekssé*, coupe  
en morceau la graisse v. viande.  
Je lui coupe le né [nez], *netemitanésañ* ;  
— les oreilles, *netemi'tasagšésañ* ; je  
les ai coupées, *netatémí'tasagša*, 3.  
*dalé.* ; — la tête, *netemigšétéhañ*,  
3. *tem*, v. *netemiksssañ* v. *netemigšé'harañ*.  
Je coupe une partie de bois, v. g. p'r qu'un  
autre y soit inséré, *nederetéhémen*.  
Je le coupe avec les dents, *nepeskadámen*,  
nob. *nepeskámañ*.  
Je coupe les terres p'r me rendre à un en-  
droit, seu, je traverse là, &c. Vid. Terre.  
Je lui coupe les mains, les pognets, *netemi-*  
*retsétéhañ*.  
Je lui coupe la langue, *netemirašétéhañ*.

*Baraghessss*, seu, *baraghissssi aressss*, il s'est un peu coupé.

[COURAGE. Vide infra.]

[COUTEAU.]

Mon couteau coupe bien, *kesighi'rs netsé-ksaks*; — mal, *matsighi'rs*.

COURAGE, prens courage, *zoktängšadets*, v. *zoghiri*.

Prenez courage, *zoktängšadets* v. *zoghirik*s. Prenez courage, di'r [dicitur] etiam, *zoktängšadskéks*.

Prenons courage, *zoktängšadskéda*.

Je pers courage, *nedaskšitēha*, 3. *skšitēhé*.

Homme courageux, *kinañbé*, *kinañbas*, je le suis, *nekinañbaï*; je l'encourage, lui fortifie le cœur, *nemerkitēhékasañ*.

[COURBER.]

Je suis courbé profondém't [profondément], disant v. g. c'fíteor [confíteor], *nenasssi-gañbasi*.

Je courbe en devant, *nenasañghi*, 3. *nas*; — en derrière, *nesamaghigañbasi*, 3. *sama*; — la tête, *nenasaskšébi* 3. *na*, v. *nenasaskšégañbasi*; je la baisse en marchant, *nenasaskšéssi* v. *nedatsitaškkšé*, v. *nedatsitaškkšéssi*.

Je vais courbé, *nepikañgssé*, 3. *pik*.

[Page 140 of the MS. is blank.]

[141.] Je le courbe, manu, *nepikañghénemen*, 3. *ap*.

Je courbe une planche, bois, *nepikañghéskámen*, 3. *ap*.

Cela est courbé, croche, *sañghíghen*, v. *sañghetséghen sañketsaakšat sañgakšat*.

C'est bien [combien] ce bois est différemm't [différemment] tortu, *ntsedañmañgs arakšat*.

COURONNE, *tsi'tokšébi*; j'en ai, *netsi'tokšébi*, 3. *tsi*; je la mets, *netsi'tokšébi-nsretsn*, 3. *st*; je lui mets, *neisitokšébi'rañ*, 3. *tsi*.

Couronne de prêtre, j'en ai une, *nedasañde-bémsssi*.

[COURROIE.]

Courroies sauvages, babiches, *srsghes*, *sar*; — de souliers, *tatésagšanañbi*.

[COURIR.]

Je cours, je vas vite, *nemañtérira*; 3. *mañt*. v. *nekesirra* v. *nekeskarra* v. *nekesssé*.

Voions qui coura mieux de no' [nous] 2, v. g. jusq' à ce pin, je courai mieux q' toi, *nénegañsadida kšé sékkét arikenegarerba*.

De 2 q' nous étions à courir, je cours le mieux, *nenegaršé*.

Courons à qui mieux mieux, *nénegañsadida, nenénegañsadibena*.

Je cours en deçà, je reviens, *nepé'tsi'ra*, 3. *bet*, en de-là, *nedereñi'ra*, 3. *are*; deçà et de-là, *nebabañmi'ra*; 3. *bab*.

Je cours après, &c., *nenssspenárai*, 3. *nss*; abs'tum [absolutum], *nenssspená'si*.

[COURT.]

Cela est trop court, *ssañmi taatetakesesen*; de fune silvestri; nob. *taattakesess*, de fune, v. g.; nob. *-kesess*. Vid. Long.

Il est court, nob. *taádéss* v. *taakséss*, ig. *taada'ksât* v. *tasa'ksât*; long, *ksné*; voilà c'bien [combien] long, &c., *nikšé-nek*, &c. Vid. Long; je suis grand, *neksná'kssi*, 3. *ksn*.

Je cous. Vid. superius, Je couds.

[COUSSIN.]

Coussin de tête, *ps'kšésímsn*, *nar*.

*Nedaps'kšésinen*, *is*, j'ai cela p'r coussin; 3. *sdapskšésinen*; imper. *ps'kšésin is*, ai cela p'r coussin.

COUTEAU, *ntsé'ksaks*, *gsr*; mon couteau, *nenetsé'ksaks*, 3. *snetsi'ksaks*.

La gaine p'r le pendre au cou, *pitaraksañgan*.

Couteau à 2 trenchants, *idasaraks ñtasisi ntsikkšaksio*.

J'ai un couteau, *nsntséksaks*; il coupe bien, *kesighi'rs*, v. *arara'ghi'ré*; mal, *matsighi'rs*.

Couteau croche, *pekarakñigan*, *arakamighé*; coupe bien, *arara'ghi'ré*, *éarakamighek*.

[142, 143.]

## [COUTUME.]

C'est la coutume, *arenasagat*, sub. *érnasagšak*.

C'est ma coutume, *ni érkamigšia*; c'est sa c. [coutume], *ni érkamigšit*, v. *ni éšia*, *éšian*, *ni éšit*.

C'est n're c. [notre coutume], *ni érkamigšieg*, c'est la v're [votre], *ni érkamigšiegs*.

C'est une vieille coutume, *negaiñié*.

J'ai coutume, *nederekamigšin*, 3. *sd*.

Je n'ai point cette coutume, *māda* [maida] *nederenasákesisn*.

J'ai les me'es [mêmes] coutumes q' lui, *nšitkamigššaiñmañ*, v. *nšitkamighessmañ*.

J'ai coutume de faire cela, *nedahasin*.

Je veux t'rs faire co'e [toujours faire comme] j'ai coutume de faire, je ne veux point me repentir, v. je ne puis autrem't, *nedérighésérdam*, 3. *éri*.

## [COUVERCLE.]

Couvercle de caisse, &c. *assškšéigan*. [Vid. infra.]

## [COUVERT.]

Je marche à couvert de q'q' ch. [quelque chose], je le mets à couvert, &c. Vid. particulam *añbagasisi*.

## [COUVRIR.]

Je le couvre, manu, *nedaiñbagsnemen*, 3. *sd*; avec instrument, *nemcragšáhamen* 3. *am*. v. *nedasshsmen*, *nedasshañ*.

Je couvre le visage de l'enfant v. g. *nedagšarañgšéhañ*.

Le vent a couvert le chemin de nége, *sanañbañtsen*.

Je me couvre, étant couché, *nsresshysi*, v. *nsršéhšderesi*, 3. *sres*.

Je suis trop couvert, étant couché, *nekišhssin*.

Je ne suis pas encore assez couvert, *éssema netépsésé*.

Je me couvre de ma robe, *nedágsin nedassé*.

Couvrons no' [nous] de ma robe, *tagšisi agšida nedassé*.

Je couvre un hōe q. [homme qui] est couché, *nsrasshañ*.

Je le couvre de belle manière qu'on ne peut

lui rien faire, ni battre, ni &c., *nedañks-té<sup>c</sup>kasañ*.

De quoi couvres-tu ta cabane? *kégšič épks- [144, 145.] añšian?* 1<sup>a</sup>. *nedépkšaiñsi?*

De quoi couvre-on? *kégšičé pkšémek*, v. *épkš-añšimék?*

*Arigšaghenaiñss*, on couvre d'écorce.

*Nederigšaghenemen maskšé*, je couvre d'écorce.

*Nederigšaghenaiñ peksahañ*, je couvre de grosses écorces.

*Kégšinasa érigšaghenasitsmek* 1<sup>a</sup>. *nederigšaghenasi*, de quoi couvre-t-on?

*Arapšaiñšits nšigsaiñm*, qu'on la couvre de, *peksasañk*.

*Meskikšigaiñšits*, qu'on la couvre de pailles. *Nederetsnar psikaskšr* v. *meskikšar*, je les accommode, place, pose.

*Abáksaiñnar meskikšar* v. *ébkšaiñmeghir*, on couvre de pailles.

Je couvre cela, j'y mets un couvercle, *neda<sup>c</sup>-sskšéhémén*.

*Éri sañghenaiñšik araiñšisi*, *psikaskšr sibisi kisi sañghenighétañss*, p'r la voûte il faut des planches.

*Asšéhtañss*, il faut couvrir les images, tirer les rideaux, &c.

*Paskéghenaiñss*, il faut les découvrir, &c.

COUVERTE, *maskšé*, *maskesar*, ma c. [couverte], *nemaskšé*.

—— de drap v. étoffe, *arenéghen*.

Une g'de [grande] couverte, *mesa<sup>c</sup>taks*.

Je m'en couvre, la mettant sur la tête de telle sorte qu'on ne voit qu'un peu le visage, *nedagšarañgšéssin* v. *nedagšarañgšéhssi*.

Couverte de laine, *messaiñié*, pls. *iar*, v. *mesaiñiéšisar*.

Je lui donne une partie v. tout de ma couverte, robe, je le couvre, *nedasshañ*.

## [COUVERCLE.]

Couvercle de pot, de chaudière, *assškšéhigan*.

CRACHAT, *sésseks*; je crache, *neséssegšiči*, 3. *séssegšs*.



## [CRACHER.]

Je lui crache contre, un peu par moquerie,  
v. sans moquerie, *nesessegémaï*.

[CRAINDE. Vid. infra.]

## [CRAINTIF.]

Je suis craintif, *nesänséghesi*, 3. *saä*.

## [CRAINDE.]

Je crains, *neséghesi*, 3. *séghess*, v. *nenanc-*  
*kapäihi*.

Je tremble de crainte, *nenanekpäü*, 3. *na-*  
*nekpäü*.

Je le rassure dans sa crainte, *nekérhamasaü*.

Je suis à craindre, *nekäsi'taérmegssi*, 3. *ks'ta*.

Je crains la mort, *nekäsitadsaügané*, 3. *ksta-*  
*dsaügané*.

Je le crains, *neksi'tamen*, v. *neksi'taérda-*  
*men*, 3. *ak*.

Je le crains, *neksi'taérmaï* v. *neksäüksi-*  
*taérmaï*.

Je crains le châtement, je le fuis, &c., *nesa-*  
*ksitêha*, 3. *skäsitêhé*; dicat etiam *hō* [homo],  
*masimaüdi sätsincriidé nesaksitêha*, je  
pleurs, &c.

Je cesse de craindre, *nedé'ksipäü*.

C'est de craindre, *é'ksipäü*.

Je les dissipe en leurs imprimant de la  
crainte, *netzétzépäüsräü*.

Cela est à craindre, *ks'taérmegsat*.

## [CRAPAUD.]

Crapeau, *maskeké*.

## [CRAQUER.]

Cela craque, arbre v. *maté'rré*; mes doigts,  
*matéskírar neretsíur*; melius, *päükské'rar*.

## [CRASSEUX.]

Je suis crasseux au visage, *nemi'kassésigsa*,  
3. *mkas*; par le corps, *nemi'kasséshagha*,  
3. *mkazéshaghé*; à mon habit, *asesksia*  
*nedassé*, &c.

[Page 146 of the MS. is blank.]

## [147.] [CRÉDIT.]

Je lui donne à crédit, *nstzaüncmaügs*.

Je te donne à crédit, *kstzaüncmsr*; donne-  
moi, *nstzannemasí*.

Je n'ai encore fais crédit à p'sõe [personne],  
*éssema asënni nstzaüncmangs*.

CRÉMAILLIÈRE, *kessperaüksaügan*.

[CREUSER. Vid. infra.]

## [CREUX.]

Cela est creu dedans v. arbre v. noix v. &c.,  
*apikséghen*, nob. *apikségs*.

Cela n'est pas creu v. g. plat d'écorce, item,  
sac, *manét*, nob. *manéss*; il est creu, pro-  
fond, *peskaüt*, nob. *peskaüss*.

## [CREVER.]

Je crève, *netaraghi'ra*, 3. *tara*; ne pouvant  
respirer, *nekeparaüdam*, 3. *kep*.

Je crève de manger, *netaraketsé'ra*, 3. *tara-*  
*ketsé're*, usitatus, *taraghi're*.

Je le crève de la main, *netaraghenemen*,  
3. *sd*; du pié, *nedaraghikamen*, 3. *sd*.

Cela est crevé, *taraghirré*; par le feu,  
*tarakazidé*, *tarebé'rré*, *dégste*.

Je lui crève les yeux, *nebípesskaüraghigseté-*  
*haü*, 3. *abé*.

## [CREUSER.]

Avec quoi creuseras-tu? *kégsjmasa saürké-*  
*lasan*, *isnsaürkéttsn*.

Je creuse avec instrum't, *nsaürkéhemén*, 3.  
*as*; de la longueur du bras, *ni éri sémi-*  
*neskémek*; dans la neige, *nsaüraürhakká-*  
*men*, 3. *asaür*.

[CREUX. Vid. supra.]

## [CRI, CRIER.]

Je fais un cri, *nebaübaüghími*.

Je le fais p'r l'appeller, *nebaübaüghímaü*,  
*kebaübaüghimerén*, je l'appelle par un  
cri, &c.

Je crie, *negaügaürsé*; à lui, *negaügaürsmaü*.

Cri public, *sabétaügsssaügan*.

Je le fais, *ncpemsansi*, 3. *pem*.

Je fais le cri p'r avertir, &c., *nebaübaük*;  
un, *baübank*, plusieurs, *baübaügsk*.

Fais le cri, *baübaüghé*, faites-le, *baübaükks*.

Je fais le cri, *nebaübaüghén*, 3. *baübaüghén*,  
*baübaüghéts asami*.

Je crie, *nekoügaürsé*, 3. *kaü*, v. *negagaürsé*;  
par surprise, *neksa'rsé*.

L'enfant crie, *ni sdedarapaüsin*, 1<sup>a</sup>. *ni nede-*  
*darapaüsin*.

Je fais le cri de mort, *neksémi*, 3. *kéms*,  
*kémsak*.

Je crie disant *q'q'* [quelque] chose, *nstkšémi*.

Je crie apres lui p'r lui dire *q'q'* ch. [quelque chose], *nstkšémítasäi*.

[148, 149.] [CROCHET, ACCROCHER.]

Je l'accroche, je le pens, *nenuäbitetsn*, v. *nedé'hsdsn*.

Crochet, *anëskamäin*, nar.

Cela est crochu, v. g. couteau, v. &c., *pegäighighen* v. *sr säitséghen*.

Cela ne l'est pas, il est droit, *sasaghíghen* v. *sra'kšat*.

CROIX, *skahésa'tks*, ksr.

Je fais le signe de la croix sur moi, *nedaskahésa'tkskhäimësi*, vulgo, *netsibahatekské*; sur *q'q'* ch. [quelque chose], *nedaskahésa'tkskhändamen*, 3. *šat*.; sur *q'q'* un [quelq'un], *nedaskahésa'tkskhäimäi*.

Ça fais le signe de la croix sur toi, *tsénosa skahésa'tkskhäimësi*; mets ta main et touche I<sup>o</sup> ton front, *keskategšékareni keretsi*; *tsénasa ketsrekék*, estomac; ensuite ton épaule, *tsénasa ni nemanä agänmi teremäi'gané*, v. *paäntisi aragsisi*.

[CROIRE. Vide infra.]

[CROISER.]

Je croise les piés, jambes, *nedansšiganassin*, 3. *äis*.

[CROIRE.]

Je crois, *nekiktam*; lui, *nekiktasäi*.

Je le crois, *nsramtamen*, *nsramsedamen*, 3. *sr*.

Je le crois en l'entendant raconter, &c., *nsraäntasäi*; credo nunc illud vere eē [esse] anteà vix, &c., *nsraämérdamen*, nob. *nsraämérman*.

Je me crois, *nektzasi'ttam*; lui, *nektzasi'ttasäi*, 3. *ket*.

Je ne crois pas, je désavoüe, *nektzasérghé*, cela, *nektzasérdämen*; *ketsasi're pegša io*, peut-on désavoüer cela, peut-on ne le pas croire.

Vraiment je te crois, ironicè, seu, je méprise ce *q'* tu dis, *keghenskiktsr*.

Je ne me crois pas, je ne crois pas ce *q'* je dis, *nektzästäisi*, 3. *ketzästäiss*.

J'ai beau lui dire, je ne suis pas cru, je ne puis le persuader, *nedatsérineba*.

[CROÎTRE, DÉCROÎTRE.]

Je crois, cresco, *nemaätséghi*, 3. *maätségs*, [150, 151.] v. *nedäüptsighi*, 3. *äüptsígs*.

*šé'kénaägs téhänrasí*, près, *érghikkí nabi-ghian*, co'e [comme] une tourte.

Je crois avec cela, &c., *nenespi'ghin*, &c.

Je crois avec la folie, v. g. seu, le caractère de ma croissance est ma folie, *nenespi-gšäidamen nedazsgsaügan*.

Il cesse de croître, *ni šd'kšimaätséghin* v. *ni stzäiníghin* v. *tzanígs*.

Il décroît, *ni ssaäin* I<sup>a</sup> *nssšé*, 3. *sasšé*.

[CRUCHE.]

Espèce de cruche d'écorce, faite en dos d'ane en haut, froncée au 2 bouts; elle sert à mettre l'huile, &c., *iaäntss iaäntssar*.

Espèce de cruche d'écorce, ronde en haut, p'r aller quérir de l'eau, *potäntss*, *po0äntss* v. *pekenäntss*.

Une autre espèce plus longue *q'* large, &c., *pekenäntss*.

CRUD, *skié*, je mange crud, *nedaski'ppi*, 3. *ski'pps*.

Cruement, on le mange cru, *skisi*; cru, nob. *skihäi*, pls. *skihäik*.

[CUEILLIR.]

Je cueille, je ramasse, *nemasiné*, 3. *mas*.

Je vais cueillir, chercher des fruits, *nemasisi*, 3. *mas*., v. *nemasiné*.

Je monte sur l'arbre p'r les cueillir, *nedaksminé*, 3. *aks*.; di'r [dicitur] etiam verso [?], &c.

Je cueille du blé, *nekasaksníghé*.

Je cueille *q'q'* ch. [quelque chose] d'ign. [ignoble], *nenstsi'tsn*, nob. *nensthíhän*.

On cueille des coquillage, *manésäin* v. *nsthíhänk essak*.

On ne ramasse point, *mäda* [mäüda] *manésésn*.

[CUIRE.]

*Nedabipesi*, je fais cuire dans la cendre.

Je fais cuire, v. g. de la viande, *nebagas'tsn*.

Faisant cuire de cela, *bagastsmeghé*.

Qu'elle soit bien cuite et fort tendre, *psskeredéts*.

Cela est-il cuit? *kisedé é'to?* il e [est] dur à

cuire, *sipkedé* v. *siphess*; vite, d'abord cuit, *nabedi*, nob. *nabess*.

Qu'il le soit bien, *pessaŋgi kiscdets*.

Je fais cuire des poires de trre [terre], *nebagassemañk penak*, &c.

Fais-en cuire, *tsipené penak* v. *bagassemé*.

Fais m'en cuire, *tsi'peri* v. *bagastasi penak*; *bagastasi* di'r de o'ibus [dicitur de omnibus]; *kenesiperer nenesiperañ*.

Je les fais cuire dans la cendre, *nedabipesi penak*, 3. *abipess*.

Fais m'en cuire, *abi'peri*.

Je fais cuire sur les charbons, *nedabamégsé*; à la broche, *nepesakšabanégsé*. Vid. Rôtir; — dans les cendres, *nedabaññ*, &c.; de pisce, etiam de ave di'r [dicitur], *nedabaññ*.

*Nssagamadámen* v. *nssagapáhagsn*, *añsañlétsik nedakšamadámen*, cela me cuit bien, me fait bien mal; *añrasi nedakšamadá-*

*men é'rimék*, ce qu'on me dit me fait à la vérité de la peine, me cuit bien, mais je le souffre p'r l'amour de Jésus.

[Page 152 of the MS. is blank.]

Cela me cuit, me fait mal, *nedsósgsn*, *absó*. [152<sup>a</sup>.]

CUIVRE, *šisañsa'ragšié*.

[CUILLER.]

Culiere, *cmksaññ, nak*; à dresser, *kabaigan*.

[CUILLERÉE.]

J'en avale une cuillerée, *negsdemkšaññ*, 3. *neg*.

CURE-DENT, *asiğšañbi'téhsn*; je les cure, *nedasiğšañbi'téhsni*, 3. *asi*.

CURE-OREILLE, *asiğšañrakšesaññ*; je les cure, *nedasiğšañraghséhšsi*, 3. *asi*.

[Pages 152<sup>b</sup>, 153, 154 of the MS. are blank.]

## D.

[D'ABORD.]

[155.] D'abord qu'il sera arrivé je lui parlerai, *aneğhiti messagarüidé negheršrañ*.

[DAME.]

Dame, femme c's'dérab, [considérable], *sañgmañškšé, kšak*; je le suis, *nesañgmañškšäñ*.

[DANGER.]

Je me sauve, *nepeskami*, 3. *pes*; je me sauve, di'r t'tü [dicitur tantum] de mancipio [?]

Je cours le mœ [même] danger, *nšipenédamen*, 3. *asi*; avec lui, *nšipenémañ*, 3. *asi*.

Je suis en danger de mort, *nedañminé*, 3. *añ*.

[DANS.]

Dans la maison, v. g. *siğšañmek*; *tañni is érasékañšisa*? R. [Réponse] *siğšañmeghdari*.

Je suis dans l'arbre, *nedapin arañmisi arañmensinesksask*.

Dans c'bien [combien] de jours partiras-tu? *késssgnakétsi kemañtsi*? dans 2 jours, *nisssgnaké*, &c.

*Tépté*, il est dedans, le sac, v. g. &c.; *téptets*, qu'il y soit, &c.

[DANSER.]

Je danse, *nepemega*, 3. *pemegaññ*, v. 3. *pemega*; en entrant, *nepitighéga*, 3. *pitighégaññ*.

Je dans et chante en mœ [même] tems, *neskañsahé*, 3. *skaññ*.

Je le fais danser, je badine en le, &c., *nepemega'çaññ*.

Je danse le mort, *nepemegámaññ*; on le danse, *pemegaññ*.

No' [nous] dansons à qui mieux mieux, *nepemeghadibcna*.

*Nšikkega*, je prens plaisir à danser.

*Nšrega*, je danse bien.

*Nenetañšga*, j'ai coutume de danser; je sçais, &c., 3. *ntañšgaññ*; pls. [?] [plusieurs] *gañk*.

[Page 156 of the MS. is blank.]

DARD, *masa'ké*; mon, *nemasaké*. [157.]

[DARDER.]

Je le darde, *nedéstéhemén*, nob. *nedéstéhaññ*.



DAVANTAGE, *mina, amp<sup>t</sup>si.*

Il y en a un davantage, *baëmi<sup>r</sup>é pézeksn.*

Je lui donne avec, de petun, v. g., *kira-daisi nemi<sup>r</sup>rañ sdamaür negsdañiganéssar.*

[DÉBARQUER.]

Débarque-toi vite, *kabáhasi nenañdagáhasi.*

Je me débarque sans précipitation, *negabañsé, nenañdagañsé.*

[DÉBAUCHER.]

Je n'ai point d'esprit, &c., *nsnañdam, 3. san.*

Je le rends méchant, &c., *nsnañdamihañ, snañ.*

[DÉBONNAIRE.]

Je suis débonnaire, *nekesañsi, 3. kes.*

[DÉBOUCHER.]

Je débouche, j'ouvre un baril, v. g., *nepsksdénanñ, ig. nepsksdénemen*; il coule, *ssañtsövin.*

Débouché, caché, v. g. *pañnenañss*; je le débouche, cache, v. g. *nepañnenemen, 3. ap.*; un baril, *nepsksaghenañ, un pot, nepsksks<sup>r</sup>aghenañ.*

[DEBOUT.]

Je suis debout, *ncsakké, 3. ské.*, auprès de cela, *ncsckékadamen.*

Je suis las d'être debout, *ncsañigañbasi, 3. sas.*

Je me lève debout, *nsnañghi*, je le lève.

[158, 159.] DÉÇÀ, en deçà, *nsdañisi.*

Un peu en deçà, *sdassanck*; de ce bord, *is aragsagsañmsañsi.*

Retirez vous en deçà, *sdasañépiks.*

[DÉCENT.]

Cela est décent, *srinañgat, srinañgsss*; cela me sied bien, *nsrinañgssi, 3. sr.*

[DÉCHARGER.]

Je me décharge d'un fardeau, *nepsuhi, 3. psuhs.*

Je décharge le canot, *negabañnemen, 3. agab.*

[DÉCHAUSSER.]

Je suis déchaux, j'ai les piés nuds, *nema-mésaghesidé.*

[DÉCHIQUETER.]

Je le partage v. lambeau, *nederañbéssemen, nederañbéssañ.*

Je me déchiquette, *nederañbéshssi.*

On le déchiquette, par le corps, *pepkéchañss*; je le &c., *nepepkésañ.*

[DÉCHIRER.]

Je déchire mon habit, *nebighinahadsn neda<sup>r</sup>sé, v. nedaraghiptsn, v. nedaraghinéptsn, v. nedaraghinahadsn*; déchire, imp. *taraghi nahads.*

Je le déchire, *nederaghinéptsn, 3. sd.*

Je le déchire, *nederaghinéphañ, 3. tarag.*; je le pince, *ncpessaghikasañnañ.*

Je lui gratine le visage, *ncpessaghigésénañ.*

Mes habits s't [sont] déchirées, *nebaski<sup>r</sup>ra, 3. bask.*

Cela est déchiré, *taraghi<sup>r</sup>rré.*

Je le déchire avec mes ongles, *ncpessaghikazañnañ.*

Je lui déchire la bouche, la gueule, *nenesadañpikanénañ.*

[DÉCLARER.]

Je lui déclare entièrem't [entièrement], *nesañbínañ.*

Je déclare la calomnie, v. g. *q<sup>r</sup> j'ai faite, nemanañdokkañdámen nepissankskighémsañgan, 3. amanañ, &c.*

Je déclarerai la faute *q<sup>r</sup> j'ai faite* en me confessant, *nemanañdokkañdámen confes-sésiañne,\* &c.*

[DÉCOCHER.]

Je décoche, *npsaté, 3. psnte*; contre lui, *nekenpemañ.*

[DÉCOUDRE.]

Je le découpe, *nskañsemen*; découpe-le, *skañsi skañsihiis skañsets.*

[DÉCOUVRIR.]

Je découvre, je vois, *ncnami<sup>t</sup>tsn, nob. nenanamihañ, 3. sn.*

Je lui découvre, lui montre, *nunami<sup>t</sup>trañ, 3. nam.*

Je lui découvre le visage, *nepaskañgésénañ, 3. pas.*

Découvre lui le milieu des épaules, v. g. p<sup>r</sup> [160, 161.] l'indre, &c., *pasghenemas pesksañs paskipesksañéné nepaskipesksañénañ.*

[\* From the French verb *confesser*. EDIT.]

- Je découvre la cabane, *nepaskighésédé*, 3. *pas*.
- À découvert, *metsinaïsi* v. *petsinaïsi*; je le vois &c., *nemitsinaaïbadâmen*, lui, *nemetsinaïnamihâi*.
- Je découvre sa faute, *nemśkenâi érasé<sup>c</sup>kaïsideban*.
- [DÉCOUVERTE.]
- Je vas à la découverte, *nendasaha*.
- [DÉCOUVREURS.]
- Les découvreurs, *nadasahak*; je cherche où ils ont passé, *neksirasâiperšé neksirasâipraï*, pls. *aïk*.
- [DÉCRASSER.]
- Décrasse-toi le visage, *kassigšéhési*, 1<sup>a</sup>. *nekassigšéhési*.
- [DÉCROÎTRE.]
- Cette oiseau, v. g. qu'on fait rôtir a bien décreu, seu, s'est fondu, *métbéss sa sipsis*.
- [DÉDIRE.]
- Je me dédis de la calomnie &c., *nedighésamâi*. [Vide infra, p. 175.]
- [DÉFAILLANCE, DÉFAILLIR.]
- Je t'be [tombe] en défaillance, tant ma tristesse ē g'de [est grande], *nesâïkstéssikérdam*, 3. *saï*; de chaleur, *nesâïkstési*; de marcher, *nesâïksténasi*; de manger, *nepa<sup>c</sup>sssé*, 3. *pas*; de courir hors d'haleine, *nekeparaïdami<sup>c</sup>ra*, 3. *kep*; ne pouvant respirer, *nedé<sup>c</sup>kšaraïmi*, 3. *ék*; de boire, *nesâïksté<sup>c</sup>sseni*; de danser, *nesâïkstéga*.
- Les bras me défailent, *nesasi<sup>c</sup>pediné<sup>c</sup>rra*, 3. *sas*; les jambes, *nesâssé*, 3. *sas*; tout le corps, *nssss<sup>c</sup>šamadamen nhaghé*, 3. *ss*, *shaghé*.
- Je tombe en défaillance, *nssseka<sup>c</sup>rré*. Vid. Pâmer [p. 374, 375]; j'en reviens, *nedâïbaraïmirâï*, v. *ra*.
- Je lui jette de l'eau étant t'bé [tombé] &c., *nedskakssîmaï*.
- [DÉFAIRE.]
- Je défais, v. g. une cabane, un autel paré, *nensghenemen*, *nsghené*; défais-le, *nsghenemsk*, pls.
- Je cherche à me défaire de lui, *negagaïsskaïngs*.
- Il cherche à se défaire de moi, *negagaïsskasâi*, &c., irrégulier.
- Je défais la cabane, *nens<sup>c</sup>çamen*.
- On la défait, *ns<sup>c</sup>çâïss*, v. *nsghenaïss*; *ke<sup>c</sup>taïss*, p'r [pour] la transporter.
- [DÉFAUT.]
- Tu es plein de défauts, *kedâïnnâïnaïngssi*; il paroît sur ton visage *q<sup>c</sup>q<sup>c</sup>* ch. [quelque chose] de défectueux.
- [DÉFILER.]
- Les grains de mon chapelet s't [sont] défilés, *taraghîrar*.
- [DÉFENDRE.]
- Je défens, *nekérhama*; lui, *nekerhamasâi*; [162, 163.] à lui le passage, *nekepte<sup>c</sup>kasâi*.
- Je le défens c'tre *q<sup>c</sup>q<sup>c</sup>* un [contre quelqu'un], *neti<sup>c</sup>kaïraï*.
- Je le défens de parole, *nedikaïssmaï*.
- Toi qui me défens c'tre [contre] le démon, v. g., *ikaïrian*, &c.
- Je me défens, *nedikaïssmesi*; défens-toi, *ikaïssmesi*.
- Je me défens contre lui, *nedarsdasâi*.
- Je rends la pareille, je me venge, *nedarsda*, 3. *arsdaï*.
- Je le défens, j'empêche qu'on ne lui fasse rien, *nekerhamasâi*, *sa*.
- Je défens, je retire v. g. de la gucule du loup, *nepskšarshmasi*.
- Je défens sa personne, la retire de la gueule du loup, *nepskšarshmasin shaghé*.
- Je le défens, empêche qu'on ne lui fasse du mal, *nepskšarshaï*.
- Je le défens a c'se [cause] d'un autre *q<sup>c</sup>* j'aime v. g., *nepsksarshmaïnar srir*.
- Ils se défendent dans un fort attaqué, *nskaïbašak* v. *pi<sup>c</sup>ta kesi arsdarik*.
- Nous nous défendions, &c., *naïbiki kessada neskaraïbenshsban*.
- [DÉFIER.]
- Je me défie de moi-même, de mes forces v. g. p'r [pour] les tourmens, *nenanésaïssitêhaïmesi*.
- Je me défie de lui, *nenesahaï*.
- Défiez-vo' [vons] de l'Anglois, *-ntsahks ascnsts*.

## [DÉFRICHER.]

Je défriche un désert, *nibi<sup>c</sup>reké*. Vid. Champ.

## [DÉGELER.]

Je le fais dégeler, *nsskepéssemen*, nob. *sañ*, 3. *ass*.

Je le mets là p'r [pour] le faire dégeler, nob. *nsskesañ*, 3. *ass*.

Je me dégèle, *nsskesi*, 3. *ss*.

Je suis gelé, *nedagšatsi*.

Cela est dégelé, *ssskitsé*, nob. *sskiss*, imper. *sskesé*, sub. *sskessk*; la rivière l'est, la glace ne vaut rien, *méttebéhen sips*, id. ē [idem est], *s.mabs peksann*.

*Skainn*, il dégèle.

Cela est dégelé, *ssski<sup>c</sup>ré*, nob. *ssskiss*.

## [DÉGOÛTER.]

Je suis dégoûté, de viande, *nessäsääsé*, v. *neghenskahsgsn*.

—— de cela, *nessihádsn* v. *nekeneskadámen*, 3. *ak*, v. *nesshsdsn*.

—— de lui, *nekeneskamáñ*.

—— de poisson, *nessámégšé*; de poire de terre, *nessípené*.

—— de manger de la viande, *neghenskahsgsn*.

—— de boire, *nšemessemi*, 3. *sem*.

—— de manger, *nšemi<sup>c</sup>ppi*, 3. *sé*.

L'eau dégoûte, *tarebé<sup>c</sup>ré*.

Cela me dégoûte, *nekenkigängsn*, 3. *agh*.

Je suis dégoûté d'être sur la terre, *nesiskáñdam isdarikik*.

## [DÉGRAISSER.]

Je le dégraisse, *nekassipenékámen*, nob. *nekassipeme<sup>c</sup>žañ*.

[Vide infr. Graisser.]

DEGRÉ, *arañdašönögan*, *nar*.

Je les monte, *nedukssagšé*, v. *nederandásé*.

Je les descens, *nebenságšé*, v. *nepenandasé*; *añtsesagahañss*, il est en degré; *nedañtse-sagahamen*, je le mets en degré; *aññtse-sagahañss*, ces planches, v. g., v. bois sont mis en degré; *sésépesaghi*, mis en degré.

## [DEHORS.]

[161, 165.] Dehors, hors de la maison, *peksatsemek*; hors du fort, *peksatsemakairšenek*; je

vas, sors, dehors, *nensdessé*; de-là, de ce côté-là, *sdékka* v. *ara<sup>c</sup>káisi*; je vas en de-là, *nederemssé*, 3. *are*; j'y cours, *nederemi<sup>c</sup>rra*, 3. *arc*.

## [DÉJOINDRE.]

Cela se déjoint, je, déjoins &c. la lame v. g. sors du manche, l'os de la viande étant bien cuite, &c., *kékétsi<sup>c</sup>ré*.

## [DÉLIBÉRER.]

Je délibère, je pense, *nederitéhañsi* v. *nederérdam*, 3. *ar*.

—— de cela, *nederérdamen*.

## [DÉLIER.]

Je me délie, *nedañphšiaresi*.

Je délie l'esclave, v. g. *nedañbekšiharañ*; *q<sup>q</sup>q* ch. [quelque chose], *nedañbekšihadsn*; lui, *nedañbekšiharañ*.

Je délie v. g. ceinture, &c., *nedambksiási*, 3. *am*.

Cela est délié, *añmksi<sup>c</sup>ré*.

## [DÉLIVRER.]

Je délivre l'esclave, v. g., seu, je l'adopte, *nenarenañbaikañ*.

Je délivre, suis cause qu'on laisse un chien qu'on veut tuer, *nepskšarshsmasín*.

Je délivre de la mort, un chien qu'on vouloit tuer p'r avoir dérobé, *nepskšarshañ*.

DÉLUGE; la terre est inondée, *ki nekebé<sup>c</sup>rré*, v. *kata<sup>c</sup>sé*, 3. sub. *kida<sup>c</sup>rañghé*.

DEMAIN, *séba*; après-demain, *nissgnakie*.

## [DEMANDER.]

Je demande, *nšikštema*.

Je demande cela, *nši<sup>c</sup>kstemem*.

—— à lui, *nši<sup>c</sup>ks<sup>c</sup>temasañ*; je te d'de [demande], *kšikstemr*.

Il me demande *q<sup>q</sup>q* ch. [quelque chose] il m'interroge, *neksaksétsimsreks*.

Je lui d'de [demande], l'interroge, *neksaksétsimsrañ*.

Je lui demande fortem't, absolument [fortement, absolument], *nedatssstemasañ*.

Je le d'de [demande], je le désire, *nšikšimañ*.

Il demande ce qu'il voit par envie, *tañsisi-kstemañ*, 1<sup>a</sup>. *nenitañsi-sikstema*, seu, *kégši namittañgšé asikstemañ*.



Il me donne ce que je lui demande, *nekšitainmäñ*.

Il me refuse ce que je lui d'de [demande], *nesikšémañ*.

[166, 167.] [DÉMANGER.]

Cela me démange, *netsitsighi v. nemamegakira*.

—— à la tête, *neketsegañdaba*.

[DÉMÊLER. Vide infra.]

[DÉMEMBRER.]

Je le démembre, *netemeskaharañ, netemeskäharañ*, 3. *sd.*, di'r de a'li [dicitur de animal] chevreuil, orignal; *netemesitésan*, je le démembre, de ave.

—— p'r lui, *netemeskéhadasañnar*, 3. *stem*.

[DÉMÊLER.]

Je démêle, v. g. fil, *nedaiñpekšihadsn*, 3. *sd.*

Cela est démêlé, *añpekširé*.

[DEMEURER.]

Je demeure, habito, *nsighi*, 3. *sigs*, v. *nsitighémé*.

Voilà où je demeure, voilà ma cab. [cabane], *ni sighia*.

Où demeure N.? *tañni sighet N.*? (sed usitatiüs in pl.) *tañni sighihidit N.*?

Je le fais demeurer, *nsighi'çañ v. nsitighémañ*, 3. *sig*.

Je demeurerai 3. jours à Kébec [Québec], *tssgništsi nedápin Kébec*.

Je demeure avec lui, je le loge, *nsidasémañ v. nsitighémañ*, 3. *sid*.

Je demeure là, *nedarakañ'damen v. nededarakañ'damen*.

Je le retire v. g. dans mon . . . . ; mon hôte, chez qui je demeure, *nsitighémks*, v. *mks*.

C'bien êtes-vous qui demeurez ensemb.? [combien êtes-vous qui demeurez ensemble?] *kekéssinína?*

Voilà ceux, seu, c'bien no' [combien nous] sommes, *ni késsinšieg*.

Je demeure pendant l'hiver, *nepepsnámi*, 3. *pcp*.

—— avec lui pendant l'hiver, *nesitsipepsnamémañ*.

Je demeure auprès de lui, *nederapi'tasañ*.

Je demeure dans cela, *nedapi'tamen*; dans lui, *nedapi'tasañ*.

Je l'invite à demeurer avec moi, je désire, &c., *nedatsiñháñ*.

[Page 168 of the MS. is blank.]

J'ai ton corps p'r demeure, ait Jesus v. g. [169.] Mariæ, *khaghé nsigšañmkañt*.

J'ai assez demeuré ici, v. g. *neséniapi*, 3. *ésigšañnikañt shaghé*.

Je demeure ici avec plaisir, avec attache, *nekesañtin*.

Allicio ad habitandum in me, *nekesañtssrañ*. Je demeure avec lui avec attache, attrait, *nemétañdérmañ*.

Je demeure v'l'tier [volontiers] v. g. dans ce lieu, &c., *nemétañtké*; une terre belle qui a des attraits, *métañtkañgansio*.

La pluie me fait demeurer, *nekesañdérañnámi*, 3. *kes.*; le vent ———, 3. *kes.*, *nekesañdérañmpsenami*; la neige ———, *nekesañtangšarañnámi*, 3. *kes.*; le froid ———, *neksi'tádemí ssañmi thái*; la marée ———, *nsriharegs*, 3. *sr*, pls. *nsriharegsbena*.

Je demeure là un peu en passant, *nenañmškébi v. nekeptabi*.

Je demeure ici, je ne vas pas avec les autres, *nekakésañtké*.

DEMI, en large, *ps'kksié*; demi-pain, *ps'kksié abañn*, v. *temi abañn*.

Je l'emploi à demi, *nedañptahsbé'hadsn*, 3. *sd.*, nob. *harañ*.

À demi plein, *nérañšbé*; sac à demi plein, *nérañšté*.

[DENT.]

Ma dent, *nipit*; 3. *sipit*; d'en haut, *nedaspemañbídar*; d'en bas, *nenaskšañbídar*; de derr. [derrière], *neki'tañbídar*.

Je ne mange q' des dents de devant, *usnaskšañbi'táma*, 3. *sa*.

J'ai mal aux dents, à c'se [cause] des vers q. les rongent, *nedañbídañgs*.

Il me manque une dent, *nsañsarañbída*, 3. *sañ*.

Je suis édenté, je lui en fait manquer une, seu, je la lie et la tire, *nsaïšarañbidébirañ*.  
Je suis édenté, di'r t'tùm [dicitur tantùm] de sene, &c., *neméttarásra*.

La dent revient, *sdañbidañss*.

[170, 171.] Les dents me viennent, *nesaïšgañbída*, 3. *sañ*.  
J'ai une dent, *nenekstañbita*, 3. *nekstañbité*.

J'en ai deux, *nenisañbita*, 3. *nisañbité*.

Je les ai aiguës, *nekesañbita*.

*Pekšatsi'ré sipité*, une dent est t'bée [tombée].

Elles me t'bent [tombent], *nekédañbidé'rsa*, 3. *ghed*.

Je les ai agacées, *nebapessañbída*, 3. *bap*.

Cela me les agace, *nebapessañbité'kañgsnar*.

J'ai les dents fort grosses, *nemamesañbída*.

Elles sont bien affilées, *kesighiršar mipitar*.

*Nekakesañbída*, je les ai affilées.

Je les grince, *netsitamañbidési*, 3. *tsi*.

Je les cure, *neda'siksañbidéhssi*, 3. *asi*, *me-liüs*, *neda'siksañbita*; cure-dent, *asiksañbitéhsn*.

Je les lui arrache, *nekédañbidéphañ*.

Elle est cassée jusqu'à la gencive, *sikkši siosseisik adsti temi'ré*.

Je le coups avec les dents, *nepssksañbidañdámen*, 3. *pss*.

Je le prens avec les dents, *nekeradámen*.

Je le tiens avec les dents, *nesagadámen*, 3. *ss*.

[DÉPÉCER. Vid. infr.]

[DÉPÉCHER.]

Je me dépêche à faire cela, *nena'nabarskké* v. *nekérbarskké*.

[DÉPENDRE.]

Je le dépends, . . . . 3. *snes*. *nenesēnemen*, nob. *nenesenañ*.

—— en tirant, *nenesšiptsn*, 3. *sn*.

Je dépends de lui, *netebéremeks*, &c.

[DÉPÉCER.]

Je dépèce, v. g. un oiseau, *neseksskesañ*; *segsskesé pi'ta*, cela est en pièce.

[DÉPITER.]

Je me dépîte, *nematsitča*, 3. *mat*.

—— contre lui, *nematsitéhañmañ*.

[DÉPLAIRE.]

Cela me déplaît, *nematsérdámen*, *nematsitéhándámen*.

[Page 172 of the MS. is blank.]

[DÉPLIER.]

Je déplie v. g. une [robe ?] v. peau d'original, [173.] *nesibéghenemen*, 3. *ssi*; nob. *nesibéghenañ*, *ssé*, v. g.

Je déplie couverte, &c., *nesibéreghenemen*.

[DÉPLORER.]

Je le déplore, le regrette, *nekširšmañ*; illius teneor desiderio.

[DÉPOUILLER.]

Je le prens, *nekétenemen*, nob. *nekétenañ*, 3. *ghé*.

[DEPUIS.]

Depuis quand es-tu arrivé par eau? *tañne sipisi kemesagarañnesa?*

Depuis Kébec [Québec] jusqu'à Tadoussak, *Kébektsi Tadssagšghéari*; j'ai mis trois jours, *nenessgnibié*, 3. *tssg*, 1<sup>a</sup>. *nenektsgnibié*, *nenissgnibié*, *nitsgnibié*, *nenañnsgnibié*, &c.

[DÉPUTER.]

Je le députe, *nepetsitañmañ* v. *nepetsita'rañ*.

[DÉRACINER.]

Je le déracine, une médecine, *nemsnemen*, 3. *am*. nob. *nemsnañ*; racines à coudre, j'en arrache, j'en déracine, *nemanadábé*, 3. *ma*.

[DÉRANGER.]

Je le tire. *neseksskiptsn*, *ness'ksiptsn*, 3. *ss*.

Cela est t'bé [tombé], *ss'kksi'rré*.

DERECHIEF, *mina*.

[DERNIER.]

Je, tu, il vient le dernier, . . . .

[DÉROBER.]

Je dérobe, *nekmstené*, 3. *kem*; à lui, *neke- [174, 175.] mstemañ*.

—— p'r lui, *nekmstenésañ*.

—— de la boisson, *nekems'θebé*, canot, *nekems'θsri*.

—— des vivres, *nekmstenañ mitssañgan*, 3. *ak*.

DERRIÈRE, plus avant, *ašassisi*.

Derrière mon dos, *nepeskšanek*.

Derrière la cabane, *asassigamîgšé*; l'isle, *asassenaghisi*.

—— la montagne, *asassadenc*; l'arbre, *asassághi*.

—— le canot, *asassraghi*.

Il est derrière, il vient des derniers, *sksânik pemssé*.

Je le laisse derrière, *nenegatsiharañ*.

[DÉSALER.]

Je le désale, le mets désalé, *nedagšidedsn*, nob. *nedagšitsimañ*, 3. *sd*.

Les anguilles s't [sont] désalées, *kisi agšit-sinsk nahâmsak*.

[DESCENDRE.]

Je descends de la montagne, *nenessâñki*, 3. *nes*. v. *nepenassé*.

J'y monte, *neda<sup>c</sup>ksañbi*.

Je le descends, posant, v. g. de la montagne dans la vallée, *nepenañkssadsn*, 3. *pen*.; *nepenagssadsn*, du grenier je le descends.

—— d'un arbre, *nepenañdusé*.

J'y monte, *nederaindasé*.

La descente de la montagne, *penañkañstsesen*.

Je le descends v. g. du grenier, *nepensssadsn*, *nepenssé*, *penšadañss* v. *penadasadañss*.

Je le descends avec une corde, *nepenañbéghenemen*, 3. *abc*.

Je descends d'un lieu un peu élevé, v. g. d'un cheval, *nensikdâi*.

Je le descends d'en haut avec corde attaché, v. g. le paralitique qu'on, &c. *nepenañbé<sup>c</sup>χañ*, 3. *apen*.

Je le lève avec corde attaché, v. g. un mort, &c., *nesiksâñbé<sup>c</sup>χañ*; on le lève, &c. *siksâñbé<sup>c</sup>χañ*.

[DESCENDANT.]

Mes descendants, *nsssessak*, 3. *sssessa*. v. *nsdañkasinsdiak*, v. *nsmak*.

[DÉDIRE. Vid. supra, p. 160 – 161.]

176, 177.] Je me dédis, *nepirššé*, 3. *pir*.

[DÉSESPÉRER.]

Je désespère du malade, *nenepšéremañ*; di'r

[dieitur] etiam d'un ho'e [homme] qui va en guerre, &c.

Ne désespère pas, v. g. de la miséricorde de Dieu, *mssak érañbérdamskkan*, 1<sup>a</sup>. *nedé-rañbérdam*, v. *mssak séksnésérdamskkan*.

Je désespère de lui pouvoir persuader ce q<sup>q</sup> je prétendois, je renguaine, &c., *nedéhérañbšé*, 3. *ahérañbšé*, v. *nenaskatañgssi*, 3. *naskat.*, &c.

Je le fais désespérer, seu, j'ajoute même q<sup>q</sup> ch. [quelque chose] à ce qu'il me dit (sive in bonum sive in malum), *nedéhérañbimañ*; *nedéhérañbimañ*, item, en lui faisant plus qu'il ne me fait.

Je désespère de cela, *nederañbérdamen*.

Je le fais désespérer, *nederañbérdamihañ*.

[DÉSIRER.]

Je désire v. g. d'aller, d'être, à Kébec [Québec], *nederipañskké*.

Je désire cela de pensée, *nešighérdamen*, 3. *asi*, *nepañšérdamen*, v. g. *spenki neda-tssañdamen*.

—— de veüe, seu, le voiant, *nšighina-men*, 3. *asi*.

Je le désire (illius teneor desiderio), *neksiršmañ*, v. *nepañsadšnoñ neroñsadsnemen*; summo illius desiderio teneor, *nesañkstéksiršmañ*.

Je le désire, je voudrois qu'il vint, *nšiskasihañ*, 3. *asi*.

Je désire cela avec impatience, *nesisizakkamen*, nob. *nesisizakkasañ*.

Je désire ch. q<sup>q</sup> [chose que] je vois, *nšighinasi*, 3. *šig*.; *nepañskké*, v. g. *asassenaghé*, v. *spenki*, je désire, &c.

Je désire q<sup>q</sup> [quelque] chose q<sup>q</sup> je n'ai pas, q<sup>q</sup> j'ai perdu de q<sup>q</sup> [quelque] manière q<sup>q</sup> ce soit, &c., *nekširstem*; cela, *nekširstemen*; lui, *nekširšmañ*.

[DESSEIN.]

Sans dessein, *arení* v. *narasisi*.

Il le fait sans dessein, *arení stessin*.

DESSOUS, *arañmek*; sous l'arbre, *arañma<sup>c</sup>kšémek*.

DESSUS, au dessus, *ssskitsisi*; de l'eau,



*ssskidebé*; de la montagné, *spemañ<sup>c</sup>ksk*; de la tête, *ssskitañ<sup>c</sup>tebi*.

Je les mets les uns sur les autres, *nenañ-nssketśnar*.

Je suis assis dessus, *nsskidapi*, 3. *ss*.

Là-dessus il arrive, *ni abaññ, ni kebaññ, ni nebaññ*.

Je le mets dessus *q<sup>c</sup>q<sup>c</sup>* ch. [quelque chose], cheval v. g. *mssisi kégsi nsskittrañ*.

Je te donne à manger, &c., *kssskhamsr*.

[DESTINER. Vide infra.]

[DÉTACHER.]

Je détache *q<sup>c</sup>q<sup>c</sup>* [quelque] chose attachée, *nepkśatnemen*, nob. *nepkśatenañ*.

Je détache avec la langue, v. g. l'hostie q. est prise dans ma bouche, *nepkśadarappañ*, 3. *aps*.

[DESTINER.]

[178, 179.] Je me destine le meilleur et lui donne le pire, je prens le meilleur, *nenessasaghérmañ*.

[DÉTERMINER.]

Je détermine le jour, le tems *q<sup>c</sup>* je reviendrai, *netephama*, 3. *tebahamañ*.

Détermine-le, *tebahama*; à moi, *tebahamasi*.

L'a-t-il déterminé? *tebahamañsanasa?* Non, *māda* [mañda] *tebahamañsi*.

C'est le jour qu'on avoit déterminé, *ni édstsi* v. *ni éri tebahamañsa*.

[DÉTERRER.]

Je le déterre, le tire de terre, &c. *nepikahañ*; qu'on le déterre, *pekahsnéts*.

[DÉTOURNER.]

Je le détourne de faire *q<sup>c</sup>q<sup>c</sup>* ch. [quelque chose] l'empêchant, *nekerahamañ*, 3. *ker*.

Tu n'as *q<sup>c</sup>* peu de penak, j'en ai b'p [beaucoup] par moquerie, *nedainimañ*, 3. *sd*; je me moc*q<sup>c</sup>* [mocque] de lui, je lui dis *q<sup>c</sup>q<sup>c</sup>* ch. [quelque chose] par moquerie, v. g. illud q'd [quod] attuli ex'plum [exemplum] de penak.

Je l'empêche, *nsdamimañ*, 3. *sd*.

Je détourne la glace avec instrument, *nedasigśasañ pkśami*; avec la main, *nedadasergsnañ*, 3. *sded*.

Je le détourne de son dessein, je lui dis *q<sup>c</sup>* cela est difficile, &c., *nedéhétsimañ*.

Je le détourne de son dessein en le trompant, par finesse, *nekéspkśharañ*, 3. *akés*. [DÉTREMPE.]

Je détrempe *q<sup>c</sup>q<sup>c</sup>* ch. co'e [quelque chose, comme] couleur, terre &c. avec de l'eâu, *nemsébégainkenemen*.

*Nemsainkenañ*, je détrempe avec graisse.

[DETTE.]

Mes dettes, seu, je dois, *nstzañnemassin*, v. *nstzañnemasi*.

J'en ai b'p [beaucoup], je dois beaucoup, *nemesair-atzañnemasi*.

Je les paie, *nedañbenkaññ*, 3. *sd*, 1<sup>a</sup>. *nedañbenké*.

— de cela, *nedañbenké<sup>c</sup>ttsn*, 3. *anb*. *-kasañ*.

[DEVANT.]

Je suis devant son jour, *nedañbagaśkasañ*.

Tu es devant mon jour, *kedañbagaśkasi*.

Je fais cela devant, seu, par avance, *maśasa is nederittsn*.

Je pense qu'il va devant et *q<sup>c</sup>* je le suivrai &c., *nenikañnermañ*; devant lui, *nenikkañnssśesañ*; *nikkañnaisi*, devant, par avance.

Je vais devant, marche le 1<sup>r</sup> [premier] par terre, *nenikkaussse*; par eau, *neni<sup>c</sup>kkaini<sup>c</sup>rra*.

Je suis assis devant, *nstskasapi*, 3. *sts*.

— devant lui, en regard, *nstka<sup>c</sup>sa<sup>c</sup>pi<sup>c</sup>t-tasañ*, 3. *st*.

*Kesésdo<sup>c</sup>kśébibena*, nous regardons, nous sommes visage c'tre [contre] visage.

*Nstskasapi*, je suis assis en regard, j'ai le visage tourné, c'tre [contre] le sien.

Je me mets devant lui p'r l'empêcher de passer, *nedétsigañbasítasañ*.

Je suis devant lui, l'empêche de passer, *nekepeté<sup>c</sup>kasañ*, 3. *akep*.

Je vais au devant de lui par honneur, *nedaptsikasañ*, v. *nedapitkasañ*; 3. *sd*.

— pour le décharger, *nenañtssarésañ*.

[DEVENIR.]

Qu'est ce qu'est devenu cela? *tañmi ésisik?*

nob. *ésit? kégsi asssé*, v. g. qu'est devenu la peau de chevreuil ?

*Isga é'to assio*, voilà ce qu'il est devenu.

[DÉVIDER. Vide infra.]

[DEVINER.]

Je devine ce qu'il a dans le cœur, *nsésité-hänmäñ*, 3. sé.

[DÉVIDER.]

[189, 181.] Je dévide, fais peloton, *nedatchabéremen*.

[DEUIL.]

je porte le deuil aiant seulem't [seulement] le bonnet &c., *nedasssi*, 3. as.; je le porte les cheveux épars, (di'r [dicitur] etiam de habente biretum &c.) *ncuitaŋghi*, 3. *netaiŋs*, *netaugisio*, ign.; je le porte aiant coupé mes cheveux, *temesans nepiéssm*; no' [nous] le portons de Jésus mort, *nenitaŋghibena Jesss stsi n' redé*; *nekassigšénañ*, je lui ôte son bonnet de deuil en quoi je lui éssuie ses larmes, *ni edstsi nctanghisik panbatamisigamigr aübagaségaberanssar asiŋiganar tai mes-sisi sésrikeghir, sésinangsat sibisi miksitéhandansi netsinet Jesss*.

[DEUX.]

Marchez 2 à 2, *nisssséks*; il y en avoit 2, de ignobili, *nissensbanir*; no' [nous] sommes 2, *nenissibena kenissiba, nissšak*; je les lie 2 à 2, *nenissaiikké*; 3. *nis*; *nenissaübikañnak*, je les lie 2 à 2.

Je mets 2 ch. [chose] l'une joignant l'autre, en 2, *neuiss'ttsn*; 3. *sn*.

J'en prens 2, *neuissnemenar*; nob. *neniss-nänk*.

J'en mets 2, je les joins, *nenisstsnar*; 3. *sn*.

— en 2, *idasisi*, v. g. *idasisi temi'ré agšiden*, un canot rompu en deux.

[DÈS.]

Dès q' la marée montera embarquons no' [nous], *aneŋhetsi tamagaghé kepssibena*.

[DEVOIR. Vide infra.]

DIABLE, *matsiniséks, ksak*.

Le diab. [diable] le possède, *matsinisesksr sadapitaŋgsr*, 1<sup>a</sup> *nedapi'taŋgs*.

DIEU, le g'd génie, esp. [grand génie, esprit], *ketsiniséks*.

*Nenisésksšéramañ*, je le connois p'r Dieu.

DIFFÉRENT, diversum, *piršié*; cela l'est, *piršinaŋgšat, gsss*.

Différent de parole, *kikkšüdin, kikkaüdsak*; co'e [comme] si nos sentimens n'étoient pas différens, *pézeksušio pegša éritéhañsieg*; cela est différent, *mañskšighen* v. *piršighen*.

[DIFFICILE.]

Il est difficile, *saagat, saaghinaŋgšat, gsss*. [182, 183.]

— à dire, seu, je dis avec difficulté, *nesaagañdsé, 3. saag., 1. saagandsaän*.

— à faire, *nesaagarokké, 3. saag., 1. saagarokkuin*.

J'ai de la peine, *nesaagšérdam, 3. saag., 1. saagšerdam*.

Les ch. [choses] les mots difficiles, c'posés [composés] &c., *saaghisittameghi* v. *saaghisiregšadsr* v. *gšakir*.

Je les dis, *nesaaghisittamñ*.

Les ch. [choses] v. mots qui ne le s't [sont] pas, *nekemisittameghi*, v. *nekemisiregšadsr*.

Je les dis &c., *nekemisittamen*.

[DIMINUER.]

Je fais cuir p'r lui, *nstsibaghémasñ, 3. stsi*.

Je diminue soit chantant, pleurant, parlant, *nepisañdséssi kšaskšaiši*.

Le feu diminue, *pisikedé*, v. *sikkakozédé*.

L'eau diminue, *si'kekat*; dans la chaudière, *sikkebété*.

[DIRE.]

J'ai coutume de lui dire, *nedañran, neda'rañ, keda'rer, keda'ri*.

J'ai coutume de dire, dis souvent, pl's [plusieurs] fois, *nesaï, 3. ahidam, nesäibena*, v. *nesibena, kesäiba, ahidamsk*.

Je dis, *nesi, kesi, idam*; je dis cela, *nesitamñ, 3. si't.*; à lui, *-nsi'tamasäñ*.

Je dis autrem't [autrement] qu'il ne faut, *nbarisi'tamen*.

Je ne pense pas á ce q' je dis, *m̄da* [mañda] *nederitéhañsi istsi idama*.

Je dis sans dessein, *areni nesin, 3. ss*.

Je dis comme, avec les autres, *nšidšaiši*; lui, *nšidšaiššmañ*.

Tu en dis trop, *kssañnibañmañ'tsemi'*

- Qu'est-ce *q'* cela veut dire, comment s'appelle-t-il ? *kegsi arisitañss* ?
- Je me dis à moi-même, *nedi<sup>c</sup>resi*, 3. *ress*.
- Ils disent ensemb. [ensemble], *sitšak* v. *sitsañssak*.
- Que dit-on, quelles nouvelles ? *kégss arittañgšat* ?
- J'entens dire, *nederetáma*, 3. *aritamé*.
- C'est de la manière *q'* no' [nous] le disons, qui est bien, *nisna érenañdšueg*.
- Je dis ce qu'il dit, je l'interprète, *negherssi<sup>c</sup>tamasésañ*.
- J'oublie ce *q'* je veux dire, *nsnitéhañdamen kédasi idamañneban*.
- Je prépare ce *q'* j'ai à dire, *neksirasitéhañdamen kédasi idama*.
- Je n'ai pas to' [tout] dit, *nensdañsi<sup>c</sup>ttamen*.
- Je dis to' [tout], *netégšagsisi<sup>c</sup>ttamen*, 3. *st*.
- On dit, v. dit-on, *añinga* ; on a dit, *inésa* ; on dit, *imek*.
- On ne dit pas cela, *mañda is isn*.
- Je lui dis, *nedi<sup>c</sup>rañ*, 3. *sd.* ; des ch. [choses] facheuses, *nesaghimañ*.
- Je cesse de lui dire, *nedé<sup>c</sup>ksimañ* ; cesse de me dire cela, *é<sup>c</sup>ksimi*.
- Je disois, *nedidamsnsban*.
- Ce *q'* je dis est mal, parlant v. g. de la prière comme j'en parle, *nepa<sup>c</sup>tañsé*, seu, *saugat idama*.
- C'est p'r cela *q'* je dis, *nšé<sup>c</sup>tsa* v. *ni sé<sup>c</sup>tsa* 2. *sétsan*, 3. *sé<sup>c</sup>tšét*.
- Je me dédis, *nedanbantsikerssi*, 3. *sdan*.
- Je dis *q'* je n'ai pas cela, v. *q'* je n'ai pas vû &c., *neséssemšé*.
- Je le dis à lui, &c., *neséssemimañ*, v. *neséssemersmañ*.
- Je suis dis, *nedi<sup>c</sup>ršé*, 3. *ršé*, *ršéppan*, &c.
- Je lui dis, ignobili, *nedi<sup>c</sup>redámen*.
- Je lui dis *q'q'* ch. [quelque chose] qui lui fait plaisir, *nedaramimañ*.
- Je dis cela d'une autre manière, *nemañskšisitamcn* ; cela est différent, *mañskšighen*, v. *piršighen*.
- Je dis avec &c. *ncsi<sup>c</sup>tamassi*.
- Je dis *q'* cela est bien, v. g. *nsrerššmen*.
- Je lui dis *q'* cela est bien, *nsrerššmasañ*.
- Je dis du bien de lui, *nsrerššmasin sa*.
- Je lui dis qu'il est capitaine, *nesaňgmañšrshañ*.
- Je lui dis *q'* je le méprise, *nekeneskershañ*.
- Je lui dis qu'il est Dieu, *neketsinisésksrshañ*.
- Je lui dis qu'il est méprisable, *nekeneskerššmasi*.
- Je lui dis *q'* celui-là est méprisable, *nekeneskersšmasañ*.
- Je dis *q'* cela n'est pas de valeur &c., *nenekemersšmen* ; je lui dis &c., *-rššmasañ*.
- Je lui dis des choses qui lui s't [sont] dures v. difficiles, *nesaagakrañ*.
- Je dis to' ensemb. [tout ensemble], *ne-* [184, 185.] *mañsisi<sup>c</sup>ttamen*, 3. *am*.
- Je le dis et redis, *nsañsi<sup>c</sup>ttamen*, 3. *asañ*.
- Je le dis et dirai t'rs [toujours], *nesañihintsi*, 1. *ncsañintsi*.
- Je lui en dis, je lui en conte, *nsañsi<sup>c</sup>ttamasañ*, 3. *as*.
- Je lui dis son conte, son fait, *nesésimañ*.
- Que dis tu, *q'* veux tu dire ? *kégšičesi* ?
- Je dis du bout des lèvres, *ketzasai nesin*.
- DISCIPLINE, *sasémihiganar*.
- [DISPOSER.]
- Je dispose de cela, *is nederitebi<sup>c</sup>tsn* ; donne ce *q'* j'avois fait, mangeailles, v. *matsesss*.
- [DISSIMULER.]
- Je dissimule, *m̄da* [mañda] *nesañbše* v. *m̄da* [mañda] *nesañbikerssi* ; id. ē [idem est] *nedaksina nesin*.
- Je ne lui dissimule pas, *nesañbikersrañ*.
- [DISTRAIT.]
- Je suis distrait, *barisi nederitéhañsi*, 3. *ar*.
- [DISTRIBUER.]
- Je dresse la chaudière,
- Je distribue viande, blé &c., *nedagnasé*, 3. *ag*.
- à eux, *nedagnasésañk*.
- Je distribue, *nedagnasañnar*, 3. *sd*.
- Je distribue cela avec justice, égalem't [également], *nsritobiméghen*, nob. *nsritebimirañ* v. *nsritebeskasimirañk* ; *nézañsi nedi<sup>c</sup>rañbipassisi nedi<sup>c</sup>rañ*.
- J'en mets 2, 3, 4, &c., *nenissttsn*, *nessttsn*, *neniésttsn*, *nenañsttsn*, &c.



J'en ai pl's [plusieurs], je puis &c., *nemesairetsnar*, 3. *am.*

[DOIGT.]

Mon doit, *neretsi*, ar, 3. *sr.*

Le petit, *nedaskaämir etsi*, 3. *sd.*; annularis, *nepskéretsau*, nar, commune o'ib. [omnibus.]

Medius, *nenänsiretsi*, 3. *sn.*; l'index, *nedaróhiretsi*, 3. *sd.*

Poll'x [pollex], *neghitkšérets*, 3. *ag.*

Je montre du doit, *nederohighé*, 3. *aro.*

Je le montre au doit, *nederohigaändamen*, 3. *sdr.*; lui, *nederohigaäraä*.

J'appelle du doit, fais signe, *nsatsipetasääneretsi*, v. *nsatucmasää*, abs'tum [absolutum?], *nematsenemassi*.

Je lui fais les doigts crochus, seu, les cornes, c'est mocquerie, *nematsenemasää* v. *nemat-senighé' tsn neretsi*.

Il me les faits, *nematsenemaäks*.

Les doigts craquettent, *pañgheské'ré*.

Je les fais craquetter, *nepañgheskénemenarneretsiar*.

Mes doigts craquettent, *pañgheské'rar neretsiar*.

[DEVOIR.]

[186, 187.] Je dois v. g. castor, blé, *nstzaänemassimata'rre rak. skamsnar*.

On me doit, *nstzaänemañghé*.

Il me doit, *nstzaänemässs*.

Je lui dois, *nstzaänemasää*.

[DOLER.]

Je dolle, *nederikamaäsi*; cela, *nederikemaändamen*, *arikmaändässs*.

[DONNER.]

Je me donne cela, *nemiresin is*.

Je donne cela, *neméghe*, 3. *am.*; à lui, *nemiraä*, 3. *am.*; gratuitement, *nepisšimiraä*.

— à manger, *neda'samaä*, 3. *sd.*, à petuner, *neméksenamaä*, 3. *mek*.

— à boire, *negadossemihää*.

Je ne lui fais rien presque faute qu'il fasse au c'traire [contraire], je l'appaise, *nedéhérasihää*, v. g. *nenitzää*.

Je lui donne la bête tuée, *nedaänbekshaä*; on me, *nedaänbkshshghé*; *nesissénéghe*, je

donne aux uns et aux autres séparém't, *nesissénemen*, *netzatzibiméghe*, *sissääsi neméghe*.

[DORMIR.]

Je dors, *nekasi*, 3. *kas.*; volontiers, *nšikekšassi*, 3. *sik*.

Je dors trop, *nsssaänmekšassi*, 3. *ss*.

J'ai assez dormi, *nšemkšassi*, 3. *šem*.

*Nekesäntegšassi*, je dors b'p [beaucoup] jusqu'au g'd [grand] jour.

Je dors sur qq' ch. [quelque chose], *nekasi'ttamen*.

J'ai envie de dormir, *nekadori*, 3. *k*.

Je ne dors pas quoiq' je sois couché, *nesaänsaäbesin*.

Je parle en dormant, *nebaäbašdsnké*.

Je suis éveillé, *nebégšira*.

Je feins de dormir, *nekasi'kaäsi*, 3. *ka*.

Je dors t'te [toute] la nuit sans m'éveiller, seu, *nšikkšassin*, v. *si*.

Je ne dors pas t'te [toute] la nuit, je m'éveille, identidem, *mäda* [mäida] *nesaänkakšsi*.

Je l'endors, *nekasikaä*, en chantant, v. &c., *neda'ttšmä*.

Je dors le visage découvert, *nepaskaängšässin*; le visage couvert &c., *nedagšaraängšässin*.

[DOS.]

Mon dos, *nepesksän*, 3. *pes.*; derrière m. [mon] dos, *nepesksauck*.

Je tourne le dos, *nedaremigaäbasi*; à lui, *nedaremigaäbasitasää*.

[DOUBLER.]

Je le double, il n'y avoit qu'un fil v. g., l'aïant doublé, il y en a 2, &c., *nedakstaghemenen*, j'alonge courroie; *nenisštagnaä hsaäštagsk*, je les double, ig. *ghenemonar pikannar*.

Je le double, fais boucle, *nepikasaänbéghemenen*, □ v. g. hac notä; il le faut doubler, *pekašbégnaässs*.

[DOUX.]

Doux au gout, *sripsgšat*.

[DOULEUR.]

J'ai un extrême regret, *ids pitansdérdamen*.

Je suis dans le regret, doul. [douleur], *ne-*

*däimbdérdamen, nedsdérdamen, nssikka-  
rañ, id. nia stsi matsa'rokké.*

—— à cause de lui, *nšassikérmañ.*

Je t'en cause une extrême, *kssikkarer.*

Je ressens une extrême doul. de cela, . . . .

[188, 189.] Il me cause bien de la douleur, *nsssikérdamihksks.*

[DOUTE.]

Je suis en doute de ce q<sup>l</sup> je dois faire v. g.,  
*nenénisitéhañ'mesi.*

Je suis en doute de ce q<sup>l</sup> je dois faire &c.,  
*nenénisitéhañmesi tañni ksina t'ragšitéhañ-  
mesia.*

[DOUZE.]

Nous sommes 12, *nisañnkáo nekššsibena.*

[DÉRIVE.]

Cela s'en va à la drive [dérive], l'eau l'em-  
porte, *añ'taññ.*

Les pins qui sont sur le bord de l'eau s'en  
iront à la drive [dérive], *maniaregsktsi  
sghik ksak érañgšétsik sitemeghé, péssdé  
ssañksk.*

[DRESSER.]

Je dresse, je distribue la chaudière, *ness'kassi.*

Lorsqu'on dresse, *ss'kassimeghé.*

Je dresse p'r lui, *ness'kamasañ.*

DROIT, *sassaghiši*; cela l'est, *sassaghi-  
ghen*; crochu, *pegañghighen* v. *sañtséghen.*

Chemiu droit, *sassagañstessen*; bois droit,  
*sassagakkšat* v. *srakšat.*

Je le dresse, *nesassaga'ksnemen*, 3. ss.

Je dresse une fourche, je la plante droite,  
*nesakáharañ skahañgan.*

Je pense droit, à cela, *nesassakérdámen*, 3. ss.

Cela va droit, *sassaghi'ré*, n'est pas droit,  
*m̄da [mañda] ara'ksadši.*

Il est droit horizontalem't, *tétebiighen.*

Ce bois, cette règle, v. g. est droitto, *tétebi-  
ghen, tétebiighéts.*

Fais-la droitto, *ketétebikemañdamen* v. *tétebi-  
kemañdañsits.*

[DUR, DURCI.]

Cela est dur, *sañgheré.*

Trop durcis au feu, *sañgherúskedé.*

Il est dure à cuire, *sipekedé.*

[DURER.]

J'ai de la peine de me défaire de ce q<sup>l</sup> j'ai,  
*nekikanérdam*, 3. kik; id. ē. *m̄da* [idem est,  
*mañda*] *tégne deri nederitéhañsi nekik-  
kañmeghé*; *barisi* v. *bagsasisi nedererdam,  
kanisi nederérdam*; *istsi ketak nederitsn,  
kanisi nederarokké m̄da [mañda] nederir-  
dames istsi ketak nederitsn.*

Je dure long tems, je vis long tems, *nesibénc.*

[Pages 190, 191, of the MS. are blank.]

## E.

[192, 193.] EAU, *nebi*; claire, *sassébégat*, v. *srebégat*;  
puante, *maskebégat.*

—— boueuse, *pipeghebégat*; salée, *ssbé-  
ks*; froide, *tekebi.*

—— chaude, *kescbété*; profonde, *messi-  
temé.*

Eau qui tournoie, *sdañksibesks* v. *sdañksibe-  
sksk.*

Eau d'érab. [érable], *ma'ksaññ*; j'en fais  
couler, *nedatsbahadsn.*

Eau de vie, *á'ksbi.*

Eau froide, fraîche, *tekebi*; elle l'est, *tekebé-  
gat.*

Eau qui est chaude, v. g. l'été in fluvio,  
*kissbégat.*

Eau bénite, *pañba'tami nepi*; j'y trempe  
mon doit, *netsašpinské*, v. *kaññ*, 3. *tsasa-  
pinské.*

Dans l'eau, *nebi*; le chevreuil s'y est  
jetté, *tsasa'ps*, di'r de o'i item de ho'e  
[dicitur de omni, item de homine]; nob.  
poissons, *msskagšahsk*, pls. *msskagsahs-  
gsk.*

Au dessus de l'eau, *ssskidebé.*

Cela se lève au-dessus de l'eau, *msskagša-  
haññ.*

L'eau a inondé, *psañgasésen.*

*Šrañgasésen*, id ē [est], *srisañgasésen*,  
je me mouille les piés passant le ruis-  
seaux, v. g. &c.

- J'entre dans l'eau, *nedrañsǵhé*, 3. *ar*.  
 J'y suis jusqu'à [jusque-là], *ni é'kšamta*,  
 3. *ni é'kšamit*.  
 Je vois au fond, *nekeda'rra*, 3. *ked*.  
 J'y saute, *netzas'ppi*, 3. *tza.*; j'en sors,  
*nstágsa*, 3. *stágsäñ*, *nedagsäñsé*.  
 Je parois au dessus de l'eau venant du fond,  
*nemsski'rra*, 3. *mss*, nob. *mssks*; *arañbé-*  
*ksk*, au fond de l'eau.  
 Je vais au bord de l'eau, *nemattañbé*, 3. *mat*,  
 nob. *sárañ*.  
 Je l'y porte, *nemattañbéssádsn*, 3. *am*.  
 Je vais contre le fil de l'eau, *nedagsté'hem*,  
 3. *dag*.  
*Sikarahassio*, il n'y a point d'eau étanché.  
 Je t'be [tombe] dans l'eau, *netzas'pi'rra*,  
 3. *zasapi'rré*.  
 Je l'y fais t'ber [tomber], *netza'paxañ*,  
 3. *stzas*.  
 Je le mets dans l'eau, le mouille, *nepasbañs-*  
*adsn*, 3. *pas*, nob. *nepasbátusanñ*.  
 Cela est emporté par l'eau, *manittanñ*, nob.  
 se v. g. *maniáre'ks*.  
 L'eau dégoûte, *tarebé'rré*.  
 Je la fais dégoûter, *nededarébáhadsn*, 3. *sded*.  
*Nebikagañsǵhé*, je passe, traverse la ri-  
 vière.  
*Nstagsaañsǵhé*, je sors de l'eau, soit en  
 canot, soit aussi après le bain, &c.  
*Nebagañsé*, je sors du canot p'r aller à terre.  
*Sikarahass ksk*s, l'eau, seu, les bouillons ne  
 s't [sont] plus.  
 [194, 195.] Je vais quérir de l'eau, *nedasihíbé*, 3. *asi*.  
 J'en puise, *nedasiem nebi*, 3. *as*.  
 Viens-tu d'en quérir? *kedañbasihíbé é'to?*  
*Nedasihimasañ*, j'en puise p'r lui.  
*Ā sibi nebi*, vas quérir, puise, de l'eau, soit  
 du ruisseau, soit à la cab. [cabane.]  
 J'en mets à la chaud. [chaudière], *neteghes-*  
*semañ*, 3. *sd*.  
 Mets de l'eau dans la chaudière, *teghéssemé*  
*ksks*.  
 Il y a de l'eau, vin, v. *q'q'* [quelque] liqueur,  
*tasbé* v. *tašté*.  
 Je lui jette de l'eau t'bant [tombant] en  
 foiblesse, *nedakaksímañ*.  
 Je pris l'eau dans un creux, v. g. rivière,  
*nedakhíghé* v. *nedákebé*; on la tire,  
*akaikédin* v. *kaikédin*.  
 J'y t'be [tombe], v. &c. *nedagsitsin*.  
 Je le jette dans l'eau, *nedagsitsimañ nebi*.  
 Je l'en retire, *nenañdagañmañ*.  
 J'arrête l'eau par une chaussée v. g. vel  
 par bois, terre, &c., *nekpheghé'tsn*.  
*Nkepenemen*, je fais une chaussée p'r  
 prendre castor.  
*Nkebakstéhíghé*, j'en fais.  
*Esseghitasé tema'ksé*, le castor en fait.  
 [ÉBAUCHER.]  
 Je l'ébauche, *nemasihadsn*, 3. *am*.  
 Je l'ébauche, je le fais grossièrem't, *nemañ-*  
*māngsittsn*.  
 [ÉBLOUIR.]  
 Je suis éblouis du soleil v. feu, *nedagadassi*,  
 3. *agad*. v. *nedagadassgsn skstāi*, v. &c.  
 ——— de la nége, *nsisāñsāñri-agañbadam*,  
 3. *si*.  
 [ÉBRANLER.]  
 Je l'ébranle en tirant de la main un arbre  
 v. bois couché, *ñemamañdaksnemen*, 3. *am*.  
 Je l'ébranle étant debout, *nenénemañghiptsn*.  
 ——— avec instrum't, *nemamañté'hemen*,  
 3. *am*.  
 [ÉBRÉCHER.]  
*Nepsksérs'tamen*, J'ébrèche un couteau avec  
 les dens.  
 Je l'ébrèche, couteau, dans un bois, *nepsk-*  
*kšérsnemen*, 3. *aps*.  
 ——— dentibus, un bois, *nepskkšé'ttamen*;  
 instrum'to, *nepskkšét'hemen*; couteau,  
*poskkšérs'rré* v. *pokšérsstéssen*.  
 [ÉCAILLE, ÉCAILLER.]  
 Écaille de poisson, *sarahághé*, *ghak*.  
 Je l'écaille, *netsikaghéhañ*, 3. *stsikaghéhañr*.  
 Je fais freler viande, poissons, *nedañmirké*,  
 v. *kaññ añmirkémeghé*. [196, 197.]  
 [ÉCHANGE.]  
 En échange, *añsitāñsi* v. *éssisi*. Vid. *Éssisi*,  
 Donne moi cela en échange, *añsitāñsi io*  
*miri*.  
 Je te donne en échange, *kedañsitaimirer*.



Je le donne en échange, *nedänsitémégheñ*,  
3. *sd.*

Je lui rends en échange, *nedéssadañmañ*, 3. *sd.*  
En échange je lui fais &c., *nedänsitéhañ*,  
3. *sd.*

*Aänsitenañss nedänsiténemen*, je joins, j'appens  
un bois, je le mets à la place d'un autre,  
&c. v. g. . . . .

[ÉCHAPPER.]

Je m'échappe v. g. de l'ennemi, de mancipio  
t'tum [tantum], *nepesskâmi*, 3. *ps.*

Cela m'échappe des mains, je laisse t'ber  
[tomber] ce q' je tenois, *nepasségsmemen*,  
3. *apas.*

Je m'échappe des mains qui me tiennent,  
*nepskšatsiretsé'phšöñ.*

[ÉCHARPE.]

Je le porte en écharpe, v. g. baudrier, épée  
à la ceinture, *nedänsšita'kâmen*, 3. *sd.*

[ÉCHAUFFER.]

Je l'échauffe par mon souffle, *nekissarañ-  
mañ.*

J'échauffe mon enfant le tenant dans ma  
couverte, &c., *nšipémañ nenémañ* v. *ne-  
dassañ.*

Il ē [est] échauffé par sa mère (di'r [dici-  
tur] etiam de ave matre, v. &c.), *sipémegsr  
sigassar*; *sipédiks*, dit-on v. g. à 2 gar-  
çons, v. à 2 filles, dormez-là tous 2;  
male m [?] sonat hoc v'bun [verbum] de  
viro et muliere; *nšipémañ*, sollicito ad  
peccatum.

Je m'échauffe, suis échauffé, *nekesabessi*,  
3. *kes.*

Je l'échauffe, *nekissasshemen*, nob. *nekissä-  
sshañ*, 3. *aki*; le pressant, *nekisskkamen*,  
3. *akiss*, &c., nob. *nekisskasañ.*

Je l'éch. [échauffe] in sinu meo v. manib.  
[manibus], *nekissnañ.*

Je l'échauffe étant v. g. auprès de lui, *ne-  
däñsékasañ.*

Cela m'échauffe, *nekisskañgsn* v. *nedäñsë-  
kañgsn.*

La cab. [cabane] est échauffée, *kesigamikdé.*  
[Vid. Chauffer.]

ÉCHELLE, *arañdasañgan*; j'y monte, *ne-*

*derañdasé*, imper. *arañdase*; j'en descens,  
*nepenañdasé.*

[ÉCHOUER.]

Je suis échoué, *nekérkassin*, 3. *kér.*

Le canot l'est, *kerikassen agšiden.*

[ÉCLAIRER.]

J'éclaire, *nesassénema*, 3. *sassénemañ*, imper. [198, 199.]  
*sassen.*

J'éclaire avec cela, *is nesassénemé'tsn.*

Je l'éclaire, *nešassenedâmen*, 3. *asa.*

Je l'éclaire, *nšassenedašañ* v. *nebagadassc-  
mañ* v. *nesassénemasañ.*

Qu'est-ce q. [qui] éclaire? *kegsi é'to бага-  
dassék?*

Il v. elle éclaire, *sasaksré.*

Éclaire-moi, *sassénemasi.*

Il fait des éclairs, *fulgurat*, *sa'saibigsâk.*  
Vid. Tonnerre.

[ÉCLAIRCIE.]

Éclaircis sur la rivière parmi les glaces, *taš-  
béghé.*

Éclaircis sur t'rre [torre] où il n'y a point  
de bois, *baba'rickamighé.*

J'en fais, j'abbas le bois, *nemassa'kšighé*,  
3. *mas.*

ÉCO, *pagadañkšésé'rré*; je le fais retentir,  
*nepagadañkšéséhâregs*, 3. *pag.*

[ÉCORCE.]

Écorce de bouleau à cabaner, *maskšé*, *ksâr*;  
etiam, p'r faire des ouvrages.

Grosses écorces à cabaner, *pkšahañ*, *hânk.*

J'en vais chercher, *neps'kša*, 3. *pekšahé* v.  
*nekadsnarañk pekšahañk.*

Grosses écorces p'r brûler, *saraghésks*, *ksk.*  
Écorce à canot, *massšigšé*, *ar.*

J'en vais chercher de bouleau, *nenšitsn*  
v. *nemañhigšäë*, *nedatssi'tsn* v. *nekadsna-  
dšn maskšar*; des grosses à cab., v. *neté-  
satsipkšahañsé* v. *neps'kanca* [?].

Je vais à l'écorce, etiam, à canot, *nenanñts-  
hads*, 3. *nan.*

Je la lève, *nepskhigšäë.*

Je la lève, *nepskhâmen maskšé.*

J'en vais lever, *nenanñsigšäë*, 3. *nan.*

Je fais des pointes à l'arbre p'r lever  
l'écorce, *netemikehéhíghé.*

Je la roule, *nedatbigšaghēncmen maskšé* ;  
di'r [dicitur] etiam de aliis.  
Ecorce machée et figurée, *arigšakadigan, nar*.  
Je la mache, *nedrigškadighé*.  
Je lève une feuille de l'écorce, *nepitohadsn*  
v. *nepitogšagēhamen*.  
L'écorce plate se roule, se replie &c. par la  
chaleur, *atebaraskedé*, nob. *sikšaskess*.  
[ÉCORCHER.]  
[200, 201.] J'écorche, *nepessihadassi*, 3. *possihadasss*.  
Je l'écorche, tout entier, *nepessiharañ*, 3. *pes*.  
Je m'écorche, par un bois, pierre, *nepsğša-*  
*nasketéssin*, 3. *peg*.  
La corde de la raquette m'a écorché le pié,  
*nepekssitébisi*, 3. *p*.  
J'ai le pié écorché, *nekikitsesída*, 3. *kik*.  
[ÉCOUTER.]  
J'écoute, *nekiktam*, 3. *kik*.; cela, *nekiktam-*  
*men*; lui, *nekiktasañ*.  
*Nssksstasan*, je l'eutens de dehors la cave,  
lui qui parle dans la cab. [cabano] v.  
vieissim.  
Je l'écoute avec plaisir, *nšikedasañ*.  
*Barisi aragss tañğsat ézsghitsik*, ils le  
tourne d'un mauvais sens.  
Je l'écoute cōe pauvre, cōe misérab. [comme  
pauvre, comme misérable], . . . .  
*Barisi, aragss tañğsat ézsghitsik*, ils le  
tourne d'un mauvais sens.  
Écoute-moi autant qu'il faut, seu, exauce-  
moi, *tépsdasi*.  
Je ne l'écoute pas, *nebaresctasañ*, id ē [est],  
*barisi nedaragssstasañ*.  
Tu ne m'écoutes pas, *kebaresctasi*, (p'prie  
[proprie] solus Deus ita loqui p't [potest].)  
Il m'écoute v. g. moi qui l'ai prié de faire  
q'q' ch. [quelque chose], *neksittañmañ*;  
resp'det v'bo [respondet verbo] *nekikitañ-*  
*gs*; est v'bum anormale.  
Tu m'écoutes, tu m'obéis, *keksittañmer*.  
Je t'écoute, je t'obéis, *keksittañmi*.  
Je l'écoute avec admira'on [admiration],  
*ncdañsaghestásañ*.  
Je l'écoute et ce qu'il dit me fait de la peine,  
*nesaghestásañ*, 3. *ssag*.  
ÉCRAM [écran], item un rameau, qu'on met

devant soi p'r qu'on ne se brûle, *akskršss-*  
*an*; je lui en mets un, *nedakskrsrai*, 3. *ak*.

[ÉCRASER.]

Je l'écrase, *nesegsskikamen*, nob. *nesegsski-*  
*kasañ*.

Il l'a été par un arbre, *kasąğs*; 1<sup>a</sup> *nekabrs-*  
*gs*, je l'ai été, un arbre est t'bé [tombé]  
sur moi.

J'écrase v. g. pou, punaise, *nesegsskiphañ*,  
ign. *nesegsskiptsn*.

Je lui écrase le né [nez], *nesagskitanétéhañ*.

[Page 202 of the MS. is blank.]

[ÉCRIRE, ÉCRITURE.]

J'écris, je peins, *nedasiçighé*, 3. *asi*.; *is* [203.]  
*nedasiçighétsn*.

J'écris, je peins, cela, *nedasiçamen*; lui,  
*nedasiçañ*, 3. *sd*.; sub. *ésiçak*, qui écrit.

Je lui écrit v. g. à Kébek [Québec], *nedasiçamasañ*.

Il m'écrit, *nedasiçamañks*.

Je lui fais réponse, *nedañsitésiçamasañ*.

Écris cela, *asasiçia*; cela est écrit, *arasi-*  
*çañss*.

Il ne l'est pas encore, *éssema arasiçañsisi*.

Instrum't à écrire, *asiçiganié*.

J'écris à l'aveugle, *nenipeskasiçighé*.

Je décriis, copie, l'écriture, *nekikinasañba-*  
*dámen*.

Écriture, lettre, image, *asiçigan*.

*Ni érañbändissa*, voilà co'e il ē [comme  
il est] écrit, voilà co'e il ē [comme il est]  
marqué, *srañbändé*; ce bois v. &c. marque  
bien, écrit bien, nob. *srañbañss srgšanigsn*;  
*nsrañbändsn*; je marq' bien écrivant, fai-  
sant traits, *sérañbändek*.

ÉCUME, de chaudière, de rivière, de la  
bouche, *pi'tté* v. *pitté*: cela en a, *pittasio*;  
cela écume, *pi'ttété*.

*Pi'tté'tté sdsn*, il écume par la bouche.

Je l'ôte, *nemanipitté'sé*, 3. *ma*, v. *nenstsi'tsn*  
*pitté*.

[ÉCUMER.]

J'écume par la bouche, tant je suis faché,  
*nepi'ttégamedsné'si*.

ÉCUREUX [écureuil], *mi'kšé*, *ak*.

## [EFFACER.]

*Noχasshámén, nekashamen*, j'efface, &c.

J'efface, v. g. l'écriture, *nekassasi χighé*.

J'efface cela, l'écriture, *nekassasi χameu*,  
3. *kas*.

Cela est effacé, ne paroît plus, *kasi rre* v.  
*ara té*.

Je l'efface, il ne paroît pas tant, v. g. je le  
surpasse en beauté, *msänsani kkasä* v.  
*nsnkäsä*.

Marie efface ce q<sup>e</sup> Eve nous avoit, &c.,  
*M. sdénasi tsné, sdénasittsn*, 1<sup>a</sup>. *nenénasit-*  
*tsn*.

J'efface, j'absous, *nedanbksné* ; lui, *nedäüdb-*  
*kstan*.

J'efface, je rends nuls les péchés, après  
qu'il se repent, il dit, *nedannikkamen*,  
*nedannikkamasä*, idem.

## [EFFORCER.]

[204, 205.] Je m'efforce, mais je ne puis le porter, *ne-*  
*däirašnemén*.

## [EFFROYABLE.]

Cela est effroyable, *tsibaghinañgsat*.

Il m'effroie, *netsibaghinañgs*, *netsibaghi-*  
*nasä*.

Je l'effroie, *nesegpákasä*, v. *neségpañhsrañ*,  
3. *ss*.

J'ai des pensées d'effroi, *nesäkkstâitéhäsi*.

## [ÉGALEMENT, ÉGALER.]

Égalem't, *tétebisi* ; no' sommes égalem't  
g'ds [nous sommes également grands],  
*netétebeghirébena*, 3. *tétebeghirsk*.

Je le divise égalem't, ce qui est dans la  
chaudière, (v. o'is cibus qui ö [omnis  
cibus qui omnino] est in ollä,) *netéte-*  
*baghendé*, 3. *tét*. ; *sra kéhäñss*, v. *nsra-*  
*kéhémén*.

J'égle le fort, le terrain, *netétebakkéhémén*.  
Les ho'es [hommes] sont égaux en noblesse,  
&c., *tétebesäak arenäñbak*.

## [ÉGARER.]

Je m'égaré, me détourne du chemin, *neki-*  
*soñsi*, 3. *kisäñs*.

Je l'égaré, le faisant détourner du chemin,  
*nekisäñsihäñ*, 3. *ki*. , abs'tum [absolutum],  
*nsuihadäñsi*.

J'égaré, perds q<sup>e</sup>q<sup>e</sup> ch. [quelque chose],  
*nsuihadñs*, 3. *sn*.

## [ÉGARD.]

Sans aucun égard, *nañnsasi*, in comp. t'tum  
[tantum].

Sans aucun égard, difficulté, familièrement,  
*narasi*.

## [ÉGOUSSER, ÉCOSSER.]

J'égousse poix, fèves, blé, *nebskšaresksnemen*.

## [ÉGRENER.]

J'égraine du blé, *nepskšikšéhíghé*, 3. *psg*.

Je l'égraine le blé avec les ongles, *nepessa-*  
*ghikasäñpetsn*, 3. *pes*.

## [ÉGRATIGNER.]

Je l'égratigne, *nepessaghikasäñnä*.

## [ÉGUILLE, pour AIGUILLE.]

Éguille p'r faire des nattes v. raquettes,  
*tsamaks*.

Eguille Française, *tsäñkkäñdi* v. *sksäñ sšdi*.

## [ÉGUISER, pour AIGUISER.]

J'éguise, *nekittadasi* ; cela, *nekittadsn* ; p'r  
lui, *nekittadasäñ*.

*Psskeripsdé*, tendre à éguiser ; *sañgripšdé*,  
dur.

## [ÉLANCER.]

Je m'élance contre lui p'r le battre, mais  
je ne le bas pas, *neméméspahañ*.

## [ÉLARGIR.]

J'élargis, éparpille la braise, *nedapskäñsé-*  
*ghé*.

Drap, peau s'élargis étant mouillée, v. g.  
*siptaghíré*, nob. *siptags* ; se retressis,  
*stsä'ta'ghíré*, nob. *stséghíré*, au feu v.  
soleil, *stsi té*, n. *stšéss*.

## [ÉLEVER.]

J'élève un enfant, j'en ai soin, &c., *nekañ* [206, 207.]  
*kisighenäñ*.

Je m'élève en haut, v. g. Jésus montant au  
ciel, *nedaspigšsé*.

J'élève un enfant avec b'p [beaucoup] de  
peine, *nesaagakeraks*.

J'ai de la peine à élever mes enfans, *nesaa-*  
*gakerégsk*.

## [ÉLOIGNER.]

J'éloigne, je battie [?], *netsikkéhíghé*.

*Nekšakšäñmäñsé*, seu, *kšakšäñmäñsi nede-*



- rssé, je m'éloigne un peu ; loin, *naïsa-déghé*, v. *naïsat*.
- C'est bien [combien] est éloigné d'ici l'autre village ? seu, y a-t-il loin d'ici ? *naïsadéghénasa ketak sdéné tãî ?*
- Il paroît éloigné, *naïsinuïngsat*.
- Éloignez vo' [vous] les uns des autres, *nénaïsapitaïnsadiks*, 1<sup>re</sup> *nénénaïsapitaïnsadibena*.
- Éloigne-toi de moi, retire-toi de moi, *aiémátasi*. Vid. Retirer.
- J'éloigne, je me fais de la peine p'r qu'il n'en vît pas, *nesaaghéssäïmaï*.
- Je m'éloigne de lui, je quitte son parti, *nekSagSänmaïsaïmaï*.
- Éloignez de moi les ch. q' s't [choses qui sont] indignes de mon amour, *menennemasi* v. *aiémaïnemasi*, 1<sup>re</sup> *némaïnemasaï* v. *nedaiémaïnemasaï*, ign. *nedaiémaïnemasaï*.
- [EMBARRASSER.]
- Je l'embarrasse par les d'des [demandes] q' je lui fais, &c., je le surprends, &c., *nekSakSétsinb'kadusaï*.
- [EMBARQUER.]
- Je m'embarq', *nepssi*, 3. *psss* ; dans ce canot, *nepssi'tamen agSiden*.
- Je l'embarq', *nepssi'ttsn*, nob. *nepssihaï*, 3. *ap*.
- On s'embarq', *psssredin* ; embarquons-nous, *psssredida*.
- Il y a trop de pierre, on ne peut s'embarquer, *paï'kskat*.
- Nemataïbé*, je vais à la grève p'r m'embarquer.
- [EMBELLIR.]
- Je l'embellis, *nsri'ttsn*, nob. *nsrihaï*, 3. *sr*.
- Je l'embellis noblem't, *nesésésíhaï*.
- [EMBOUCHURE.]
- Embouchure, sortie de la rivière, seu, la source, le commencement d'en haut, *sanke-dé'ttegSé*, *saïngsk*, *pütilégSé*.
- [ÉMBRASSER.]
- Le feu embrase tout, v. la maison, v. g. s'embrase, *tsekátãî* v. *tsekedé*.
- [EMBRASSER.]
- Je l'embrasse, le prenant par le cou, *nekike-sksénaï*, 3. *kik*.
- Ils s'embrassent, se prenant par le cou, *keskSéndSak*.
- J'embrasse, v. g. un arbre, *nedaiïkesenemen*.
- J'embrasse, v. g. un enfant, *nedaiïkesemaï*. (Non male sonat illud v'b'm [verbum].)
- [EMBROCHER.]
- J'embroche une grillade, *nebattekahamen*, [208, 209.] nob. *nebattekabaï*.
- Nedaskshairã*, je l'attens ici p'r le battre, v. p'r lui parler.
- Kedeskshairr*, je demeure ici p'r te parler, sçachant q' tu y viendras.
- J'attens p'r battre v. p'r parler [?], &c., *nedaskshibi*, 3. *skshíbs*, *skshíbsak sakaïrsre nek aksirasaïsamaïsaïr asennstsar*, qui y doit venir.
- [EMOUVOIR.]
- Je l'ému à la colère, p'r lui dire ne pas se fâcher, il fait le c'traire [contraire], *neksímaï*, 3. *ake*.
- EMISSAIRE, je me sers de lui, p'r mes messages, il parle en mon nom, *nedaiïnkasändskaïdamaïngs*.
- [EMMAILLOTTER, DÉMAILLOTTER.]
- J'emmaillotte l'enfant, *nedakínaï*.
- Je le démaillotte, *nedaiïbekSiharaï*.
- [EMMENER. Vid. infra, Enmener.]
- [EMOUSSER.]
- Mon couteau est émoussé, *kesebi'rré nenet-sé'kSaks* ; de ligno di'r [dicitur] *kesebé*.
- [EMPÊCHER.]
- Je suis empêché, qu'on me parle, *nsdami-highé*.
- Je suis empêché, par le travaille, *nsdamarokké*, 3. *sd*.
- par la pluie, *nsdameraï'nami*, 3. *sd*.
- par la maladie, *nsdamine*.
- par la fumée, *nsdamarssi*, 3. *sd*.
- Je l'empêche d'entrer v. g. dans la cab. [cabane], *nekaképetéhémasaï*, v. *nekepetéhémasaï*.
- Je ne sçaurois m'empêcher, *mãda* [*mãnda*] *nekeskíssi* v. *mãda* [*mãnda*] *nekeskitosn*.
- J'empêche (molestus sum), *nsdamisé*, *sdamiséio is* ; cela empêche.

Je l'empêche, *nsdamihañ*, 3. *sd.* v. *nsdami-kasañ*.

*Nsdamitéhañmañ*, la pensée *q'* j'ai de lui m'est un empêche'mt p'r faire, v. g., ce *q'* je prétendois.

Cela m'empêche, *nsdamihgsn*, 3. *sd.*

Je, *nsdamikungsn*, 3. *sd.*, ce qui est auprès.

Les arbres abbatu empêchent, embarrassent, *sdañnkássar abásiar*.

Ils s'entre-empêchent, *sdamihsdár*.

Je l'empêche par ce *q'* je lui dis, *nsdami-mañ*.

J'empêche, *nsdamighémi*.

Je l'empêche, *nsdami-kasañ*.

Nous sommes empêché par la crainte, *nsdamapaisreghé-bena*, v. *nsdamapaiibena*.

*Nedañbagasasitasañ*, je suis devant lui l'empêchant de se chauffer.

[EMPLIR.]

J'ai emplis passant le ruisseau, j'ai mis le v. les piés dedans, &c., *nederañsghé*.

[Page 210 of the MS. is blank.]

[EMPLOYER.]

[211.] J'emploie, je loue, *nedarokkëmi*, lui, *nedarokkairañ*, 3. *ar*.

*Nstsins-sittsn*, 3. *stsin*, je prens, la cueille, blé, v. g. dans le champs.

J'ai tout employé, *kisi nemétsihadsn*, 3. *met*.

*Kisi nemétsihadsnégar skaniminar*, j'ai employé to' [tous] mon blé de semence, j'ai semé, je n'en ai plus.

[EMPOISONNER.]

Je me suis empoisonné mangeant *q'q'* ch. [quelque chose], *nenaspamsresi*. Vid. Poison.

Je l'empoisonne, *nenespamśrañ*, 3. *sn*.

[EMPORTER.]

Je l'emporte, *nemañtsadśn*, nob. *nemañtsarañ*, 3. *mañ*.

Cela est emporté par le vent, *manerañpsen*.

— par l'eau, *mané'tan*, *manitané*.

Je l'emporte, l'aiant pris, chargé sur mon cou, *nemañtséphañ* v. *nemañtsésamañ*.

Je continue à l'emporter, *nederimiphañ*, v. *nedañptésamañ*.

[EMPRUNTER.]

J'emprunte, *nenemkasi* v. *nenemkasin*, v. *nenemkasihsé*, v. *nemakasihi*, 3. *snemkasin*, 3. *ne makaś*, imper. *nemakasi*; les *saisana-kets* disent, *nematemihsé*.

— de lui, *nenemkasihañ*, 3. *sn.*, v. *nematemihañ*.

J'emprunte de toi, *kenemkasihsr*; tu de moi, *kenemkasihi*.

J'emprunte une p'so'e p'r [personne pour] lui faire faire *q'q'* ch. [quelque chose], *nematmímañ*.

[ENCEINTE.]

Je suis enceinte, *nedarenskké*, v. *nebimsri*, 3. *bimsrs*; *abimsrinar Joannar*, v. g. &c.; l'enfant est porté ici, *bimsrin*.

— de lui, je le porte dans mon sein, *nedarenskkaiñmañ*, 3. *sd*.

Je cesse d'avoir mes mois, je suis enceinte, *nedá'ksgñni*, *nedé'ksitsebíghé*.

*Neneskšitáhada*, je suis enceinte quoi<sup>q'</sup> j'aie un enfant qui tette encore, *māda* [*mānda*] *nsrérdamssn néskšitait nemitzañ* v. *néskšitahadañia*; (de puero di'r [dicitur],) *tséksitaiñ*, il tette et il y en a un autre, &c.

ENCORE, *mina*, *amptsi*.

[ENDROIT.]

En c'bien [combien] de forts? *késssdéna-hak*?

En 2 divers endroits, *nissssdénahak*.

En quel endroit? *tañmi*, *tañdékka*?

[Page 212 of the MS. is blank.]

[ENDURER.]

J'endure *q'q'* [quelque] peine, *nesaagakké*, [213.] 3. *saag*.

[ENFANT.]

Enfant, *asañsis*, *sisak*; enfant mort-ué, *ns-déms*; enfant à peine formé dans le sein de sa mère, *pa'too*; puer orbus patre v. matre, *kiapes*; s'il est petit, *kiapimis*; puella orba patre v. matre, *ssé'ksis*, dimin. *ssé'ksímis*. Vid. Parenté, *nedasañsen*.

Je n'ai eu *q'* cet enfant, *neuekstsetsasañ*.

Je suis enfant, *nedasañsisí*, 3. *asañsisíio*.

J'ai un enfant, *nsnizaini*, 3. *snitzains* ;  
*nsnizainin*, 3. *snitzainar*.

Je le regarde co'e [comme] mon enfant,  
*nsnizainšéremañ*.

C'est l'ainé, le pr. [premier] quem *peperi*,  
*nenitametsasañ*, 3. *snitametsasañnar*.

C'est le cadet, le dern. [dernier] quem  
*peperi*, *nemeté'ssañ*, 3. *ametéssañnar*.

Sa mère étant malade, une autre l'allaita, v.  
lui donne à manger, *tsebatzainnañasañsis*.

*Métsiminigs*, qui meurt naissant.

Une femme q. [qui] avorte, qui se fait avor-  
ter, q. [qui] tue son enfant dans son sein,  
*rasañséss*.

J'ai un enfant, *nšiasañ*.

J'ai un enfant toute seule, *neneksi'tsišasañ*.

Tu regardes tes enfans co'e [comme] s'ils  
étoient à un autre, tu n'en as pas soin,  
*ketsbéremañk kenitzainak*; id est, *ketzé-  
biarérmañk*.

Je l'ai adopté p'r mon enfant, *nsnizain-  
çain* ; p'r mon fils, *nsnémainçain* ; p'r  
ma fille, *nsdssçain*.

[ENFANTER.]

J'enfante, *nenighihé*, *nenitsé*, 3. *nig* ; lui,  
*nenighihainmañ* ; la sage femme, *nstsihset*,  
1<sup>a</sup>. *nenstsihsé* ; je vais p'r voir, &c., *neki-  
kinatsi*, *nekikihasañ nitset*.

Je charge l'enfant, je le porte, *nšihsmañ* v.  
*nenahsmañ*, v. *nekisamañ* v. *nekisadañsi* ;  
porte-le, *sihsmé*, &c.

Je le mets sur le dos, *nšihšderañ*, 3. *sih*.

Je le décharge, *nepsnhsman*.

Je lui fais, *tse*, *tse* p'r l'appaiser, *nctsitse-  
sšman*.

Tu parle en enfant, *kedasañsishikeršsi*.

[Page 214 of the MS. is blank.]

[215.] Suis-je donc un enfant ? *nedasañsisši pegša* ?

Tu fais l'enfant, *kepapi'tsmkañsi*.

Je fais ce q' font les enfans, *nepapi'tsm-  
késañ*.

*Nišiañné* v. *nissetzasainé* v. *niseda pémisni-  
tzañmianné*, tu me prens p'r un enfant,  
v. g. moi qui en ai deux.

[ENFERMER.]

Je l'enferme, dans la maison, coffre, &c.,  
*nekepesakkámen*, 3. *ak*, nob. *hamasañ*.

— dans un sac, *nekepsberemen*, 3. *akep*,  
nob. *nekebsbirañ*. [Vid. infra, v. Ferme,  
p. 247.]

[ENFILER.]

J'enfile de la porcelaine, *nedaskšaiñskké*.

Je l'enfile en collier, *nenañpetsn*, 3. *nañ*.

J'enfile, *nenañpeañbié*, 3. *nañpeañbié*.

[ENFLURE.]

Enfleure, *magšin*.

[ENFLÉ.]

Le pain enflé se lève, de mince qu'il étoit,  
&c., *pétsess abañn*.

Je suis enflé, *nemagšisi*, 3. *mag*.

— d'eau, *nepassebé*, 3. *pas*.

J'ai les mains enflées, *nemagširetsa*, 3. *mag* ;

les bras, *nemagšipédina* ; les jambes, *nema-  
gšikañda* ; les piés, *nemagšida* ; le vis-  
age, *magšin nesisseks*, &c. ; les yeux, *ne-  
magšairaghigša* ; les joues, *nemagšanša*.

Le blé, les poix, &c. enflés après avoir été  
dans l'eau, *passagsssen nsr*.

Je le mets p'r qu'il enfle, *nedagšideden*.

[ENFONCER.]

J'enfonce, v. g. dans la glace, v. nége, dans  
la terre, *nepstebaham*, 3. *ps*, v. *nepstbe'ra*  
v. *nededasi'çámen*.

Je vais au fond de l'eau, *nekeda'rra*, 3. *ghe*.

Je l'enfonce dans l'eau, et va au fond, *ne-  
ghedáhamen*, 3. *agh*.

J'enfonce dans la glace, la glace manque

[manque] sous mes pieds, *nedagšitsin* ;  
item, *agsitsiñsrké*, se jette dans l'eau ;  
(item, *hō* [homo]), *sderagšitsinan*, il se  
jette dans l'eau p'r passer de l'autre  
bord.

On enfonce dans la nége, jusq' là [jusque-  
là], &c., *pekšakañsi*, &c.

[ENFOUIR.]

Je l'enfouis dans la nége, *nenéšañriaghene-  
men*, 3. *šn*.

Cela l'est, *akšanañriaghi'rré*.

[Page 216 of the MS. is blank.]



## [ENFUIR.]

[217.] Je m'enfuis, *neksäisi neksäizstse*, 3. *ksäiss*, idem, *neksäisi rra*.

—— de cela, *neksäüssdämen*; de lui, *neksäüssräi*.

Je le fais fuir, cacher, *neksäinsi ktsn*, nob. *neksäinsi çaii*.

## [ENGENDRER.]

Je l'engendre, *nsnizäimi*, v. *nin*.

Ils engendrent ensemb. [ensemble], *nighiañ-redsäk*, v. *snitzäinkëdsäk*.

## [ENGOURDIR.]

Je suis engourdis de froid, *nepapësegätsi*, 3. *papëgätss*.

Je suis engourdis aux jambes, aux piés, *nekeskimi*, 3. *keskins*.

—— aux mains, *nekeskimiretsa*, 3. *kes*.

## [ENGRAISSER.]

J'engraisse, je deviens gras, *nepirsigäimi*, 3. *pür*; je suis gras, *näi kai*, 3. *sikäs*.

Je l'engraisse, je le fais manger c't'uellement [continuellement], soit lui donnant, soit disant 'Mange,' *nepirsigamshaii*.

N. m'a engrossi, ma rendu grosse, *nsnizäinçésks sa*.

## [ENLEVER.]

Je l'enlève, la conduis loin, v. g. fille, femme, *neksäisiphaii*.

## [ENMENER, pour EMMENER.]

Je l'enmeine, *nemañtsadsn*, nob. *nemañtsaraii*, 3. *mañ*.

Je l'enmeine malgré lui, *neksäischsärai*, en canot; differt ab eo, je le fais, *neksäissräi*.

## [ENNUI.]

Je m'ennuie, je désire qq'un [quelqu'un], *negaghisaäsi*, 3. *agagh*.

—— de penser à cela, *negaghisdämen*, 3. *agag*.

—— de l'entendre, &c., je l'entens avec mépris, *neghenski ttasañ*, 3. *aghen*.

—— de le voir, avec mépris, *neghenskinasañ*, 3. *ag*.

Je fais cela avec ennui, à regret, *neghenski ttsn*, 3. *ag*.

Je l'ennuie, suis cause de son ennui, *negaghisdämiñ*, 3. *agag*.

—— lui parlant, *negaghisiñmañ*, 3. *agag*.

—— lui faisant qq' [quelque] chose, *negaghisiñhaii*.

[Page 218 of the MS. is blank.]

## [ENROUER.]

Je suis enroué, *nekepesésé*, 3. *kep*.

## [ENRHUMER.]

Je suis enrhumé, *nssegsiné*, 3. *sss*.

## [ENSANGLANTER.]

Je l'ensanglante, *nebakkani ttsn*, nob. *nebakkaniñ*, 3. *ab*.

Je le suis, *nebakkani*, 3. *bakkanäio*.

—— à la tête, *nebakkaniñdeba*, 3. *bak*.

—— aux mains, *nebakkaniñretna*; aux piés, *nebakkaniñsäda*.

*Mesikkägheß*, ce chien, v. g. à tué bête, il est ensanglanté; a's'tum [absolutum], *nekikkimi* v. *nekakkékihémi*.

## [ENSEIGNER.]

Je l'enseigne, *nekikimaii*, v. *nekakékiman*, 3. *ak*.

Je lui enseigne le chemin, *neki kinssaraii*.

Maître, celui q. [qui] enseig. [enseigne], *kakékihémsiñs*, 3. *kik*, v. *kikémsiñs*.

Enfin on no' [nous] enseigne, *nesibisi kéké-kameraghinags*, *nesibisiksina kékinsmsghinags*.

ENSEMBLE, *mañsisi*; je les y mets, *nemañsinañk*, 3. *mañ*.

Je les mets ensemb. [ensemble], *nemañsine-mear*, v. 1<sup>a</sup>. *nemañsine-men*.

Je lie ensemb. [ensemble], *nemañsäibi kké*, 3. *mañ*.

Ils demeurent ensemb. [ensemble], *mañsigak*; ils vont ensemb. [ensemble], *mañssak*.

## [ENSEVELIR.]

Je l'ensevelis, *nsrikabiraii* v. *näisaségabiraii*, 3. *si*, v. *näiségheñaii*, 3. *asi*.

## [ENTASSER.]

J'entasse l'un sur l'autre, *netsi ttakasi*, 3. *tsi*.

Je les entasse, les mets ensemb. [ensemble], *nemañséhadsnar*.

[219.]

## [ENTENDRE.]

J'entens, audio, *nensdam*, *nederesedam*, *nederetama*, v. *nederesedamen* v. *dama*; lui, *dasai*; cela, *nensdamen*; lui, *nensdai*, 3. ns.

—— distinctement, *nesés'ttamen*, 3. sés.

Je cherche à entendre, *nekširsstam*; cela, *nekširsstamen*; lui, *nekširsstasai*.

Je l'entens dire, *nedertamañ*, v. *nederesedasañ*.

[220, 221.] Je prens plaisir à l'entendre, *nšizedasañ* v. *nsresedasañ*, ig. *nširedámen*.

Je ne prens pas plaisir à l'entendre, au c'traire [contraire] je l'entens avec déplaisir, *ncmatsedam*, nob. *dasai*, 3. *matsestam*.

On m'entens, *neusdañgssi*.

Je ne prens pas, &c., *ncmatsedasañ*.

Je l'entens, comprends ce qu'il dit, *neséstásai*.

Je t'entens, c'prends [comprends], *kesés'tsr*.

Je ne l'entens pas, ne c'prends [comprends] pas, *nedasañnetasañ*.

Je l'entens avec c'plaisance, *nemétañtse-dasañ*, v. *nedasañnesedasañ*.

Cela se fait entendre, *nsdañgšat*.

J'entens cela avec plaisir, je l'aggrée, &c., *nširedámen*.

Je ne veux pas q' ceux-là m'entendent (je parle pour cela d'un langage différent), *nederérmañk sghik é'ksisés'tasiks*.

Je ne veux pas qu'il m'entende, &c., *nederérmañ é'ksisés'tasi*.

On me parle de la prière et je ne fais pas semblant d'entendre, *nekeneskes'tam* v. *nekeneskesedami pañba'tamiktotañgan*.

## [ENTERREMENT, ENTERRER.]

On va faire l'enterrem't, assistez-y, *psskenígan*, *sitsirañks*.

Je l'enterre, *nepsskenai*.

Je mets l'écorce, et puis la terre sur la cache, &c., *nedagšanakénemen*, nob. *nedagšanakénañ*.

—— dans le sable, *nedagšanamkáhamen*, 3. sd.

—— dans la neige, *nedagšanañriakkámen*.  
Cela est enterré dans le sable, *agšanamki'rré*.

Je suis enterré, *nepsskenai*.

Je m'enterre, *nepsskenesi*.

## [ENTIER.]

Cela est entier, n'est pas rompu, *sdaghé*, nob. *sdaghirs*, v. g. *peksahañ*, bois de raquettes.

## [ENTORTILLER.]

Je l'entortille, *nedat'ebakšénemen*, 3. dat., nob. *nedatba'kšénañ*.

*Atebissar* v. *atepsrdšar*, nob. *atebíss*, *atepsrdšak*, entortillé à q'q' [quelque] chose, &c.

*Atebissar skamsniksk ateba'ksūar*, les fèves sont entortillées au blé.

ENTONNOIR, *sakéssksañgan*; j'entonne q'q' [quelque] liqueur, *nepi'obé*.

J'entonne de l'huile, *nepitsípemé*, 3. pit. v. *nessgnípemé*.

## [ENTORSE.]

Je me suis fais une entorce, *nekeregšira*.

## [ENTOURER.]

Nous sommes entouré d'ennemis, d'Iroquois, no' [nous] en sommes assiégé, . . . .

## [ENTRER.]

J'entre, *nepitíghé*, v. *nepetasíghé*, 3. pit. 3. pet.

—— vite, *nepedasíghé'rra*.

Je le fais entrer, *nepitígadsa*, nob. *nepitígarai* v. *nepetasígarai*.

J'entre dans la cab., je lui en sort, *nedésšipitíghé*; id ē [est] *éssisi arssé egma nsdésšé*, *nia nepi'tíghé*.

J'entre dans son corps, *nepitíghékadásañ sa gakké'to asennir apitíghékadañgs*, il faut q' qq'un soit entré dans son corps, tant il est méchant.

Je l'empêche d'entrer v. g. dans la cab. [cabane], *nekaghépetéhémasai*.

J'entre à reculón, *nedassétañpitíghé*; q'q' [222, 223.] eh. [quelque chose] m'est entré dans l'œil, *nepessri*.

Entrons dans la rivière, *pi'óirañda*; entrez, *pi'óirañks ni* v. *arirañda is érmitegšék*.

EN VAIN, *areni*, *pissisi*.

Arihiré, id ē [est] *māda*. [*mānda*] *staiñbéme-gšatsi*, en vain.

- Cela est en vain, (hoc in vanum recidit,) *anahšia, anahšé séghé.*
- C'est en vain q' tu, . . . . . seu, . . . . .
- [ENVELOPPER.]
- J'enveloppe cela, *nšiséktsn*, nob. *nšséghenomen*; *nšiségghenañ*, j'enveloppe, ensevelis, mort, *nšisékkañ*, imper. *sisékri* v. *nsrasšañ*, *srasši* v. *nsrêkrañ*, *srêkri*; enveloppe-moi, *srasši srêkri.*
- Nšisékkañmenébañ*, *banir*, v. *nšiségghenemenéban*, j'enveloppeois.
- [ENVIE.]
- Envie, substantivum, *éskasésaŋgan*; il y en a partout, *messisi pematâiéskasésaŋgan.*
- Je lui porte envie, *neteskasañmañ*, 3. *sts.*, v. *nedeskasañmañ.*
- Je lui porte envie, *nedeskasihsks*; il me, *nedeskasiñ*; je te, *nedeskasi*; tu me, *kedeskasišr.*
- Neteskásié*, je porte envie; à lui, *tâika'tai neteskasañmañ.*
- Ils se portent envie l'un à l'autre, *skašañmedšak.*
- No' no' [nous nous] portons envie, *nedaskasañmedibena.*
- J'ai envie de cela de pensée, *nedatss'érda-men*, 3. *sd.*
- le voiant, *nšighinámen*, nob. *nšighinasañ*, 3. *sig.*
- J'en perds l'envie, je ne m'en soucie plus, *nemessasérdam*, 3. *mes.*
- Je la lui fais perdre, *nemessasihañ*, 3. *ames.*
- Je te cause de l'envie, *kedaskasañmeren.*
- [ENVOLER.]
- Il s'envole, *tšič'rré*, 1<sup>a</sup> *netšič'ra agša*; je le fais, je le laisse envoler, *netšič'rañ.*
- [ENVOYER.]
- J'envoie q'q' part, q'q' ch. [quelque part, quelque chose], *nepétsida'kké.*
- Je lui envoi q'q' ch. [quelque chose], *nepétsidakkésan*, 3. *apet.*; je t'envoie, *kepétsidakkésr.*
- Je l'envoie, v. g. en France, je pense, je veux qu'il aille en France, *nederaghimañ agañmenskkik sa.*
- J'envoie cela, seu, je donne cela à un p'r donner, porter, à un autre, *nepétsida'kkañnis*, 3. *apet.*, v. *nepétsidakkésañ*, je lui d. [donne.]
- Kepétsita'rer*, *nepétsitañmañ*, je t'envoie porter ma parole.
- ESCLAVE, (ponendum inferiùs, non est hic [224, 225.] ejus locus,) *asakañ asakañnak.*
- Il s'est sauvé, *peskams*, 1<sup>a</sup> *nekadasipeskami.*
- Ša sdaškainemar*, son esclave.
- Šdasakañnimin nhághé*, je suis son escl. [esclave.]
- Šdasakañnihémiané nihaghé*, si tu m'avois p'r esclave.
- Šdasakanihemi*, ai moi p'r escl. [esclave.]
- Je le suis, *netasakañsi*; j'en ai un, *nedasakañnem*, 3. *sdaske.*
- Je le fais escl. [esclave], *nedasakañnekañ sa.*
- Je le prens fais escl. [esclave], *kedaksner.*
- J'achette v. g. un escl. [esclave], *nemanshañ asakañ.*
- Il me traite, regarde co'e un escl. [comme un esclave], *asakañneghé nederihšghé.*
- L'esclave est condamné à mort, *tebersmañ kadási n'rañ.*
- J'ameine un escl. [esclave], *nekighésarañ*, v. *nepésšo asakañ*; je le prens, *netaksnañ.*
- Je le ramène, s'étant fuit, *nssšéssárañ*, 3. *sass.*
- [ESPACE.]
- D'espace en espace, *kšaskšai.*
- Cela est dans cette espace, *is arspisi*, v. *is arghikšisi.*
- [ÉPAIS.]
- La sagamité est épaisse, *pañkssabañss*, v. *pañkšdâi*; claire, co'e [comme] de l'eau, *nebisañbañss.*
- Épais en rond, *mesa'ksat*, nob. *mesa'kšss.*
- Planche, bois épais, en plat, *kepághé*; *érghikksi kepaghck*, tant il ô [est] épais, nob. *kepaghégs.*
- Voilà co'e [comme] il doit être épais, *is éspagšak.*
- [ÉPARGNER.]
- Je l'épargne, je ne le traite pas co'e [comme] les autres, *netsañšérmañ.*



- J'épargne le blé, v. g. les vivres, &c. *neks-paérdamenar skamsnar*; à lui, *nekspaérdamasän*.
- Je l'épargne, je ne le tue pas, je ne lui fais rien, *nedakstsitéhäü*.
- [ÉPANOUIR.]  
La fleur s'épanouit, *pskšasasé*.
- [ÉPARPILLER.]  
Éparpillé, *sisse<sup>c</sup>rré*; je l'éparpille, *nesissaän-kēncen*, 3. ss.
- [ÉPAULE.]  
Mon épaupe, *nedcremañgan*, 3. sd.  
J'y porte, canot, bois, &c., *nsuñghé*; *q<sup>q</sup>* ch. [quelque chose], *nsuñghéhadsn*.
- [ÉPÉE.]  
Je frappe avec l'épée, *ncமாகé*; lui, *nc-masakámaü*.
- Épée Française, *ssemañgan*; sauvage, *éskšisan*. Vid. inferiùs.
- Je la porte au côté, *nsdañssitákkamen*, 3. sd.  
Je la tire du fourreau, *nekétaraghi<sup>c</sup>ptsn*.
- Je la remets, *nepida<sup>c</sup>ragšāñdamen*.
- Épée sauvage, épée emmanchée, *éskšisan, nar*.
- J'en ai une, *nedeskšišani*, 3. sd.
- [ÉPIER.]  
[226, 227.] J'épie, *nedaskšibi*, 3. sk.; je l'épie, *nedaskšhañdamen*, 3. sd.; lui, *nedaskšhañrañ*.
- ÉPI de blé, *mesasks, ksr*.
- [ÉPINE, ÉPINEUX.]  
Épine, *kañsis, kañsiak*; cela est épineux, rude, aigu, *kañséio, kañsiss*; mon épine du dos, *nañhigan, kañhigan*, 3. sañhigan.
- EPINGLE, *pinss, \* sar*.
- ÉPONGE v. ce qui sert, &c. p'r puiser l'eau du canot, *kahabañgan*; j'en puis l'eau, *nedakhíghé*; puis l'eau, *kahíghé*; *kahíghéts is*, puis avec cela.
- [ÉPOUVANTER.]  
Je suis épouvanté, *neséghesi*; je l'épouvante par *q<sup>q</sup>* [quelque] action, *nesékpañhšrañ*; par parole, *nesékpañmañ*.
- [ÉPROUVER.]  
Je l'éprouve, *nekstsiharanñ*; éprouve-moi, *kstsihari*.
- Je m'éprouve p'r voir si je pourrai faire, &c., *negšagšétsksháresi*.
- On éprouve, *ktsiadasss*; *édari kstsihare-dimek*, on s'éprouve, novitiat, v. g.
- [ÉQUARRIR.]  
On l'équarre, *tsiktéhañss*; qu'on, *tsiktéhañsits*.
- J'équarre une piece de bois, arbre, &c., *netsikté<sup>c</sup>hēmen*.
- Iañsāisi tsiktéhañssar*, v. *isiganāisi*, équarrées d'un côté, t'tum [tantum] en long.
- [ÉQUILIBRE.]  
Je mets cela en équilibre, *netebañbékhámen*.
- [ÉQUIVALENT.]  
Je lui donne l'équivalent de la perte *q<sup>q</sup>* lui a faite mon chien, v. g. *nenañbenañ*.
- Je lui donne p'r un autre, je paie p'r lui, *nenañbenemasan*.
- ÉRABLE, *ssenāñs*; eau, [i. e. d'étable,] *ma<sup>c</sup>kšāñ*; j'en fais couler, *nedatsbahadsn*.
- ESCLAVE. Vid. p. 224.
- [ESPACE. Vid. supra. p. 225.]  
*Amañnté, namihsk pa<sup>c</sup>triañsak kšnañbañsihidit is stsi sa<sup>c</sup>kañsuck ari*, je voudrais voir autant de père [pères?] qu'il y en pourroient avoir dans l'espace d'ici au fort, &c.
- [ESPÉRER, ESPÉRANCE.]  
J'espère, seu, je pense fortem't [fortement], (vid. Penser), *nemerkitéhañsi*, 3. mer., v. *nemerkérdam, -dāmen*, je . . . .
- J'espère un jour la joie, *nekéttetéhañdamen, sighérdamsañgan*.
- J'espère en lui, *nsiasétsesšāñmañ*.
- Mon espérance, *nsiasétsesšdi*.
- [ESPRIT.]  
Je n'ai point d'esprit, *nsnañdam*, 3. *sanañdam*, v. *nedazšghi*.
- J'ai de l'esprit, *nsésañdam*, 3. sé.; je lui en donne, en fais avoir, *nsésañdamihāñ*; — lui parlant, *nsésañdamāmañ*.
- Je n'ai pas beaucoup d'esp. [d'esprit], je ne sçais rien faire, (de viro,) *nenañba-*

[\* From the English word pins. EDIT.]

*sañbā*; (de *fæminā*,) *nenanañbaseskšā*.  
[Vid. infra, v. Homme.]

[228, 229.] Je te regarde co'e une p'so'e q. [comme une personne qui] n'a point d'esprit, *kikassghéremc*; il n'en a point, il est fou, *assgs*, 1<sup>a</sup>. *nedassghi*; je pense qu'il en a, *mšés-añdaméremañ*, 3. *asé*; je lui remets l'esprit, *mšésañlamimañ*; j'élève mon esp. [esprit] à Dieu, je pense à lui, *nekerité-hañmañ kesks*.

[ESSAYER. Vid. infra, p. 294, 295.]

J'essaie une robe v. g., *nrsrésderesi sdasse*; essaie-la, *sdassé sderesi*; j'essaie, éprouve *q'q'* ch. [quelque chose], *nekštsihatsn*, nob. *-harañ*, v. ign. *neksdasé-kañ*; j'essaie de faire *q'q'* ch. [quelque chose], *nekštsitsn*; j'essaie une robbe p'r voir si elle va bien, *neksdagšin*; essaye v. g. de faire ce *q'* je te dis, *kstsisiga*, in pl. v'ò di'r [vulgò dicitur], *aritsksga*; essaie de dire cela, *kstsisita*, v. *kšakšétsisita*, vos, *ksstisi'ttamsks*; je fais *q'q'* ch. p'r [quelque chose pour] voir si je le ferai bien, j'essaie &c., *negšagšétsitstn*, nob. *-tsihañ*.

[ESSUYER.]

Je l'essuie, torche, *nekassehamen*, 3. *ag.*, nob. *nekassa'amasañ*, *nekassamasañnéban*; qu'on l'essuie &c., *kassehats*; essuie cela, torche cela, *kassehais*; je m'essuie le visage, *nekassigšéhssi*, 3. *gas.*; à lui, *nekassigšéhañ*, 3. *ak.*; *nekassibigšanéhssi*, 3. *gas.* mes larmes avec un mouchoir, *kekassibigšanéhsren*, tes larmes; avec la main, v. *kégsis*, *nekassibigšanénesi*; je lui essuie le sang qui est à son visage, *neka'ssigšagahamasañ*; à lui, les larmes, *nekassibigšanéhañ*, 3. *agas*, v. *nekassigšagahañ*; ni *sskassahamasañ sauraur saghé angeri*, un ange lui essuie, &c.; je l'essuie v. g. plume &c., *nekasshañ*; je lui essuie les piés, *nekassesitahañ*; les mains, *nekassiritséhañ*; le corps, *nekassaghéhañ*.

[ESTIMER.]

Je l'estime. Vid. pag. sequentem [231].

[ESTOMAC.]

Mon estomac, *nemighigan*, *nar.*; je le

touche, frappe, *nederetéhssi*, imperat. *aritetéhssi*, 3. *aritéhssso*; di'r [dicitur] etiam de celui q. [qui] s'est coupé, *nederetéhssi temaigan* v. *ntse'ksaks*, v. *nederetéhsgheñ*.

[ÉTANCHER.]

Je lui étanche le sang, en lui mettant *q'q'* [quelque] chose p'r l'arrêter, *nekepi-kšébi'rañ*, *nekepi-kšéberemen*, *is*.

ÉTANG, lac, *peksasebem*, pl. *-bémar*.

ÉTANÇON, fourche, *skuhañgan*, *nak*.

ÉTENDARD, *metéséghen*.

[ÉTÉ.]

L'été passé, *nipené*; présent, *nipen*; dans [230, 231.]

l'été, *érminipek*; un peu avant dans l'été, *añgsoime nipeghé*; l'été prochain, *nipeghé*; tous les étés, *ési nañnipeghi*; il y a 3 étés *q'* je suis malade, *tsinipenaisi aneghi nssagamaresi*; tout l'été, *erigsuinipek*, v. *kšéninipek*; pendant l'été, *nipenisi*.

[ÉTEINDRE.]

Éteignez, v. g. les cierges, *nekasénighéks*.

J'éteins cela, v. g. chandelle, &c., *nenikazéhémen*.

Éteins le cierge, *nekazéhé sassénemangan*, pls. *nekasséhémks*.

J'éteins le feu, *nenikassasé*. Vid. v'bum [verbum] Feu.

Mets ta main devant la chandelle de peur que le vent ne l'éteigne, *añbagāšni*, 1<sup>a</sup>. *nedañbagāšnemen*. [Vid. infra, v. Éteint.]

[ESTIMER.]

Je l'estime, *nekesrdámen*, nob. *nekesérmañ*, v. *nserémañ*; grand, *nesaüğmañsrdámen*, 3. *ss.*, nob. *nesaüğmañsérmañ* v. *nemesérmañ*; cela l'est, capitaine, *saüğmañsérmeğsat*; je le suis, b'p. estimab. [beaucoup estimable], *nesaüğmañsérmeğssi*, 3. *saüğ.*; je suis celui qu'on estime b'p., p'r [beaucoup, pour] lequel on a t'rs [toujours] de grands égards, *nesaaghirmėğssi*; on estime ce qui est rare, et on méprise ce qui est commun, *tagasėsgəhé kėgsi kesėrmėğsat*, *mesairekė kėgsi keneskėrmėğsat*; voilà c'bien [combien] on m'estime, *nedsdėrmėğssi*; il ne fait point de conte de sa p'so'e [personne], il n'en a point d'estime,

*negmérness*; je l'estime moins, *nesédé-remañ. ign. damen*; je l'estime autant, *netétebérdamen, 3. st., nob. netétebérdam;* je l'estime plus, *nébaémérdámcu, 3. abaë., nob. nébaéméremañ; nšiedérdámen, nob. mañ.*, j'estime cela au dessous; *nébaémérdámen, nob. mañ.*, j'estime cela par dessous; je l'estime petit, seu peu, &c., *nepisérdamen*; cela l'est, *baémérmegšat, nob. -gsss.*

[ÉTAT.]

Je ne fais point d'état de ma p's'oc [personne], *nessasanérdamen nlaghé.*

[ESTROPIER.]

Je l'estropie, casse l'os de la jambe, &c. *nepskšisanédété kkasañ, 3. ap.*

[ÉTEINDRE. Vid. supra, p. 231.]

[ÉTENDRE.]

J'étiens le bras p'r prendre *q'q'* ch. [quelque chose], *nesa'saghipeđinúsi.*

J'étiens le bras v. en baillant, v. de lassitude, v. m'éveillant, *nesiptaghi, nesiptaghin pera [?]*

Je m'étiens étant couché, *nesašsadssin. v. nesa'sághesin.*

J'étiens la main, . . . . 3. *éuat*; les piés, *nesašsúti, 3. sašsáts.*

[Page 232 of the MS. is blank.]

[ÉTERNUER.]

[233.] J'éternue, *neketsékí'ttana, 3. ghe., v. nenék-kšaimš nenénékksañni.*

[ÉTEINT.]

Lorsq' tu verras la chandelle v. &c. éteinte, tu l'allumeras, *nemitasané sassénemañgan kasséghé ketsakesemen.* [Vid. supra, v. Éteindre.]

ÉTINCELLE, *sisésskstaté'rré*; le feu étincelle, *pépéskesátté is.*

ÉTOILE, *sa'ta'sésss, šak*; elle paroît, *ni édañt*; pls. *ni édahadit.*

[ÉTONNANT, ÉTONNER.]

Je suis étonné, *nedašsakérdam*; de cela, *nedašsakérdámen, 3. ašs.*

Chose étonnante, *ašsaghérdamings*; cela l'est, *ašsaghérdaminañšat.*

ÉTOURNEAU, *tssgheres, tssghereskšak.*

ÉTOFFE, drap, seu, qui n'est pas grosse couverte, *arenéghen, sértaiñské.*

[ÉTOUFFER.]

Je l'étouffe avec la main, *nekparaimšnañ, 3. ak.*; avec violence, *nekparaimš'k-kasañ.*

[ÉTOUPE.] Chanvre, *sé'ttugs, gsk.*

[ÉTOURDIR.]

Je suis étourdi, *nekšisanaskšési, 3. kisan.*

—— de la fumée, *nsdamipeghesi, 3. dami.*

—— de parler, *nekšisanaskšemesi, 3. kis.*

—— de boire, *nsnšsemi, 3. san.*

Je l'étourdis faisant *q'q'* ch. [quelque chose], *nsnañdamihañ, 3. snañ.*

—— lui parlant, *neksaskštéhañ, 3. akis.*

—— le frappant, *nekšisanaskštéhañ, 3. ak.*

Tu parles en étourdi, *kedasšghikeršši.*

[ÉTOURNEAU. Vid. supra.]

[ÉTRANGER.]

Homme étranger, *piršiarenañbé*; femme

étr. [étrangère], *piršiphainem*; je parle une langue étrangère, *nepirsnañšé*; j'agis [234, 235.]

en étranger, *ncpiršakamighési, 3. pir.*; je le crois étranger, *nepiršéremam, 3. apir.*

[ÉTRANGLER.]

Un os v. &c. dans le gosier m'étrangle, *nedaršhi, 3. aršhs.*

Je l'étrangle, *nekeskedsnébírañ, 3. agh.*; avec la main, *negheskedsnėnañ, 3. agh.*

ÊTRE, *tanni ait, kšeni ait*; qui est, *ait*, ceux qui sont, *aihidit*; qui cessent d'être en ce monde, v. g. *é'ksiaihidit*; il n'y est pas, *m̄da [mañda] tési v. añdatañmañ.*

ÉTROIT, v. g. arbre v. to' [tout] &c., *tsitsigšésss, šar*; chemin, *tsitsigšañstšessen*; cela est étroit, *tsitsigšé is*; couverte étroite, *tsitsigšéghen maskesé*; chemise étroite, *tsi'tsigšé'ghess*; cela va en étroit-sissant, *šsskšaiñghen, nob. šsskšaiñgs.*

ÉTUI, *pita'rákšāngan.*

ÉTURGEON, *kabassé.*

[ÉVANOUIR.]

Šani'ré, il s'est évanoui, perdu, on ne sçait qu'il é [est] devenu.

Šani'ts, fais, *q'* ce *q'* tu as mangé, qui est amer, s'évanouisse.



EVANTAIL, *oibassésn*; mon, *nedanbassésn*.

[Vid. infra.]

[ÉVEILLER.]

Je m'éveille, *nebégšira*, 3. pé. v. *netskíra*;  
pour ne plus dormir, *nšémegšasi*.

Je l'éveille, moi parlant, *nebégšimañ*, 3. abé.,  
v. *netskímañ*, v. *netakšimañ*.

—— par le bruit *q'* je fais en marchant,  
*netskasañ*.

—— de la main, le poussant, je l'éveille,  
*nebégšanañ*, 3. abég., v. *netskíharañ*, *nebégšiharan*; je le bas, ce q. [qui] le fait  
éveiller, *netsktéhañ*.

[ÉVENTER.]

Je m'évente, me rafraîchis, *nebañbaséhssi*,  
*nedanbeséhssi*; item, je classe le marin-  
gouin, &c.

[ÉVENTAIL.]

Évantail, *bañbeséhšanañ*; j'en ai un, seu, le  
mien, *nebañbeséhšanañ*. [Vid. supra, v.  
Évantail.]

[Page 236 of the MS. is blank.]

[ÉVENTRER.]

[237.] J'éventre un poisson, v. g. *nebskšétsírañ*; je  
le fens, *nedaraghesañ*.

[ÉVITER.]

Je ne sçai où il est allé, il m'évite, me  
fuit, *nepesatzsreks*.

J'évite le coup, *nedabási*, 3. *da'báss*; je le  
fuis, *neksašsrañ*, 3. *ksañ*, . . . . 3. *ks*.

J'évite, je fuis cela, *neksašssdámen*.

Je l'évite, je ne vas pas où il est, *nekeska-  
mi'kasañ*.

*Nekeskamssé*, j'évite, je ne vas pas où il est  
quoiq' proche.

EXCRESCENCE de chair, *tségsar*, *ak*.

[EXHORTER.]

Je l'exhorte à eela, je l'y porte, *nedatsšímañ*  
v. *nedatsšéremañ*.

Je l'exhorte, le presse, *neka'késsmañ*, 3. *ak*.

Je m'exhorte, j'exhorte ma p'so'e [personne],  
*neka'késsmañ naghé*, v. *neka'késsmesi*.

J'exhorte, *neka'késsghémi*, 3. *kak*.

[EXEMPLE.]

Je donne bon exemple, on me prend  
p'r exemple, *nekinasauábameghe*; je  
suis son ex'ple [exemple], je fais co'e  
[comme] je lui vois faire le bien, *neki-  
kinasauábamañ*; tu fais mal qu' [quand?]  
tu me le vois faire, *kematsikinasauábami*; ne  
fais pas mal qā [quand?] tu me le vois  
faire, *mssak nematsenasakessañgan kina-  
sauábadašskkan*.

[EXPLIQUER.]

J'explique sa pensée qu'il ne sçait pas bien  
expliquer, *nedanñaitasañ*.

[EXPOSER.]

J'expose ma p'sonne [personne] à la mort,  
allant v. g. en guerre, &c., *nemétanasker-  
dámen naghé*; je l'expose aux bêtes p'r  
en être dévoré, *arenanbar nedassamañnar  
asenhanñšak, pi'tairšk*, &c.

[EXPRÈS.]

Il ne le fait pas exprès, *sskítsissi stesin*.

[EXCITER.]

Je m'excite, *nekihíršssi*, v. *neka'késsmesi*. [238.]

Je l'excite, *nekihíršhañ*, &c.

[Page 239 of the MS. is blank.]

## F.

[240, 241.] FABLE, *antrš'kan*, *nak*; j'en raconte,  
*nedantrš'kké*, 3. *añ*; je lui en raconte,  
*nedantrš'kkésañ*.

*Nedantrš'kanñmañ essebanes*, v. g., la fable du  
chat.

[FACE.]

Ma face, *nesisegsk*, 3. *ss*.

[FÂCHER. Vid. infra, p. 245.]

Fâché, v. pag. 245 [infra].

[FÂCHEUX.]

Je lui suis fâcheux, importun, *nsnemihañ*.

Je lui suis fâcheux, importun, je l'empêche,  
v. g. de travailler, *nsdamihañ*, v. *nsdami-  
'kasan, nsdamitéhaidamen*, nob. *téhañmañ*.

## ]FACILE.]

Il est facile, *nekemat, nekemess* ; il est facile de &c., *nekemessak éssak, penak*.

Je le pense facile, *nekemézdamen*, v. *nekemitéhää'damen, luimää*.

Je suis facile, *nenekeminaängssi*, 3. *nek*.

## [FAÇON.]

Façon de faire, coutume, *arenasákesin, ni érenesakesime*.

C'est ma façon de faire, *ni érkamighesía*.

Vid. Coutume.

FAIM, *manssaägon* v. *aspsn* ; j'ai faim, *nemansssé*, 3. *man*, v. *nedaspsnami*, 3. *aspsnams*.

J'ai g'd [grande] faim, *nssagaräämi* v. *nemansssé sésmäsi*.

Je toujours mange, *nemssattam*.

Je n'en puis plus de faim, *nedanadaraämi*, 3. *amad*.

J'ai faim marchant, *nepeskaräädamssé*, 3. *pes*.

J'ai faim de cela, j'ai envie d'en manger, *nekads'tamen*.

Je pleure de faim, *neséssaraämi*, 3. *ses*.

J'ai une faim canine, *nda [mända] nekisisé-mipi*.

On a faim, *manssaägons*.

No' no' [nous nous] avons faim les uns aux autres, *nemansssédibena*.

J'ai faim n'ayant point de viande, ni poisson, quoiq' j'aie bp. [beaucoup] de blé, v. g. *nessodän* ; *nedaspsnem*, 3. *sdaspsnemar*, j'efface les marques qui sont sur mon visage, qui marquent q' j'ai eu faim ; *nenanabaraämi*, j'ai d'abord faim quoiq' j'aie mange depuis peu.

[242, 243] Je lui cause la faim, je l'affame, *nemansssé-zaä*.

Je mange t'rs [toujours], *nemssattam*, 3. *ms-sattam*.

## [FAIRE.]

Je fais q'q' ch. [quelque chose], *nederi'ttsn*, 3. *sd* ; à lui, p'r lui, *nederi'tasaä* ; entièrement, achève, *nekisi'ttsn*, 3. *aki*.

Je lui fais q'q' ch. [quelque chose], *nederi-*

*haä* ; q' lui as-tu fait ? *kégsi kederihaäsa ?* rien, *nda [mända]*, *kégsi nederihaäsi*.

Je fais q'q' [quelques] choses, je travaille, &c., *ndaäsi*, 3. *ääss*.

*Mssak ääsi'ka*, ne permets pas, Jésus, q' je fasse cela.

Je le fais beau, bien, *nsri'ttsn*, nob. *nsrihaä*.

Je le fais mal, le gâte, *nematsi'ttsn*, 3. *amat*.

Je fais, j'agis, *ndaäsi*, 3. *ääss*.

Je ne le fais qu'à demi, *neps'ksi'ttsn*, 3. *ap*.

Je ne puis faire ce q' je pense, je ne puis penser tant il est beau'p [beaucoup], v. g. *nenaskaärdamen* ; grossièrement, *nemamégsi'ttsn*, 3. *am* ; vite, *nenabi'tsn*, 3. *sn* ; lentem't [lentement], *nebenetsäsi'ttsn*, 3. *ab*.

Je ne puis le faire, soit à cause de maladie, soit ne le voulant pas, v. . . . . *nensrhäsi*, 3. *nsr*.

Je ne le peux faire, *ndaärasit'sn*, 3. *sd*.

Sçais-tu co'e [comme] il faut faire cela ? *kséserdamemosa tääni éritsmek ?* je ne vois pas, *nenikuäbi*.

Je fais q'q' ch. p'r [quelque chose pour] voir si je le ferai bien, *nekksätsi'ttsn*, nob. *negsägätsihaä*, v. *nekstsitsn*, id. *kstsisä nedritsn*.

Que fais-tu ? *kégsi éri'ttasan ?*

Voilà ce q' je fais, *ni éri'ttasa* ; co'e [comme] il, *ni éri'ttängs*.

Je lui laisse faire à sa volonté, *netsiki'tasaä*.

Je te ferai co'e [comme] tu me feras, *ni arihiäné, netse nääbi kederihren*.

Fais cela à ton tour, *ne nääbi kederi'ttsn*.

Je défais v. g. une cab. [cabane], v. autel paré, *nensghenemen* ; défais-le, *nsghéné, nsghenemsks*, pls. [plusieurs.] [Vid. supra, Défaire, p. 161.]

C'est fait de toi, si tu fais v. g. ce q'l [qu'il] te dit, si tu l'écoute, *ki'tasadé ni kekisána-hsgsn*.

C'est fait de toi si tu écoute le démon, *matsks ki'tasadé ni kekisanahsgsn*.

*Nena'nabi'tsn*, j'ai coutume de faire cela bien vite, &c.

*Nedéni'tsn*, je le refais de telle manière qu'il

- ne paroît pas qu'il ait été rompu, v. gâté, &c., *m̄da* [*mānda*] *tsirinaṅṅsat̄si*.
- Nedéuasi'tsn*, seu, *énasisi nederi'tsn*, v. *netétebi'tsn*, je fais un soulier v. g. comme l'autre, v. quid aliud.
- Je ne puis lui rien faire, il n'accepte point mes services, *nedéhérasihan̄ éhérasitasānē neba stsi srighek*.
- Nedéhérasit̄tsn*, id est, *éhérasisi nederi'tsn*, je le fais de mieux en mieux.
- Je lui fais t'tes [toutes] sortes de mauvais traitem'ts, *nemanínasañ*.
- Nepeḡsatéhañ*, ig. -*téhémén*, je puis lui faire q'q' [quelque] chose.
- Que veux [?] on faire de cela, p'rquoi est-ce faire ? *kégsi é'to asin* ?
- On en veut faire cela, c'est p'r cela, *iśga ésimék*.
- Kesahagakki*, je suis mal traité, &c.
- Ékksné prgsa sa idak nesahagakki* ? ne dit-il pas encore qu'il ne le peut pas faire et qu'il ē [est] mal traité ?
- Il ne sçait rien faire, *m̄da* [*mānda*] *sésineskési*.
- Je sçai tout faire, *nesésāndamineské*.
- Je lui fais q'q' ch. [quelque chose] de mal, le faisant t'ber [tomber], couper, &c., *neségghihāñ*.
- [FAMILIÈREMENT.]
- Narasisi*, familièrement, franchem't.
- Nenarasighersrañ*, je lui parle familièrem't, &c.; *nenarasihan̄*, j'agis familièrem't avec lui
- FAMILLE, seu, tous les parens, &c., *negsdaṅgs̄śak*.
- [FANTASQUE. Vid. infra, p. 245.]
- [FAON.]
- Le fan de biche, chevreuil, orignal, *māksesis*; d'un an, *kadenadsris*. [Vid. infra, p. 245.]
- FARINE, de blé d'Inde, *skamsnínshkhamen*; farine, *nshkhámen*; de blé François, *asennst̄s̄siminínshkhamen*; de petit blé, *abāūt̄tégan*; de blé groulé, *pesedamsn, nar*.
- [FÂCHER.] Vid. pag. 241, [v. Fâcheux.] [244, 245.]
- Je suis fâché, je me fâche, *nemssksérdam*; de cela, *nemssksérdamen*, 3. *mss.*; *neneskāra*, v. *nekeska'ra*; c'tre [contre] lui, *neneskarañsañ*.
- Je parois fâché, *neneskañmāṅgssi*; — de ce qu'on me dit, *negagañsimégghé*, 3. *gag.*; . . . . 3. *darh.*, id ē [est] *aribisi nekikkaimeghé m̄da* [*mānda*] *neskstemañ*.
- Je le fâche faisant q'q' ch. [quelque chose], *negagañsihan̄*, 3. *agag.*, v. *nemssksérdamihan̄*.
- de parole, *negagañsimañ*, 3. *agag.*
- Je parle t'rs [toujours], *nekesedśnké*, 3. *kes.*
- Je lui parle, étant fâché, *neneskañmañ*.
- Je me fâche beaucoup, *nedereghikkśasérdam*.
- Je me fâche, *nekeska'ra*; je me suis fâché, *nekisirasé'ra*.
- Je suis à me fâcher, *nedañptsirasé'ra*.
- Je veux me fâcher, *nekadarirasé'ra*.
- Nedarhíman̄*, celle q' je querelle ne dit mot p'r se défendre.
- Celle qu'on querelle, ne disant mot, dit, *nedarhimégghé*.
- [FAON. Vid supra, p. 242.]
- Fan de biche, d'orignal, de chevreuil, *nsssdśks, kśak*.
- [FAUTE.]
- C'est une faute, péché, cela n'est pas bien, *aññāinaṅṅsat*.
- Ces raquettes s't [sont] belles, mais celles-là ne le sont pas, *srigśak sghik aṅghemak, sghikki aññāinaṅṅśśak*.
- [FANTASQUE.]
- Je suis fantasq, je veux t'tôt [tantôt] une ch. [chose] t'tôt une autre, *nenitañsima'tsenamási*.
- [FÉLICITER.]
- Je me félicite à moi mēē [même], *nedaramisi*.
- Je le félicite, *nedaramisshāndamasāñ*.
- FEMME, *phāinem, msk*, v. *manāndagśśess, śśak*; sage femme q. [qui] reçoit l'enfant, &c., *nstsihset*, 1<sup>a</sup> *nenstsihsé*; tu es plus sage v. g. q' toutes les autres femmes, *nī akésin phāinem*; femme étant mariée, si



son mari en prend une autre, la 1<sup>re</sup>. bat la 2<sup>de</sup>. (di'r [dicitur] de primâ,) *ksaï'ksné*, (male audit apud illos.)

FENÊTRE, *tašsaŋgan, nar*.

[FENDRE.]

Je fens, *nepsikassi*.

Je lui fens instrum'to, *nepesiktêhemen*, 3. *ap.*, nob. *nepsi' çaiï*.

Je le fens la tête, *nepesigañdebéttêhaï*, 3. *ap.*, v. *nepetiktêhemen step.*; cela est fendu, *pesighi'rré*.

Je fens la bête par le milieu, (scil. en long depuis la tête aux piés,) *nepesiktêhaï*; je fens, j'ouvre la bête, poisson, *nederesaiï*.

Ce bois, v. g. fent mal, *matsiné'ré, sriné'ré*.

[246, 247.] FER, *arenarags*; \* cela en est, *arenaragsié*; le forgeron qui travaille au fer, *nsdara-gskket*; je chauffe le fer, *nekesara'ghesemen*; chaines de fer, *arenaragsaïbi, ar*; fer qu'on met au feu p'r qu'il devienne bon, propre, co'e [comme] battefeu, haches, *sskanaragskkan*; le fer aiant été mis au feu est co'e [comme] rouillé, &c., *agšoŋšaraghi'ré*.

[FERMER.]

Je ferme v. g. le livre v. *q'q'* ch. *q'* [quelque chose que] je ferme co'e [comme] je ferme un livre, *nšisasaïnnaghenemen*.

Je l'ouvre de même qu'un livre, *nebaïnaïnnaghenemen*.

Je le bouche, un trou, *nekephâmen*, 3. *ak*.

Je ferme, la main, p'r donner v. g. un coup de poing, &c., *nepetegširetsési*, 3. *pet.*; la bouche, *nekepedsnési*, 3. *kepedsnés*; les yeux, *nepeseghigšési*, 3. *pes.*; la porte, *nedenté'hadsn*, 3. *šden*, imper. *entéhads*; le couteau, *nebi'kašnamen*, 3. *ab.*; le sac, liant, *nekebsberemen*, 3. *ak.*; cela, cabane v. g. est fermée par une pierre, *kebap-ska'té puapcsks*; *q'q'* ch. [quelque chose] en tournant v. g. les visses, *nepima'rragahamen*, 3. *api*; je ferme étui, écritoire,

&c. *nekepeskšagâhamen*; la cab. [cabane] est bien fermée, *tsittamatté*; la plaie est fermée, *nitsekaïnn*; ma plaie est fermée, *nenitsekîsi*.

[FERME, FERMENT.]

Cela qui est debout est ferme, il ne branle pas, *saŋgrégaïnbáo mda* [*maïnda*] *éhégaïnbasisi*.

Je suis ferme, forte, d'une forte c'plexion [complexion], *nesaŋgherîsi*, 3. *saŋg.*

J'agis fermem't, *nesasaïbaï*, 3. *sas.*; je l'enferme, mets en prison, *nekepesakhaï*, 3. *ake*, v. *nekepesagahaï*.

Les ho'es [hommes] ne veullent pas abandonner le fort, village, ils tiennent ferme, *sangraghenéhémaïk*.

Celui-la tient ferme, *sangraghenéhémaï*.

Je tiens ferme, *nesangraghenéhem*.

FESTIN, *maneskaïnsadin*; j'en fais, *nemaneskassi*, 3. *ma*; de cela, *nemaneskassin, am.*; à lui, *nemaneskasaiï*.

Je fais festin d'un chien, v. &c., *nemaneskassi aremss*.

Je le fais le maître du festin, *nemaneskassîhaï*, 3. *am.*; on t'en fait le maître, *kemaneskassîhšghé*; j'y tiens sa place, *nederššésaiï*; on me fait festin, *nemaneskaïghé*; t'a-t-on invité au festin? *kšitsimanéskaïghébasanasa?*

On ne m'y a pas invité, *m̄da* [*maïnda*] *nšitsimaneskaïghéheban*.

Je fais festin à tout manger, *nšimaïnsin*.

[FÊTES.] Les fêtes.

[248, 249.]

C'est aujourd'hui fête, *saïnn'té\** *nikksaïbi*.

C'est demain fête, *sébatsi saïnn'té*.

On fait la fête de St. N., *kšssihai saïngmaïsi N.*

C'est le jour de sa fête, *ni édštsi kšssihst*.

De 7 en 7 jour c'est la fête du dimanche, *ési taïbasaiïkšssghenakkîsighi saïnt*.

La circonsision, *ni édštsi sîresa*, v. *arisisîsa Jesss*.

Les rois, *ni édštsisi naïdarami'akasahadis n'ršak saïngmaïk*.

[\* *Quare*, if from the English word *iron*? EDIT.]

[\* From the French word *saint*. EDIT.]

La purification, *ni édštsi gherenemek sassé-nemaŋganar gherenemeghé, &c.*  
 L'annonciation, *ni édštsi naüdaüdokkékéssa Marie Gabriëlar.*  
 Les rameaux, *gherenain sèdiak.*  
 Le Vendredi st [saint], *ni édštsi skahésa<sup>c</sup>te-ksk darinésa Jesss.*  
 Pâque, *ni édštsi kighéhssisa J. [Jésus.]*  
 L'ascension, *ni édštsi spemkik ariraüsa J. [Jésus.]*  
 La pentecôte, *ni édštsi srinisésksit pétsiraüsa, pétsiraüde.*  
 Le Jeudi st. [saint], *ni édštsi samaüsa shaghé sdokkana, ni édštsi J. [Jesus] sdokkana pa<sup>c</sup>triaüšsirisa.*  
 La fête-Dieu, *abaümsšé aiamiahaümeghé.*  
 La St. Jean, *édštsi péskamek skštâi, péskameghé skštâi.*  
 L'assomption, *ni édštsi sang-Mari spemkik arssarsa.*  
 La visitation, *ni édštsi naïtsi arami<sup>c</sup>kaüsa Elizabëtar.*  
 La c<sup>c</sup>ception [conception], *ni édštsi bimsri-mëghesa säüg Marie.*  
 La présenta<sup>c</sup>on [présentation] de la v. [virge], *ni édštsi arssarsa nessigadenéde säüg Marie paüba<sup>c</sup>tamigsk mircéde k<sup>c</sup>ks.*  
 Noël, *nibaüiaüamiahaümeghé.*  
 Voilà le retour du jour auquel on fit la fête p<sup>r</sup> la 1<sup>re</sup> fois, *tebskašikizat.*  
 FEU, *skštâi, skštar*; il y en a, *skstašio.*  
 J'elargis, éparpille la braise, *nedapskaüšé-ghé.*  
 Il y a trop g<sup>d</sup> [grand] feu, *ssaümkéde.*  
 J'en fais, mettant le bois, *nemadšdasé, 3. ma.*; je l'allume, le fais flamber, *nepesks-rénemen, 3. ap.*; je le souffle p<sup>r</sup> l'allumer, *nepšdase*; j'arrange le bois par avance p<sup>r</sup> l'allumer ensuite, *kéttâisi nrtsn, asassrat*; le feu est bon, *sra<sup>c</sup>kkéde*, ardent, *kesa<sup>c</sup>kkéde*; j'y mets du bois, *nematštasétaüsaü, nepšnesé*; p<sup>r</sup> lui, *nepšna<sup>c</sup>raü*; le feu petille, *péskesa<sup>c</sup>té*; j'en vais quérir hors de la cab. [cabane] p<sup>r</sup> le mettre au feu, *nepintsé, nepitsé*; p<sup>r</sup> lui, *nepitsésaü*; je l'attise, *usresénemen, 3. sr.*, v. *nemaüksaü-*

*senighé, v. nebiksséhigh*; attise le feu, 1<sup>a</sup> *nedaüksaüštsn, aüksaüšts skštâi*; instrum<sup>t</sup> à l'attiser, *biksséhigan, maünté-higan*; cela y dure, *sipkakazéde*; j'appliq<sup>e</sup> le feu où j'ai mal, &c., *nepesi*; à lui, *nepesaü*; substant. [substantivement], *pessâin*; je le jette au feu, *neketsétéstsn, 3. ake, neketsénemen, nob. neketsénaü, 3. ak.*; je le tire du feu, *nekétkazénaü*; je tombe au feu, *neketsétéssin, 3. ket.*; il faut mettre du feu, v. g. dans la chaudière, *téptaüštskštâi, téptaüšs*; le feu y prend, v. g. à la cab. [cabane], v. &c., *tsekéde, tsékess*; *nenitasé*, je porte du feu m'en allant le soir, v. g.; *éhésapskedâi*, il est tout pénétré de feu, v. g. damnatus; *sšsnek stsi sasaükaümkerâi skštâi*, sort par la bouche, 1<sup>a</sup> *nsdacaümkerâi*; je l'éteins, *nenikassasé, 3. nek.*; en soufflant, *nenikas-sépsdasaüdamen, 3. sn.*; en foulant, *neni<sup>c</sup>kazé<sup>c</sup>kkâmen, 3. sn.*; avec de la neige, *nenikazé<sup>c</sup>hemen*; je le tire du feu, *nenaü-dagaünnemen, nob. -dagaümaü*; ils n'ont point de feu, *nekassasaük, 1<sup>a</sup> nenikassa-saübena, vous, ba. [?]*; j'allume du feu p<sup>r</sup> qu'il fasse beaucoup de fumée, *nepipesaü-hadsn*; il faut creuser, faire un chemin, p<sup>r</sup> couper chemin au feu, *psakéhaük, 1<sup>a</sup> nepes-kéhémen.*

FÈVE, faisoles [faséoles], *a<sup>c</sup>teba<sup>c</sup>kšé, kšar*; *pitsné<sup>c</sup>ré.*

[FEUILLE, FEUILLER.]

L'ardoise, v. g. se lève, feuille, item le cèdre, et autre bois.

Feuille, *mibi, mibiar*, elles t'bent [tombent], *pensbagat*; t'bant [tombant], *pensbagak<sup>c</sup>kké.*

Je m'en irai lorsqu'elles t'beront [tomberont], *pensbagakkétsi nemaütsi.*

Feuilles t'bent [tombent], *pensbagat* v. *pensbagak* v. *pensbagakké.*

Les petites feuilles des *sèdiak* t'bent [tombent], *ss<sup>c</sup>ksaüdaghirak.*

FIANTE [?], *mitseگان.*

[FICHER.]

Je le fiche, *nesa<sup>c</sup>kkéhadsn, 3. ss.*; le faisant [250, 251.]

tenir droit, v. *nederigañbasihadsn*, v. *neba-dañkahádsn*, idem ac priüs.

FIEL, *sísi*, ar.

[FIÈVRE.]

J'ai la fièvre, *nekesísi*, 3. *kesíss*, v. *kesidé*, *kesassédé nhagké*, &c.; il a la fièvre tierce, double tierce, v. quarte, *ritétebeska-skiskésé sssagamaress*; la fièvre quarte v. tierce, seu, q. [qui] vient toujours à la mēē [même] heure, *nsnstsessañgan*; je l'ai tel [?], *nensustsesi*, 3. *nsnstsess*.

FIGURE, image, *asiçigan*; il prend t'te [toute] sorte de figures, *ntsedañmañgs sderinañgssin inessisi kegši*; je donne une autre figure à mou corps, *nederigšhañsi*, seu, *érighia nepiršitsn*; je me mets dans q'q' [quelque] chose de telle manière q' j'en représente la figure, v. g., le diable dans une statue d'un ho'e [homme] rendant ses oracles, *nesakskésin*; *ssakskésinar*, *meskšar*, il est revêtu de la peau d'un ours, de telle manière qu'il y ressemble.

FIL, nerf, *kikšañdi*, ar; fil fait de bois v. d'herbes, *pi'kañn*.

Fil François, *skšañsutags*, *gsk*; j'en fais, je le tors, *nederetaknighé*.

[FILLE.]

Ma fille, *nedss*, 3. *sdssar*; orba patre v. matre, *ssé'kkšis*; orba sum, &c., *nedssé'kšisši*; je l'ai p'r fille, *nsdsskan*, 3. *sds-skañnar*; je lui donne, *nsdsskésañ*, 3. *sds-skésañr*; ma petite fille, *nssses*, 3. *sssesar*; fille, vierge, *nañkškésé*, *nañkškéséssis*, dimin.; elle se pare p'r plaire, *bañreskšai*, 1<sup>a</sup>. *nebañreskšai*; je suis fille, *nenañkškésisši*, 3. *nañk-ssio*; fille Française, *asennstšis-skéséssis*; fille Huronne, *abémadenäiskš-essis*, &c.

[FILS.]

Mon fils, *nnemañn*, 3. *snémañnar*.

Je l'ai p'r fils, *nsnémañnin*, 3. *snémañninar*; je lui donne, *nsnémañnkésañ*, 3. *sn-késañr*; mon petit, *nssses*; j'ai un fils, *nsnitzañni*, 3. *snitzañns*; je l'ai p'r fils, *nsnémañnin*, *shaghé*.

[FINIR.]

Q'q' [quelque] chose qui est finie, *mané're*, [252, 253.]

1<sup>a</sup>. *nemané'ra*.

Je crois q' son pétun, v. g. est fini, *nemanésé-remañ*.

Il y a peu de blé v. g. dans mon champ, *manét nedakkikkañn*.

Je finis par cela, je fais cela finalement, *nemé-tanaski'tsn*.

Je finis ma prière, *nemétanaskipañba'tam*.

[FLAIRER.]

Je le flaire, *nekstsimerañsoñ*, ig. *damen*; 3. *akst*.

Je le flaire, *nemerañdamen*, 3. *am.*, nob. *nemerañsañ*.

Flaire p'r voir s'il est bon, *kstse merañda éri mañgšak*.

Le chien flaire l'ours, les bêtes [?], v. &c., *sdahighé*.

FLAME, id est, il flambe, *peskšré* v. *sasa-ksré*.

[FLASQUER.]

Je flasq' v. g. linge, je l'unis, &c., le rends glissant, *nšasséçamen*.

Il est rendu uni, flasqué, &c., *sasséçañss*.

[FLATTER.]

Je l'appaise, *nedasighihañ*.

Je lui dis des ch. q. [choses qui] le flattent, *nedasighirasémañ* v. *nsrimañ*.

Je lui fais des ch. q. [choses qui] le flattent, *nedasighiraséhañ*.

[FLÈCHE.]

Flèche à pointe, *arss*, *sar*; ——— a tête, *pa'kšé*, *-kšar*. Vid. Arc.

Je le perce des flèches, *nepemañ arss*, v. *pa'kšé*.

FLEUR, *pépskšasásek*, *ghir*; les arbres fleurissent, *sañghibat* v. *sañghibagadsr abasíar*; je m'en irai quand les arb. [arbres] fleuriront, *sañghibagakkétsi nemañtsi*; fleur sèche, *messipté*; il . . . . *messiptétsi*; cet arbre fleuri, *peskšasasé'is abasi*, *ni édstsi peskšasasek*, *peskšasaséghé*.

FLEUVE, *síps*.

FLOT, *tegs*, *tegs'ak*; g'd [grand] flot, *kesañtegs*, *ak*.



[FLOTTER.] Cela flotte sur l'eau, *mskagšahän*.

[FLUX.]

Il a le flu, soit de sang, soit autre, *nā ariné*, 1<sup>a</sup> *nēnā ariné*; habeo fluxum menstruum, ait mulier, *netsepü'ghé*.

FLUTTE, *piksāngan*; j'en joue, *nederekšétsi*, 3. *arsk*.

[FOIBLE.]

254, 255.] FOIBLESSE, défaillance. Vide Défaillance.

*Nesañgherigana*, 3. *soñg.*, j'ai les jambes fortes, je suis fort de jambes.

[FOIS.]

Parfois, v. *nañnekstsisi*, v. *añksañbē'kki*; peu-à-peu à la fois, *ési sack'éssimis*; une autre fois, *añsidamútsi*; au moins une fois, *tégné pézekšda*; chacun une fois, *pipézekšda*; p'r la dern. [dernière] fois, *metsšsara*; p'r la 1<sup>o</sup>, *ni aneghi ni sipisi*; cent fois, *negsdattégšé, késseta*, &c.; tout à la fois, *atsisi*. Vid. *atsisi*. [In Particul.]

[FOLIE.] Vide infra.]

[FOU.]

Il est assez fou p'r faire cela v. g., *sdereghikšši -assghin*; je suis fou, je n'ai point d'esprit, *nedassghi*, 3. *as*.; je suis fou, *nsnañdaminé*, v. *nsnañdam*, 3. *san*.; je parle en fou, *nsnañdšé*, 3. *san*.; j'ai des folles pensées, *nsnañdamitéhānsi*.

FOLIE, *azsgsañgan*; cela tient de la folie, *azsktañgs*.

[FOND.]

Au fond de l'eau, *arañmbégsk*; cela y va, *keta're*; de la terre, *arañmkik*; du sac, *arañmsték*; *atsi'tasisi*, à la renverse la tête en bas; *atsi'tasi're*, il t'be [tombe] à la renverse la tête la p're [première], 1<sup>a</sup> *nedatsi'tasi'ra*.

[FONDRE.]

Je fais fondre v. g. plomb, *ness'ksbéssemen*, v. *nenskbéstsn*; nob. *-béssai nskbéssemaük ssriaük*; ——— graisse, *nskbéstañss*.

Je fais fondre de la graisse, *nesarsipemé*, v. *nepemiké*.

Je lève aiant été fondue, *nepemiké*; lève la graisse de cette viande grasse, *si'ké*.

*Nskekšamédé pemi*, la graisse fond.

*Nskekšaméss*, la glace v. nége fond dans l'eau, v. g.

Je le fonds au feu, *nsnsksbéssemen*, 3. *sn*.; dans la bouche, *nsnsksbétamen*, 3. *sn*.; la glace se fond dans l'eau, . . . .; le feu fait fondre v. g. la chandelle, *ssksb'é'té skstaikestsi*, idem de sole, *kizss stsi*.

FONTAINE, eau froide, *tekepíghe*.

[FORCE.]

Je me sers de force, j'emploie la force, *ne-* [256, 257] *merkasani*; envers cela, p'r cela, *nemerp-kikadāmen*.

Je lui fais ressentir ma force, *nesañgrassani'tasañ*, v. *nemerkasani'tasañ*.

Je me procure cela, absolument, *nedatsšittsn*, 3. *sd*.

De t'tes [toutes] mes forces, *érghikkšisania*.

Par force, malgré, *tsigañsisi*.

Je le tiens fortem't, fermement, *nemerkenañ*, ig. *-nemen*, *nesañgherenañ*, ig. *-nemen*, v. *nedassanenañ* ig. *nemen*, *ssanen sa*, veré [?].

Je suis fort, *nesañgherisi*, 3. *soñg.*, v. *nesañgrañbāi*.

*Nesañgritéhékañgsn*, le nom de Jésus v. g. me donne des forces, &c., 1<sup>a</sup> *nesañgritéhé'xañ*, je lui, &c.

Il est d'une odeur forte, *akkšimañgšat*.

FOREST, lieu, où il y a des arbres, *arañmaki'ks*, v. *abasi'ks*, v. *keka'kšiks*.

FORT, forteresse, *sa'kañrszen*, *nar*; le fort est attaqué, *ntañss* v. *ntañšé*; nous l'attaquons, *nenitsnénasé*.

Je l'entoure de pieux, *nesá'kañrszenáhamen*.

Les pieux, la palissade, *sa'kañrszenakšémar*; *sa'kañrszenahañss*, on l'entoure de pieux.

Je prens un fort, *neni'ttsn sa'kañrszen*.

J'étois à cette . . . .

Je passe par-dessus les pieux du fort, *nebañsitañdasañ sakarszen*, v. *nebañsitañsakarszenahañdasé*, *nebañsidarikké*, je passe par-dessus une petite palissade.

FORGERON, q. [qui] travaille au fer, *nsdaragskkét*.

FOSSE, *psskenígan*; j'en fais, *nepskeníghé*; j'en fais, *nšáürké*, 3. *sañ*; on ne l'a pas encore faite, *ésséma saürkésn*; quand on l'aura faite &c., *kisi saürkémeghé*.

[FOU.]

Je suis fou, je n'ai pas d'esprit, *nsnañdam*, 3. *san*., v. *nsnañdaminé*, l'habitude.

Je parle en fou, *nedazsgsé*. [Vid. supra, p. 255.]

[FOUDRE.]

Le foudre, tonnerre, *pédañghiags*; — tombe, *arikté kasak*, *pédañghiaks*.

FOUET, *sasémhígan*; je le fouette, *nesasémháñ* v. *nesásasemháñ*, 3. *ss*, abs'tum, *nenasemhsé*; je lui donne un coup de fouet, *nenegsdu kamañ*; — 2, *neuissá kamañ*; 3. *nenessákamañ*; 10, *metara neké ssakamañ*; c' bien [combien], &c. ? *kckéssakameghénasa* ?

[Page 258 of the MS. is blank.]

[FOUILLER.]

[259.] Je fouille, je cherche, *nekširasá tassi*, 3. *ksi*.; je le fouille dans le sein p'r voir s'il a dérobé, *nekširskámasañ kémstenét*.

Je le fouille, manu, *nekširšnemen*; nob. *nekširšnenañ*, 3. *ak*.

[FOULER.]

Je le foule aux piés par mépris, *nedakeskámén*.

Je le foule, *nesekkikkamen*, 3. *ss*., *sekikkañss*.

FOUR, où l'on met cuire le pain, *abaññ xañgan*.\*

FOURCHETTE, cela est fourchu, *nike tasakšat*.

FOURMI, *érigss*, *erigssak*.

[FOURRER.]

Je me suis fourré un bois dans le pié v. main, &c., *nšéghitsin*; je le tire, *nepskšatenemen séghitsína*; je le fourre, mets dedans, *nepidsn*, 3. *ab*., nob. *nepi rrañ*;

dans le sein, *nepimsrin*, 3. *ap*.; mets-l'y, *piméri*.

FRAISES, *meskikšiminsak*; j'en vais chercher, *nemasiné*.

FRANBOISES, *pekeskíminak*.

[FRANCE.]

En France, *agañmens kík*; François, *asennts, tsak*.

[FRANÇOIS.]

Je suis François, *nedasemstsší*, 3. *as*.

Je parle François, *nedasennstsšándé*.

[FRANÇOIS.]

Le village de S. Fran. de Sales [St. François [260, 261.] de Sales], *néssasakamíghé*; les hommes, *snessasakamíghésíak*.

FRANGE, *q'q'* [quelque] chose déchiquetée, *asañgan*; il y en a à cette robe v. g., *asañgañss*.

[FRAPPER.]

Je frappe co'e [comme] d'un fouet, seu, peu loin, *nemasa k'é*.

Je frappe avec cela, je me sers de cela p'r frapper, *netaghé tsn*.

Je frappe sur une planche qui fait bruit, &c., item à la porte, v. g., *nedabakssaghitéhémén, kerangan*.

On y frappe, il y faut frapper, *abakssakstéhañss*.

Je frappe contre les bois, en cadance, c'tre *q'q'* ch. [contre quelque chose], écorces de la cab. [cabane], *nedabagšitéhémén*.

On y frappe, &c. canot, écorce, &c., *abakstéhoñss*.

Je frappe c'tre [contre] une pierre co'e p'r [comme pour] faire bruit, *nemadahapeskitéhémén* v. *netsakšahapeskitéhémén*.

Je frappe avec l'épée, *nemasaké*.

Je le frappe, lui voulant couper la tête, v. g. *nemasákamañ*.

Je le frappe, *nedagámañ*.

Je me frappe, v. g. la poitrine, *nederetéhssi*, v. *sin*.

Je frappe bois, fer, &c., *nederetéhémén*.

Je frappe du bois, je bûche, *nedagámen abasi*.

FOÏNE [faine], fruit du hêtre, *satsšimínar*.

[\* Quære, if from the English word oven? EDIT.]

## [FRÉMIR.]

Je frémis, tremble de crainte, *nemaütsipéssi*.

FRÈRE. Vid. Parentée.

## [FRICASSER.]

Je le fricasse, nob. *nedapañ kšésan*, ig. *nedapañ kšésamen*; il est, *apañ kšéss*.

Je fricasse dans la poêle, *nesararañpsekšahadighé*, v. *nedapan kšésighé*.

## [FROID.]

*Pekšaméghen*, froid co'e [comme] glace.

J'ai froid, *nedañbedatsi*, 3. aüb.

—— aux mains, *nedañbedaskiretsétsi*.

—— aux piés, *nedañbedaskikátsi*.

—— par tout le corps, *nekesinhaghétsi*.

J'ai froid q'd [quand] je suis habillé legèrem't, *nekesinèrdam*.

La sagamité est froide, *tagšaðen* v. *tkài*; le malade est froid, *kisaskatss*; la cabane est froide, il y fait froid, *tekigamígat*; cette robbe est froide, elle ne tient pas chaud, *tekéghen*, nob. *tekégs*; la terre est froide, *tekíghen*.

Je ne me mets point en peine du froid, &c., *m̄da* [*mānda*] *tégné nemsθsgssn añbedatss-añgan*.

Froidem't habillé, v. g. v. être, &c., *tekéghisi*.

Je suis tendre au froid, *nepsškeratsi*.

*Pšatsšak arentañbok*, ils ont froid, ils en s't [sont] incommodés, *nemesatsibena*, ke., *kemesatsiba kemesatsibañsa é'to!*

*Tkañbañ*, il fait froid le matin, *tkañbanspan tkañbunssa*; sub. *té'kañbak*, *tkañbághé*, *té'kañbakban*; *tekerañgs*, *tekerañgšî'ré*, il fait froid le soir; sub. *tékerañgšîk*, *tekerañgšighé*, *tékerañgšikeban*.

*Tekiteba'kat*, il fait froid la nuit, &c.

*Šdaganitebi'kat*, *šskanitebi'kat*, il ne fait pas froid la nuit.

*Tekekizekat*, un jour froid.

*Kesitaitébi'kat*, il fait chaud la nuit.

FROMAGE, *atsis*, \* *sak*.

FRONT, *meskátégšé*; mon, *neskátégšé*; je le ride, *nedahañtekeskátégša*; il l'est,

*ahañtekeskátégšés*; j'y ai une loupe, *netsegšarem* v. *nedahañtekeskátégšéra*; loupe, *tsegšar*.

FRONDE, p'r jeter des pierres, *kekerasnépsdañgan*.

## [FROTTER.]

Je frotte cela avec sable p'r le nettoier, *nekesañmkipsdsn*, nob. *kipsrañ*.

Je frotte ma robe où il y a de la boue, après l'avoir fait sécher, *ness'kšipsdsn asesks*.

Je le frotte de q'q' ch. [quelque chose], *nepsagšatsn*, nob. *tasañ* v. *sainn*.

Il faut frotter, &c., *kesibaripsdañss*, v. *špsdañss*, 1<sup>a</sup>. *nkesibaripsdsn*, v. *nedasšpsdsn*, nob. *rañ*.

*Nsssañmipsdsn*, je le frotte trop.

*Nederipsdsn*, je le frotte.

*Pšskeripsdé*, il est tendre à égniser v. g.; *šañgripsdé*, dur.

*Šasassipsdañss*, v. *kasibaripsiañss*, v. *kesibaripsdañss*, il le faut frotter qu'il soit glissant.

Je frotte mes yeux, v. g., *nenañsenemen*.

On le frotte de, seu, met du vermillon v. g., *asšañss sraman* v. *assnañss*.

## [FUIR.]

Je veux m'en fuir, *nekadasaza'ra*.

Je fuis, je m'enfuis, *neksañsi*, v. *neksañssršé*, v. *neksañssssé*.

Je me fais fuir, *neksañšrañ*; *reks*, je le; *šsri*, je te; *šsrer*, tu me.

Je l'attrappe, joins, en chemin, *nedatmí'kasañ*.

Je m'enfuis de telle manière qu'on ne me trouvera pas, *nepsčtssršé*.

Je fuis le péché, *neksañssdamen*, *matsenasekessañgan*.

Je le fais fuir, aiant vû v. g. un homme, voulant l'approcher, il s'en va croiant q' je lui ferai q'q' ch. [quelque chose], *nekarabeskasañ*, v. *nekurabañbamañ*; di'r [dicitur] etiam, 2 qui pèchent, s'apercevant qu'on les voit, se sauvent fuient celui qui les voit.

Je fais fuir cela, id ē [est], je le retire, de peur qu'on ne le prenne, *neksañsiktsn*.

[\* From the English word *cheese*. EDIT.]





il n'a pas pris feu ; *añrasañkeré're*, il a pris une fausse amorce. Fourreau de fusil, *pitaraññigan*.

[Pages 264, 265, of the MS. are blank.]

## G.

[266, 267.] GADELLES, *asbañmskšémínar* ; rouges, *mes-símínar*.

[GAGE.]

Je donne cela pour gages, *negheretsu* ; à lui, *negheretásañ*, v. *sañ* ; je les retire, *nšiksnemen*.

[GAGER.]

Je gage contre toi, seu, gageons, *añmadída*, v. *tañsadída*.

[GAGNER.]

J'ai gagné, *netemhšé*, v. *negahšé*, nob. *negahšañ*, nob. *netemhañ*.

Ils s't to' [sont tous] bons, il n'y en a pas un qui ne soit, &c., je ramène bien, &c., *nsrihara*, *nemessdam*, *pézeksda* *nderak-kann*, 2. *nenissram*, 3. *neussram*, *níšram*. *Nedénesi*, il n'y en a [qu'un ?] noir v. blanc, tous les autres sont, &c.

*Nemessdam*, il y en a 2, &c.

*Nenissram*, je ramène 2 fois 2 d'une me'e [même], &c. ; trois fois, *neussram*, *neíšram*, &c.

GALETTE, *abañ*, *nak*.

GALE, *meghi* ; j'ai la galle, *nemeghisi*, v. *nemancgaki'ra*.

*Psakédar*, espèce de lèpre ; *psakédénereks*, il l'a, &c.

GANT, mitaines, *meretsés*, *sar*. Vid. Mitaines.

[GARDER.]

Je garde cela, *nenénasérdámen*, nob. *nenénasérmañ* ; p'r lui, *damasañ* ; de veüe, *nenénasañbatámen*, nob. *-bamañ* ; de pensée, *nekeritéhañdamen*, nob. *-hañmañ*.

Je lui garde à manger, *nedakstsenemasañ*.

Je garde cela avec peine, je prens peine p'r les garder, *nesaaghéssi* ; *nesaaghéssinéban*, j'ai souffert, soit du froid, &c. &c.

Je garde la cab. [cabane], *nekesenasíghé*, *nekesenasigan*, *sasan*, *nstíghé*, v. *nekesenasasé*, v. *nekesenasitañsi*, di'r [dicitur]

de puero l'enfant v. g., *nekesenasihan* ; prens garde à ce q' tu fais, *sa'klésto'kkan* ; on me donne gratuitement, *nemégatsés-sšámeghé*.

GARÇON, *sskins*, dimin. *sskinssis* ; je suis un garçon, *nsskinsssissši* ; orbus patre v. matre, *kiabes*, dimin. *kiabimis* ; non marié, *kikañbé*.

[GARGARISER.]

Je gargarise, *nekesesedsna*.

[268, 269.]

[GÂTER.]

Je gâte ma robe, v. g., v. &c., *métassesskšé'ree* v. *tetaraghi'rré nedassé* ; cela est gâté, corrompu, v. g. viande, &c. ; elle sent, *arikkañ*, sub. *érkañghi* ; *arikañk* *arikañgak* *añmptgšak*, les outardes s't [sont] gâtées, &c.

Cela est gâté, *anahšé*, v. *šéghitañsšé* ; qu'on n'y fasse plus, rien qui le gâte, v. g. la barq, *meusak séghits'kits charspé-srags* ; *pesâisen*, cela ē [est] gâté, cette viande ē [est] corrompue ; *nepesaimerañdamen*, je sens qu'elle ē [est] gâtée ; *nšékarokké*, j'ai gâté q'q' [quelque] chose q' je voulois faire, v. qui s'est rompue par ma faute, &c.

[GAUCHE.]

Je me sers de ma main gauche, seu, j'ai une main gauche, *neda'pañtsi*, 3. *pañtss* ; de ma main droite, *nedarenakâisi* ; assoi-toi à ma gauche, *pañtsisi aragšisi api*.

[GELER.]

Je suis gelé de froid, *pi'ta nedañbedatsi nekisátsi* ; j'en suis tout roide, *nedagšátsi* ; je suis gelé en q'q' [quelque] partie de mon corps, il y a ampoullé, *nšégátsi* ; je le suis un peu, *netsirátsi*.

J'ai les doigts gelés, *nebabšgótsi* ; le né [nez], *nedagšatsitanitsi*, *nedañbedasskitanétsi* ; le visage, *nedañbedasskigšétsi* ; les oreilles, *nedañbedaskitasagšétsi* ; cela est gelé, figé, *tagšaden*, nob. *tagšatsš* ; la

rivière l'est, *kebadcn, kisaden*; elle ne l'est pas, *m̄da* [*mānda*] *kebadensi*; il est tout à fait gelé, *tsitsamāden*; *kasadcn, kasadensr, kasadensgak*, les blés sont gelés; de nobili, *kasatss*, pls. *tsšak, tssgak*.

## [GÉMIR.]

Je gémiss, *nekesšapañsi*; — après elle, v. g. un enfant après sa mère, *illius desid-erio teneor*, apud illum gemo, *nekesšapañss' tasan̄*.

**GENDRE** (vid. Parens); mon gendre, *nedarsseks*; je suis son gendre, *nesirss*; je viens être son gendre, *nenañtsestremāñ*.

## [GENOU.]

Je suis à genou, *nedatsitgšakégāñbasi*; je m'y mets, *nedatsitgšakébi*.

## [GÎTE.]

[270, 271.] Le gîte de l'original, v. &c., *mss akašdi*.

**GLACE**, *peksām*; sur la glace, *pkšamik*; il y en a, *pkšāñnisio*, v. *mšo*; la rivière en est couverte, *pešaniarsks pksam sipšk*; la glace rompt, *pešigheregširre pksām*; la glace se fond dans la chaudière, *peksām, nskebéss, métbéss*, elle ē [est] fondue; *sskisaden*, il gèle, seu, la première glace qui se forme, qui n'est pas forte; je perce la glace, *nedašhebé*; j'y fais un trou p'r tuer le castor, *nepekšamaha*; je marche sur la glace de la rivière, *nebemkširra*, v. *nebemkši*; *nesenstksira*, je vais, &c.; le long de la glace, *senstksāñmé*; la glace est forte p'r porter, *sañgrāden*; les glaces fondent, s'en vont dans la rivière, *pemeregšitāñ*; à la fonte des glaces, &c., *pemeregšitāghé*; elle s'en va, *pemeregšitāñ*; le bord de la rivière est glacé, *assebaskšaten*; les ho'es s't [hommes sont] arrêté par les glaces, *kesāñdercksgskarenañbak*; *nekesāñderckšgs*, pls. *gēbena, pekšdami*, v. *ar*, je suis arrêté par les glaces; il s'est perdu aiant enfoncé dans les glaces, *agšitsina é'to*; peu s'en est fallu q' je ne me sois enfoncé, &c., *érsé neda-kšitsin*; je glisse marchant sur la glace, v. *nszassām*; la glace est extremem't glissante, *sasassé*; cela a glissé du haut

en bas v. d'un lieu un peu élevé, *atabi-ré*.

## [GLAND.]

Glan, *aneskemen, nar*.

Je casse des glands, *nepokañdam*; étant cassé, je les trie, *nepškšanskéghé*, v. *nesiñ kañmar srir*; on les trie, &c., *kšāñkšéañssar*.

## [GLISSER.]

Je t'be [tombe] en glissant, le pié m'a manqué, *nssasitékkan*; je le fais glisser t'ber [tomber], *nssasitékkan*; je glisse sur la glace, *nedaskéhipssi*, 3. *skéhipss*; cela est glissant, bien poli, *sasassé*; *sasasépsdañss*, on le frotte qu'il soit glissant, bien poli; le chemin est glissant, sur la glace, *sasasserēgšé añšdi*, v. *sasassé*; ce sac, paquet, &c. est glissé de dessus l'autre, &c., *atebi-ré*.

## [GLOIRE, GLORIEUX.]

Je suis glorieux, *nebañredsn*, v. *nebarañbañ*. J'ai des pensée de gloire, &c., *nebañrañbañ-téhañmesi*; je me glorifie de cela, *nebañrañbañtsu*.

**GLUANT**, *pesagšé*, nob. *pesagšiss*.

**GOUFFRE**, naturellement fait, &c., *tasakamik*; j'y t'be [tombe], *nepeni-ra*; *peksakamik*, le gouffre, trou q' les hommes font.

**GOUME** [Gomme], *peks*; il y en a, *peksio*; je l'ôte de l'arbre, *nemanikšé*.

## [GOURMAND.]

Je suis gourmand, *nšighišripī*, *neda'si'pi*, v. *nemétañtisiri'pi*; je cherche les bons morceaux, *si'ké*, v. g., &c.

## [GOÛT.]

Cela a bon goût, *sripšgšat*; mauvais goût, [272, 273.] *matsipšgšat*; cela a le goût du pain, *abaññimañgšat*; je le prens en goûtant, *nenitštamen*; je goûte p'r voir s'il est bon, *nekstadāmen* v. *nekstsi'tamen*, v. *nekstsi'tsu*, nob. *nekstsi'pañ*; j'y trouve bien du goût, je prens plaisir, &c., *nšigatamen aksbi*, v. g. v. *nšighessemi*; je trouve en cela le goût du sucre, *nessgari'tamen* \*;

[\* *Quære*, if not from the English word *sugar*?  
EDIT.]



je le trouve d'un autre goût, . . . 3. *sder*, v. *nepirši'tamen*, 3. *pir*.  
 Je le trouve du goût de l'ours, *aséssüiañké nederítamen*.  
*Nederi'tamen*, je le trouve de ce goût-là.  
 Je goûte, tête, le manger, *nedaktsi'tamen*, nob. *nedaktsi'päñ*.  
*Nedaktsi'tamašain*, je lui donne le reste, &c.  
*Mda* [*maida*] *nesési'tamssn éripšgšak*, je ne sçai quel goût cela a, je suis enrumé, v. g. je ne goûte rien.  
*Nesési'tamen* v. *nens'tamen*, *éripšgšak*, je connois quel goût, &c.  
 [GOUVERNER.]  
 Je gouverne, *netebérghé* v. *netebérdam*; cela, *netebérdamen*; lui, *netebérmañ*, &c.  
*Mda* [*maida*] *netebérdamañghésn*, je ne suis gouverné de personne p'r cela, il est à moi, &c.  
 [GRÂCE.]  
 De grâce attens, *pera menni*.  
 [GRAFIGNER.]  
 Je le grafine avec ongles, par le corps, *nemétsikasañnañ* v. *nemétsikasañbeñ*; *nemétsipasañbehsgs*, il me, &c.  
 Je le grafine au visage, *nepesagigšénañ*.  
 GRAI, pierre à aiguiser, *ki'tadañgan*.  
 [GRAND.]  
 Je suis grand, *nemeseghir*, 3. *mešeghir*, 3. pls. *meseghirsk*, *rsbanik*, sub. *méseghirek*, *reghé*, *mémeseghirsh sdit*, *meseghirshsdidé*, &c.  
 Je suis aussi g'd q' [grand que] cela, *netétebákssin is*.  
*Tsañsekkéssañkao késseta erghikksk*, *ki*, *ni éreghirek kizss*, le soleil est . . . . . g'd [grand] comme la terre. [Vid. infra, p. 275, v. Grand.]  
 GRAIN, graines, *skaniminar*.  
 GRENIER, *spemsagsk*.  
 GRAISSE, *pemi*; de moëlle, *šin*; d'ours, *aséssššipemi*; d'original, *mysipemi*; de loup marin, *akikšipemi*; viande grasse, seu, il n'y q' de la graisse, *si'ké*; la bête est grasse, *si'kašio*; — maigre, *pängšésags* v. *kakésags*; je la coupe

en morceaux p'r la fondre, *nesešssemen*, nob. *nesešssañ*; je la fais fondre, *nesarsipemé*; fais-la fondre, *sarsipemé*; étant fondue, je la lève de dessus l'eau, *nepemi'ké*; on la tire, *pemikan*; je la mets dans une vessie, *nepitsipemé*; je graisse cela, je l'engraisse, *nepemšittsn*, nob. *nemsihaiñ*, in corpore, *nemsinañ*, in capite, manu; je me graisse la tête, *nemsisi*; à lui, manu, *nemsinañ*; je graisse v. g. souliers, &c., *nemšéghihémen*; graisse-les, *mšéghihé*.

[GRAISSER.]

Je me graisse, je gâte mes habits v. g. par la graisse, *nepemihssi*.

Je me graisse le corps v. g., *nemšihssi*.

[Page 274 of the MS. is blank.]

Je me graisse les mains, *nemširetséssi*. [275.]  
 J'ai les mains grasses, *nepemširetsa*, 3. *pemiširetsé*.

On graisse v. il faut graisser v. g. les souliers, *mšéghiañssar*; je le dégraisse, *nekasipemékámen*. [Vide supra, v. Dégraisser.]  
 On engraisse la terre par fumier, &c. *pakkikañ*; je l'engraisse, *nedapšiké*.

[GRAS.]

L'original v. n. &c., est gras, *si'kaš*; maigre, *añrašss*.

Je suis gras, *nsi'kañ*, 3. *si'kaš*; je suis maigre, *nedañrahšsi*.

Je suis difforme tant je suis gras, *nepiršigañmi*, 3. *pir*.

[GRAND.]

Je suis grand, *neksná'kssi*; cela l'est, *messeghikškn*.

Cet ho'e [homme] est grand, *messeghir arcnañbé*.

Je le fais plus grand, *nemeseghiksi'tsn*.

[Vide supra, p. 272, v. Grand.]

[Graton. Vide infra.]

[GRATTER.]

Je me gratte, au corps, *netsitsighénesi*; la tête, *netsitsigandebénesi*.

Je gratte, *netsitsighi*.

Je me gratte où il me démange, *neketseka-*

*madamen nhagé ketsekamadañss ; par tout le corps, tsitsigsam.*

Je m'y gratte, *neketekikasamnesi.*

GRATON, *siksébété, -ttéghir.*

GRATTE, instrument à gratter les peaux, *kakhigan.*

[GRATUITEMENT.]

Je lui donne gratuitement, *nepisimi'rañ.*

[GRAVER.]

Je grave sur du bois, *nederak'ssighé ;* sur de l'écorce, seu, je grave en figure, *nederiks-highé.*

[GRÊLER. Vid. infra.]

GRÈVE, bord en deça du fleuve, *sitemek ;* j'en viens, *sitemeghé, nsm, v. nsdssé.*

[Vid. infra, p. 277, v. Grève.]

GRÊLER.]

Il grêle, *si'ksrâi ;* s'il grêle, je demeure ; *si'ksrâ'ghé nedâpi.*

Les blés s't [sont] grêlés, *sksskibaghitékaménégar si'ksrâi skamsnégar.*

Les grains de grêlé, *pegsan, pls. pekšamak.*

[276, 277.] GRÉLOT, sauvage v. François, *éssabañsanépsdék, pl. -psdégbir.*

GRENOUILLE, *tsegšures sak.*

GRÈVE, *sitemek sitemeghé,* j'y vais *nema-taibé.*

GRIL, *abeméksaigan.*

Gril de bois sur lequel on fait sécher les huitres, poissons, *kesá'sam, pl. nak.*

[GRILLER.]

Je grille, v. g. un anguille, viande, *nepesa-kgsabam.*

Je grille de la viande sans broche, *nedabé-sam.*

Je fais griller le poil de la bête, *netsákesam.*

Je fais griller un poisson frais, *nedabanési, v. nedabam v. nedapsi ;* un sec, *nedabagšamási.*

Je fais griller du blé d'Inde, *nedabimisi ;* de la chair, *nedabésasi.*

[GRIMACES.]

Je fais des grimaces, *nemañmaskigšétassi.*

[GRIMPER.]

Je grimpe à un arbre, *nederandásé ;* vite,

*nederandásé'rra ;* l'ours y grimpe, *arañdasé aséssss.*

[GRINCER.]

Je grince les dents, *netsi'tamañbidési.*

[GRONDER.]

Je gronde, suis fâché, *nemssksérdam ;* je le, *nemssksérmañ.*

[GROS.]

Cela est gros, v. g. bois, *mesakšat, sub. mé-sakšak mésakské ;* *sdamañ mesakss, le* petun est gros ; grosse antre de rocher, *arañmapesks.*

Comme s't [sont] grosses v. g. les *penak, tañnenasa sdereghireñ,* in sing. *tañnenasa sdereghiren,* ignob. in sing. *tañnenasa arighen.*

Il est gros comme un tourte, *présghé érgbirsk.*

*Isba arghiksghé,* si on m'en donnoit v. g. gros co'e [comme] cela.

Gros, *mesakšat, nob. mesákss, v. meségs ;* petit, *piségs ;* cette femme est grosse, prête d'accoucher, *messigañgu, 1<sup>a</sup>. nemeskañgs ;* je suis grosse, ait, *nepikkañga ;* *nedarenskke,* hominem in ventre habeo ; habeo fluxum menstruum, *netsepighé.*

[GROSSIÈREMENT.]

Je fais cela grossièrement, *mañmañgšisi nederi'tsn v. nemañmañgšit'sn ;* à lui, *nemañmañgšihaiñ ;* lui parlant, *nemañmañgšimañ.*

GRUE, *tarégan, tarégañk.*

[GUÉRIR.]

Je suis guéri, *nedé'ksamaresi ;* *nsrañbé'tte-rañ,* je le soulage, il profite de la médecine v. prière.

Je le guéri, *nsrañbési'çaiñ.*

[Pages 278 and 279 of the MS. are blank.]

[GUÉ.]

Je passe la rivière au guet, *nébi'kagañsghé,* [280, 281.] *kisipukagañssghédé.*

[GUERRE.]

La guerre, *mattanbeks ;* je vais en guerre p'r avoir terre, ville, argent, &c., *nenspé-sssékadamen ;* je vais en guerre, *nenspé-sssé ;* j'en reviens, *nedañbinspéssé ;* contre lui, *nenañkásam, v. nekadsnarañ, 3. snañs ;*

- je fais la chaud. [chaudière] de guerre, *nesa'kkara*, 3. *skáre*; qui est-ce q. [qui] fait la chaud. de guerre? *asenni é'to sé'karañt?*
- Je le veux défaire, prendre l'ennemi, &c., *nekadsnarañ v. nenañskasañ*; les guériers, *mattañbégši-arcnañbak*; je le suis, *nematañbégši-arenañbai*; j'entens bien à faire la guerre, *nenitasatañbékské*.
- Nenañtemassibena*, nous allons p'r les secourir, &c.; ils, *nañtmassšak*.
- La guerre nous mange, nous défait, *nemshsgšna mattañbéks*.

[GUEUX.]

Je suis gucux, misérab., *neketemañghesessi*.

## H.

## [HABILLER, DESHABILLER.]

[282 383.]

Je m'habille, *nsresshssi v. nsrékresin*, 3. *srékresin*.*Nedaneskanakkañ*, je mets ma robe, couverture intérieure, ait mulier.Je me déshabille, j'ôte tous mes habits p'r dormir, *neχéssébags'sin*, v. *nedañbiasi*.Je suis habillé de noir, *nemikazéssésé*, 3. *mkaž*; de blanc, *nsañbégnaham*; de rouge, *nemskšégnaham*; de jaune, *nsisañsignaham*.Je fais un habit, une robe, . . . . , *nedap-skšanasé'ké*. Vid. Robe.Je suis habillé logèrem't, c'est p'r cela q' j'ai froid, *nekesinátsi*.Ils vont là habillés co'e [comme] les morts, *nemañ sdañmañ mamétsinétsik araséséhédit érsésétsik*.Je suis habillé, mais je ne suis point ceinturé, *nesésébágssin*.*Nekesinerdam*, je ne suis point joieux à c'se [cause] du mauvais toms qu'il fait, seu, ce mauvais jour me rend chāgrin, &c.

## [HABLER.]

Je parle, *nepissañtsemi*, 3. *pis*.HACHE, *temahigan*; \* ma hache, *netemahigan*, 3. *st*.Je n'en ai point, *māda* [mānda] *nstemahiganisi*.

[\* In the Delaware language, *tamahican*; in Mohogan, *tmuhagan*; and hence in English, *tomahawk*. EDIT.]

Je la casse, ébrèche *nšéktéstsn*; *asenni šé-ktañgšssa séghétemahigané?* qu'il'a rompue? Elle est cassée, *sé'téssen*; par le milieu, *pssketéssen*.Je l'emmanche, *nenassákšadsn v. nssidakšskkañ v. pekagañsi*.Je la démanche, *neketsésitakšéhadsn v. neketesida kšéstsn*.

## [HACHER.]

Je la hache, mets en pièce, *nesesegssketéhemen*; de la chair, *nesegsskésa'ktéhemen v. nskkésaghitéhemen*; *nesegssemen*, 3. *sseg.*, je hache viande, &c., nob. *neségssañ*, 3. *ss*.

## [HAINE.]

Je lui donne, inspire, de la haine de sa coutume, *netesérdamasañ érkamighesit*.Je lui en inspire p'r son idole, v. g., *netesérdamasañnar*, &c.Je donne, inspire de la haine, *netesérdamasi*.

## [HAÏR.]

Je le hais, *netsibaghitéhañdamen*; lui, *netsibaghitéhañmañ*, *netesérdamen v. nematsérdamen*; lui, *netesérmañ*.HALEINE à percer, *tsaŋgañ v. megss*.

## [HALENER.]

Je halaine sur lui, en lui batisant, v. g., *nertésémštasañ*.HAMEÇON, *mkikan*, v. *tasapénigan*.

## [HARANGUER.]

Je harangue dans le conseil, dans le festin, [284, 285.] je suis entendu de loin, *nspétañgssi*, 3. *sapétañgsss*.Parle harangue, in imperat., *sapétañgssi*.



Je ne sçais pas haranguer, *m̄da* [*mānda*] *ne-ni'tānsisapétaṅssi*.

Je harangue marchant dans le village, *nepc-metāṅssi*.

*Tsibaghitéhési nangs eritéhansit herode san-kasi métsinéhedits messisi asansisak nisi-gaden stsi erenanbaitsik niksambi ari neba setsi kiradén'ret, &c., mssak tegné pezeks kstsetéhakéks temitéhks tzatsébessks pe-si'ktéhks nega tanne kirsansa erihegs, sa tami nrsk̄s nenémañ.*

HAUT, *spemek*; je le mets, attache haut, *nedé'zsd̄n*, nob. *nedé'zsrāñ*.

Je le lève, le mets plus haut, *nedaspigsne-men*, nob. *nedaspigsnañ*.

Tire-toi en haut, dit-on à un qui est couché, *spigssi* v. *sin*, v. *spesin*, 1<sup>a</sup> *nedespesin*, 1<sup>a</sup> *nedaspigssi*.

La poisson, v. g., s'élève en haut p'r prendre l'air, sortant de l'eau, *ékcdas*.

Cette pierre v. g. qu'on jette va trop haut, *ssañmi-spi'ré*.

La cabane est haute, *spigain̄s*; voilà de c'bien [combien], *ni éspigain̄nik*; basse, *tassigain̄s*; voilà de c'bien [combien], *spigain̄nitsga, ni tépsigain̄nik, ni tabassigain̄nits*; elle est basse, *tsatsighen*.

Il faut qu'il soit haut v. g. ce bois qu'on veut faire en arc en haut, v. g. ], *msspāṅghenañss, spaṅghenañss*; bas, *tabassaṅghenañss*.

[HAUTEUR.]

Quelle hauteur doit-il avoir? *tañni spaṅghenañss? ni spaṅghenañsik*, voilà de quelle hauteur.

HÉLAS, *sé'kénaṅgs* v. *agaie, aghé, aghia*, &c.; diverso modo usurpatur.

*Nesé'kaerdam*, je dis hélas; on le dit, *sé'kaerdāñss*.

*Nesé'kaermañ*, je dis hélas sur lui, touchant sa p'sõe [personne].

Hélas, *aghè, agaie, aghia*, &c., termes de plaintes, souffrances.

*Nedaghihāñmi*, je dis *aghé*.

*Nesisaérmi*, je crie, je crains quelq' malheur,

disgrace, accident, &c; *sisaérms*, di'r [dicitur] etiam de ægroto.

*Éksisisaérm̄n pera*, dit-on à un qui a faim seu cesse d'avoir faim.

*Maghisisaérm̄rna*, dit-on à une qui d'de [demande] de la viande, v. g. au retour de q'qu'un [quelqu'un] de la chasse.

HERBES, *meski'ksar*; le lieu où il y en a, *meski'ks* v. *meskiki'si'ks*.

Je l'arrache du champ, *nemaséskenighé*.

Je la coupe, *nemanéskikisé*.

Je mets le feu, *netsakesañsé, netsakesemen*.

L'herbe pousse, *sañskat*.

Elle est à la moitié de ce qu'elle doit être, *néran̄sskat*.

Elle est à sa hauteur, *sénmskat*.

Il y a des herbes v. g. dans mon champs, *sanasksé*.

Il y en a dans les champs, *sanaskségar kikkain̄nar sénéskséghir kikkain̄nar sritshs-dits*.

[HÉRISSEUR.]

Le poil du chien est hérissé, *si'taghi'rré*, ē di'r de ho'e [etiam dicitur de homine.]

[HÉRITIER.]

Je le fais héritier de tout ce q' j'ai, *nemirañ-négar nematsesssmegar*.

[HEUREUX.]

Je suis heureux, je vis bien, rien ne me manq', *nsriarenañbaï*.

[HEURTER.]

Je heurte contre une pierre, *nssasapskaham*; à la porte, *neda'sabessaghité'hemen*; di'r [dicitur] etiam de aliis.

[HIDEUX.]

Cela est hideux, *tsibaghināṅgat, gsss*.

[286, 287.]

Je le suis, *nctsiaghinañgssi*.

[HIDROPIQUE.]

Je suis hidropique, *nepessañbé, nedepessa-nebañ eto sssegšinaṅgan*.

HIER, *srañgsé*. Vide Tems.

[HIPOCRITE.]

Je suis hipocrite, *ketzasai nepanba'tam*, v. *nsskitsipañba'tam*.

HISTOIRE, *nāñnegañnaitsemaṅgan*.

## [HIVER.]

L'hiver où l'on est, *pebsn* ; le passé, *pebsné* ; le prochain, *pebsghé* ; le milieu lorsqu'on y est, *nañsipsn* ; il est bien rude, *akSi'psn*, v. *tki'psn* ; il est doux, il n'est pas rude, *sdagani'psn*.

## [HIVERNER.]

J'hiverné avec lui, *nepebsnapinèna*.

Je demeurerai pendant l'hiver au village, *nepebsnabin sdénék*.

*Minasipsn*, c'est co'e [comme] un autre hivers en voiant néger, v. g. &c., v. *stsi-tasipsn*.

*Baiémipsn*, l'hivers dure long-tems, est bien prolongé.

HOMME, homo, *arenañbé*,\* *ak* ; vir, *séenañbé*, *ak*.

Je suis un homme sans aucun défaut, *nepék-kaiñbäi*.

Je n'ai point d'esp. [d'esprit], je ne sçai rien faire, travailler, ait vir, *nenanañbasaiñbäi* ; ait mulier, *nenanañbaseskšäi*. [Vid. supra, v. Esprit.]

Tu n'es pas un ho'e [homme], tu es une bête, *arenì asènni kia*.

Jeune homme non marié, *kigañbé* ; marié, *ketsdé*.

Un ho'e [homme] sans soucis q. [qui] ne se met en peine de rien, *pañgšì-arenañbé*.

Un homme marié, *ssirdam*. Vid. Marié.

Homme qui a 2 femmes v. femme q. [qui] a 2 maris, *niss'kasé*, 1<sup>a</sup> *nenis's'kasa*.

## [HONNEUR.]

## [HONORER.]

Je l'honore, *nekssitsn*, nob. *nekssihäi*.

Je suis digne d'hon. [honneur], *nekssihì-gssi*.

Je suis avec lui digne d'hon. [honneur], *nekssihigssmäi*.

Je je le crains, *nenañnekšitërmañ*.

[Page 288 of the MS. is blank.]

## [HONTEUX.]

[289.] Je suis honteux, *nedegatsi*, 3. *ag*.

—— de n'avoir rien a lui rendre, *nedagatsi, mda [mäüla] kégšì nañbi négssa*.

Je le hontoie, lui fais honte meo ex'plo [ex-emplo], *nedagatsihäi* ; tu me, *kekagatsihi*, &c. ; je te, *kedagatsihsr*, &c.

Je lui fais honte v'bis [verbis], *nedagatsimañ*, 3. *sdag*.

J'ai honte de cela, *nedagatsiketsn*, v. *nedagatssañdamen*.

Je n'ai point de honte, je ne me mets nullem't en peine de la honte qu'on me pourroit faire, *mda [mäüda] tégné nemsšgssn agatssañgan* ; du froid, *añbedatssañgan*.

## [HOQUET.]

J'ai le hoquet, *neghetépsri*.

Quand on ne l'a qu'une fois, di'r [dicitur] *neps'kšhada*.

Signe, dit-on, qu'on me donnera à manger, je le fais p'r lui afin qu'on lui donne à manger, *neps'kšahadasésañ*.

## [HORREUR.]

J'ai horreur de cela, *netsibaghitéhañ'damen* ; de lui, *-hañmäi*.

## [HORS. Vid. Dehors.]

HOUE, bêche, *arakéhigan*.

*Erighenba pétaséghé, kedrekéiganšair*, &c., vo' [vous] ferez bien d'apporter vos houes, &c.

HUILE, graisse, *pemi* ; j'huile, *nemšéghihghé*.

## [HUITRES.]

Des coquillages, *éssak*.

## [HUMIDE.]

Cela è [est] humide, *kakañmké* ; il ne l'est pas, *mda [mäüda] mssbékañmkési*, nob. *nekeséghisañ*.

Cela est est froid, *tekéghen* ; je le sèche, *nekesabéghisemen*.

## [HUMILIER.]

Je m'humilie, *nensdäéresi*, 3. *nsd*.

## [HURLER.]

Le loup v. le chien hurle, *tarakšéss, sghiké, sghirañ asennir*.

[Pages 290, 291, and 292 of the MS. are blank.]

[\* In the Delaware language *lenápe*? EDIT.]

## I, J.

## [JALOUSIE.]

[293.] J'ai des pensées de jalousie, *nedaskasété-hänsi*.

JAMAIS, *mändahatsi*.

## [JAMBE.]

Ma jambe, *üekaüt*, 3. *skaüt*. Vide les parties du Corps [p. 133.]; je me la suis rompue, *gaändétéssin*; je l'ai enflée, *nemagšigända*.

## [JAPPER.]

Le chien jappe, *tarokkšéss*, v. etiam *zaska-déms*.

JARDIN, *ki'kañu*, *sda'ki'kañn* v. *nebizsnki'kañn*.

Jarretière, *kikanañbi*, ar; de porc-épi, *kañsiañbikikanañbi*; je la lie, *nekikiganañbisi*; je la délie, *nedaampkšiadšnar nekikiganañbiar*.

ŒUX, *tsisegsr*, in sing. *tsisegs*; mes yeux, *netsisegsr*.

J'ai de bons yeux, *nšäšraüraghigša*.

Je les ai mauvais, *nemamatsaüraghigša*, v. *nesasinigša*.

Je les ai rouges, *megšiketsé'rar netsisegsr*.

J'y ai mal, ils me cuisent, *nepspskigséné*.

Q'q' ch. [quelque chose] y est entré, *nebesri*, 3. *besrirs*.

J'y ai q'q' [quelque] saleté au coin, *nemameršigša*; qui a de petits yeux, *babisäüraghiks*; eux, *bébisäüraghikšañtsik*, 1<sup>a</sup> *nebatisäüraghikša*; j'en ai de g'ds [grands], *nemañmesaüraghigša*.

[294, 295.] Je eligne les yeux, *nepseghigšéasi*.

Je les ouvre, *nepeskšadasañbi*, 3. *bes.*; je les ferme, *nebeskigšési*.

Je les lui arrache, *nepskaüraghikšénañ*, v. *neghédäürakigšéhañ*.

J'ai les yeux sur lui, je ne le perds point de vue, *nenénasañbamañ*.

Je lui verse d'une liqueur, v. g. dans les yeux p'r les guérir, *nessgnigšesañ*; je te, *kessgnigšésr*.

J'essaie souliers, bas, je les mets p'r voir s'ils sont bien, *nekstkámen*; item, justau-

corps, robe, item justaucorps, robe, chemise, *nekstagšín* v. *nekstsiagšín*; chemise, *nekstagšín* v. *nekstkasánn*, *nekstsiagšín*.

## [JETER.]

Je jette de l'eau, j'asperge, sur cela, *nederebéghiadsn*; sur lui, *nederebéghiadasañ*.

L'asperger, v. g., *arebéghiadigan*.

Je le jette, *nederakkañ*, di'r [dicitur] de nob. et ig.

— du haut en bas, *nepenakañn* v. *nenesakkañ*; du bas-en haut, *nedasbigšakaañ*.

Je le jette dans l'eau, *netsašpakkañ* v. *netsa'pakkañ*.

Je me jette du haut en bas, *nepenikedañ*, 3. *penikedas*.

Je lui jette de l'eau t'bent [tombant] en foiblesse, *nedakakssímañ*.

Je me jette, rue sur lui, *nekširdasañ*; lui sur moi, *nekširdañgsn*.

Je lui jette q'q' ch. [quelque chose], *nedera'késánn*.

Je le jette au feu, *neketesénemen*.

Jette-moi cela, *nañsdakési*.

Je jette l'eau depuis le canot, *nessinebékkamen*, v. *neda'šigánn*, celle qui est dans le canot.

Je la rejette de ma bouche, *nessgarátamen*.

Je jette cela en versant v. g. l'eau d'une chaudière, &c., *nesskahadsn*, nob. *nesskaharañ*.

Il se jette dans l'eau, *ni stsapitéssinen*.

Je le jette contre lui, *nederakkañ*.

Je le jette par terre (de ignob. et nob.), *nekiba'kañn*, pls. *nekiba'kañmak*.

Je le jette c'tre q'q' [contre quelque] chose, illum allido, *nekšasksté'símañ*.

Je le jette au feu, *neketsénañ*, ig. *neketsénemen*.

Je le jette dans l'eau, *netsa'pakkañn*, nob. *netsa'pakkañrañ*.

Je me jette du haut en bas, je me fais t'ber [tomber], *nepenikedañ* v. *nnesikdañ*.



*Ksäsakkaäu is, ksäsakkaäna, 1<sup>a</sup> nekšäi-sakkaän*, on le jette à la voirie, abandonne, &c.

[JEUNE.]

Mes jeunes gens, *nsskinsssemak*.

[JEÛNER.]

Je jeûne, *nemanssékäisi, 3. man.*

Voilà c'bien [combien] de tems j'ai jeûné, *ni k'ëssgnearamia*.

À peine ai je pu venir, tant j'ai jeûné, *askaätsi nepetarami*.

ÎLE, *insula, menahan*; dans l'île, *menahansk*.

*Métnaghéghé, sigšak, sa ari métnaghéghé*, ils st [sont] cabanés au bord de l'île en long. *Assamenaghisi* d'autres demeurent aussi à mes côté dans l'île où je demeure.

Ceux qui demeurent dans cette île, où je demeure, et demeurent à un bout de l'île directem't opposé où je demeure, di'r [dicitur] ils demeurent, *asassenaghé*; di'r t'tum [dicitur tantum] de la largeur, seu, qui demeure sur la largeur vis-à-vis, *asassenaghisi*.

Presqu'île, seu, la terre de la presqu'île, *ksäsäsaäms*; ils demeurent là, *asighinaän kšésäsaäümék* v. *kšésäsiék*.

*Anaskšäaäüméki*, au bout de la presqu'île, v. *sanaskšäaäümék*.

IMAGE, *asi žigan*.

[IMAGINER.]

Je m' imagine, je pense, *nederitéhäsi*.

[IMMENSE.]

Je suis immense, par tout, *netémesäibi, 3. tem*.

[IMITER.]

Je l' imite, je fais ce qu'il fait, &c., *nesi<sup>c</sup>tsi-remmäi*.

*Kégs stsi sitsi<sup>c</sup>remmat sghik ézsghitsik*, ou p'r le vol ou péché, &c. [Vid. infra, p. 297.]

[Page 296 of the MS. is blank.]

[297.] *Nederasaän*, je lui ressemble.

[INCITER.]

Je l' incite à condescendre à mon inclina'on,

v. in bonam v. in malam partem, je fais tant par mes importunités *q' &c.*, *neghë-sps<sup>c</sup>kaharaän*. [Vide infra, p. 299.]

JEU, *änmkaän*; j'y suis addonné, *nekañghé-gaämké*. Vid. Je Joue.

[IMITER.]

Je l' imite, je le regarde p'r faire co'e [comme] lui, *nekikinasäibamaän*. [Vide supra, p. 295.]

[IMPLORER.]

Je l' implore, *nesi<sup>c</sup>sinsémaän*; pour qq'un, [quelqu'un] *nesisiusaässsäi*; p'r moi, *nesi<sup>c</sup>sinsäüsséhssi*.

J' implore avec instance, *nesaükstâisinsäisi*. J' implore Jésus avec t'te [toute] l' instance possib., *nesaükstâisinsäisi Jessssek* v. *Jesssghé*.

[IMPORTANT.]

Il est important *q'* je parle, j'ai *q'* ch. [quelque chose] à dire de c'sq' nce [conséquence], *nesaaghiketsaägané*; il est important, *saaghébat*.

[IMPORTER.]

Il n' importe, *negadähari, v. minagsba*.

[IMPORTUNER, IMPORTUN.]

Je l' importune le visitant trop souvent, *nemaanihäi*; il, *nemaaniheks*.

Je m' enfuis me voiant trop importuné, *neksäüssrše, v. nksäsi*.

Je lui suis importun, je l' afflige, le tourmente, par les visites, *nsnemihäi, nsdami-meghe*.

Il est importun, il court les cab. p'r [cabanes pour] avoir à manger, non t'n [tamen] ipsi datur, *manihšé*.

Il m' importune venant bis [?] dans ma cab. p'r [cabane pour] avoir à manger, &c., *mneäaniheks*.

Je suis importun par mes visites, *nsigsdäi, 3. sigsdas*.

[IMPOSSIBLE.]

Cela paroît impossible, infaisable, &c., *naskaäntéhaämegšat* v. *naskaänaängšat* v. *naskaähérmegšat*, v. *penérdaminaängšat, nenaskaähérdamen*.

## [IMPRIMER.]

J'imprime une chose sur un autre, *nedasi'-xámen*.

## [IMPROVISTE.]

Je le prens, je vas à lui à l'improviste, *nekimeskásañ*, v. g. les . . . . .

## [IMPUTER.]

[298, 299.] Je lui impute *q'q'* [quelque] faute, *nepisši-mañ*.

## [INCARNER.]

Jésus s'est incarné, s'est fait *hō'e* [homme] dans le sein de Marie, *Jesss arenäübañhs-ssssa sdaramhaghékdari Marie*.

INCESSAM'T [Incessamment], *sänghé'ga*.  
Je parle incessam't, *nekañghékdské*.

## [INCITER.]

Je l'incite; vid. anteriorem pag. [p. 297.]

## [INDIGNE.]

Je me crois indigne, *nensdañéresi*.

## [INFORMER.]

Je m'informe, *nekšaksétsimskké*; de lui, *nekšaksétsimšrañ*; je rapporte ce *q'* j'ai appris, *nedainkasäntšeni*, 3. *añ*.

## [INTERPRÈTE.]

Tu me serviras d'interprete p'r parler à N., tu lui diras ce *q'* je te dirai, *kenäüberstasi-tsi ghersršghé N.*, *ési kedañdökkésañ*, 1<sup>a</sup>. *nedainkasäñdökkésañ*.

Tu me serviras d'interpr., tu parleras p'r moi, *kegherssitamasésitsi*.

D'de [demande] lui, v. g. s'il a été batisé, *kšakkétsimsre kisi ssgnebañssssac'to*.

J'interprete la lettre, v. g. *nedainkasäñdokkañdamen*.

## [INTERROGER.]

J'interroge, *nekšaksétsimskké*; je l'interroge, *nekšaksétsimšrañ*.

## [INTERROMPRE.]

Je l'interromps parlant, *nsñibirañ*, *nsñimañ* v. *nsntémañ*. Vid. Part. *Pemetsinisi*.

## [INSTRUIRE.]

J'instruis *q'q'* un [quelqu'un], *nekakékimañ*, - &c. Vid. Je l'enseigne.

Jésus a le p'r [premier] instruit ses apôtres à prier, *Jesss akakékimañsaani*, *tami sdokkana paibatam stsi* v. *pañbatam*.

## [INTENTION.]

Quelle est ton intention lors<sup>q'</sup> tu fais cela, p'r qui le fais-tu? *kégssnasa kederitéhañsi érokkani*, *aséñni é'to érokkésat?*

## [INVENTER.]

J'ai inventé cela, je suis le p'r [premier], &c., *nemi'kasitéhañdamen*, 3. *amik*.

## [INUTILE.]

Je le rends inutile, je pare le coup, *nedanatšn*, *nšikšitéhañdamen*, *nšikšéremañ*.

## [INVOQUER.]

Je l'appelle dans mon cœur, je le . . . . , *nederermañ amañté baañt*.

[JEU. Vid. supra, p. 297.]

## [JONGLERIE.]

Les espèces de jongleries; —

*Metesrensangan basénardsangan*, le jongleur qui tué *q'q'* un [quelqu'un], *basibscsangan basi handé aschannsar aregssangan namikande asenni aschandsar tebeskssidé et kitasande*, &c.

*Šimansin* v. *simanssšin*, v. *simanssangan*. Vid. inferiüs. *Štsipéde simansšdin*.

*Ksranssangan arerdaghe amesihsgr ksranssar ara asansisar nemihanritsir setsi māda* [mañda] *neratebiks*.

*Ksssigann*, le feu fausses observa'ons de futuro; *masinebissnar*, in distans.

*Ksssitangan*, v. *ksssitanganikann*, ne manger de certaines de peur de porter malheur, item, les os d'un castor pris à l'atrape; on ne donne point les os aux chiens, *mesittann*, *kegs stsi mesitasian samade sigsadsr aremss*.

*Pissikssihscsangan*, idolatrie, *amesihsgsr*, &c.

*Metesi siphamasangan*, v. *siphamassangan*, sacrifice p'r avoir bonace, &c.

*Ansimessangan*, *ansimeside kadasinede ansi-mansaane meghireté ni setsi metsinet*, v. *stšibaahsregsr meghiretsir setsi kadsnet ansihdsangan*.

*Amattamsangan*, sentir sur soi-même, *netsi-ramadāma kemetsinebena*, &c., *kakerhamañ sadsangan*, *nekakerhamangs manman-*

*tsaranghe sresangan*. [Vide Jongleur, p. 301.]

*Nedaimérmaï*, je le pense de lui.

*Nedaimiman*, je lui dis, je ne ferai pas ce q<sup>e</sup> tu fais.

*Nipskansdesangan snipskimanr nanksksar* novit illam ut impotentem, &c.

[JOIE, JOYEUX.]

[300, 301.] Je suis joyeux, *nšiagaiñbaï*, *nšighérdam* (de viro), *nsiakksäi* (de muliere).

Je suis joyeux, *nšiagakké*.

J'ai des pensées de joie, *nšiaghitéhañsi*.

Je suis entendu, je fais paroître une g<sup>r</sup>de [grande] joie, *nšēštaiñssi*.

J'ai une très grande joie, *neksa<sup>r</sup>rirasémañ*, j'ai une grande peur, . . . .

Je cause de la joie à cela, *nesañsiaghi<sup>t</sup>tsn*; à lui, *nesañsiaghi<sup>t</sup>tavañ*.

Je lui dis des ch. q. [choses qui] remplissent son cœur de joie, *nepessanšrirasémañ*; usitatus, *nsrirasémañ*.

Je marq<sup>e</sup> sur mon visage ma joie, *nedaramigšé<sup>r</sup>rá*, 3. *aram*.

*Nedaramigšáharañ*, je lui fais un bon visage p<sup>r</sup> le remercier, v. g. de ce qu'il me donne à manger.

*Neksa<sup>r</sup>rirasémeghébena éri n<sup>r</sup>rañt ersé kemitañgssena*, on no<sup>t</sup> [nous] a avertis, &c., no<sup>t</sup> [nous] n'aurions pas pensée à cela.

*Neksa<sup>r</sup>rirasémañ*, je lui raconte une chose qui lui c<sup>'</sup>se [cause] de la joie v. douleur.

*Nedé<sup>k</sup>ksisés<sup>k</sup>ké*, je cesse p<sup>r</sup> ainsi dire d'avoir de l'esprit voiant la p<sup>'</sup>so'e [personne] q<sup>e</sup> je desirois passionném<sup>'</sup>t voir.

[JOINDRE.]

Je le joins en chemin, *nedatemi<sup>t</sup>ksañ*.

Je joins une chose à une autre, *nepébagadsnemen*.

Je joins les mains, *nedakšivetsési*, v. *nebébagadsnemenar neretsiar*.

Je joins 2 écorces, v. g., *nebébagadsnemen*.

Une jointée. Vid. Poignée.

2 gouttes d'eau se joignent p<sup>r</sup> n'en faire qu'une, *mamañsbéghi* v. *mañsbéghi<sup>r</sup>ré*.

*Tsi<sup>t</sup>tamisi*, bien joint; cela l'est, *tsi<sup>t</sup>tamáté*; ces planches le sont, *tsi<sup>t</sup>tamapsak kšak*;

les pins [?] s<sup>'</sup>t [sont] bien joints, *tsi<sup>t</sup>tama<sup>t</sup>arsvir psikaskr netsi<sup>t</sup>tama<sup>t</sup>tsn*, nob. *netsi<sup>t</sup>tama<sup>t</sup>rañ*.

*Nebébagadsnemenar neretsiar*, je joins les mains.

JONC, *anañsnaks, ksr*; j'en vais chercher, je le tire, le coupe, *nemananañsnuskšé*.

[JONGLER, JONGLEUR.]

Jongleur, *metésrens, -nsak*; la jonglerie, *metésrenšdi*.

Je jongle, *nenebi<sup>t</sup>ké*; je le jongle, *nenebi<sup>t</sup>rañ*.

Le jongleur invoq<sup>e</sup> le diab., *mtésrens snañdérmañ matsksar*.

Je chante et on répond à mon chant, *nenc. kshsmassi*.

Je donne au jongleur ce qu'il me d<sup>'</sup>de [demande,] p<sup>'</sup>r q<sup>e</sup> q<sup>e</sup> q<sup>e</sup> un [pour que quelqu'un] ne meure pas, *nesipamasañ*; on donne, &c., *sipamañsadin*.

Je porte ma *manits* (dit le jongleur), *nebasiañ*, v. *nebasiañ*. [Vid. Jonglerie, p. 298.]

*Šimañsin* v. *simañssdin*: c'est une jonglerie qui se fait en pendant à la crémaillère un petit serpent ou espèce de petit serpent qui a le bout de la queue blanc, (il s'appelle *sañbañrsess*,) et on fait cuire du blé entier; cela se fait le soir et le lendemain; le jongleur chante pendant que le blé bout, and après avoir chanté, il boit de l'eau qui est dans une petite chaudière pendue vis-à-vis de lui, et fait manger le blé cuit aux autres qui sont dans la cabane, &c. *Štsipinésu simañssdin*, il a mangé de ce blé cuit, &c.

*Kssigain*: c'est une jonglerie par laquelle; on fait un feu qu'on dispose de telle et telle manière pour avoir tel et tel effet; on observe de quel côté le feu jette, &c.; c'est pour savoir si ceux qui sont allés en guerre ou à la chasse dont on ne reçoit point de nouvelle, le tems qu'ils a mis étant expiré, — c'est pour voir s'ils sont morts ou vivants, &c.

JOUE, *mansé*; ma joue, *nansé, kansé, sansé*.

[JOUER.]

Je joue, ludo, *nedaimké*, 3. *añmké*.

[302, 303.]



*Mesairtassidé* [?], *m̄da* [mañda] *saghensi*.  
*Temahsté ascenni m̄da* [mañda], &c., *si-gaïmketsik*, joueurs.  
 Je gagne, je tire ce qui est sur le jeu, *netemhsé*; lui, *netemhañ*.  
 Ils jouent, ils gagent, *aïmadak*; jouons, gageons, *aïmadido*.  
*Is sétsra*, je joue cela c'tre [contre] toi; *neda'ta'sin is*, je joue cela; je joue cela, *is nedam̄ké'tsn*.  
 Que jouerons nous? *kégsi étaisadiags?*  
 Nos fusils, *kepéksaïndinasar taïsadida*.  
 Je ne joue rien, *m̄da* [mañda] *neni'taïnsita'si*; 3. *m̄da* [mañda] *ne'taïnsita'sisi*.  
 Je joue avec des ronds blancs d'un côté et noirs de l'autre, *nederakké* v. *nedam̄ké*, v. *nedasé'aïnar*.  
 Les ronds, *éssé'sánar*; les grains, *tagssak*.  
 Lorsqu'ils s'en trouve (du n'bre de 8) [nombre de 8] 5 blancs et 3 noirs, v. 5 noirs et 3 blancs, *nebarham, keb.* &c., (on ne tire rien); idem fit de 4 blancs et 4 noirs.  
 Lorsqu'il y en a 6 d'une couleur, et 2 de l'autre, *nemessdam*, (on tire 4 grains).  
 Lorsqu'il y en a 7 d'une mēē [même] couleur, et qu'un de l'autre, *nedlénsi*, (on en tire 10).  
 Lorsqu'ils s't to' [sont tous] 8 de mēē [même] couleur, *nsrihara*, (on en tire 20).  
*Nesákasi*, je plante un bois dans terre p'r marquer les parties.  
 Je lui gagne une partie, je mets un bois p'r &c., *negsdagšaharañ*.  
*Nedasahamañks*, il me démarque une partie, il ôte un bois, &c.  
*Nemétasahamañks*, il me démarque entièrement, il les ôte to' [tous], &c.  
*Piršané negahšks*, il me gagne, *keg.* 3. *agašgsr* v. *stemhgsr*; (dans le jeu du chariot) *m̄da* [mañda] *temašdisn*, on n'en prend pas des grains q. [qui] font chariot, &c.  
 Je saute, je porte, place mon grain t'tôt [tantôt] ci, t'tôt là, &c., *neketehi*.  
 Nous autres no' [nous] ne sautons point

co'e [comme] cela, *m̄da* [mañda], *keda-hisn nišna*.

Les pailles, avec quoi on joue a un autre jeu, *posseniganar*.

Les grains du jeu du plat, dicuntur etiam, *éssé'sánar*.

Un autre jeu où l'on place des grains sur des espèce de lozanges entrelassées, di'r [dieitur], *maimadöaŋgañ*.

Je joue au plat, *nsaïradéhama* 3. *soï mé*.

No' [nous] y jouons, *nsaïradéhamañbena, k.ksaïradébamañba*, &c.

Mets les petits ronds, &c., *psné éssésanar. Nederakébena*, je les mets.

Que veux-tu joier? *kégsi étássian*, v. *kégsi étássiaigs?* rien, *m̄da* [mañda] *kégsi nedatassi*.

Je joue un v. 2 castor, v. 3. &c., *mata'rré*, v. *rak nedátassi*.

Jouets des enfans; —

*Sšhé*, c'est un bois plat qu'ils font glisser sur la neige, glace.

*Nessha*, je le fais glisser; imper. *ssha, ss-haïts*.

*Séskip*, ig. une petite seringue, dont ils, &c. *Pébéksamañgan*, toupie sur la glace, &c.; sur la terre, *avipsdañgan*.

*Nesascemhañ*, je la foïette.

*Nenënaïts'ssi*, je suis v. g. le coquelimalot, j'ai les yeux bouchés et je cherche à prendre qq'un [quelqu'un], &c.; 3. *nénaïts'ssio*, celui est pris, est, &c.

[JOUR.]

Un jour, *nekstkiskšémigat*; 2, *nissikiskšémigat*, &c.

Jour, *kizsks*; un jour, *pezéksn kizsks* v. *pezeksn sa'kanek*.

*Étsé'kšisighi*, étant jour.

Beau jour, *srisá'kamé*.

À la petite pointe du jour, *sspäisšisi*.

*Tsé'ksât*, il est jour, le jour commence.

*Sémañban néhi're*, le soleil va se lever.

*Tsé'ksnisi*, jusqu'au jour.

*Ni aneghiespirassit*, il paroît un peu.

*Nibadssce*, il éclaire, il marche; *paskšé*, le milieu du jour.

*Pedegsssé, nasé'kšé, aïremasé'kšé v. smai-*  
*dañdé.*

*Neki'ré, il se couche.*

Depuis le soleil couché jusqu'à la nuit, sur le  
crépuscule, *magrañgsi'rré, v. kégañ pe-*  
*sedé.*

*Pesedé, añgsaïnétebikat, amasiteba'kat,*  
*nañsitébikat, aghikiteba'kat, pésssté'kšat,*  
*tsé'kšat, &c.*

En quel tems de la nuit est-il? *taiñi édtsi*  
*tebi'kat?*

Pendant le jour, *érigsukizégak.*

De jour, *spetaïsi*; voilà un beau jour, *sri-*  
*kizégat.*

Un mauvais jour, *matsikizégat.*

Jour court en hiver, *tadañgskizégat pépšghi.*

Long en été, *gšagsaïnkizégat nipeghi.*

Il y a 3 jours qu'il est venu, *tssgnógat baïep-*  
*pan.*

Depuis Kébek [Québec] jusqu'à Tadousak,  
j'ai mis 3 jours, *Kébektsi Tadssagsghéari*  
*nissgnibié, 3. tssg.*

Je demeurerai 3 jours à Kébek, *tssgnistsi*  
*nedapin Kébek.*

Je viendrai au jour assigné, *nebagatsi nik-*  
*ksmbekizégatki.*

C'est le jour d'aujourd'hui, *is kizégat.*

Pl's [plusieurs] jours, *mesaïrokisi.*

[304, 305.] C'bien [combien] marcherons no' [nous]  
de jours? *kekéssksnsdébenatsinasa.*

Y arriverons no' [nous] ce soir? *kšemihañ-*  
*benatsinasa, nšemi'ra, nensda'ra*; non,  
R. [Réponse], *kensdarañbenatsi, no' [nous]*  
serons en deçà.

Je revois le jour, je ne suis pas mort, *neda-*  
*tsé'kssin*; lui le voiant, &c., *tséksisghé*;  
qu'il le voie, *tsé'kssits.*

Je travaille tout le jour, *nenikégarakké.*

Un beau jour, *srisá'kamé.*

Mauvais, *mastsá'kamé.*

Je connois le tems qu'il fera, &c., seu le  
jour, &c., *nesésinamen sa'kamé.*

*Érmekizégak*, pendant le jour.

*Kikizéga'keban*, ce jour passé.

*Kiseksé*, lorsqu'il n'est pas encore passé,  
&c.

*Ernikésgnisi*, dans *q'q'* [quelques] jours.

*Ša'késssgnisi*, pendant *q'q'* [quelques] jours.

*Ša'késssgna'ké*, dans *q'q'* [quelque] jours.

Je prie Dieu *q'* quand tu enfanteras, tu en  
fasse autant qu'il y a de jours en l'année,  
*nesi'siušamañ k'ks. 'kiatsi snitzaïniané*  
*tanni kesseta kizégat nekstsigadéghéari*  
*nitsi akéssšinañ éreuañbaitsik kenitzaïnak.*

[ISSUE.]

Je ne vois point d'issue p'r sortir d'ici, je  
marche mais je ne sçais où je vais, *nekiš-*  
*añsi.*

[JUGER.]

Je juge, *netebersmšé.*

Je le juge, *neteberštemen, nob. neteberšmañ.*

[JUMEAU.]

Nous sommes jumeaux, *nedagšésšibena, 3.*  
*tagšésššak.*

[JUSQUE.]

Donne m'en jusqu'à-là, *kesibahagaioksatéts*;  
regarde, il y en a jusqu'à-là, *iséksték kina*  
*kinañgšiga is kšatéts.*

Jusqu'à-là, *nitsi sikšisi.*

La marée monte jusqu'à-là, *sasikšitamágak.*

Voilà jusqu'ou elle descend, *sasikšak.*

Si vo' [vous] ne travaillez dès maintenant  
jusqu'à l'automne, *m̄da [mañda] arakkésé-*  
*gsé nikkšañbi stsi t̄ai tagšañghighé ari,*  
&c.

Je marcherai jusqu'au soir, *nepesscdéñssšétsi.*

[IVRE, IVROGNERIE.]

Je suis ivre, *nsnšeni, 3. sanessemš.*

Je le suis à demi, *netegsssemi, 3. deg.*

Je suis addonné à l'ivrognerie, *nesighšsemi,*  
*3. sigh.*

[Pages 306 and 307 of the MS. are blank.]

## L.

- [308, 309.] LÀ, quand on ne le voit pas, *nemañ*; là, quand on voit le lieu qu'on montre, *iés'moñ*.
- LAC, *pegsâseben*, *mar*; anse dans un lac, *sañrinañgamek*.
- [LAID.]  
Il est laid, il rend son ame laide, *tsibaghinañgusi utssetsakuihgvo*.  
Je suis laid, *nematsighi*.
- LAIDEUR, *matsigsañgan*.
- LAINE, *asibiipiésser*; couverture de laine, *nessaïié*.
- L'AIR, *kiznko*; dans l'air, *pisvvliskšé*.  
Au de-là de l'air, dans le ciel, *avasskiskšé*.  
[Vide Air, p. 16, 17.]
- [LAISSER.]  
*Nsékañdssse ésisa asenni*, je m'en vais à c'se [cause] de ses façons.  
Je le laisse-là (voulant bien le laisser), *nene-gatemn*; imper. *negáti*; pls. [plusieurs], *negatenuko*.  
Je le laisse par oubli, &c., v. g. mon cou-teau au cabanage, &c., *nskašsiné*, 3. *va-kavsina*, *nencsékšako*, nob. *nkašsina*, v. *nskavitéhañmañ*, de l'appeller v. g. au festin, *nkašsinéban sakašsinéban*.  
Je le laisse, le quitte, *nenegatsiharañ*.  
Qu'on le laisse, qu'on ne le regarde pas, *arapits*, ign. *aretéts*.  
Laisse-le, ne lui fais rien, *é<sup>c</sup>kšihé*; laisse-moi, *é<sup>c</sup>kšihi*.  
Laisse-le, ne lui dis rien, *é<sup>c</sup>kšime*; laisse-moi, *é<sup>c</sup>kšimi*.  
Je laisse cela, *nedakvtsenemen*, 3. *sd.*; cela est de reste, &c., j'en laisse la moitié, je ne le porte pas.  
On le laisse, on ne l'embarq<sup>e</sup> pas, *negabañ*, 1<sup>a</sup>. *nenegatahañ*.  
Je le laisse là, je ne me soucie pas de lui, *nepsnárañ*.  
Lui aiant dit pl's [plusieurs] fois de ne pas faire cela, il le veut faire, je lui laisse faire ce qu'il veut, c'est malgré moi q<sup>e</sup> je lui consens de parols [?], *nšékañstmañ*, v. *nšékañdaëremañ*, je lui laisse faire.  
*Nšékañdërdamen nhaghé*, je prens une fâ-cheuse résolution p<sup>r</sup> ma p'so'e [personne], n'importe ce q<sup>e</sup> je devienne tant il me fait chose fâcheuse.  
*Nšékañdšé*, je laisse faire.  
Je ne le force point &c., ut ita dicam, *net-satzégañmañ*.  
J'ai laissé là mon sac, v. ma traîne, &c., *nderákañiné nšiasšé*, v. *nsdañbañgané*.  
Je la vais quérir, *nenañšadamen nšiasšé*.  
*Nenañdenassi*, je vais quérir ma traîne laissée, &c.  
[LAIT.]  
Du lait, *merenáks*.  
Cette femme n'en a pas p<sup>r</sup> son enfant, *ga-ghébinné*, 1<sup>a</sup>. *negaghébinna*.  
Je tire le lait v. g. de la vache, *nesereghinéhighe*.  
Je le tire à la vache, *nesereghinéhañ*.  
[LAME.]  
Les lames entre dans n're [entrent dans notre] canot, *kšañpehañn*, *netsrena*, v. *nsañ<sup>c</sup>psgšbena*.  
[Page 310 of the MS. is blank.]
- LANCETTE, *dagadamañgan*, *nar*. [311.]
- LANGUE, *mirars*; ma langue, *nírars*, *ki-rars*, *širars*; on lui coupe, *temirarsésañ*; 1<sup>a</sup>. *netemire*; on lui a coupé, *temirarsésañsaané*.  
Langue d'original, *mssirars*, *mssirarsar*.  
Je lui coupe la langue, *neghétsirarsésañ*, v. *netemirarsésañ*.  
Je tire la langue, *nesañbirarsési*, 3. *sañ*.  
Je lui mets sur la langue le corps de Jésus, *nepsnemasañ širarsk Jessš shaghé*.  
Je lui perce la langue, *nedésirarséhañ*.  
[LANGUEUR.]  
Je suis en langueur, il y a long tems q<sup>e</sup> je suis malade, *nedatsañšsi* v. *nenstsemši*.
- LANterne, où l'on mets la chandelle, *sassénemañganianr*.



## [LAPIDER.]

Je le lapide, le frappe avec des pierres, *neda-gámañ pnapksr*.

LARD, *piksisiké*. \*

## [LARGE.]

Il ē [est] trop large, trop ample (dont il ē [est] habillé), *ssañmégs*, &c., v. *ssañmikeskégs keskiss*, sse v. g. v. *meské*; ig. *ssañméghen*.

Large, cela l'est, *keské*; voilà co'e [comme] il l'est, *ni késkék*.

Couverte large, g'de [grande], *keskéghen*, nob. *keskégs*.

LARME, *mesbígsan*, nar; j'en verse, *nssebígšau*.

Elles me t'be [tombent] des yeux, *nesebígsanar penpétsšansr* v. *nesebígsanar sš'kšiar*.

[Page 312 of the MS. is blank.]

[313.] On essuie les larmes, *mašrsredin*.

Je les essuie, fais presens, &c., *nemašrskké*; à lui, *nemašrsrañ*.

St. LAURENS, *abaméksanganck pensks*, *tarabéks*, *kisikisidé isiganisi i ksrepri*, &c.

## [LARRON.]

Je suis un larron, *nenetañsikemštené*, v. *nekmstenéski*.

## [LAS.]

Je suis las de marcher, *nesaššai*, 3. *sassai*.

—— de travailler, *nesasrokké*.

—— d'être debout, *nesasiganbasi*, 3. *sasig*.

—— d'être assis, *nesaškési* v. *nesasigána* v. *nesavamarsi* v. *nesavamadamen nhaghé*.

—— de ramer, nager, *nesaššani*, 3. *savaššans*.

—— de porter du bois, *nesaššav avañsonar*.

—— d'aller en raquette, *nesavañghemé*, 3. *sav*.

Les mains me lassent, *nesaviretsévi*.

[LAURENT, St. Vide supra.]

## [LAVER.]

Je lui verse de l'eau, le baptise, *nesagnebañrañ*.

Je le lave, *nekesesebéharañ*, (aptiùs est pro baptismo q'm [quàm] *nesagnebañrañ*.)

Je le lave, *nekesesebéhadən*, nob. *nekesesebéharañ*.

Je lave des poires de terres, *nekesesipené*, v. *nekesesebaharañk penak*.

Je lave du peau, linge, &c., je le blanchis, *nekesestaghenemen*, *nekeseséghenemen*, v. *nañbéghenemen*, *vañbeghenansv*.

Je lave v. g. une chemise, *nekeseséghenañ*.

Blanchis-moi, lave-moi mes chem. [chemises], *keseséghenemasi nedaitöréhoñvé*, v. pls. *hañvak*.

Je me lave le visage, *nekesigvâ*, 3. *kes*; à lui, *nekesesigšenañ*.

Les mains, *nekesiretsa*, 3. *kes*; à lui, *nekesiretsenañ*.

Les piés, *nekesebahadšnar nesitar*; à lui, *nekesesiténañ*.

## [LÉCHER.]

Je lèche, *nenšksañsi*, digito v. linguâ, 3. *nvs*, ig. *nenšksañšadamen*.

Ma cuillier, *meršksañmañ*, digito v. linguâ, *nedenkoañ*, 3. *nenšksañmañ*.

Je lèche avec le doit le plat, v. &c., *nenšksaššisše vranğan* v. *nenšksañšadamen*.

## [LÉGER.]

Je suis léger, *nenañnañkésessi*.

Cela est léger, *nañnañkesessen*, v. *nanañgan*, nob. *nañnañkesesv*.

Je le trouve léger, *nenanañgšadamen*; l'absolut. *nenanañgšaré*, *nenanañgšadamen*, v. *nenanañghenemen*, nob. *nenanañghenañ*.

LENTEMENT, *nesañma*, *menni*.

## [LÈPRE.]

*Psakédar*, espèce de lèpre; *psakédé mereks*, il l'a, &c.

LETTRE, *avišigan*, nar.

## [LEVER.]

Je le lève en haut, *nedaspigšnemen*, nob. *nedaspigšnañ*.

*Nibadenakvañ*, on le lève.

Je lève un pieu, v. g. une croix, *nenibadena-kšn*; on le lève, *nibadenansv*.

Lève cela, *nibadené*; lève le pieu du fort, v. g. *nibadenakšé*, 1<sup>a</sup>. *nenibadena'kšé*.

[\* From the English word *pigs*. EDIT.]

[314, 315.]

Je me lève, a somno, *nedaïmikki*, 3. *aïmikkv*.  
 Je le fais lever, je le lève de terre, *nedaïmi-kenañ*, 3. *od*.  
 Je me lève de bout d'assis q' j'étois, *nənañghi*, 3. *ənañgv*, *ni ənañghin*.  
 Je lève un fardeau à peine, le puis je soulever, *avakaïtsin nepegšaiñnemen* v. *nepegšaiñnemen*, 3. *ap*.  
 Je lève la porte, seu, la couverte de la porte, p'r qu'on passe librement, *netaiñšdénemaïsi*; à lui, *netanšdénemavañ*, 3. *ətaiñšdénemavañ*, *tanšdénemaïss*.  
 Étant levé il a peu d'esprit, il est co'e [comme] endormi, hébété, *ənekəsv*, 1<sup>a</sup>. *nəkəsv*.  
 Étant levé il ne sçait ce qu'il fait, tout hébété, *tekəsv*, 1<sup>a</sup>. *nəkəsv*.  
 Je fais lever, je vais par eau p'r faire lever les oiseaux afin qu'ils volent, où on les puisse tirer, où on les attend, *kekarabahan*; idem par terre, *nekarabekasañ*.  
 Je fais lever la bête, *nekarabekasañ*.  
 Au moment q' je lève le bras, *aneghi mévire gšanahasia*, 1<sup>a</sup>. *nemaviregšanahesi*.  
*Navikšaiñbé' xan*, on le; *vikšaiñbé' xan*, je le lève avec corde attaché, v. g., un mort, &c.  
 Je le descend par le toit v. g. le paralytique, &c., 1<sup>a</sup>. *nepeñañbé' xan*.  
 [LÈVRES.]  
 Mes lèvres, ma bouche, idem, *nansé*, *kansé*, *ənišé*.  
 Je le dis du bout des lèvres, *ketzavai nesin*.  
*Avənnəvəni* *ərañbit*? qui est, qui est piqué co'e [comme] cela? *məda ni avənni vde-rañbit*, p's'oe [personne] n'est piqué co'e [comme] cela.  
 LÉZARD, *é'kataïks*.  
 LIEN, de cuir, de peau, seu babiche, *vrəghes*, *sar*; babiche qui tient la couverte attaché aux épaules, *aneskamañ nar*; *nedaneskamakkañ*, je les mets.  
 Lien de bois blanc, *vighebi*, *biar*; de cèdre, *kañkesighébi*.  
 Lien, seu corde, ou d'herbes, v. &c., *pi'kan*.  
*Nekere'táhenan*, je le conduis, lui étant lié

et moi tenant la corde, co'e [comme] esclave.  
 [LIER.]  
 Je le lie, *nekeraberemen*, 3. *ker*; nob. *nekerabiran*.  
 Fortement, *nedassanañbi'kkəñ*, 3. *od*.  
 Lui, cela, est lié, *kerabisv*.  
 Je les lie 2 à 2, *nenisañbi'kké*, nob. *nenisbirañk*, 3. *nenisbirañk*.  
 Je lui lie les mains, *nekeraberemenar vretsiar*.  
 Il est lié, trop serré, on ne le porte pas commodem't, *ssaïmiksnañbé*, nob. *ssaïmiksnañbikoïss*.  
 Je lui lie les mains derrière le dos, *nedərmaskébiraiñ*.  
*Érmaskébiraiñ* v. *biss Jesss*, J. *ē c'duit* [Jésus est conduit] les mains liées derrière le dos.  
 Ou lie, v. g. les pieux d'un fort en mettant des perches de travers, &c., *spañakšabiss*, *spañakšaberənišits*.  
 Je le lie de la sorte, *nedaspañakšaberemen*, v. *naderakšaberemen*.  
*Éssema arakšabisiš*, *arakšaberemsk*, il n'est pas encore lié ita, &c.; lie le, *kedaspañakšaberigaiñnañ*.  
 LIÈVRE, *mattegséss*, *ssak*. [316, 317.]  
 J'en cherche, j'en vais chercher, *nema'tte-gsésskké*.  
 LIGNE à pêcher, *meghikanakšam*; je la jette à l'eau p'r pêcher, *nedaïmé*.  
 J'y prends poisson, *nebiəa*.  
 [LIMAÇON.]  
*Aketsebañrass*, limasson.  
 LIME, *araraghipsdigan*; je lime, *nedararaghipsdighé*.  
 LION v. espèce de lion, *pi'taïrs*, *rsak*.  
 [LIRE.]  
 Je lis, je connois l'écriture, *msəsi'namen asi'xigan*, 3. *asé*.  
 Lis, lege, *səsi'na asi'xigan*.  
 LIT, cubile, *kašdi*; mon lit, ma natte, *nekašdi*, 3. *ak*.  
 Lit élevé de terre, *téssákšabsn*; qui ne l'est pas, *apsn*; le mien, *netapsn*.  
 J'accomode mon lit, *nekašdi nsrittyn*, 3. *sr*.

LIVRE, lettre, image, peinture, écriture, *asiχigan*.

Je plie la lettre v. g. v. *q'q'* [quelque] chose, *nšisašncmen asiχigan*.

Je ferme livre, v. *q'q'* ch. [quelque chose] eodem modo, *nšisasānaghencmen*.

Je l'ouvre v. *q'q'* [quelque] eodem modo, *nebañnoñnaghencmen*.

[LOGER. Vid. infra, p. 319.]

[LOIN.]

Je le trouve loin, je trouve qu'il y a loin d'ici là, *nenāšerdamen*; proche, *nepess-dérdamen*.

Je le voudrais voir bien loin de moi, *negagāhsskañs*.

Il me voudrait voir, &c., *negagāhsskasāñ*.

C'est bien [combien] est-il loin? *tañnenasa adsdat*?

C'est loin, *nañsadšghé* v. *nañsat*; ce n'est pas loin, *māda* [*mānda*] *nañsatš*.

*Nenāñnašérmegsn é'to añmesskkañti*? ne croit-il pas que je sois bien loin?

[LONG.]

Il ē [est] trop long, ceinture, corde d'écorce, &c., *ssañmiksnaatagat*; de fune Gallico, scil. nob. *ssañmiksnaatagsss*. Robbe, v. g. v., couverte trop longue, *ssañmiksneghen*.

Il est trop courte, *ssañmi toute*, *takesesen*, nob. *-kesess*.

Voilà comme il ē [est] long, de nob., *ni aksnisin*.

*Niseda kšénisit*, *ni ksné ssegsné*, sa queue est 2 fois la longueur de son corps.

Il est long, *knagšat*, *ksniss*, *ksné*; il est trop long, *ssañmi ksné*.

Apporte-m'en un (v. g. bois, bâton), de cette longueur, *maneska ni kšének*.

Il est trop court, *ssañmi taakšéss*, ig. *taakšé*. Une ceinture, v. g. longue, *ksnaatagat*.

LORETTE, *abémadenāñek*; les sauvages (Hurons) q. y s't [qui y sont], *abémadenāñak*.

[LOUAGE.]

Je te donne un castor p'r le louage du fusil,

v. g. *pézekš mata'rre kemirer nemkasihiañneban*.

[LOUER.]

Je le loue auprès des autres, je dis aux autres du bien de lui, *nsrersšmasaānar srir*.

Je dis du bien de lui &c., *nsrersšmasin sa*.

Je le loue, laudo, *nsreršāñ* v. *usrañdokkañrañ*.

Je le loue, eum conduco, *nedarokkañrañ*, 3. *sd.*, v. *nematemimāñ*.

Je loue, absolutum, *nedarokkémi*.

Je le loue lui promettant *q'q'* [quelque] chose, *nedāngšadasāñ*.

[LOGER.]

Je le loge, je demeure avec lui, &c., *nšiti* [318, 319.] *ghémañ*.

Je demeure dans une cabane étrangère p'r *q'q'* [quelque] tems, *nšitighémšé*.

LOUP-CERVIER, *mānrsem*, *msk* v. *msak*; sa peau, *mānrsemšésé*.

LOUP-MARIN, *a'kiks*, *ksak*; sa peau, *akikšésé*.

[LOUPE.]

J'ai une louppe, v. g., au front, *netsegšarem*, 3. *stsegšaremar*; la louppe, *tsegšar*.

[LOUTRE.]

Loutre, *kisniǵhé*; sa peau, *kisniǵhésé*.

[LUIRE.]

Je luitte [?], *neméménañkké*, 3. *mém.*, *ménénañkahadida*, *-kahadiks*, *-kéhédits*.

Cela luit, éclaire, *speté* v. *sassé*.

*šassé*, après le tonnerre il vente et puis pleut.

LUMIÈRE, *sasáksré*.

[LUNE.]

La lune, *kizss*, *nibañkizss*.

Elle se lève, *néhiss*; se couche, *nekiss*.

Le renouveau de la lune, *nañgsss*, (elle paroît.)

Son 1<sup>r</sup> quartier, lorsqu'elle a 5 ou 6 jours, *nérañšghir*, (elle croît.)

Lorsqu'elle a 11 ou 12 jours, *kégañ aémeghir*, (bientôt pleine.)

Elle est pleine, *sémeghir*, *sémeghirghé*.

Après son plein, *pekinem*; étant après son plein, *pekeneghé*.



Son 16, 17, et 18<sup>e</sup> jour, *stsiné*, (elle décroît, elle commence de-là à mourir.)

Son 22, 23<sup>e</sup> jour, *pébossiné*, (elle est morte de la moitié.)

À son défaut, *séscmina* v. *métsina*, (elle morte entièrem't.)

Elle morte, *nepa*; étant morte, *nepeghé*.

Environs minuit, seu, lorsqu'elle est au midi du soleil, *pasksé aïbanáms*.

Elle luit, éclipse, *paügsâssen*; éclipse, *pkenem kizss*.

Les Mois par les Lunes; —

Janvier, *mekšasígšé*, lorsqu'il fait g'd [grand] froid, &c.

Fevrier, *names kizss*, qu'on prend du poisson.

Mars, *nemataïmsi kizss*, on prend quantité de poisson.

[Page 320 of the MS. is blank.]

[321.] Avril, *aïmss-kizss*, qu'on prend quantité de harans, poissons, qui dicuntur *aïmsš'ak*. Hic mensis appellatur etiam *kikâi-kizss*, la lune qu'on sème.

Mai, *nskekéhigâi-kizss*, qu'on couvre le blé d'Inde; *nenskkéhíghé*, je le couvre.

Juin, *nekakšigâi-kizss*, qu'on réchausse le blé; *nenikakšihíghé*, je le réchausse; *nkakšihigan*, le réchaussem't.

Juillet, *sattâi-kizss*, q' les bluets s't [sont] meurs; hic mensis di'r [dicitur] etiam *matsipenâi mss*; *ni matsinipenâimss*, les anguilles c'mence [commencent] en été.

Oust [Août], *kizss*, v. *mañtesadokkšî-kizss*, les g'ds [grands] jours, le g'd [grand] soleil.

Sept. [Septembre], *masinâi-kizos*, qu'on ramasse le gland.

Oct. [Octobre], *assebaskšâts*, quand les bordages sont glaces; *assebaskšaten*, le bordage est glacé.

Novemb. [Novembre], *pekšâmhaïi-kiss*, quand on fait un trou à la glace p'r tuer le castor; *nepeksâmaha*, je fais un trou à la glace p'r tuer le castor.

Decemb. [Decembre], *ksne-kizss*, la lune est longue. [Vide infr. Mois, p. 343<sup>b</sup>.]

LUNETTE D'APPROCHE, *arañšdi*, di'r [dicitur] etiam des simples lunettes.

[Pages 322, 323, 324, of the MS. are blank.]

## M.

[MÂCHER.]

[325.] Je mâche, v. g. viande, &c., *nesegsskadâmen*, 3. ss., nob. *nesagsskâmaï*.

— de l'écorce, p'r y faire des figures, *nederagšakadíghé*; écorce mâchée et figurée, *arigšakadigan*, *nar*; elles s't [sont] bien écrites, *svigšakataïss*.

[MAIGRE.]

Je suis maigre, *netâïrašsi*, 3. *aïrašss*, di'r [dicitur] etiam de pecore.

MAIN, *meretsi*; ma main, *neretsi*, 3. *sre-tsiar*; la droite, *arenakaisi*; la gauche, *pañtsisi*; ma droite, *nedarenakaisi*; ma gauche, *neda'pañtsi*.

Je me sers de la droite p'r travailler, *nedar-enakérokke*.

— de la gauche, *nedapañtsarokké*.

J'ai les mains blanches, *nsasañbiretsa*.

Je le prends par la main, *nesaghipedinénaï*.

Je donne de main en main, *nedañkahssadsn*, 3. *sd*.

Je lui mets dans la main q'q' ch. [quelque chose], *nedaspäüretsénaï*; mets-moi, *späüretséni*.

Je mets ma main dans un trou, *nepisineské*.

MAINTENANT, *nikksañbi* v. *neghé'tsi*.

MAISON, *sigšam*, *nar*; dans la maison, *sigšamck*. Vid. Cab. [Cabane.]

[MAÎTRE.]

Je suis le maître dans ma maison, *nededari-tebérdam nšigsamck*.

Je suis le maître de la vie, *netebérdami-pemañssaŋané*.

Je suis le maître, *netebérdam* ; de cela, *netebérdamen*, &c.

Vid. Je gouverne.

Est-on maître de cela, peut-on s'empêcher, v. g., de tousser ? &c., *tebérdañs pegša é'to ?* &c.

[MAL.]

Cela est mal, cela n'est pas bien, *matsighe-nis*, v. *sahaia*, *māda* [*mañda*] *srighensi*.

Je lui dis du mal, *nematsimamesaniñ*.

Je lui fais du mal, *nemamesanihañ* ; je lui en dis, *nemamesaniñ*.

[326, 327.] Où as-tu mal ? *taini édaramársian ?*

*Netepek*, à la tête, *nedapskskšik*, au cou ; *negsdaiŋganek*, au gosier ; *netsisegsr*, v. *tsisegsr*, aux yeux ; *pekitanek*, au né [nez], *nañiganek*, au ventre ; *nepeskšanek*, à l'échine du dos ; *nerésañganek*, au cœur ; *nedañbidañs*, j'ai mal aux dents ; imperf. *-gshsban*, 3. *gsppan*, imperf. *añbidañs*, *gsts*, *gsda*, *gskš*, *gshsdits* ; *asenni é'to añbidañ* ? R. *nia añbidañša*, 3. *abidañs* ; *métsiganasin*, il n'a plus q' les os, tant il a été malade, 1<sup>a</sup>. *nemétsiganasin*.

Il est toujours malade, il n'a q' les os, *tsañšia*, *tsañs*, v. *nstsemšio*, *nstsems*.

J'ai mal aux yeux, ils me cuisent, *ncpspski-gšéné*.

J'ai mal au gosier, *negsdaiŋgan nssagapáhagsn*.

Je suis malade, *nessagamaressi*, v. *nssagapahagsn*, v. *nssaganbadamen*, *nepeskšañ kañdak*.

Je suis en langueur, languissant, je suis maladif, *nedatsañšio*, v. *nenstsemšio*, 3. *tsañšio*, *nstsems*.

Il a une maladie habituelle dont il guéri et puis ret'be [retombe], *mañdamars*, 1<sup>a</sup>. *nemañdamarsi* ; 1<sup>a</sup>. *māda* [*mañda*] *nemañdamarsi*.

Il tombe du haut mal, *stsbireks*, 1<sup>a</sup>. *nstsbireks*.

Il en t'be [tombe] tous les mois, *ési pézeksar kissar néperitsi stsbireks*.

[MALADE, MALADIE.]

La maladie court le village, *pétsinabañgans*. Cette sorte de maladie di'r [dicitur], *pétsinabañgan*.

Nous avons une horrib. maladie, *nesaaghi-nibena*.

Maladie, *sssagamaressaŋan*.

Maladie secrète, *sucpšaŋan*.

Je ne suis plus malade, *nedé'ksissagamaresi*, 3. *ék*. v. *nedéksamarsi*.

Je me porte mieux, *nebapakamarsi*, 3. *bepa*.

Je sers le malade, le soulage, *nenstsetsaŋš-añmañ*.

Le malade se plaint, *mamañde*, 1<sup>a</sup>. *nemañmañde*.

Je le bas étant malade, ce qui fait qu'il l'est davantage, *nenirasitêhañ*.

Je lui fais q'q' [quelque] chose étant malade, qui le rend malade davantage, *nenirasihañ*.

*Tsegšar*, une loupe ; j'en ai, *tsegšar neu'regs*.

Si celui qui l'a ne la coupe, on fent, &c., il en meurt, *māda* [*mañda*] *kadsnurañkšé tsegšar sni'regs*.

*Pemšé*, c'est une enfleure q'q'fois grosse co'e [quelquefois grosse comme] la loupe, mais il y a apostume dedans, non dans la loupe.

*Nedaksamadamen*, cela me fait bien mal, cela me cuit bien.

*Añrasi nekaksamadamex é'rimek*, ce qu'on me dit me fait à la vérité de la peine, me cuit bien, mais je le souffre p'r Jésus.

*Nssagamadamen neretsi*, v. *nhaghé*, &c., ma main, &c. me fait mal.

*Kighitsé messisi nhaghé*, j'ai mal, douleur, par tout le corps.

*Nekighidamadamen*, v. *nekighitésaghesi*, j'ai mal, douleur par tout le corps p'r avoir trop travaille, v. *pissisi*.

*Sasigané*, le corps lui fait mal p'r avoir trop travaillé v. faisant trop chaud.

*Nenanépnighi*, je ne puis marcher à c'se [cause] de la foiblesse des piés.

*So'ksi'ré*, mon corps est à non plus, &c.,

1<sup>a</sup>. *ness'ksi'ra*.

[328, 329.] Il y a de l'apostume dans cette enfleure, &c., *penšé*.

J'en ai dans le corps, &c., *nepemšem*, 3. *apemšémar*.

J'ai une maladie habituelle, *nenstsemši*, v. *nedanšangši*, 3. *nstsems*, is, 3. *tsangšio*, v. *tsangs*.

Je lui donne maléfice, je charme, fais du mal, *metšrens nederipenarañ* v. *nebasinárañ*.

[MANCHE.]

Manche de femme, *petenañgan*, *nak*, 3. *ap*.

Je les mets, *nepitenañganašderesi*, v. *nepittenaññ nepitenañganak*.

Je les ôte, *neghšsipetenañganénesi*, v. *neghš'tenank nepitenañganak*, 3. *agh*, *ap*.

Qu'on fasse un manche, &c., *ssidaksañsits*.

Manche de couteau, *šítaks* v. *ssidakskañ*.

Je l'emmanche, *nssidakskaññ*; p'r lui, *nssidakskésañ*; -*késgn*, il m'en fait.

MANCHON, *meretses*.

*Taragšo nšékšaks*, seu, *m̄da* [mañda] *ssidakšañsisi*, v. *ssidakšisi*, point de manche.

[MANCHOT.]

Je suis manchot, *negagasipedína*; boiteux, *negagasikañda*.

Je suis manchot, seu, j'ai le bras coupé, *nenaba'reptína*, 3. *nab*.

[MANDER.]

*Nšikigšéni*, j'appelle.

Je le mande, le fais venir, *nšikšimañ*.

[MANGER.]

*Nesakkadañksé*, 3. *skadañksé*, j'apprête à manger.

Je mange, *nemitsesi*, 3. *mit*, v. *nessgršsi*.

— cela, *nemitsi*.

Je mange poisson, poire de terre, pommes, hommes in g're [genere], canes in gr'e, pedes animalium, &c., di'r [dicitur] *nemshañ*; v. g., *nemshañk penak*, *nemessak*, canes, &c.; *nemshañsk mégsak*, je mange l'Iroquois.

Je mange de la chair, *sios nemštsi* v. *nemištin*.

J'ai envie de manger de cela, *negado'tamen*.

Je lui donne à manger aiant bien faim, *nenabatsihañ*.

Je lui donne à manger, *nedásamañ*, 3. *sd*.

Je lui mets le morceau à la bouche, *nesa'kamstrañ*, v. *nepišamsrañ*.

Je lui mets dans la bouche bonne nourriture, *nsripsderañ*.

Je mange avec, *nesitsi'ppi*; avec lui, *nsitsi'psmañ*.

Je mange avec mes doigts, *neretsi nedasé'kaññ*.

Je lui apprête ce qu'il faut, *nenšdenañ*, 3. *snsdenaññ*.

J'apprête à manger, *nensdañksé*, 3. *nsdañksé* v. -*ksés*.

À lui, *nesakadañksá'rrañ*, 3. *ssak*; apprête-moi, &c., *skadañksá'rri*, *nikksaññi*.

Je lui porte à manger, *nederssadasañ mitssañgan*.

Je m'apprête à manger, je fais ma chaudière, *nebagastañksarsi*.

*Nsdañksári*, j'apprête dans q'q' [quelque] tems, j'ai coutume, &c.

Je mange avec lui, seu, je prends dans le mē [même] plat q' lui, mangeons no' [nous] 2, *nenisskadinéna*. *nisskadida*; ils, *niss'kadsak*.

Mangez vo' [vous] 2, *nisskadiks*; vo' [vous] 3, *tsskadiks*.

Il met la main au plat avant son rang, seu, il mange 2 fois pendant moi une, *nēnegañ-mihšks sa*.

Tu manges 2 fois pendant moi une, *kenéne-gañmihi*.

Je ne mange pas assez, *nensda'ppi*, 3. *nsd*.

Il mange vite, *nabi'ps*; je suis rassasié, *nšémipi* v. *nšémañbési*.

Je mets q'q' ch. [quelque chose] p'r qu'en mangeant je ne salisse mon habit, *nebaradamen anitssañgan*; p'r q' l'hostie ne t'be [tombe], v. g., *nebaramañ hostisñ*.

*Nesipkarañmi*, je puis être long-tems sans manger, je supporte long-tems la faim.

*Neni'kékarañmi*, un jour.

*Nenissgnarañmi*, 2 jours.



*Nenessgnaraimi*, 3 jours, &c.

*Nedapamin kégsi*, ce qu'on mange avec, &c., seu, qui sert co'e [comme] d'apas pour manger autre ch. [chose], *nedapaminar aneskemnar*, &c.

*Nemitsamasan*, je mange ce q'il vouloit manger, je mange p'r lui soit de force, &c.

*Nepesigamañ tsighené*, v. g., je mors dedans, j'en mange la moitié par cette morsure, &c.

*Ni késssgniadasa* v. *nikésssgnecaramia*, voilà c'bien [combien] de tems je n'ai pas mangé.

*Asakañsi nepétarami*, à peine suis-je pu venu, tant j'ai jeûné.

*Netébi*, j'ai assez mangé.

De cela, *netébi'tamen*, nob. *netébi'pañ*.

Je vais lui porter à manger, je le fais c'tu-mièrem't [coutumièrem't], seu, c'est moi qui lui porte vulgò, *nenanañssamañ*.

*Nesakadänkša'reghé*, *nekisünkšareghé*, on m'apprête à manger, on me fait le maître du festin.

*Sskebedsnié*, soit viande ou poisson, &c.

Tu me dis t'rs [toujours] q' je te donne à manger, tu veux par-là faire finir mes vivres, hé-bien je te donne tout, *nšékaitesámañ*, 3. *asck*.

J'ai de la peine de donner à manger p'r vouloir épargner les vivres, *nesaaghesi*.

[330, 331.] J'ai envie de manger de q'q' [quelque] soit poisson, viande, &c., *nessšhsdsn*, 3. *ššhsdsn*; *sskebedsnié*, v. chair, poisson, &c.

Je laisse de mon manger, *nedukstsadamen*. Je ne puis manger de viande t'te [toute] seule, *nenan'étañsipañšadamen sios*.

Je fournis de la mangeaille, *nesághéghé*.

Celui qui l'a fourni, seu, pastor qui nutrit, *saaghššsinns*.

Les bêtes ont mangé le blé, v. ton blé, *kedaněssgar*, v. *kedamenāngar*.

Je vais quêter, chercher à manger, dans les cabanes, *nekisighé* v. *nekisigheski*, 3. *kis*.

Étant dans la cab. [cabane] il souhaite

qu'on lui donne à manger, *késañss*, 1<sup>a</sup>. *nekéranisi*, v. *uneskasañšéski*, 3. *kas*.

Je lui d'de [demande] à manger, *nemikésañmōñ*.

Je n'en ai pas assez p'r donner à manger à tous, *nensda'rra*, 3. *us*.

Je n'en ai pas p'r lui, *nensda'rraām*.

Je ne mange q' des glands, *nebañšáttegšé*; q' de la viande, *nebañšadamen*; q' de la viande grasse, *nebañšinšgšé*.

Je n'ai pas coutume de donner à manger, *nesáakesi*, 3. *saakšss*; di'r [dicitur] etiam, sed minùs benè, *māda* [*mānda*] *nemctañsarsš*.

Mangeant de cela mon cœur se soulève, *nepetsšīrasa*.

J'ai coutume de donner à manger, à pl's [plusieurs], à tous, *nemckemési*, 3. *nekemšss*.

Je ne mange q' de la viande, *nepañšadamen*; q' de la viande grasse, *nebañšinšgšé*; q' des glands, *nebañšáttegšé*.

Je prends plaisir à manger, je mange volontiers, *nšighimitsi* v. *nšiga'ppi*.

On mange ces choses, *mitsañsar*.

Je mange ce qu'on avoit donné à manger à un autre, *nssañsarremi'ppi*.

Je lui donne à manger ce qu'on m'avoit donné à manger, *nesañpesámañ* v. *neghésakassamañ*. Vid. *Sañbisi*.

Je te donne à manger, &c., *kesañpesamšren is* v. *keghésaghérmeren is*.

Un petit enfant qui c'mence [commence] à manger, *ntaps*, *ntapess*, 1<sup>a</sup>. *nenitapi*.

Je ne puis parler de crainte et de honte p'r avoir cette mangeaille, di'r [dicitur] etiam de suppellectili q'd [quod] habere non possum, *neuesañsāñsi*.

*Nenesañsāñsin is*, je prends cela, je dirai pas [!] après à q. [qui] il appartient q' je l'ai pris.

La mangeaille d'un qui est mort, dont on fait festin v. qu'on mange, *masségšī-mitssāngan*.

Je vais chercher des vivres, mangeaille, soit castor, &c, *nenatebi'ka*.

Je ne mange *q'* de tems en tems un peu, je n'ai point d'appetit, c'est ma coutume de ne manger *q'* peu depuis *q'* je suis né, *ñenánétámbi* v. *nenanétápi*.

Je ne mange point à cause de ma maladie, je ne puis manger, *nedsdenasé*, 3. *ñsdenasé*.

Je n'ai rien encore mangé dès le matin, *éssema nsssepañsipi*.

Ce *q'* j'ai mangé me reproche, *neps<sup>c</sup>kšéri* v. *neps<sup>c</sup>kšerkañgsn kégši*.

Je me fâche de ce qu'on me donne la plus petite part, de ce qu'on ne me donne *q'* peu à manger, *nemétasé*.

Je me fâche contre lui de ce *q'*il me donne la plus petite part, *nemetasamañ*.

Il y a des vivres, *mitssañganiké*.

Je dresse p<sup>r</sup> lui, *ness<sup>c</sup>kámasañ*.

Je mange tout, *neketámi*; cela, *neketámen*, nob. *neketámañ*.

Je mange avec lui, *nšitsokkadšmañ* v. *nšitsipšmañ*.

Je donne v<sup>l</sup>tier [volontiers] à manger, *nene-kemesi*.

Je donne à manger, *neda<sup>c</sup>sar*, k. *sar*, *nedasarshsban*, subj. *nia éšara*, *ran*, *ésarek*, *ésareg*, *rags*, *régš éšamegshšdit*, *m̄da* [*mañda*] *nede<sup>c</sup>sars*, 3. *sarši*, imp. *sari*, *sarihi is neda<sup>c</sup>sarené*, donne-moi à manger, &c.

*Monadam*, le chien prend, mange, &c.; *amanadamen*, cela; *amanamañr sipsar*, v. g., *manadañss*, il est prit, mangé, par un chien.

[Vid. supra, Faim, p. 240, 241.]

[MANQUER.]

Je ne manque de rien, j'ai tout le nécessaire, *nemirañbédam* v. *-damen*.

Je manque de cela, *ñenadasihigsn*.

Je manque de to' [tout], *messisi kégši nenasasihigsn*.

Je ne man<sup>q'</sup> de rien, *m̄da* [*mañda*] *kégši nenasasihigsn*.

Patior necessitatem ab o'i [omni] re, &c., *messisi nenasasihigsn*.

1<sup>a</sup> subj. *messivi nédasihik*, negat. *higako*.

2. *nédavihssk*, neg. *hsrsko*.

3. *nédavihot*, neg. *nedasitsko*, qui nullam patitur, &c.

Je le manque, je ne puis l'attrapper, je ne puis le prendre, v. g. pou, *nebarenññ*, ignob. *nebarenemen*.

Je manque en tirant, *nebarchañ* v. *nebarchéghé*, 3. *aralíghé*.

*Matsighen pesái ni šétsi barahked*, &c.

MANTEAU à la François, *sišnéghesek*.

MARCHAND, *nsdaiñksrañt*.

MARCHANDISES, la maison où sont les, *nsdañkvrarahigamigsr* v. *matsessshigamigsr*.

[MARCHER.]

Il marche la tête baissée, *atsitaškšéssé*, 1<sup>a</sup>. *nedatsitaškšéssé*.

Je marche, *nepemóssé*, 3. *pem*; lentem<sup>t</sup>, *nemennsssé*.

Vîte, soit en haut, soit en bas, *negšagšañmañsé*.

Je t'be [tombe] en defaillance de marcher, *nesañksté<sup>c</sup>ssé*.

Je marche de nuit, *nenibañsé*; je marche t<sup>r</sup>s [toujours] jusqu'à la nuit, *nenikégssé*.

Je marche une partie du chemin, je suis [332, 333.] arrivé à une partie du chemin, *neda<sup>c</sup>kšañbsssé*, 3. *kšañ*, subj. *éksañbssset*; *neda<sup>c</sup>kšañbssssarañ*, je le c<sup>d</sup>uis [conduis] une partie.

Je marche dans un méchant chemin, *nesaagsssé*.

Je ne puis marcher à c<sup>s</sup>e [cause] de la foiblesse de mes piés, *nenanépnihi*, 3. *nanp*.

Je fais du bruit en marchant, *neti<sup>c</sup>késé*; ils, *tí<sup>c</sup>kañbañbsssak*.

Je marche sur cela, et je le romps, *nebi<sup>c</sup>tetékámen*, v. *nesegsskitékámen*; sur lui, sur son pié, v. g., *nebi<sup>c</sup>teté<sup>c</sup>kasañ*, v. *nesegsskitékasañ*.

Je marche sur une planche, *nepesikkámen*.

Je marche sur un bois et je le romps, *neps<sup>c</sup>skskámen*.

*Aneghi kškañšañmérañna*, lorsque je marche &c., di<sup>r</sup> de toto c<sup>p</sup>ore [dicitur de toto corpore], &c.

*Nşrekamen*, je marche à l'aise, je n'enfoncé pas b'p [beaucoup] dans la nége, &c.

*Ninisssséks tétebeskasséks*, &c., marchez 2 à 2, *nisséks*, 1<sup>a</sup>. *nenissé'bena*.

Je marche bien, rien ne m'en empêche, item, en beau tems, *nşrssé*.

Je marche dans l'eau, *nepemañsghé*.

Je marche après lui tout proche, co'e [comme] à une procession, &c., *nesaaketsikasañ*.

Je marche sur mes genoux, *nedatsitegşaké'ssé*.

Je marche à 4 pattes, *nepemigssi*; seu, en serpentant sur le ventre, *pemigsss sksk*.

Je marche avec la pluie, *nekegherañssé*;  
—— vent arr. [arrière], *nenamségé*;  
—— vent devant, *nedaptsigşéssé*.

Je marche à 4, *nepemigssi*; ils, *pememañgşuk*.

[MARÉCAGE. Vid. infra.]

[MARQUE.]

Marque rouge qui paroît sur le corps de l'enfant, la mère aiaut mangé *q'q'* [quelque] fruits &c. en étant enceinte, *minse, sar*. [Vid. infra, p. 337.]

MARÉCAGE, de l'eau des terres [?], *megşak, megşaksr*, v. *nebianaskikké*.

J'y enfonce, *neşdba'ké'kam*.

[MARÉE.]

La marée est haute, *psanessen*; basse, *kisekat*, v. *añpsikat*.

Elle descent, *ssi'kkat*; elle monte, *tamagan*, di'r [dicitur] etiam *añpsitamagan*.

Elle ne monte, ni ne baisse, *tzanebéghi*.

Elle monte jusq'-là, *sasikstamagak*.

Elle descende jusq'-là, *sasikskak*.

Je m'embarq' marée montante, *tamagaghé nepssi*.

Je m'embarq' marée descendante, *ssikeké nepssi*.

[MARIAGE, MARIER.]

Je veux me marier, *nekadasatzaiñañ*, v. *nekadasinişşiné'na*, di'r [dicitur] ab utroq'; v. *nekadasisitapşmañ*, id minùs benè audit.

Je veux faire presens p'r cela, *nekadasanshañ*.

Je les fais, *nemanshañ*, v. *nepsnatséssé*.

L'ho'e [homme] les fait, *sinnas*, 1<sup>a</sup>. *nşşin-nasi*, (p'r la p<sup>te</sup> fois, q. c'sistent [qui consistent] en un fusil v. collier.)

On les a fait, *sinañttin*, v. *psnatséssşadin*.

Si ensuite on donne des couvertes, di'r [dicitur] *agşihşdin*.

Si des chaudières, de la porcelaine, des peaux, di'r [dicitur] *miredin*.

As-tu fais les presens? *kekisishinnasipesanasa*, v. *kekisipnsnatséssşépesanasa*?

Quels presens a-t-on fait? *taiñi éri miredin*?

Elle renvoie les p'n'ts [présents], *asatañss*, [334, 335.]

1<sup>a</sup>. *neda'sa'ts*; on les a renvoié, *asatañsadin*.

Lorsq' la fille ou femme refuse, les autres ho'es [hommes] disent d'elle, *kşşikké phâinem*, elle ne veut point de l'ho'e [homme]; mais le père dit seulem't, *şigañdam*; vir autem dicit, *neda'satañghé*, on me refuse, je suis refusé de ce q' je donne.

La manière v. g. qu'on parle au missionnaire p'r avoir une fille v. femme en mariage: —

Qq'un [quelqu'un] des parens du garçon, le père v. g. dit au missionnaire, *nederémañ nenénuin*, *tsitşebakandats*, *nirba satzaiñandé N.*, *nşritéhañmañ*, *srenasakess'éto*, *neşkşsmasañ*.

Lorsqu'elle aura consentie v. &c., *kisi neşkşsmşreghé*, *kemirañ*, &c.

On consent à ma d'de [demande], on m'exauce, *nekisishkşmañghé*, v. *nekiktañghé*.

Lorsq' le missionnaire parle p'r cela au père v. mère de la fille, il lui dit, *kekadassiremeghé*.

Si c'est d'un autre q' sa fille, &c., *kadasitşebakandam sa phâinem N.*

Qui est-ce qui la d'de [demande]? *asenni kadasatzaiñañt*, v. *asenni kédassiremit*?

Hé-bien j'en parlerai à mes parens p'r şçavoir s'ils le veulent, *peragatsi nedi'rañk kėsşaiğşdiég ari srérdamşşdidégatsi*.

Le missionnaire parle à celle qu'on d'de [demande]: —



Te veux-tu marier? *kekadasi tsebakañdam?*  
 &c.; *mssak arit'hañsikkan, matsighentsi kêtzatašghé nemi'taings mdahaba [mañdahaba] is kstsitsšimerssn, mda [mañda] ketebéremers is stsi, kiaga tañni érérme-sian, &c.*

Ne penses-tu pas à marier ton ainée? *ésse-manasa kederérdams asennirba sitighémañdé nesesis?*

Consens-tu qu'il se marie? *kederisrérdamen-nasaba asennir kesesis nissihididé?*

*Nañperañ*, une veuve recherchée en mariage par un des parens de son feu mari, v. vicissim, un veuf, &c., 1<sup>a</sup> *nenañpereghé*, v. *nenañperañ*, 3. *srañperañ nenañpereršé*.

*Šsirecin*, on porte les presens p'r le mariage.

*Nssiremañ*, je les porte v. g. au père, v. &c.

*Nssiredamékkañ*, je fais presens d'une chaudière.

*Nssiredamékka kskšák*, je fais presens de pls. [plusieurs] chaudières.

*Nssiredamékts pesksañdi*, v. *sksañss*.

*Šsiremsañss*, on les porte p'r la femme.

*Tsnañss*, on les reçoit v. *tsnem sa sédssit*.

La publication des bans: —

*N. N. keni'ksmereba kadási-pañbátami-niss-sak, N. N. ni aneghi pézekšda nširañk*, v. *si'tamek*, v. *si'ret*.

Le 2<sup>d</sup>, *ni aneghi nisceda nširañk*, &c.

Le 3<sup>e</sup>, *ni aneghi metsessara nširañk*, &c.

Je vous marierai demain, *sébatsi kenébasi-žérba*.

Ce q' le p. [prêtre] leur demande; —

*N. Kederérmánasa N. sasé'kkét asskamis. Nenissinína érnasagak pañba'tami-nissin?* et vicissim.

Prenez-vous la main, *sa žiretsénédiks*.

Insere illi annulum, *sa žiretsésderé*.

Je suis marié, ait vir, *nekitsdé*; mulier verò, *nsssi*.

Ils sont mariés, *nissššak*.

Ils s'entr'aient, *mssañriditsir*.

Je suis marié avec elle v. avec lui, *nšitaps-mañ*.

Je les ai marié, *nekisinibasižañk*.

As-tu une femme? *phāinénnaša kstzāñnañ?*

Où est ta femme? *tañnsaiga nissšičgša?*

Il est, v. elle est mariée, *tsebakañdam*; ils le s't [sont], *tsebakañdamsk*.

Il n'est pas marié, il ne trouve p'sõe [personne] q. le veulle, *kañghéghighikššé*.

[MARMOTTER.]

Je marmotte, murmure, *nekikimedsnké, 3. kiki*.

[MARQUE. Vid. infr. p. 337.]

MARTEAU, *tsitañbéigan*, v. *amare, amaris*.\*

[MARSOUIN.]

Marsouin blanc, *sañbaméks*. [336, 337.]

[MARQUE.]

C'est la marq<sup>e</sup>, la figure de N, *sañga édarasi'žssida N*.

Je mets ma marq<sup>e</sup>, *nedasi'žssi*.

Je marq<sup>e</sup> avec courroie p'r connaître prenant q'q' mesure, &c., *nekikañbésemen*; idem, avec un bois, *neki'kakssemen*; idem, me servant de utroq<sup>e</sup>, v. &c., *netebaksnemen*.

MARTE, *pépanakesss*; attrape aux martes, *kerahigan*.

J'en prens, *neghé'raha*; item, castor, &c.

Robe de martes, *panakesésesak*.

[MATACHER.]

*Eraghinañss*, il le faut mâtacher, pinturer, &c.; il le faut mâtacher de noir, v. g., planche, &c., *mekazšéraghinañss*.

Je mâtache une peau, *neniskšéghihémen*; du bois, &c., *nemckssaghenemen*; il le faut mâtacher, *mekssaghenañss*.

Je me mâtache, *nedéraghi, 3. éragš*.

Je le mâtache, *nedéraghinañ*.

Je suis mâtaché de rouge, je me mâtache, *nemckšānšéhssi, 3. mek*.

Je suis mâtaché de rouge v. d'autre par hasard, *nemamskšānsa*.

Je suis mâtaché par hasard sans le vouloir, *nemams'ksānshé*.

MÂTIN, *tse'ksé*; de g'd [grand] matin, *esspañssisi*.

[\* From the English, hammer. EDIT.]

Je partirai demain le g'd [grand] matin, *nes-spañssétsi*, 3. *sp.*

MAURE, v. nègre, *perakamen*, -*ménak*.

[MÉCHANT.]

Je suis méchant, fâche facilem't, &c., *nenskañbäi*.

Je suis méchant, *nematsenasakesi*, 3. *mat.*

Je n'ai rien de méchant, *m̄da* [*kégsi*] *nems-ogs*, 3. *m̄da* [*mañda*] *kégsi msōsgēi*.

MÉDAILLE, *pañba<sup>c</sup>tami-ssriañ*.

[MÉDECIN.]

Je suis médecin, *nenstsängsē, nenstsängsāñ-<sup>c</sup>rañ*.

MÉDECINE, *nebizsn*; p'r faire vomir, *saga-gsi-nebizsn*.

Médecine p'r les yeux, *ssgniksāngan*.

Médecine, onguent, emplâtre, *sipissan nebizsn* v. *sipissāñ*.

Je te demande une médecine, *kšikstmsr nebizsn*.

Quelle médecine me d'des [demandes] tu ? *kégsi nebizsn sikstmasian* ?

As-tu profité de la médecine ? *ksramarsinasa* ? v. *ksrañbédamenasa* ?

Je porte t'rs [toujours], je ris<sup>q</sup> t'rs [toujours] avec, mes médecines, *nekisinepinar nšipenédamenar, nenebizsnar*.

[338, 339.] Cette médecine ne me fait bien, plus de bien, je cesse d'en profiter, *nedé<sup>c</sup>ksañbédamen*.

Cette médecine n'est pas bonne p'r la brûleure, *m̄da* [*mañda*] *srighensi métkazézimeghísti*.

Elle est bonne p'r les coupeures, *srighen siktéhssineghé stsi*.

Je l'avale, *nekssihadsn*, 3. *ags.*, v. *nemessihadn*, 3. *am*.

Je lui fais avaler, *nesa<sup>c</sup>kamsrerañ*.

[MÉDIRE.]

Je médis, *nssksghémi*; de lui, *nssksmañ*, id ē [est] *ssskasis neteberśmañ*.

[MÉLANGE.]

Avec mélange, *ks<sup>c</sup>radisi*, in comp. *ks<sup>c</sup>radé*.

Je mêle cela avec, *neks<sup>c</sup>radénemen*, nob. *neksradénañ*.

*M̄da* [*mañda*] *mina ks<sup>c</sup>radénañsisi*, on ne le peut plus mêler avec, &c.

MELON d' eau, *éskitamék sa<sup>c</sup>sasé*, pls. *éskitaméghir*, id ē [est] qu'on ne fait pas cuire.

Il est meur, *kisi nitzigsét*.

Je le coupe, *nederesemen*, nob. *nederesañ*, v. *nenstsitsnak*, je cueille les pommes.

Coupe-m'en un morceau, *baghésemasi*, ig. *nebaghésemen*, 1<sup>a</sup>. *nebaghésemasañ*.

[MÉMOIRE.]

J'ai la mémoire de cela, je m'en souviens, *nemi<sup>c</sup> kšitéhañdamen*.

*Šsañmi tétéba<sup>c</sup>tar katoānganar*, ces sont trop les mêmes mots.

[MÉNAGER.]

Je ménage les vivres, *neks<sup>c</sup>paéredemen mitssāngan*, nob. *nekšpaérmañ sdamañ*.

[MENTIR.]

Je mens, je raconte en vain, *nepišsañtsemi*.

Je mens, seu, j'invente ce *q<sup>o</sup>* je raconte, et je le dis t'tôt [tantôt] d'une manière, t'tôt [tantôt] d'une autre, *nebabsrebšé*.

[MENTON.]

Mon menton, *nkši, keksi, sksi*.

[MÉPRISER, MÉPRISABLE.]

*Nekeneskershsmasi*, je dis de lui *q<sup>o</sup>* il est méprisable, vraiment il lui appartient bien.

*Nekeneskershmasañ*, je dis à *q<sup>o</sup>q<sup>o</sup>* un [quelqu'un], Celui-là est méprisable.

*Kekeneskershmsren*, je te dis *q<sup>o</sup>* celui-là est méprisable.

*Keneskérms<sup>c</sup>tañgšat* v. *keneskesetañgšat*, cela ressent le mépris.

Je le méprise, *nekeneskérdamen*, nob. *nekeneskéremañ*.

Je le méprise, l'estime petit, *nekeneskinasañ*; en fais peu d'état, *nemamégšéremañ*.

J'ai lui fais tout à la négligence, grossièrem't, *nemamégšihañ*.

Je suis méprisé, on ne tient conte de moi, *nekeneskighi*.

[MER.]

La mer, eau salée, *ssbéks, ssbégsk*; à la mer, *ssbégsk*.

## [MÈRE.]

[340, 341.] Ma mère, *nigass*, 3. *sigassar*. Vid. Parentée.

J'ai une mère, *nšigašši*.

*Égak nedaraméskésaäk*, *N. N. métsinidégak*, v. *nésuanigak*.

*Is érisisihidisa*, v. *deban*, *N. N. ségaknasa éraméskéšghigak*.

*Égak kepañba<sup>c</sup>tamasésašngaktsi*.

*Šaṅga pañba<sup>c</sup>tamasésags*.

*Égak poñba<sup>c</sup>tamasésagšigak*.

MESSE, *aramāiškañ*; \* je la dis, *nedaramāiské*, (usus invaluit.)

Je la sers, *nensdenaké*; sers-moi la messe, aide-moi, *arcnmasi*.

Sers toujours la messe, *ési aramaiskémeghi kensdenaké*.

Sçais-tu servir la messe? *ksésérdamennasa ahari nsdenakémek?* v. *kenitašsinsdenakénasa?*

Après la messe, *kisáramāiskémeghé*.

Il vint avant la messe, *éssema šaramāiskémskeban baié<sup>c</sup>pan*.

Je prie pendant la messe, *nepañba<sup>c</sup>taramāiškañ*.

Je veux vo' [vous] apprendre à servir la messe, *kekakékimereba kadási nsdenakéšaṅgan*.

Pertinentia ad missæ ministerium, &c.:—

*Šski<sup>c</sup>tagši*, habille-toi, &c.; *sski<sup>c</sup>tagšiks*, pls.

*Kšššits srir*, *kšššitsks srir*.

*Mššak matsitskkan*, *mššak matsits<sup>c</sup>kkéks*, ai, aiez soin de ces robes, &c.

*Škstāi ataštek*, l'encensoir.

*Peks étasapit*, la navette.

*Arčéghiadigan*, le goupillon [goupillon], l'aspergès.

*Nederebéghiadadasaäk arenañbak*, je les asperge, &c.

*Nikašssšéhédits sassénemašganar ghéreneghik*, *q<sup>c</sup>* ceux qui portent les flambeaux marchant les p<sup>rs</sup> [premiers].

*Nikašssšésšik nissak na<sup>c</sup> šdagšisi aragša-bihidits*, *q<sup>c</sup>* 2 *q.* [qui] vont devant s'arrêtent là, &c.

*Šdésk sghik*, v. *sédssšésšik nemañ aragšabihidits*, &c.

*Épemašisi aršssšéhédits nissak*, *nissak arenakašisi*, *nissak aragšisi pañšisi*, 2 à la droite, 2 à la gauche, &c.

*Tétebisi kederašghibena*, nous saluons, &c., en même tems.

*Kinasañbamiks*, *ne nañbi kirsansa ketesinañ*, regardez comme je fais, et faits de même.

[MEASURE, MESURER.]

Une mesure, *tebakšnigau*.

Je mesure, *netebakšnighé*, 3. *teb*.

*Arakšnašs pézeksda*, une aulne [aune].

Je le mesure, *netebakšnemen*, 3. *st*.

Measurez vous p'r voir qui est plus grand, *tétebghiršks añéghiršks*.

*Nekštéi* v. *š areghir*, il a une palme; *nisséi*, 2; *utséi*, v. *ntséš*, 3; *iéséi*, v. *š*, 4; *nañnuéi*, v. *š*, 5; *negšdašs ké<sup>c</sup>séi*, v. *š*, 6;

*negšdañkaš ké<sup>c</sup>séi*, 12, &c.; *nañširetsé*, demie palme; *neuighiretsé*, un doit en long.

[METTRE.]

Je le mets, *nepsnemen*, 3. *ap*.

Je le mets dedans, *nepi<sup>c</sup>rañ*, 3. *api<sup>c</sup>rañr*; mets-le, *pi<sup>c</sup>ré*; ne le mets pas, *mššak piriégats*.

Je mets une chose à la place d'une autre *q<sup>c</sup>* je prens, *netššatšañnemen*.

Je mets to' ensemb. dans un me'e [tous ensemble dans un même] lieu, *nemañšitšsn*, 3. *amañ*.

On me met v. on met dans moi, *nepsmañghé*.

Je mets dans lui, *népsnmasañ*.

Je le mets là jusqu'à demain, soit p'r le faire cuire, soit p'r achever cela, &c., *nega<sup>c</sup>degsntsn*, nob. *negadegsnrañ*.

Je le mets parmi, &c., je le mêle, &c., *neki<sup>c</sup>radenañ*.

Je le mets là, nob. *nededsrañ*; je m'y mets, *nededsresi*.

[ \* Formed from the French messe. EDIT.]



Je le mets sous ma robe, *nedarambsé'nemen*, nob. *nañ*, v. *nebimérin*.

Je le mets dans un ouragan, vase, &c., nob. *nedéperañ*, 3. *sdép*, ign. *netéptsn*.

Je lui mets dans la main *q'q'* ch. [quelque chose], *nedaspañretsénañ*; mets-moi, *spañretséni*.

Je le mets la dedans, *nedat'usatsn*.

Je le mets dessus *q'q'* ch. [quelque chose], v. g. cheval, *messisi kegši nsski'troñ*.

*Nepitsipsnemen*, je mets cela en un lieu croiant le mettre en un autre, *patsi*, part. *nederérdum patsi ni psnema* v. *pissisi nederérdam is éto psnema*.

Je me mets dans quelque chose, *nebiresi*.

Ils se mettent autour de lui soit à genou, &c., v. g., autour du berceau de Marie naissante, *sdakSarapi'tanañsañ*, 1<sup>a</sup> *nedakSarapitasañ*.

#### [MÛR.]

Le blé est meur, *kisi nitsigšét*.

Les blés meurissent, *skamsnar nitsigšédsr*.

Cela l'est, *kisighen*; les fruits le sont, *atsi'tar*; ils ne le sont pas, *sekaretsišar*, *éssema atsitésiar*.

[Page 342 of the MS. is blank.]

#### [MEUBLE.]

[343.] Mes meubles, *nematsésssm*, *mar*.

Les meubles du défunt ou défunte, *srir sasigšanañghir*; v. celle q. [qui] les apporte dit, Je fais p'nt [présent] p'r le mort, *nepakitnighé sañga stsi mctsinédebána*.

#### [MEURTRIR.]

Je suis tout meurtri, *messisi minañbsi're nhaghé késtéhimek*, 1<sup>a</sup> *neminañbsi'ra*.

Tu Pes, *messisi minañbsi're khaghé késtéhsrek*.

Il l'est, *messisi minañbsi're shaghé késtéhstt*.

#### [MIETTE.]

Les miettes, soit de pain, soit d'autres ch. [choses], *béierañghir*.

Mes miettes, *nebiétamenar*.

#### [MIEUX.]

Je fais mieux un canot *q'* toi, *nia srahami neni'tañstéri*.

MILIEU, *nañsisi*.

Pendant le jour, *érignkizekak nañsisi* v. *paskšété*.

Il est midi, seu, le milieu du jour, *paskšé*.

Le milieu du chemin, *nañsisi* v. *añptasisi*.

Au milieu de la rivière, *tsaštegšé*.

Minuit, le milieu de la nuit, *nañšitebi'kat*.

Il est au milieu de nous, *nedéidopi'tavaana*.

Je suis au milieu, *nedéidopitañgsk*.

#### [MINE.]

Je le trompe, en lui faisant tourner le visage afin *q'*il ne me voit pas prendre ce *q'*il tenoit et *q'*il avoit quitté pour un moment, &c., idem, *nsuigšéthrañ*, *nenitzam*.

#### [MINCE.]

Cela est mince, en rond, *pisa'kšat*, nob. *piá'kss*, *pisa'kssesen*, v. *sasabissabañ*, v. g.

Mince en plat co'e [comme] écorce, planche, &c., *sasabé*, *vasabigšagat*, nob. *vasabéssš*.

Mince, v. g., couverte, *sasabéghesen*; épaisse, *kepaktágat* v. *kepaghé*; *sasabégghen*, peau mince.

MIROIR, *bibinastsakšañgan*.

J'y regarde, *nebibinastsakšañsi*, 3. *bib*.

#### [MISÉRABLE.]

J'ai de la peine, *nemcsàirissaakké tai'ka*, [343<sup>a</sup>, 343<sup>b</sup>]

3. *mes*, id ē [est] *ési saagat nederarokké*.

Je suis misérab. *neketemañghesessi*, 3. *ket*.

Je le rends misérab., *neketemañghíhañ*.

Je le regarde co'e [comme] misérab., *nedsššinasañ*.

MISÉRICORDE. Vid. Compassion.

MITAINE, *meretses*, *sar*, *mar*, *nemeretses*, &c.

Je les mets, *nemeretsésahšsi*.

Je les tire, *nekétsimeretsessé'nesi*.

#### [MOCQUER.]

Je me mocq' de cela, *nemamesanštemen*.

Je me mocq' de lui, je l'écoute avec mépris, *nekeneski'tavañ*; de toi, *keneski'tsr*.

Je me mocq' de lui, *nemamesanímañ*, v. *nematsipenémañ*.

Je me mocq' de cela, *nemamesans'temen*.

Non pas même cela, non pas même la moindre chose, *ni arghikkšišsi*.

## [MODESTE.]

Il ē [est] modeste, ne badine point, &c., *vañness*, 1<sup>a</sup> *nsañnesi*.

MOËLLE, qui est dans les os, *šin*.

Moëlle des arbres, *asip*.

## [MOIS.]

Un mois, *pézeks kizss*. Vid. Lune [p. 319.]

C'bien [combien] y a-t-il de mois qu'il est né?

*késsaknava kizssak sa iarenañbaidebañ?*

Il y a 6 mois, *negsdañsga késssa kizsssa*.

Elle commence à avoir ses mois, *ksrañss*, 1<sup>a</sup> *nekvrañsi*.

Elle les a rég'l'em't [régulièrement], *tsebighé*.

## [MOISI.]

Cela est moisi, *agšangšič'ré*; le pain l'est, *agšangšič'ré abaiñ*.

## [MOITIÉ.]

La moitié en long, *isies*, ig. *isie*; en large, *ps'kšies*, ig. *ps'kšie*.

[MOQUER. Vid. supra, Mocquer.]

MORUE, *nš'kaméks*.

## [MONCEAU.]

Je mets en monceau avec balet, v. &c., *nemañgšékámen*, nob. *nemañgšé'rañk*; mettez-les, *mañgšamsks srir*.

Avec les mains, *nemañgšénemen*, nob. *nemañgšénañk*.

Mets cela plus avant d'un autre côté, *is eri asa'ts*, 1<sup>a</sup> *neda'satsn*, item, je décharge, &c.

MONREAL, *Añsitsšansk*.

## [344, 345.] [MONTRER.]

Je montre, fais voir, *nenamittršé*, v. *nenamiršé*; à lui, &c., *nenamittrañ*, v. *nebibiñttrañ*, v. *nenamirañ*.

Je montre cela, *nenamiršn*.

Je lui fais voir, je lui montre, *nevévittrañ*.

Montre-moi cela, *namittri*, v. *namiri*.

Montre q' je vois co'e [comme] il est, *nekinamen tañni ériǵhek*.

Je le mène p'r lui montrer, où j'ai tué la bête, v. g. *nekikinšssarañ*.

MONTAGNE, *pemadené*; au dessus de la montag., *ššédensǵhé*, v. *ššañkšok*, v. *ššañkšǵhé*; au bas, *némékaañki*; le long, *se-*

*nsta'dené*; à l'entour, *ššnadené*; de l'autre côté, *agañmádené*; la descente, *penañkañšsesessen*; la montée, *tekššañkessen*.

Je grimpe, je m'agrippe en montant, *nedañhañdañbatsi*.

Il est difficile de monter là, *ni saaghiarañdavésen*.

## [MONTER.]

Je monte, l'échelle, arbre, *nederañdasé*, 3. *arañ*.

Je pleure en montant tant il est difficile, *nasétañdavé*.

Je monte v. g. à l'autel, *netekššakšé*, 3. *tekššakšé*.

Je monte la montagne, *neda'kššaiiki*.

Je la descens, *nepenaiiki*.

L'ours monte sur un arbre v. écureux, v. &c., *arañdasé'ré*; qu'il monte, &c., *arañdasérañts*, 1<sup>a</sup> *nedarañdavé'ra*.

On monte v. g. dans la rivière, p'r aller là, seu, on va contre le fil de l'eau, *akštéhaišš*.

Je la monte, *neda'kšté'hemen*.

À la montée de la rivière, *akšdañsi*.

Les poissons montent les rivières, *sderakvatañnañ*, sing. *sderakštaiñ*.

Vous monterez, jusqu'à à ce pin, *kepétakštéhembra kšésékkét*, 1<sup>a</sup> *nepétakšté'hemen*.

## [MORDRE.]

Je mords, *nesāǵhé*.

Je le mords, *nesagamañ*.

Le serpent m'a mordu, *nesagameks škok*, di'r [dicitur] etiam de cane, &c.

Je lui mords l'oreille, lui coupe avec les dents, *netemañrakesebañ*.

## [MORCEAU.]

Je lui mets le morceau à la bouche, *nesa'kamvrañ*, *-ttrañ*.

Je le coupe en petits morceaux, *neseškyskesemen*, nob. *neseškškesañ*; il la faut, &c., *seškškesañšš*.

En grands morceaux, *netzatzébesemen*.

[MORT. Vide infr., Mort, p. 347.]

## [MOUCHER.]

Mouche l'enfant qui est morveux, *kasseds-*

néné, 1<sup>a</sup>. *nekassedoné'nañ*. [Vid. infr., Moucher, p. 347.]

[MOURIR.]

Je meure, je suis mort, *nemétsiné*, 3. *mét*.

Comment est-il mort? *taiñi sderinañ*?

Il a mangé p'r la deru. [pour la dernière] fois, *mctsi'ps*, 1<sup>a</sup>. *nemctsi'pi*.

Je meure en échange, en sa place, *nebemit-nemasin nhaghé*.

Je meure p'r lui, *nedarinésañ*, v. *nepésañ-mañ*.

Il est mort, il a rendu l'esp. [l'esprit], *éremié'ksarañmu*, v. *é'ksarañmu*, v. *ék'sañbadam*, 1<sup>a</sup>. *nedérmie'ksarañmi*, v. *nedé'ksarañmi*, v. *nedé'ksañbadam*.

Celui qui revient qu'on ne savait qui s'est, soit esprit, &c., *vanaiñmess*, *s'sak*.

Un mort qui reviens après sa mort, *ké'tañss*, *s'sak*.

J'en ai peur, *nesañsi*, 3. *tsañsu*.

Ils vont pleurer le mort, couvrir la fesse [face], &c., *nantsi-mavapanssak*, v. *nantsi-brakenigak*.

*Métsinéda érañgomañdebani cōisak*, les parens de la mort, cō'ient [conviennent].

*Émesis māda* [māñda] *métsina*, ma sœur ainée ē [est] morte, cadette, *sédokañ māda* [māñda].

*E'kémuga métsina*, mon frère ainé ē [est] mort.

*E'kémūda* [ékémañda] *sa métsina*, son frère ainé ē [est] mort.

[MORT.]

[346, 347.] Je le bats à le faire mourir, il meurt pendant q' je le bats, *nek'suskstéhañ*.

Je tombe mort, to' [tout] d'uu coup, *nesarkiné* v. *nek'sérk'siné*.

J'expose ma p'sonne [personne] à la mort, v. g. allant en guerre, &c., *nemétanashérdāmen nhaghé*.

J'ai t'rs [tousjours] la pensée q' je mourai bientôt, *nepésssdérdāmen* v. *kāñghéga*, *nedaskañdāmen nemétsinañ*.

*Nep'séremañ*, je crois qu'il moura.

Je fais le cri de mort, *nek'sémi*.

Cela me fait mourir, *io nenepsañdāmen*, *nene-p'sañneg'sn sdarsgsañgan*.

Je crains la mort, *neséghesi kédosina* v. *nesék-pañné*.

Je vis long-tems, je meure difficilem't, *nesibiné*.

On meurt, *messimétsinañ*.

Un enfant est mort, est éteint, *nekasséni'gāñ asañsis*.

Je suis mort, éteint, *nenikassé*, *kenikassé*, *nikassé*.

Ils s't [sont] éteints, *nikasséni'gak*; vo' et no' [vous et nous], toi et moi, *kenikasséni-ghébena*.

Où iras-tu après ta mort? *taiñetsenosa éiañan kisi métsinaané?*

Que deviendras-tu si tu venois à mourir sans t'être repenti? *taiñctsi éritōan metsinaané kañdak māda* [māñda] *añnersisāné?*

Ceux q. [qui] prirent Jésus t'beñt [tombèrent] tous morts, *pemañg'sak*.

Nous tombons tous morts, &c., *kepemañg'sébena*.

Vous tombez, &c., *kepemañg'séba*, &c.

Vid. pag. 344, retro, &c.

*Kepañba'tamasésañna N. sedarevmañda*, *tai snitzañna*.

*Kcp. &c. N. ésitsiémañda pézek'sa*, *tai éphāi-nemsmāñda*.

*Kcp. &c. N. ésésémañda*, v. *sésemesmañda*, v. *séds'komesmañda*, v. *ékismōñda*, v. *sédokkaiñmañda*, *sésagamsnmañda*, v. *ésigasssémañda*.

*Nedarokkaiñk'v ésigasssitchana* v. *sénitzañni-debana*.

Priours p'r N., *skksdsma nisigaden métsiné-saana*.

Pour le père, *sénighihigs-māñda*; *nedarokkaiñreg'v snitzañnebani*, ses enfans.

J'ai mes souliers aux piés étant mort dans le t'beau [tombeau], *nckkesin*, 3. *kkesin*.

*Nekekesinnar*, j'ai tous mes meubles avec moi dans le tombeau, 3. *akkesinnar*.

J'assiste à sa mort co'e [comme] les autres, *nevésisi*.

Je n'y assiste pas, *nsskāsisi*.

*E'daripiss* v. *édaripisit*, il est prêt de mourir par accident, 1<sup>a</sup>. *neddaripisi*.



- Je couvre la mort faisant présent, &c., *nedāsshāñ*, ma couverte, v. *nedagšanéχañ* v. *nemeragšahañ*.
- Un qui est mort, si on parle de lui, v. g., di'r [dicitur] *ke'taïssša*.
- Je reviens d'une pâmoison, *nedāñbarañmi'ra*. *Nemesitéhañmañ*, v. *nemesāiresi*, je me souviens de lui mort, c'est p'r cela q' je pleure.
- Métsinésaana māda* [*mānda*] *apisañné amirañnésa* *Jesssar pézeksn*, *sdakkikkaññi éri aritéhañsisa paiba'tamasésinets*.
- Pezeksnsk nededaripisi*, des choses m'empêchent, soit de fuir, de marcher, ce qui est cause qu'on m'abandonne et il faut q' j'y meurs, &c.
- MOT, *gherssaigan* v. *ketsaigan*; je n'en dis q' une partie, *netagširaršétai'gssi*, 3. *tag*.
- Šsañmi tébeba'tar ketoaiganar*, ce sont trop les mêmes mots.
- Cherche un mot qui finisse v. g. par *masañ*, *kširasats ketoaigan métanaski-si'tanek*, *masañ*.
- Je n'entends pas un seul mot de ce q' tu dis, *māda* [*mānda*] *tégné negsdañkšat kšéstrs*.
- Je te raconte en un mot, &c., *negsdaññkšat kedandokkévren*.
- [MOUCHER.]
- Je me mouche, *nésañgšsi*, 3. *sani'gu*.
- Mouche l'enfant q. [qui] est morveux, *kasscdanéné*, 1<sup>a</sup>. *nekasscdanénéañ*.
- [MOUCHE.]
- Une mouche, *pstsévé*, *sak*, v. *pstsésé*.
- [MOUCHETER.]
- Il ē [est] moucheté, *pepesaghikess* v. *pepesaghigs*, ig. *pepesaghigen*, v. *pepesagavi-χañse*.
- [MOUILLER.]
- Je le mouille avec de la salive, le mettant à la bouche, *nemšsebégarátamen*.
- Me servant d'eau, 'peau d'original, [?] *nenešnbéghenemen*, nob. v. g. *sé nesēsñbighi-harañ*.
- Cela est mouillé, *mšsebégat*, nob. *bégess*.
- Je suis tout mouillé, *nemšsebégheši* v. *nebašbañsé*.
- Cela est mouillé, *bašbé*; ces ch. [choses] le s't [sont], *bašbar*; je le mouille, *nebašbañsarañ*.
- Je me mouille le, v. les piés passant le ruisseau, *nederañsšghé*.
- Homme mouillé, *bašbavañdañss*, 1<sup>a</sup>. *nebašbasadsn*.
- Peau de chevreuil est mouillé, v. g., *bašbé*, pls. *sak*, *bašbak*, v. *mušbeghésu*.
- Ma couverte v. g. est mouillé, glaçonné, de mon haleine, respiration pendant la nuit, v. g., *nekigšarañsin*.
- On le mouille, *mušbéghihadañss*.
- Je le mouille, *nemšsbéghihadsn*, nob. *harañ*.
- MOULIN, *tagšahaigan*; j'y mou du blé, *nenañtéassi*, 3. *nañ*.
- MOUSSE, *assakamiks*, *gsr*.
- MOUVETTE p'r remuer la chaudière, *ar-békhigan*; j'en remue, *nederebékhighe*; j'en fais une, *nederebékhiganikké*.

[Page 348 of the MS. is blank.]

[MUER. Vide infr.]

[MUET.]

Il est muet, *nanétañvé*, 1<sup>a</sup>. *nenañétañsé*. [349.]

[MUER.]

Bête qui müe, *añptsipeskšavahadu*; elle a perdu son poil, *mé'taséhads*; il revient, *sañ'gavé*; il est cru de la moitié, *nérañsavaéhads*, v. *nérañsasé*; il est de sa g'deur [grandeur] ordinaire, *sémusé*.

[MULTIPLIER.]

Les pains sont multipliés, *peska'rak abañnak*.

*Pesk're koks*, la chaudière s'est multiplié, il y avoit peu et il se trouve co'e b'p [comme beaucoup], il y en a même de reste.

*Nepeskañmen mitssaigan*, je multiplie le manger.

*Nepeskañghenavé*, je distribue et il s'en trouve encore de reste quoiqu'il y en eu peu.

[Pages 350 and 351 of the MS. are blank.]

## N.

## [NAGER.]

[352, 353.]

Je nage en me baignant, *nepemaksitsin*.Je passe la rivière à la nage, *nebikagáhamen*, 3. *abi*.Je nage avec l'aviron, *noθaañbié*, 3. *θaañbié*, imp. *θaañbié*, v. *neni' tañsibié*.Je nage au devant du canot, *nenikañnéké*; au derr. [derrière], *nstsitsiké*; au milieu, *nenañsragšaham*.Je suis las de nager, *nesašsáni*, 3. *sasa' sáns*.*Nepemipiébena nederipiébena*, no' [nous] allons, no' [nous] tirons de ce côté-là en canot, &c.; *ari piaredin*, on va, &c.; *Tañni éri piéssa?* R. [réponse], *sdékka sderipiáméban*.*Nepemipiébena, nederipié'bena*, no' [nous] allons là en canot en nageant, &c.*Tañni éri piéssa?* où est-il allé? &c. *Šdékka sderipiáméban*.*Ari piaredin*, on va de ce côté-là, &c.Je me sers de l'aviron, *noθam*, 3. *šotam*, v. *noθahamen*, 3. *šóahamen*, imper. *šohi*.Je nage t'rs [toujours], *nekeskamipié*.

## NAÏTRE.

Un enfant est né, *sdarenañbaï asañsis*, v. *arenañbao*, v. *baïo*.Il est né avec la malice, *snespiǵhiu*, v. *snespiǵsañdomen matsenasakessangan*.Un enfant est né, il est [?] sorti, il ē [est] sur terre, *akisi metabi asañsis*, v. *kisi metabi*, pl. *bšak*, v. *nigs*; id ē [est] *kisi metsisi aps*.

## [NATION.]

Les diverses nations . . . . .

## [NATTE.]

Je mets ma robe p'r natte, *nedanarraim nedassé*.J'accoumode ta natte, *nsranakkaim kedápsn*.Sur quoi m'assoierai-je, qu'aurai je p'r natte? *kégsi nedanákasin*, v. *kegši éna'ka?*J'ai une natte, j'ai sur quoi m'asseoir, *nedana'ké*.J'ai une peau de chevreuil v. ours, *neda-na'kañn sé*, v. *mesksé*, &c.Il y a des nattes, la cabane est nattée, *ana'kañss*.Natte, peau, v. &c., sur quoi on s'assoit, *ana'kañn*.Natte de jonc, *anañsen, nar*; ma natte, *nedanñsen*.J'en fais, *nederittsn anañsen*.

## [NATUREL.]

Il est d'un naturel très méchant, il se fâche, gronde t'rs [toujours], *aksnasakess*, 1<sup>a</sup>. *nedaksnasákesi*.Il paroît d'un méchant naturel, *matskamighesšinañgss*.

## [NAUFRAGE.]

Je fais une perte, il m'arrive accident, *nesé-ghiné* v. *nšéghiné*. [354, 355.]Je fais naufrage, mon canot s'est brisé, &c., *negsskañsi*, 3. *gss*.Aiez pitié de ceux qui ont fait naufrage, embarquez leurs affaires, divisez les ho'es [hommes] dans les canots, &c., *ketemañghérmsks seǵhi ksskañsétsik nétsik, pssitks kégssar tzatzébi pssihks arenañbak srinéñksórdiks*.NAVIRE, *ketsraks, gsr*.

## [NERF. Vid. infra.]

## [NEZ.]

Mon né, *neki'tan*, 3. *ki'tan*; je saigne du né, *nebeki'tana*, 3. *beg*.NÉGE [Neige], *sasañri*; il y en a, *sasañri-ké*; beaucoup, *pessañgšaté* v. *pessañgšaré*.On y enfonce jusq'-là, *sdékka pekš thañss*.Il y en a jusq'-là, *isga arspañgsaté*.Tu vois t'ber [tomber] les ho'es [hommes] dans le feu aussi dru, q' quand il nége, &c., *kenamikañbanik arenañbak kedakstâik, mátsena péssañghi ni akéssinañ péni-rañtsik*.Il nége, *psan*; il a négé, *psansssa*; elle porte, *keraden*.

Elle fond, *nsgsbéss sasaäri* ; il y en a plus, *métritté*, v. *mébéss*, v. *méteritté*.

J'ôte la nége de dessus la cab. [cabane], *nemagaäri tamen sigsäim* ; je l'ôte p'r cabaner, v. *q'q'* [quelque] part qu'elle soit, *nemagaäri pi*.

J'en mets dans la chaudière, *negsuhapi ké*.

Mets-en, *gsuhapi ké*.

J'en mange, *nemäriägšé*.

Il y a beaucoup de nége, *pessaängsa té*.

Jusq' où y en a-t-il ? *täine nasa araängsa ré ?*

Jusq' au genou, v. g., *mektegsk*.

*Penaks té*, la nége t'be [tombe] en pluie, des arbres, ex arbore.

*Ni araängsa ré*, il a négé de cela, montrant avec le doit v. la main, &c.

*Kesi ps*, v. *kesipsäim*, v. *pessauksps*, il nége beaucoup.

[NÉGLIGER.]

Je le néglige, je ne le regarde pas, v. g. *q'q'* [quelque] chose *q'* je trouve, &c., *nedariäbadämen*, *nedariäbamaä* *asapasä* *kaändok*.

NERF, fil de nerf, *kiksäüdi*, ar.

Nerf du corps de l'homme v. a'aux [animaux], *stsét*, tar.

[NETTOYER.]

Je le nettoie, me servant de bâton, bois, &c., *nebasté hemen*, 3. *abas.*, nob. *-téhaä* *sé kaändok*.

—— la chaudière, *nekesebaharaä kskö*.

—— le plat d'écorce, *nekesešitssaghenemen* v. *nekesešabahadsn*.

[NEVEU. Vid. infra, p. 357.]

[NEUF. Vid. infra, p. 357.]

[NEZ. Vid. supra.]

NID d'oiseau, *sasesé*.

[NIER.]

Je nie, *nedighésé*, 3. *igh.*, v. *nebégšasšé* ; S.

Pierre v. g. renie Jésus, *abégšassaämaär* *Jesssar*.

Je lui nie, *netighésamaä*.

Je nie cela, *netighésaändämen is*.

[356, 357.] [NOËL. Vide infra.]

NŒUD, [NOUER,] *ketsipriadigan* ; il est noué, *kisi ketsipriadaäss*.

Je le noüe, *nekitsipriadsn*, 3. *akitsipkiadsn*, nob. *-haraä*.

Nœud, d'arbre, *peskaaänteksn*, *nsr* ; mesärripeskäänteksnéness, ig. *mesairipeskaaänteksnégat*, ce pain é [est] bien nœueux.

NEVEU. Vid. Parentée.

NEUF, neuf fois. Vid. Les Nombres.

[NOYER.]

Je me noie, je me jette dans l'eau, &c., *netsapakaäresi nobik*.

Il s'est noié, *nebik dari na*, *tsasapi ra*, 1<sup>a</sup> *erse nobik nededariné*.

NOËL, on prie la nuit, *nibaäpäiba taäss*, v. *nibaähäimiamghé*.

NOIR, *mkazésighen*, nob. *mekazésigs*, *sasan*, *nesseghighen*, *gs*, sub. *nésseghck*.

Mon habit est noir, *nemikazésésé*, 3. *mka-zésésé* ; rouge, blanc, jaune. Vid. Habit.

[NOIRCIR.]

Je me noircis, de charbon, *nemesedaängšé* *mkasé* ; lui, *nemesedaängšénaä* *mkasé* ; ma chemise est noir, *mkazési nedaäntsréhaäisé*, v. *nemikazési-aäntsréhaäisé*.

NOISETTE, *pagaänes*, ar.

NOIX, *pagaäm*, nar ; noier, *pagaämssi*.

J'en casse avec les dents, *nesksskadämen* ; avec instrum't, pierre, hache, *nepagaäsi*.

J'en abbas, v. aliquid aliud, *nebenté hémén*.

Les vers les mangent, *amitsinaär sksgak*.

NOM, *nšissaängen*.

Son nom, *sderisisängen* ; mon nom, *nederisisängen*.

Il resuseite le nom v. g. d'aäbigaänsék *naäbisiss*, v. *snäbisissina aäbigaänséda*, 1<sup>a</sup> *naäbisissina aäbigaänséda*.

Je m'appelle. Vide suo loco.

Je prononce v. g. le nom de Jésus, *nenesedöhomen Jesss sderisi saängen*, *nenesedohaä Jesss*.

Un nom difficile à prononcer, *saaghisiregšat*

[NOURRICE, NOURRIR.]

Je suis nourrice, *nenssaä*.

Je nourris, j'ai soin de pourvoir de vivre, [358, 359.] *nesaghéssin* ; lui, *nesaghéssinaämaä*.



Je le nourris, lui fournis bonne nourriture.

Vid. Manger. [Vid. etiam p. 360.]

[NOMS. Vid. Nom, p. 357.]

La rivière de St. Jean, *Grastags*.

Orange [Albany], *Temaigan*.

*Saikedé'rañk*, c'est un lieu assez proche d'ici sur la mer, &c.

Les prêtres, *sañbcskésiañtsik*, a v'bo [verbo] *keskésébi*, collet.

Les Recollets, qui vont piés nuds, *mémesaa-ghikañditsik* v. *mémesaaghiesidétsik*, v. a cucullo dicuntur *añgsskéséssnhaghik*.

*MatsibigSadsssek*, la rivière, où est Mr. de S. Gastin.

*Méssatséssek*, Baston [Boston].

*Aghenibékki*, la rivière d'*Añmesskkañtti*.

[NOMBRE.]

Les Nombres ; —

N'ri [Numeri] Abstracti.	[N'ri [Numeri] Concreti, no-biles.	[N'ri [Numeri] Concreti, ig-nobiles.	To. quoties.
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Une fois,

1, *pézeks*, *pézeks*, *pézeksn*, *pézekésda*.

2, *niss*, *nissak*, *nissnsr*, *nisseda*.

3, *nass*, *n'rsak*, *nhansr*, *ntseda*.

4, *ies*, *iesak*, *iesnsr*, *iesda*.

5, *barénesks*, *nañns- nañne- nañneda- ak, nsr,*

6, *neksdañs*, *negsdañ- negsdañs- negsdañs- skéssak, késsensr, késseta,*

7, *tañbasañs*, *tañbas- (et sic de cast.) (et sic de cast.) añskéssak,*

8, *ntsañsek*, (et sic de castis.) ;

9, *nsrisi*.

10, *mtára*.

11, *negsdañnkáo*.

12, *nisañnkáo*.

13, *tsañnkáo*.

14, *iesañnkáo*.

15, *nañnnañnkáo*, v. *késsañn*.

16, *negsdañntsañnkáo*.

17, *tañbasamtsañnkáo*.

18, *ntsañsek-késsañnkáo*.

19, *nsrisi-késsañnkáo*.

20, *nisineské*.

21, *nisineské tâiba pézeks*.

22, *nisiniské tâiba niss*.

30, *tsineské*.

31, *tsineské tâiba pézeks* et sic, &c.

40, *iesineské*.

50, *nañmineské*.

60, *negsdañskéssineské*,

&c.

100, *negsda'tegsé*.

200, *nesa'tegsé*.

1,000, *negsdamksa'ki* ; 2,000, *nisamksa'ki* ;

3,000, *tsamksa'ki*.

10,000, *negsda'tegséksámgsa'ki*, &c.

Combien y a-t-il de cela, v. g., de syllabes ? *késsensio* ?

R. [Reponse] 4, *iesñsio*, 3, *nhasio*, &c.

Ils sont deux cens guerriers, v. g., *nisattc-gséss*.

[NOUVEAU.]

*Pirié*, nouveau, *m̄da* [*mañda*] *piriañisi* [360, 361.]

*ketsiniséskghé stsi*, il n'y a rien de nouveau à l'égard de Dieu.

Je te donne de nouveau ma p'sõe [personne], *nsnski kemireren nhaghé*.

*Èski*, de nouveau ; *pirimaskesé*, robe neuve.

*Piri*, de nouveau ; *piriné*, cela l'est.

[NOURRIR. Vid. p. 358.]

Je nourris v. g. un oiseau, bête, *nenitassmāñ*.

[NOURRISSON.]

Mon nourrisson, mon élève, *nenitassm, mak*.

[NOUVEAU. Vide supr.]

[NOUVELLES.]

Quelles nouvelles dit on ? *kégsi aritañgsat* ?

Bonnes nouvelles, *sritañgsat* ; mauvaises, *matsitañgsat* ; fâcheuses, *saaktañgsat*, v. *meskañgsat*.

La nouv. [nouvelle] se répand, *kistañgsat*.

J'en dis, j'en raconte, *nederañtsemi*, v. *nedañtsemi*, 3. *añtsems*.

J'en apprens, audio, *neki'ktam*.

Je porte la nouvelle, *nepéstañgsadokké* ; à qq'un [quelqu'un], *-dakkésañ*.

Vas porter la nouvelle, *aritañgsadokké*.

Je l'apporte en me sauvant, *nepétsiphsé*.

Voilà t'tes [toutes] les nouvelles, *ni nemé-tañtsemin*.

Je vais m'informer quelles nouvelles on dit, *nekssn's'tama* ; de lui, *nekssns'tamasañ*.

[NUD.]

Je suis nud, *nedañmésaghî'rra*, 3. *amé ghi'ré*,  
v. *nemssaghé'ra*, 3. *mss.*

Je le dépouille, le mets à nud, *nepaskenaï*,  
v. *neghédénemasannar sdassar*, 3. *ag.*

Je le meine, c'duis [conduis] tout nud, *nemémesag'ssarai*, v. *nemémesaghenaï*.

Il se met nud, *ni amémesaghènesin*.

NUÉE, *asssks*; le nuage va de ce côté-là,  
*asssks sda'ksi'ré*, v. *asssks stsitán*.

[NUIRE.]

La cabane v. g. nuit, elle empêche qu'on ne,  
&c., *atsérkasss*.

Il la faut défaire, *nsghenaïss*, v. *ns'kaïss*,  
du moins la partie, *ps'ksié*, *ns'kaïss*; *ké-  
'taïss*, p'r la transporter.

Je ne puis lui nuire, je ne puis lui rien  
faire, *nedaïrasihai*.

Je le secours dans son extrême nécessité,  
*nesaaghéssämaï*.

[NUIT.]

Une nuit, *kate'ksnisi*, v. *nekstsgnisi*; 2, *ni-  
ssgnisi*; 3, *tssgnisi*, &c.

Il est bientôt nuit, *kégaï pesedé*; il est  
nuit, *pesedé*.

La nuit passée, il étoit nuit, *titebskšigheban*,  
v. *se'rañgšighé pcsadéghé*.

La nuit prochaine seu commencée v. où  
l'on est, v. *éremitebs'kšik*, v. *éremitebakkak*.  
Cette nuit, *is tébkšisik*.

Quelle heure, à quelle partie, quel tems  
de la nuit sommes nous? *taïni édtsi  
tebi'kat*!

La nuit, *titebskšikeban*, de totâ nocte di'r  
[dicitur.]

*Ssgheraïntsi érmi-teba'kak*, il pleura pendant  
la nuit.

Nuit froid. Vid. Froid.

[Page 362 of the MS. is blank.]

Les diverses parties de la nuit; — [363.]

1<sup>a</sup>. *Pesedé*, il est nuit; 2<sup>a</sup>. *añgsaïnétebi'kat*;  
3. *amasiteba'kat*; 4. *nañsitebi'kat*; 5.  
*aghikiteba'kat*; 6. *pesssté'kšat*, il est  
bientôt jour; *tsé'kšat*, il est jour.

Je prie souvent pendant la nuit, *nemañc-  
sâiri-païba'tam tépkšisighi*; *chaq' nuit,  
tépkšisighi*.

Je vais passer là la nuit, *nededszekšaim*.

Il y a 3 nuits q' je ne dors point, *tssgnidebs-  
kšaisi ma'da* [*maïda*] *tégné nekikási*.

Les nuits sont longues, *kšakšañnitebi'kat*.

O.

[OBÉIR, DESOBÉIR.]

[364, 365.] J'obéis, *nekiktam*; à cela, *nekiktámen*; à lui,  
*nekiktasaï*.

Je t'obéis, *kekiktsr*; tu m'obéis, *kekiktosi*.

Je lui obéis, je fais ce qu'il me commande,  
*nekšitastasaï*, 3. *akšit*.

Je lui désobéis, *neketzasi'tasaï*.

Je lui obéis t'rs [toujours], *nekesikítasaï*.

Je participe à sa désobéissance, *neketzasi-  
tavémaï*.

Je te désobéis, je te suis rebelle, *kekenski'-  
tsr*.

[OBSCUR.]

Je ne puis aller là v. g., obscurém't, il n'y a  
point de lumière, *pesaghisi*.

Il est obscur, &c., *pesegatâi*.

Je ne le connois qu'obscurém't, *nsremérdá-  
men*.

Je ne puis trouver cela sans lumière, dans  
l'obscurité, *peseghisi*.

Je suis dans l'obscurité, *nepesegapi*, 3. *pese-  
gaps* v. *pesegaté épit*.

Il fait bien obscure (nou dans la maison)  
mais dehors, nuit obscure, *pekenem* v. *pe-  
keneghé*.

- Je suis dans l'obscurité, *ncañpescgábi* v. *nepescgábi*.  
 [OCCUPER.]  
 Je suis occupé, *nsdamarokké*.  
 [ODEUR.]  
 Cela a bonne odeur, *srimañgat*; mauvaise, *matsimañgat*, v. *maskimaré*, t'rs [toujours] mauvaise.  
 D'une odeur forte, comme pourri, &c., *arik-kain*.  
 ŒIL, *tsíseks*, *gsr*; mon œil, *netsíseks*. 3. *ssíseks* Vid. Œux, [p. 293.]  
 Il me tombe *q'q'* ch. [quelque chose] dans l'œil, *nepeseri*; je m'y fais t'ber [tomber], *nepeseresi*.  
 Je lui ôte ee qui y est t'bé [tombé], *nenstehigšésan*.  
 ŒUF, *sañsan*, *nar*; de poisson, *sssckañnak*; éclos, *pkshs*; elle les couve, *akassi* *çamenar sañsanar*.  
*Agšitsimés*, il ē [est] formé dans l'œuf.  
 Il a des œufs, *sañsanšio*, de avibus; de piscibus autem, *ssegainšio*, *ssegainak*, v. *sañsanmšio*; le mâle, *nañbé*'ré; femelle, *skšé*'ré.  
*Ni ansit matska ansihidit asansisak*, *asansiskandak kisi tekšnande sipsisar*, *ni ssaghikandébirann esi stšiharann*, *ni mina asikotaghenan*, &c.  
 OISEAU, *sipsis*, *sak*, *sipsšio*; son bec, *sdsn* v. *ski*'tan. [Vid. Animaux, p. 22, 23.]  
 Son gosier, *amvdémin*.  
 Son aile, *srgšana*, *nak*; sa queue, *saráni*, *sregšanšitsik*, *sregšanšio*.  
 Ses plumes, *asipsnak*; les plumes de l'aile, *srgšanšgnak*; il en a, *srgšanšo*, sing. *-gsn*.  
 Il chante, il fait du bruit, *tarokkšéss*; il donne à son, &c., *api*'tamsraür.  
 Il donne la béehée [becquée] à ses petits, *piðamšsé*.  
 Le eri *q'* fait la mère quand on prend ses petites, *kesé*'tasss.  
 Il béquette, il cherche avec son bec *q'q'* ch. [quelque chose] à manger, *mañmghenikadics*.  
 Oiseaux *q'* j'élève, seu, mes nourissons, *nentasšmak* v. *ssminak*.  
 [OFFENSER.]  
 Je l'offence, *negagañsihañ*, actione; *negagañšimañ*, verbo.  
 Je l'offence, *nemanikañ*, &c.  
 [OFFRIR.]  
 J'offre, *nepakiteníghé*; à Dieu t'tum [tan- [366, 367.] tùm], *nepakitenámasan*.  
 [OMBRE.]  
 Mon ombre, *netsetsaks*, 3. *stsetsakšar*.  
 À l'ombre, ombrage, *añbagasá*'tek.  
 Je dors à l'ombre, *añbagasá*'tek *nekasin*.  
 ONCLE. Vid. Parentée.  
 ONGLE, *mekas*, *sak*.  
 Mon ongle, *nekas*, *sak*, 3. *skásar*.  
 Je les ai longues, *nekšakšaini*'kása, 3. *kšak*.  
 Elles me t'bent [tombent], *ketsi*'rak *nekásak*.  
 Je les lui arrache, *nekétsikaséphañ*.  
 OREILLE, *metasaks*; mon oreille, *netasaks ket*, 3. *stasaks stasagsr*, t'tum [tantùm.]  
 Je les ai percées, *netsirséhésanñ*, 3. *stirséhésanñ*.  
 Mes pendants d'oreille, seu, j'en ai, *ncsaghéséhi*, pl. *ncsaghéséhsnar*.  
 Je les pens, je les mets à mes oreilles, *nesaghéséhsderesi*; à lui, *nesaghéséhsderañ*.  
 Mes oreilles bourdonnent, *ncañkesa*, 3. *bañkesé*.  
 Je me bouche les oreilles avec les mains, &c., *negaghépsé*'ncsi.  
 Je lui mets le doigt dans l'oreil, *ncdasigšañraghésénañ*, 3. *sdasi*.  
 Je lui perce l'oreille p'r y mettre, &c., *netsirséhañ*.  
 Je me, &c., je, *netsirséhssi*.  
 ORIGINAL, *mss*, *ssk*; mâle, *añañbé*; femelle, *hè*'rar.  
 Os qui est au milieu du cœur de l'original, *sskanitéhañ*, *nar*.  
 Le pié gauche de derr. [derrière], *skass*.  
 [ORNER.]  
 Je l'orne, je l'embellis, *nsrihañ*, ig. *nšri*'tšn. [368, 369.]  
 ORNEMENT, parures soit de cou, soit de tête, *ssšar*, 1<sup>a</sup>. *nssšmar*, *tsi*'tokkšébiar.



OS, *sig̃sat*, *dsr* ; mon os, *nesig̃sadm* ; mes, *-dsmar*, 3. *ssig̃sadm*, &c.

*Kékétsi'ré*, je déjoins, &c. ; *kékétsigar sig̃sadm*, la chair tant bien cuite, les os se détachent facilement, de viande, v., &c., *kékétsiganaüdé*, nob. *nskäsina*.

Os qui est au cœur de l'original, *uskanité-haïñ*, *nar*.

Je casse les os, *nesegskitéhemenar*, 3. *sseg*.  
L'os n'est pas à sa place, disloqué, *pataské'ré*.

L'os est reprimé, rejoint, *énighen sig̃sat*.

L'os est hors de sa place, disloqué, *barské'téhaïñss*.

Je l'ai disloqué, *nebarské'tésin*.

[OUBLIER.]

Je l'oublie, *ns'kasérdamen*.

*Nskasémaïñ*, j'ai oublié de le connaître ; *nsnitéhaïmaïñ*, je l'oublie.

J'oublie, *nskasitéhaïsi*, 3. *sakasitéhaïñss*.

Cela, *nskasitéhaïdamen*, 3. *sk.*, nob. *nskasitéhaïmaïñ*.

J'ai oublié, v. g., mon couteau au cabanage, *nskasisiné nenetséksaks*.

[OUBLI.]

Je le mets en oubli, *nšaétsitéhaïmaïñ*, 3. *asaë'*, &c., v. *nšaédérmaïñ*.

[OURAGAN.]

*Bragan*. Vid. Plat.

[OURLER, OURLET.]

On fait un ourle, on le replie, &c., *stebéghenaïñss*.

*Nedatebéghemenen*, je le replie en ourle, &c.

OURS, *asesss*, *sak* ; il se lèche les pattes, *msskšasirtséhéss*.

Je l'apprivoise, *nenegatsihaïñ* ; peau d'ours, *meskšé*, *kšak*, item de *hō'e* [homme].

[OUVRIR.]

Je l'ouvre, la porte v. g., *netaiñsdé'tsn*, *netentéhadsn*, *nepaiñté'hemen krañgan*, 3. *ap*.

Avec la clef, *nebsksté'hemen*, 3. *abskvté'hemen*.

À lui, *nepaiñtéhé'masaïñ krañgan*.

Ouvre-moi, *pañtsakámasi* v. *peksdémasi* v. *pañtémasi*. Vid. Porte.

Ouvre cet étui, v. g., *peksdéhé* ; non possum, *m̃da* [*mañda*] *ncpeksdéhémsn*.

On ouvre le sepulchre, *pekahaïñ*, item une cache, 1<sup>a</sup>. *nepikahamen*.

OUTARDES, *amptgšak*, sing. *amptegšé*.

[OUVRAGE.]

Son ouvrage, *akisitoaňgan*.

Vois c'est bien [combien] mon ouvrage est beau, *kina sésessi akisitoaňganá*.

[Pages 370 and 371 of the MS. are blank.]

## P.

[PAIER.]

[372, 373.] Je paie, *nedaïbenké*, v. *nedenké*, 3. *aïbenké*, 3. *énké*, *éssema iénkéksban*, v. *kéksp*, *essema énkésa* ; à lui, *nedaïbenkavañ*. Vid. paulo inferiùs.

*Kégši aïbenkan*, de quoi le paieras-tu ?

*Kégši aïbenkasiañ* ? de quoi me paieras-tu ?

Je le paie de cela, *is aïbenka*.

Je le paie avec un castor, *sa aïbenka mata'ré*.

On me paie après qu'on m'a battu, *nedapté-hšghé*, 3. *pitéhaïñ*.

Je le donne après l'avoir battu, *nedaptéhaïñ*.

Je ne puis avoir de lui mon paiement qu'il me demande, il me dit qu'il m'a payé, &c., *ne-masatstemasaiñ*.

*Nedaïbenkaïsi*, je me paie.

*Nedañrašimasatstemasaiñ*, je n'ai pu obtenir mon paiement.

[PAYS.]

Ils sont d'un même pays, &c., *neksdskamighesšak neksdskamighesibena*.

PAIN, *abaïñ*, *nak* ; j'en fais, *nederihañ* *abaïñ*, 3. *ari*. ; pour lui, *nederitasaiñ* ; tu m'en, *kederitasi* ; je t'en, *kederi'tsr* ; fais-m'en un, *aritasi abaïñ*.

Le pain enfle, se lève, &c., *pé'tsess abaïn*.  
Je fais du pain, *nebaïnké*.  
Je le pétris, seu, démêle la farine avec, &c.,  
*nedañbassámen*.

Je l'entoure de feuilles, *nsisibaghíbrañ  
meskikšar*.

*Aritéstánsadin*, on donne le pain béni, &c.  
*Nederéstassi*, je le donne, item, je mets dans  
le plat, &c., 3. *arítéstass*.

Je fais cuire le pain dans les cendres, *nedat-  
sitegšaabáïn abaïn*.

J'y fais cuire une anguille, *nedatsitegšaa-  
báïn nahams*.

Je fais cuire le pain dans la chaudière,  
*nebagassemañ abaïn*.

Est-il cuit? *kissnasa?*

Je présente le pain béni, *nepakiteníghé  
pañba'tami-abaïn*.

Demain on le présente, *síbatsi pakitenáñ  
pañba'tami-abaïn*.

PAILLE, *meskikšar*; j'en coupe, *nemssike-  
skesañsé*; pour lui, *nedañbenkadasésañ*.

[PAIER. Vid. supra.]

Je paie, *nedañbenké*, 3. *añb.*; à lui, *nedañ-  
benkasañ*, 3. *sd*.

Je me paie, *nedañbentkañsi*.

On me paie bien, on me donne b'p p'r [beau-  
coup pour] cela, *nsrahamañghé*; mal, *ne-  
matsamañghé*.

[PAIX.]

Je vais p'r faire la paix, *nenáñsisrira*.

Je ne puis la faire, *mñdahaba* [*mñdahaba*]  
*nekisisri'ra*.

Faisons la paix, *srirañda*, v. *arañghsdída*.

Ils parlent de paix, *srsañsšak*.

J'ai des pensées de paix, *nemennítéhañsi*.

Vivre en paix, *sañsañghenasésañrediks*, v.  
*sañkasésañrediks*.

Vis en paix, *sañsañghenasésañtzi*, v. *sañ-  
kasésañtzi*.

Ils vivent en paix, *sañsañghenasésañredsak*.

[PÁLIR.]

Je pális de crainte, *nsañmbekí'ra*.

[PALME.]

Je fais une palme mesurant *q'q'* ch. [quelque  
chose] avec la main, *nenegstéšnemen*, v.

*nekésséšnemen*; j'en fais 2, *nenisésnemen*;  
3, *nenésésnemen*; 4, *neísesnéinen*; 5, *ne-  
nainésnemen*; 6, *negsdañs nekéssésnemen*;  
&c.

C'est bien [combien] a-t-il de palmes? *késsetana  
késsésnañs?* v. *késséšnasa*.

[PÂMER.]

Je pâme, je t'be [tombe] en pâmoison, *ne-* [374, 375.]  
*métsiné*.

Je reviens de pâmoison, *nedañbarañmi'ra*, v.  
*rañn*, 3. *sdañ*. Vid. Défaillance.

PANIER, *abassenédé, dar*; j'en fais, *nedá-  
basse nsdékéké*, 3. *ab*.

[PENCHER.]

Je panche la tête, *nedatsidas'kšési*, 3. *ats.*;  
*-kšés*.

Le canot panche, *pemé'té agšiden*; je le  
panche, *nedapmé'kamen*, v. g. *agsiden*, 3.  
*sd*.

La terre panche, est en talus, *pemañkké*.

De quel côté panche l'arbre? *táñni éragší-  
tasaksak?*

Il panche de ce côté-là, *sdé'ka aragšítáha-  
gšat*.

[PANSE.]

Le panse de l'original, v. chevreuil, *asinássa-  
ghé*.

La terre est en panse, *atsi'tasañké*.

PAPE, *ketsisañgmañsi-pa'triañs*.

PAPIER, *pirasks, ksr*.

PAQUET, *siasse*.

Mon paquet, *nšias, sar*; je le fais, *nsrañ-  
bi'ké*; de nob. *nsrañbi'kañ*.

Je ne puis le porter, *nedañsaré*.

PARADIS, *spemki*; en paradis, *spemkik*,  
*spemkíghé*.

PARALYTIQUE.

Je ne puis marcher aiant les piés v. mains  
coupées, *ncsisibíghi*, 3. *sis*.

[PARDONNER.]

Je lui pardonne, je ne lui veux rien faire,  
*mñda* [*mñda*] *kégší nekadasirañsi*, 3. *ak*.

Je lui pardonne, *nsritéhañmañ*, v. *nsrirañsañ*.

[PARER.]

Je pare, le coup v. g., je prens ce dont il  
veut me frapper, *nenítšpsn*.

Je pare, j'évite cela seu le coup, morale v. phisiq<sup>e</sup>, *nedubasi<sup>t</sup>tamen*.

*BaïreskSao*, une fille qui se pare pour plaire, 1<sup>a</sup> *nebaïresksai*.

[PAREIL.]

[376, 377.] *Aäsitaisi*, à la pareil. Vid. Particulæ.

Je lui rends la pareille, je m'en venge, *nedäisitêhañ*.

Je rends la pareille, *nekaäsitésé<sup>t</sup>kañsi*, 3. *aäs*.

Tu méprise Dieu, v. g., il rendra la pareille, *aäsitésé<sup>t</sup>kañsitsi*.

Tu le paieras en enfer éternellem't, *kesagaämorgsntsi aräñnekin*.

Tu en souffriras, mais d'une étrange manière, &c., *netäñni ari*, v. *kesaghinésäñdamentsi*.

Le renard pronostique *q<sup>q</sup>* [quelque] malheur, *nedäñimeks<sup>t</sup>kwäñkstes*.

*Kedañsimegsän é<sup>t</sup>o*, cet ours v. g., *q<sup>q</sup>* vous avez vü si horrible, vous dit qu'un de vous moura.

*Edäñsi<sup>t</sup>tañgor*, ce chevreuil v. g., *q<sup>q</sup>* cet homme a tué, où il ne s'étoit trouvé *q<sup>q</sup>* du pus, lui s'étant blessé par après d'un couteau, fut plein de pus long tems, on dit de cet homme *sdañsi<sup>t</sup>tañgor usrkar*, &c., ou bien s'en rend [?] après avoir été co'e [comme] tué.

Je rends la pareille, je me venge, *neda<sup>t</sup>röda* v. *-däñn*, 3. *arodañ*.

Je me venge contre lui, *neda<sup>t</sup>rsdasäñ*.

[PARENTÉE.]

Les degrés de parenté ; —

*Nemomes*, *nemösmi*, 3. *amssmesar*, mon g'd [grand] père, &c.

*Nä<sup>t</sup>ksmes*, *nä<sup>t</sup>ksmi*, 3. *s<sup>t</sup>kemesar*, ma mère v. ma g'd [grande] mère, ma tante, di<sup>r</sup> [dicitur] etiam de, &c., *kis<sup>m</sup>métsindé*.

*Nekisis* v. *nekis*, ma tante du côté de la mère, seu, la sœur de ma mère, v. la cousine de la mère, v. à sa belle-mère.

*Nemi<sup>t</sup>tañgus*, 3. *ami<sup>t</sup>tañgusar*, mon père, &c.

*Nigáss*, 3. *oigásssar*, ma mère, &c.

*Nnemäñn*, 3. *snemäñnar*, mon fils.

*Nedss*, 3. *vdessar*, ma fille.

*Nedösimis* v. *nsködäsim*, ma nièce, la fille de ma sœur.

*Nnemäñnimis* v. *nsküdsm*, mon neveu, le fils de mon frère.

*Tsemes*, 3. *asemesar*, ma nièce, la fille de mon frère.

*Nedaväñsem*, mon neveu, le fils de ma sœur aînée, v. mon frère, et celui qui est *sda-säñsemar* dit *nenesis* [?].

*Nitsié*, 3. *asitsiar*, mon frère, &c. ; *asitsian*, tu es mon frère ; *no'* [nous] sommes frères, *näitsiétibena*, 3. *asitsiét<sup>s</sup>ak*.

*Tsesis*, mon frère aîné ; *kesisiston*, fr. [frère] aîné ; *ssesisar*, son frère aîné.

*Ned<sup>t</sup>kanis*, 3. *säv<sup>t</sup>kanar*, mon frère cadet, &c.

*Nesis*, mon oncle.

*Nssses*, *nässis*, pl. *nsssesak*, les enfans de ma nièce, seu, de la fille de ma sœur.

*Nnadañgss*, pl. *nnadañgssak*, mon cousin, dicat vir v. mulier, seu le fils des parens de ma mère.

*Nnadañgssesek<sup>sé</sup>*, ma cousine, dicat vir, la fille du parent de ma mère.

Les enfans des 2 nièces s'appellent frères, les 2 nièces s'appellent sœurs.

*Netsemes*, si elle [est] g'de [grande].

*Nssimis*, dit le frère v. garçon à la fille de sa sœur ; *nedösimis*, dit la sœur à la fille de sa sœur ; si c'est un garçon, *nsnemäñnimis*.

*Nadañgösis*, dicat mulier, *nedañgösi* . . . . *sadañgösisar*.

Faciam te in gentem magnam, dit Dieu à [378, 379.]

Abraham, *kemesäñrivdssesekävrrkssesak*.

*Nenitsékésss*, ma sœur, ait mulier, 3. *st<sup>sé</sup>*.

*Nebañnemsn*, ma sœur, ait vir.

*Nsdokkanin khaghé*, je t'ai p'r mon cadet.

*Nstsesisin khaghé*, je t'ai p'r frère aîné.

*Nekiabesem*, 3. *akiabesar*, ait puer v. puella, respectu ho'is [hominis] sibi affinis aliquâ affinitate, *stsiglin nhaghénsk* ; ille autem homo dicat de puellâ *nenitzäñregssksé*.

*Niscda pemisnitzañnsredin k<sup>séni</sup> pemañssit*, il v. elle voit sa 4<sup>e</sup> génération, seu, les enfans de la fille de sa fille.



*Nepi'tawirasaim*, dit l'aïeul des enfans de la 4<sup>e</sup> génération.

*Ns'ksm*, c'est ce qu'on dit à la sœur de son père.

Item *ns'ksm*, dit-on à la femme de son oncle, *sderoängsmegsk: s'ksmar utsemes*.

Les enfans de *nsksm*, la parenté, *nadaängs*, v. *nadaängsis*.

*Nenitzaüreks*, dit-on à un beau-père.

*Nadaängs*, dit-on à la femme de son frère, vicissim, *sderoängsmegsr*.

On dit aux enfans de sa *nadangs*, *utsemes nctsemesak*. Les enfans disent, *ns'ksm*.

*Nenitzaüreks*, dit-on à ceux qu'on a p'r *ns'ksm*.

*Nadaängs*, *nedarssseks*, mon gendre, dit le père au mari de sa fille.

Je suis son gendre, *nesirss*.

*Nesem*, dit le père à la femme de son fils, ma bru.

*Nesegss*, dit le gendre à sa belle-mère.

*Nedssékksisem*, dit-on à la fille de son frère mort.

*Nirem*, 3. *siremsr*, dis-je à la femme de mon frère aîné, v. sœur aînée, v. cadet, vicissim, *sdi'regsr nirem*.

*Nedainkasinsmak*, mes descendans, seu, illi q. [qui] per successionem, &c.

*Nssesak*, mes descendans, mes petits-fils.

*Nsskinssemak*, mes jeunes gens.

Mes parens, tes p. [parens], &c., *éraängsméghik*, *éraängsmátsik*, *éraängsmaütsi*.

Ils sont d'une même famille, *nekstsisiraüik*; nous sommes, *nenekstsisiraüibena*.

Je l'ai p'r parens, *nederaängsmaü*, 3. *sd*.

J'ai b'p [beaucoup] de parens, une g'de [grande] alliance, *nemesaüraängsdamen*.

Grâ'as [gratias] ago tibi Jesu, &c., *srisüi érérmiasa sa snitzaümits paübatameritsi*.

Mon frère, seu, un étranger que j'aime comme mon frère, *nidaübé*.

*Nadaängsam*, dit la sœur à la femme de son frère.

*Ksdaängsi*, tu as une belle-sœur, seu, ton frère a pris une femme, &c.

[PARESSEUX.]

Je suis paresseux, *nematsaübaü*, 3. *mat*.

[PARLER, PAROLE.]

Je parle, *neker'ssi*, 3. *ker*; à lui, *neker'sraü*, 3. *ak*; à cela, ign. *neghersrdámen*, v. g. *ska'hévasku*.

Je parle bas, in malis, *nekikimedsnké*.

Je parle bas, iu bonis, *nekikim'saüsi*, v. *né'saüma neker'ssi*.

Je parle haut, *nepessaäng'saüsi*, 3. *pass*; trop vite, *nenabed'nké*, 3. *nab*.

—— lentem't, *nemenn'saüsi*.

Je me trouble en parlant, *negaängsraüsd'nké*, v. *nskaüsd'nké*.

Je parle avec force de sagesse, *nenebaüsé*.

Je parle d'une manière pitoiab. [pitoyable], *neketemaüng'séssi*.

Je prends plaisir qu'on me parle de lui, *nsre-sedamsaümaü*, *nematsedamsaümaü*.

Je parle fortem't [fortement], *nedasaüsé*.

Je lui parle en secret, *nekikimsmaü*.

Je parle avec les autres, je dis mon sentim't [sentiment], *nüid'saüsi*, id est, *nsitsighe-r'ssi*.

Je parle comme lui, j'ai le même langage, *nüitaüd'sémaü*.

On parle de moi, *neteberstemaüghé*, v. *nedain-dokkaü'reghé*.

Je parle de lui, j'en juge, *netebersmaü*.

Je parle Abnaki, *nedarenaiülsé*; Algonkin, *nesaüngnaüand'sé*; Huron, *nedabémadena-aüdsé*; Iroquois, *nemék'saüand'sé*, &c.

Je parle de cela, j'en dis mon sentim't [sentiment], *netebers'temen*. [380, 381.]

Je parle de lui, je dis ce q' j'en pense, *neteber'smaü*.

Il parle p'r moi en prêchant, c'est sans doute p'r moi qu'il parle, *nemäghestasäü*.

Je lui parle en me fâchant, &c., *neneskaümaü*, v. *neneskaüghersraü*.

Je l'attens ici où il doit passer v. venir et je lui parlerai, *nedask'shaüraü*.

Je parle toujours, je lui réponds à tout ce qu'il me dit, je veux l'emporter sur lui, *nekeds'nké*.

Je ne gagne, avance rien à lui parler, il é t'rs [est toujours] dans ses sentimens, &c., *nenaskadéstásaü*, v. *nensdaürasémaü*.

Je fais malgré moi ce qu'on souhaite de moi, v. g. on veut *q'* je demeure et je ne veut pas, t'rs [toujours], *maneo*, *nene-danrasémeghé*.

On ne gagne rien à me parler, &c., *nens-daïrasémaï*.

J'ai pû le persuader, &c., *nepegšaïrasémaï*.  
Je lui parle par signe soit de mains soit de visage, &c., *nederssikšé'tamasai*, v. *neder-ssikšéritamasai*, v. *nederikšé'tamasai*.

*Nedasighighersrai*, je lui parle co'e [comme] de loin v. g. de *q'q'* un [quelqu'un] qui est loin, je lui dis *q'* quand il viendra je lui parlerai.

*Nitaïsé sa asaïsis*, 1<sup>a</sup> *nenitaïsé*, il parle, il parle déjà.

Il ne coute rien de parler, mais de faire, &c., *nekemat gheršsin*, *aïarokkémek ni saaghér-daiïss*.

Je parle à *q'q'* [quelque] chose ignoble, *nehersredámen*.

[380, 381.] PAROLE, *ketsaïgan*, *ghersšsaïgan*.

Parole peu séante, *matsedsnkésaïgan*.

Je dis de méchantes, méséantes, paroles, *nematsédunké*.

Je lui en dis de méchantes, *nematsighersrai*.

Je lui en dis de bonnes, *nsrighersrai*.

Paroles, termes difficiles à entendre, *saaghisirgšadsr*, v. *saaghisirgša'kir*; j'en dis, &c., *nesaaghiarisi'tamenar*.

Je lui donne, fournis, des paroles, *nemégghike-toaïganémaï*.

Je porte la parole, *nemaïtsadsn aketsaïgan*, *N*.

Parole du conseil, *aketsaïganšaï*.

Je suis sa parole, je l'ai p'r règle, *nenaiïba-méketsaïganésai*.

Garde ta parole en ce *q'* tu me dis, *vittassïksraiïmé*.

Garde ta parole, ne t'en oublie pas, ne me désobéis pas, *sakasitêhaïdamskkan idaman*; *mssak ketzasi'tskkan*.

J'envoie ma parole, *nepetsitaïsé*.

Le père en prêchant parle p'r moi, contre moi, *nemaghineks pa'triaïs*.

Je pense de lui *q'* c'est p'r moi qu'il parle,

*nemakesedasai*, v. *nemaïtsedasai*; absolutum, *nemaïtsedam*.

Il me parle par signe, seu, je connois par le mouvem't de ses doigts ce qu'il me veut dire, *nesésinamasaiïnar sretsïar kégss taiïni sétsi ariptaïngs*.

Je parle à bâton rompu, sans penser à ce *q'* je dis, *nemamédské*, v. *nemaïmaïngšigherssi*.

Je parle incessam't, *nekaïghékdsnké*.

Je parle trop, *ussaiïmdské*.

Tu parle en homme ivre, *matsena asenni kederedsnké*.

Je parle co'e [comme] lui, *nšitaïndšé'mai*.

Je parle bien de la prière, *nsripaïba'tamïketsaïgané*.

Cesse de me raconter, de me parler de ces ch. [choses], parle-moi de Dieu, *aratets is é'ksiarenandokkési ketsinisésk dakki stsi ghersri*.

Je parle mal de Pierre v. g. *nematsedskkésaiïnar Piérar*, v. *nematsenasakessaiïndokkésaiïnaiï*.

[PAROÏTRE.]

Je le fais paroître, seu, je le tiens, prends à la main et on le voit, *nšatenemen*, 3. *sat*.

Je le montre, à lui, *nsatnemasaï*, v. *nenamittraï*, v. *nenamitaï*, v. *nenamittraï*.

Je parois tout autre, *nepiršinaïngssi*.

Cela paroît, *se'sinaïngsat*, v. *tsirinaïngsat*.

PART, PARTIE, en long, *isié*; pls [plussieurs] parties, *sési isiaïšar*; *isiganisi*, une partie en long. [382, 383.]

À part, séparém't, *tsatsébisi*.

Je me fâche qu'on me donne la plus petite part, la plus petite plat, *nemētusé*; je à lui, *nemetasamaï*.

Il est là co'e [comme] s'il n'y avoit aucune part, co'e [comme] si ce n'étoit point lui qui eut fait le coup, *kaïkanaps*.

La balle passe à travers, seu, je le perce de part en part, *nesésaiïbeté'haï*.

[PARTIR.]

Je pars, je m'en vais par eau, *nepsši*; on part, *pssredin*.

Je pars, je m'en vais par terre, *nenemañsi* ;  
on part, *mañtssredin*.

Je pars de ce lieu par terre, je change de  
cabanage, *nekssi*.

On part, on va cabaner ailleurs, *kssredin*.

[PASSER. Vid. infra.]

Je passerai par-là où il demeure, *nededs-*  
*dsssañ sikhidit v. nitsi nepemssañ*.

[PARTAGER.]

Je partage les vivres, blé ou viande, *nepé-*  
*bassenemenar skamsnar v. sios, &c.*

Je partage pain, anguille, &c., *nedissenañ*  
*abañ, nahams*.

[PARTICIPER.]

Je participe à son péché, d'impureté, *nñitsi-*  
*pa'tañsé'kañsmañ, nñitsiarasé'kañsmañ*.

Je participe à sa désobéissance, *neketzasita-*  
*sémañ*.

[PARTIR.]

Depuis quand êtes-vo' [vous] partis? *késs-*  
*gnagatnasa ašassenaghé ksmenañ?* [Vid.  
supra.]

[PARTI.]

Je me c's'dère co'e [considère comme] si  
j'étois robuste, vaillant, &c., *nekinitéhañ-*  
*mesi*.

Il est dangereux, de valeur de dire la messe,  
à c'se [cause] q' les particules de l'hostie  
sont emportées par le moindre vent,  
*hostisin beié'rañk atsi mésiasis nrampse-*  
*ghé v. psksrampsen ni sētsi séagak isdari*  
*aramāissikémek, v. tañni kétsi beié'rañk*  
*Jesss shaghé psksrampsen*.

[PASSER.]

Je passe à l'autre bord, *nepikaga'rra, 3. pik,*  
*nepikagañbia*. Vid. Rivière.

*Nega'tai nemañ arahsrañ*, on le passe la  
rivière.

*Pekagáhsriks agañmek*, passez-moi à l'autre  
bord.

Je l'y passe, *nedañsšahsrañ v. -hšršé*.

Passe-moi de l'autre bord, *añsšahšri*.

Je passe la rivière tout seul, *nepikagañbié*.

Je passe sous un arbre, *nesipassagssé*.

Je passe outre, je passe la ville, je vas plus  
loin, *nebaemkómen sdéné*.

*Aneghi késkañsámérana, &c.*, lorsq' je  
marche, di'r de toto c'pore [dicitur, cor-  
pore].

*Ké'seta mévარი'ka v. mévamérkia ni ke'seta*  
*kedi'rcen Jesss kemssañrer*, autant q' je  
fais de pas, &c., 1<sup>a</sup> *nemasari'ké v. nema-*  
*samérki*.

Les maringouins v. g. passent à travers le  
crêpe, v. g., *éss'sak*, v. ils passent à  
travers de cela, *edésssañdamenañ, 1<sup>a</sup> ne-*  
*désasañdamen*.

Je ne puis passer à c'se [cause] de la foule,  
presse, &c., *nedatsérimañtséssé*.

*Nenañniképi*, je ne suis ici qu'un peu de  
tems co'e [comme] en passant.

[PÂTE:]

La pâte p'r du pain, seu, j'ai fait un pain,  
*nekisihañ abañ*.

PATTE, pié, *ssité, tar*.

— d'ours de devant, *asessss srctsiar* ;  
de derr. [derrière], *ssitar*.

PAVILLON, *metésghen*.

[384, 385.]

[PAUVRE.]

Je menage les vivres, *negsppahéresi v. neni-*  
*mérsi*.

Je les menage à lui, *negsppañhañ v. neni-*  
*mésañ v. añn*.

Je l'écoute co'e [comme] pauvre, *nedssstá-*  
*sañ*.

Je le regarde co'e [comme] misérable, *ned-*  
*sšinasañ*.

[PAYER. Vid. supra, PAIER.]

S. PAUL, *ahassar našmek, pesssdssédé ne-*  
*mañ ni sarakisi spenkik stsi bagadaté sha-*  
*ghck ari nettai apentéssinen kik ari nsda-*  
*sant asenmir crit, &c., sdansagherdamenañ*  
*tañni sitsétsi nsdasañhadit aseanir māda*  
*[mañda] nemihahadiksir ni snanghin Paul,*  
*māda [mañda] tegne namitansi vitsésantsik*  
*amantsaanbeghenannañ sde'nek ari kisi*  
*pétañbéghenedé, &c.*

[PEAU.]

Ma peau, mon corps, ma p'so'e [personne],  
*nhaghé, 3. shaghé*.

Peau passée, in g're [genere], *maté'ghen, nsr*.

Peau bien passée, *ns'kéghen, nob. ns'kégs*.



Peau d'orig. [d'original], non passée, verte, *mssssé*, v. *mesaskesigan*.  
 — de chevreuil non passée, *paängséghihänsé*, *hänsak*.  
*Öibisi kisi tsiχāñss*, v. *kákabeu*, elle sèche t'tum [tantum] et avec la poil.  
 — de cerf, *maürssésé*, *sak*; une robe de me'e [même], *maïsak*.  
 — de chat sauvage, *éssébanésé*; R. robe de me'e [même], *éssébanésak*, v. *maïsak*.  
 — de castors, *mata<sup>c</sup>rré*; d'ours, *messeksé*.  
*Paängssé*, peau passée d'original.  
 — de loup-cervier, *maürsemssésé*; ma robe de me'e [même], *nemaürsemssésak*; sa robbe, *amaürsemssésa*.  
 — de loup-marin, *akiksésé*; *akikséséndé*, sac de me'e [même].  
 — de l'outré, *kisnighésé*.  
 — de marte, le nom de la bête me'e [même], *épanakesss*.  
 Robe de peaux de marte, *épanakesssésak*.  
 Peau d'ours, *mesksé*, *ksak*.  
 Je passe une peau de castor, *nedagšihäinké*, *nedagšihäinkänak*.  
 Je mets une peau dans l'eau p'r la passer, *nedagšiträë*, v. *öré*.  
 Je la tors avec un bâton, *nebimakshíghé*.  
 Je la tors avec les mains, *nesinbéghenemen*, di'r [dicitur] etiam de aliis rebus.  
 Je l'étais après l'avoir torsé, *nesibéghenemen*.  
 Je la gratte, instrum'to [instrumento], *nedérégnasésé*, N. *nedérégnäñ mesksé*, v. *ssé*.  
 La gratte, instrum'tum, *ka<sup>c</sup>khígan*; les gratures, *sdiak*.  
 Je l'étais à un cercle, *netskabírañ*; il la faut étendre, *tskabi<sup>c</sup>rañ*.  
 Je frotte une peau grasse avec le main, *nsdaghéghenemen*, v. *nedéréguemen*.  
 Je passe une peau d'orig. [d'original], *nebañkse<sup>c</sup>kké*; en blan, *nsaübégnasésé*.  
 Je la passe bien, *nenskéghenasésé*; elle l'est bien, *nskéghen*, *nskégs*.  
 J'ôte la poil à une peau de chevreuil v. petit original, *netsi<sup>c</sup>χāñ*; on l'ôte, *tsi<sup>c</sup>χāñss*.

J'ôte la chair, je la gratte, *nederadiétéhighé*; on l'ôte, *aradiétañss*.  
 J'ôte la poil, je le racle, *nederasésíghé*, v. *nepeskšasésíghé*.  
 On l'ôte, *arahikssan*.  
*Nederhíkssa*, passe-la, &c., *arahikssé*, di'r t'tum [dicitur tantum] de bubato.  
 Je sçais passer les peaux de castor p'r des robes, *neni<sup>c</sup>tañsiagšianiké*.  
 Si tu m'en veux passer, *agšianikésianéba*.  
 Robbe de castors, *agšianak*.  
*Netskabíremen msssé*, je l'étais à un cercle, peau d'original.  
*Nets<sup>c</sup>kebírañ ssé*, une peau de chevreuil.  
*Nederhíkssé*, je passe une peau d'un côté, de o'i di'r [omni dicitur], 3. *arahíkssé*.  
 Il faut racler d'un côté ce ssé, *añsañsi kstíχssañ*.  
 Tu le racles des 2, *kebitasáχssañ*.  
**PÉCHÉ**, *matsenasakessañgai*; grief, l'impu- [386, 387.] reté, *pa<sup>c</sup>tañsé<sup>c</sup>kañssañgan*.  
 Je pêche, *nedañmäñsi<sup>c</sup>kañsi*, v. *ne aïrasé<sup>c</sup>kañsia kégsi kederasékañsipesa*.  
 Je pêche grièvement, *nepa<sup>c</sup>tañsé<sup>c</sup>kañsi*.  
 En c'bien [combien] de façon offence-on Dieu? *késsitébadsr ghégansihstisr ketsiniséks?*  
 Je pêche de pensée, *nepa<sup>c</sup>tañtéhäñsi*.  
 — par œuvre, *nematsiarasé<sup>c</sup>kañsi*.  
 — par parole, *nematsedsnkañsi*.  
 Je remets les péchés, *nedañhikkamen*, di'r t'tum [dicitur tantum] de Deo.  
**PEIGNE**, *naskšíhsn*; il est beau, *srígs*.  
 Je me peigne, *nenaskšéhési*, nob. *nenaskšéhañ*.  
 [PEINE. Vid. infra.]  
**PEINTURE**, *srámaññ*; elle est belle, *srígs srámaññ*.  
 — rouge, *mekšigsssi*; (vid. Vermillon :) noire, *atenksn*.  
 — blanche, *säñbíramaññ*; violette, *petidians*; bleue, *titiens*.  
 — blüe, verte, grise, idem ac noire, *mkozésíghen*.  
 — jaune, *sisañsighen*, nob. *sisañsigs*.

*Atemksn*, 3. *atemksnar*, couleur noire fort belle.

Cette peinture, couleur est vive, éclatante, *kesatssetâi*.

Elle n'est pas éclatante, *ânrstsetâi*.

[PEINE.]

Je ne me mets pas en peine de lui, *nebégša-séremaï*.

Cela me fait peine, *nesaaghérdâmen*.

Cela me fâche, me donne de la peine, *nedak-kérdâmen*.

Je vois des yeux une chose q. [qui] me fait de la peine, *nesaaghinâmen*.

Je la vois de pensée avec peine, *nesaaghité-haïndâmen*.

*Nedasaïérdâmasan* v. g. *netsetsaks*, je n'en ai point de soin, je ne m'en mets pas en peine.

Cela me fait de la peine, *nesaaghérdâmen*, nob. *nesaaghérmaï*.

Il a de la peine de ce qu'un tel ne prie pas, *ssaaghérdâmenésâ éri mda [mânda] païbâtamsriks rikssa*, v. *éri mda [mânda] srenasakesirikssa*.

Je n'ai point de peine de la honte qu'on me pourroit faire, v. du froid q' j'endurerois, *m̄da [mânda] tégné némsθsgssn agatssaïgan* v. *uñbedotssaïgan*.

J'ai de la peine p'r ta p'soe [personne], *nesaghéssin khaghé*, v. *nemérdâmen khaghé*.

[PELER.]

Je pelle, j'ôte la pelure des penak, des prunes, &c., avec les doigts, *neperághenaï*.

Je pelle avec le couteau, pomme, penak, &c., *neperagáskesaï, nebaraghenaï*, 3. *ara*.

[PELLE.]

Pele p'r ôter la nége, *magairasksaïdi*.

[PENCHER. Vid supr., p. 375.]

[PÉNÉTRER.]

[388, 389.] Je le pénètre à travers co'e [comme] fit Jésus à travers la pierre, *nedéssékâmen*.

Je pénètre, je vois à travers q'q' ch. [quelque chose], *nedâisâbadâmen, panbamaï*.

[PENDRE.]

*8dékstsinen*, il ē [est] pendu ; *sdé'kstsínaï*, ils.

Je le pens, *nedéχsdsn*, 3. *sd.*, nob. *nedé'χs-raï*, ign. *é'χsdé*, il l'est.

On pens v. g. un homme par le cou p'r l'étrangler, *kcskedsnébiraï*, 1<sup>a</sup>. *nekeseke-dsnébiraï*.

Je lui pens q'q' ch. [quelque chose] v. g. pierre au cou p'r qu'il baisse la tête en devant, &c., *nenasasksébirâï*, v. *nedatsi-taskksébiraï*.

[PANSER.]

Je pense v. g. un blessé, *nesipiraï*.

Je me pense, *nesipiresi*.

[PENSÉE, PENSER.]

Je pense, *nederitéhaïsi*, v. *nederérdam* ; à cela, *nederitéhaïdamen* ; à cela, *nederérdâmen, nedercremaï*.

Je pense à cela, *netepitéhaïdamen*, v. *nekeritéhaïdamen*, nob. *-baïmaï*.

Pense à ce q' je te dis, p'r en délibérer v. g., *tepitéhaïda késsireraïmir*.

Vois-tu de pensée, &c., ? *kesésitéhaïdamen é'to ?*

Je dis co'e [comme] je le pense, je ne dissimule point, *nesaïbikerssi*, v. *nesaïbésé*.

Pense à ce q' je t'enseigne, *keritéhaïda éri kakékiméra*.

Je pense à lui, *nemi'ksitéhaïmaï*, v. *nekeritéhaïmaï*.

Je pense p'r lui, *nemi'ksitéhaïdamasaï*.

Je cesse de penser à lui, *nedé'ksimstéremaï*, ig. *nedé'ksimé'tsaïm*.

Je quitte la pensée de faire cela, *nedé'ksitéhaïdamen*, v. *nepsnitéhaïdamen*.

J'ai des pensées de fraieur, *nesaïkstâitéhaïsi*.

J'ai des pensées de crainte qui me causent des tortures dans le cœur, *nedasksitéha, sksitéhé*.

J'ai des pensées d'inquiétude, *negaghisaïsi*.

J'ai des pensées, je pers la pensée q' j'avois de lui donner, &c., *nepedghitéhaïmaï, haïsi*, abs'tum [absolutum], je quitte la pensée q' j'avois.

J'ai des pensées peu justes de lui, seu, je pense de lui en deçà, *nsédéremaï, seu, nsdaïisi nededséremaï*.

Je pense juste de cela, vel in bonam v. in malam partam, *nemañsitéhañdamen tañni édsttek sérighék, v. nedérasérdámen, &c., v. matsighek.*

[390, 391.] J'ai des pensées de paix, de douceur, *nemen-nitéhañsi.*

J'ai des attrais, *nemétañdérđámen, v. nši-gañdamérdámen, mérmañ.*

J'ai des pensées désavantageuses de calomnie, &c., v. g., *nepiršitéhañghémi.*

Je n'ai rien q. [qui] arrête ma pensée, aucun empêchem't, *nesaũkasitéhañsi v. nenané-sitéha, 3. nanisitéhé.*

Je change d'abord de pensée, t'tôt [tantôt] un chose t'tôt [tantôt] une autre, *nenané-saũsitéha, 3. nanésaũsitéhé.*

Je pense à lui en l'examinant par coutume, *netaiũtepitéhañmañ.*

J'ai de bonnes pensées de moi, j'ai de la c'plaisance [complaisance], je suis plein de moi-même, *nemetsiérési.*

J'ai de méchantes pensées, *nematsitéhañsi.*

J'ai de bonnes pensées, *nsritéhé; de lui, nsritéhañmañ, -hañdamen.*

Je dis et je pense tout autrem't, je me révolte, tantôt bien je pense, tantôt mal, &c., *nepspsrebítéha.*

Nous sommes de même pensée, *nemañsitéhañsibena.*

Je pense à Dieu, j'élève mon esprit à Dieu, *nekeritéhañmañ ketsiniéséks.*

Je pénètre de pensée, je passe à travers, &c., *nedésitéhañdamen, v. nedésaũraghitéhañdamen.*

*Ésaũraghisi*, à travers, penetrativé.

Je dissimule ma pensée, *negaũsitéhañsi; à lui, negaũsitéhañmañ, 3. agañ.*

Je lui fournis, mets dans le cœur des pensées, sive ad bonum sive ad malum, *nederitéhénañ.*

Je pense de lui en arrière, sive in bonum sive in malum, v. g., je lui voulois faire mal v. bien, maintenant je quitte cette pensée, &c., *nedañbañdérémañ.*

Je pense fortem't à cela, *nekeritéhañdamen v. nekerérdamen, sub. kéditéhañdak, kérérdak,*

nob. *nemérkérmañ, v. nemerkérdámen, v. nesañgréredámen, v. neda<sup>c</sup>sanikeritéhañdamen.*

Je le fais dans mon idée, ma pensée, *nekisitéhañdamen.*

[PERCER.]

Je perce un bois avec instrum't, avec *q'q'* ch. [quelque chose], je le perce, couverte, peaux, *nedésaũragahamen sañ batkahañss, nebatkáhamen, 3. bat., v. netésibadakámen; avec fer chaud, nedasipesemen.*

Percerelle, vrille, *pimenígan.*

Je perce des grains, v. g., *nepessemenar; il les faut percer, pessañssar.*

Je perce *q'q'* ch. [quelque chose] avec le fer chaud, *nepessemen.*

Je le perce de flèches, *nepeman arsr v. pa<sup>c</sup>-kšé.*

*Tasi<sup>c</sup>ré neda<sup>c</sup>sé*, ma couverte est percée.

*Éhésami<sup>c</sup>ré*, il perce de part en part; *éhésami<sup>c</sup>ré kañsis*, l'épine v. le bois s'est percé de part en part, au pié, v. &c.

[PERDRE.]

Je perds, j'égare *q'q'* ch. [quelque chose] de beau, couteau, v. g., &c., *nsnihadsn v. -dšné, v. nšanihadsn, 3. san, netséksaks, nob. nsniharañ, v. nedantsn v. nsnihadsn, nob. nedantasañ, v. nsnihadasañ.*

Tu fais une perte, *ksnihadañsi.*

J'ai tout perdu mes belles ch. [choses], *nemétsisanihads v. nenékkanihads.*

Tu es perdu si tu l'écoute, v. g., *ki<sup>c</sup>tasadé, ni kekisanahsgsn.*

Je lui fais pendre, . . . .

Je perds, je cherche, &c., *nckširstem; cela, nekširstemcn; lui, nekšir<sup>c</sup>mañ.*

Je fais un g'de [grande] perte par le mort de mon enfant, v. il me gaignoit ma vie, v. &c., *nese<sup>c</sup>kéhsks.*

Il perd b'p [beaucoup] me perdant, &c., *nese<sup>c</sup>kéhañ, &c.*

Je perds beaucoup, lui s'en allant, &c. v., *nenanékaũtsihks.*

Je perds b'p [beaucoup], ma hache v. g. étant rompue, *nenanékaũtsihsgsn netemañgan.*



Je perds, . . . ., *nsniadañsi*.

Je lui ai perdu *q'q'* ch. [quelque chose],  
*nsniodasainar kégssar*.

Je le perds, *nsnihadsn*, nob. *nsniharan*.

PERDRIX, *matsiréss*, sak.

[PÈRE.]

Mon père, *nemi'tangss*. Vid. Parentée. J'ai  
un père, je l'ai p'r père, *nsmi'taingsi*.

[PÉRIL.]

Je suis en péril de ma vie, *ér'é nemétsiné*.

[PERMETTRE.]

[392, 393.] Je permets cela, je l'aggrée, *nsrérédámen*, 3.  
*sr*, *nedrírírdámen*.

Je te permets, *ksrérédamsr*; de venir, *nsrérédámen báináné*.

Je lui permets, je lui laisse faire, *netsikí'tasán*.

Dieu permet au démon v. g. de tenter, &c.,  
*kks stíki'tasáur matsksar*, &c.

PERRUQUE, *pirsáiratsk*.\*

[PERSUADER.]

Je ne puis lui persuader, terme de tromperie,  
j'ai beau lui dire, il ne me croit pas,  
*nedatsérineba*.

Je lui persuade, &c., *nepegšáirásémañ*; usitativè,  
*nekiktáigs*.

[PESANT. Vide infr., Peser.]

Je suis pesant, *neda'kígsr*, 3. *tekígsr*; nous,  
*neda'kígsrebena*; vos, *kedakígsreba*, 3. *tekígsrsk*.

Cela est pesant, *tekígsan*, nob. *tekígsr*.

Je suis pesant, *neda'kígsr*, 3. *tekígsr*, *ne-la-kígsrebena*,  
*kedakígsreba*, 3. *tekígsrsk*.

[PÊCHER.]

Je pêche, à l'ain, *nedáimé*, 3. *áimé*; avec cela,  
*isnedáimé'tsn*; j'en prens, *nebiθa*, 3. *petahé*.

C'est bien [combien] en as-tu pris? *késsšak kebiθañpesa?*

On pêche là, il y a pêche, *áimáñgan*.

Il y a pêche dans tous les lacs, *messisikki pekšasebémar áimáñgáñsar*.

*Negskksáimé*, je jette la ligne dans l'eau,

ō di'r [omnino dicitur] lorsqu'on a fait trou dans la glace.

[PESER. Vide supr., Pesant.]

Je le pèse, *netebañbékhamén*, 3. *steb*; on le pèse, ig. *tebanbé'žanss*, nob. *tebañbé'žañ*.

[PELLE.]

Pésle à feu, *mañtseséigan*. [Vid. supra. p.387.]

[PETIT.]

Je suis petit, *nepissessi*, 3. *pis*.

Je suis trop petit p'r atteindre là, seu, je suis grand en deçà, *nensdanákssi*; ma robe, *pisèkesesen*, couverte.

Cela est petit, cela est petit, *pisessen*; d'un *sighebi*, v. g. lien d'écorce, subj. *pisikebéghesek*, *pisikebégat*, sub. *gak*; gros, *sighebi*, *mesikebégat*, sub. *gak*; écorce, *pisigšagassen*, v. *pisigšagat*.

*Pikkan*, lien d'espèce de chanvre; il est petit, mince, *pištaget*, *pištaghessen*, nob. *piségs*; gros, *mesátagat*, sub. *gak*.

PÉTUN, *sdámañ*; j'en ai, *nsdamañm* v. *nsdamañmi*.

Je lui donne à pétuner, *neméksenamañ*, v. *nstzáinañ sdámañ*, *pañna netasasenéhañ du tasasenéhi*.

Je ne pétune pas, *nenadasip'pa*.

Je pétune, *nsdamo*, 3. *sdané*. Vid. Calumet.

Je n'ai plus de pétun, *nemétsi'ppa ni sétsi é'ksi'pan*.

On donne [?] envie de pétuner, *nesáñkstáikadasi'ppa*.

J'ai envie de pétuner, *nekadasi'ppa*, (*šáisa*, &c.) *nenaskšsené*, v. *-kšssenáñ*, *neneškšsené*.

J'ai coutume de pétuner, *neni'tañppa*.

Je lui demande à pétuner, *neneškšsenámañ*.

Donne-moi à pétuner, *méksenami*.

Pétun sauvage roulé en pain, *šáisiañbaghenáñ*.

On pétune, *sdamehedin ni édari sdamehedímek*.

Pétun comme [?] des sauvages, *arenipáñšéié*.

Je lui donne à pétuner de mon calumet, *nepintsenéšan*.

Je le hache, *nesegšipesañsé*; p'r lui, *nesegšipesañséšan*.

[\* From the French. EDIT.]

Je lui donne à pétuner de mon calumet, *nedakstsakasé'tamasäi*.

Donne-moi du pétun p'r remplir une fois mon calumet, *nekstasenehi*, 1<sup>a</sup>. *nenekstasenehäi*.

[394, 395.] PEU, *tagassissi*, *mésiassis*, *paghiessis*.

Un peu d'eau, *tagassessen nebi*, v. *sa'késsis*; il y en a peu dans la cruche, *ketzebéss*.

Peu à peu, goutte à goutte, *tarébé'ré*, ig. *netagasérdamen*, v. *nemanésérdamen*.

Je crois qu'il a peu de pétun v. g., *netagaséremañ*, v. *nemanésérmañ*, qu'il ē [est] bientôt fini.

Il y a peu de blé dans mon champ, *manét nedakkikkañ*.

[PEUR. Vid. infr.]

PEUT-ÊTRE, *érsé*, forsan non veniam, *érsétsi mda* [mañda] *neba*.

[PEUR.]

J'ai peur de lui, *nenesahai*; j'ai dabort peur, v. g. des tourmens, &c., *nedaskitéha*, 3. *sksitéhé*.

Je lui fais peur p'r lui faire quitter v. g. la prière, *nsnpáñ'srañ*.

J'ai peur, *neséghesi*, 3. *ség.*; *nek'si'taëremañ*, le crains.

Je lui fais peur, *nesékpañhsrañ*, 3. *ss*, v. *nemisppañ'sdásañ*, je lui fais peur à c'se [cause] d'un autre.

J'ai peur des morts, . . . . . *nenesañsi*, 3. *ntsäñss*.

*Namespañhsreks matsks*, le diable m'épouvante.

Je le fais trembler de peur, *nenanegapañ'srañ*.

[PHYSIONOMIE.]

Il a une méchante phisionomie, il paroît d'un méchant naturel, *matsakamighes'sinañ'gsss*.

[PIÈCE.]

Pièce d'étoffe, &c., de peau, *misshígan*, *nar*. J'en mets, *nemisshama*, v. *mañ*, 3. *misshamañ*.

À mes souliers, *nemisshaksenási*.

Cela est mis en pièce, *segsskesé pi'ta*, 1<sup>a</sup>. *nesegsskesemen*.

J'y mets un oiseau v. g., je le dépèce, *nesc-ksskesañ*.

Il se briserait en mille pièce si on tiroit contre, *táikuba'tái sésegsstéhañ is péskaméghe*.

[PIED.]

Mon pié, *nesit*, 3. *ssit*.

On me le coupe, *temesañ'sé nesité*.

Je m'y suis fais mal, *nekikitsé'sida*, 3. *kik*.

Je les ai nuds, *nemémésaghesidé*.

Je lui donne un coup de pié, *nedakskekásañ*.

PIERRE, *pnapesks ksr*.

—— à éguiser, *grái* [grès], *kidadañgan*.

—— à fusil, *péskañ'diapesks*.

Elles se fendent au feu, *péskedar* v. *péska-peskedar pnapksr*.

De la distance d'une pierre qu'on jette, *sémakémek pnapesks*.

J'en jette une, &c., *n'sémakañ pnapesks*.

[PILER.]

Je pile dans la pile, *nedak'sassi*, 3. *dak*. v. *minstéassi*; p'r lui, *netegsahamusañ*; q'q' ch. [quelque chose], blé, viande, &c., *neda'khsamen*, v. *mañ*, 3. *sd*.

Il faut piler cela, *ta'g'sahañ'sils*; on le pile, *ta'g'sahañ'ss*.

La pile, *tag'sahañgan*; le pilon, *ksnasénéks*.

Je pile entre 2 pierres, *nedaskiminé*, 3. *skáiminé*.

La pierre dont on bat, *nimañgan*; celle sur laquelle on pile, *sitk'séhsn*.

Le sac où l'on met la pierre, *pahígañ*.

*Pek'si'ré*, il ē [est] pilé bien fin; *ssañmi pek'sité asss*, il ē [est] pilé trop fin.

*Añptsitéasss*, il est à piler.

*Neksntéassi*, je suis long, &c.

*Nekistéassi*, j'ai pilé.

*K'séntéassitda*, voiez c'bien il ē [combien il est] à piler.

*Édaritaassimek te'ksasssrditsik*, où on pile.

[Page 396 of the MS. is blank.]

Je pile de viande, dans la pile ou sur la [397.] pierre, *neda'k'sé'saanké*.

Item, je pile de la viande entre 2 pierres, *neda'khsamen*.

Viande pilée, *tagšahésaim*.

Je pile pendant la nuit, *nenibatéassi*.

Je pile la nuit jusqu'au jour, *netsitséksnitéhassi tsé'ks'kéari*.

[PILLER.]

Je le pille, *nemegsgnañ*.

[PINCER.]

Je le pince, *nepesaghikasañmañ*, 3. *pes.*, v. *nepesikasañmañ*.

[PIQUER.]

Je le pique, *nedésibata'kañ*, 3. *des*.

Piqueure, *añθsañm* v. *añθsañm*, 3. *sdañθsañm*, pls. *nar*.

Il est piqué, *añθaïss*; bien, *orañθaïss* v. *srañbaïss*.

*Nsrañbaïssn*, je pique cela, &c., v. raie une peau, v. g. &c.

Je pique, grave sur le corps, &c., *nedaiñθšé*.

Je le pique, grave sur son corps, &c., *nedaiñθañ*.

Je te veux piquer, *kedaiñθsr kadási*.

Je suis piqué, *nedaiñθi*; il ne l'est pas, *m̄da* [*m̄nda*] *añθi*.

[PISSER.]

Mingo, *neseghi*; substantivum, *segsdi*, 3. *sse-gsdi*; his vulgò nunc utuntur verbis *nesšgné* v. *nensdésé*.

[PISTE.]

Je vois les pistes ou d'ho'e [d'homme] v. de bête, *nebenrañ arcañbé* v. *mss*, v. g.

Ma piste, *nedaskañpets*.

Pistes fraîches, *skañpets*, *tšak*.

Vielles, *negaiñnañpets*; *arañpts*, pistes un peu vieilles.

Je suis à la piste, sequor, *nensasañpetassi*, 3. *ss*.

Je le suis à la piste, *nssasañperan*.

J'ai vu les . . . . *arcañbé*, v. g. v. *mšs*, &c.

PISTOLET, *arañmséšéi*.

PITIÉ, avoir pitié. Vid. C'passion [Compassion].

[PLACE.]

[398, 399.] Il y a place, *iēsmañ*, *tásé*; il n'y en a point, *m̄da* [*m̄nda*] *taiñmañtaséi*.

Tout est plein, *pépsañnredin*, v. *pépsañnredšak*, v. *pépsañnapšak*.

Cela est mis à la place de l'autre, *éssa'tté*.

Je lui fais place, *nedassapittamañ*, v. *nedassématavañ*, v. *nedaiématavañ*.

Je prépare la place, *nsri'ten*, v. *nsranakañ*; à lui, *nsritavañ sdanakañ*; avant qu'il vienne, *nenikkañniöritsn*.

Fais-moi place, *tassapittamañ*, -*siks*, faites-moi, &c.

Je mets à la place de celui q. [qui] se lève, *nedapin iēsmañ sétsi samañghimék*.

Nous n'avons pas assez de place, *nenssapibena*.

Je me mets à sa place malgré lui, *nemankisañ*.

Je tiens sa place, je lui succède, *nenaiñbekavañ*.

J'enseigne à sa place, je fais ce qu'il faisait, *nenaiñbaméaïssésañ*.

On va reconnoître la place, v. g. p'r le vilage, p'r le cabanage, *añtssredin*.

Ils y vont p'r la reconnoître, *añtssšak*, v. *añtssredšak*, 1<sup>a</sup> *nenaiñsisidañtsi*.

[PLAIE.]

La plaie est fermée, *nitskanñ nitsckañ*; la mienne l'est, *nenitsekisi*, 3. *nitskiss*.

Son corps est tout couvert de plaies, tant on l'a fouëtté, battu rudem't, *sisétéhemasaimésa shaghé*, *sisétéhemasaim shaghé*.

PLAINNE, où il n'y a point d'arbres, *babarsksdâi*; s'il &c., *babarsksa'ké*.

[PLAINDRE.]

Je me plains, *nedaghiahañmi*; étant malade, *nenamañdé*, 3. *mam*.

*Nesisaérmi*, je riois v. g. et on ma choqué, &c., quoiqu'on me fasse on ne peut plus faire rire, *nesisaérmi*.

[PLAIRE.]

Je me plais chez lui, j'y suis avec plaisir, *nšasigasañdapin is*.

Je cherche à plaire, v. g. une fille q. [qui] s'orne, *nebañresksai*.

Je cherche à plaire, de viro q. [qui] s'orne, se vante, &c., *nebañrañbañ*.

Elle cherche à plaire, elle se montre p'r plaire, *snamiörshain shaghé*, 1<sup>a</sup> *nenamiörshain*.



Je lui fais plaisir, *nsrirasémañ*.

[PLANCHE.]

Une planche, ais, *psíkasks, ksr*.

Je marche sur une planche, arbre, co'e  
[comme] un pont, *nedereságšé*.

[PLANTER.]

Je le plante dans terre, *nebadäñkádšn, v. nesakkahadsn, v. nsrigañbasihadsn*.

*Seskšigañbao abasi*, ce pieux, arbre, est planté en pente, il n'est pas droit.

*Tsibatsigañbao*, il ē [est] planté droit; *pinmskšigañbao*, il n'est pas vis-à-vis de travers.

Je me suis planté une épine, bois, &c., au piés, &c., c'est une épine v. qui me piq, &c., *nemétsitsin*.

PLAT, *sañrádē*, pls. *dak*; d'étain, *skaron-skšié vañrádē*; d'écorce, *srañgan*.

Le rond, le creux du plat, *sañrighen*, nob. *sañrīgs*.

Le plat d'écorce n'est pas creu, profond, item sac, *manét*, nob. *manéss*; il ē [est] creu, *peskañt*, nob. *peskañss*.

Il est plein de *q'q'* [quelque] liqueur, *pesañnbé*; il l'est à demi, *añptašbé*, v. *nérañšbé*.

Il y en a peu, *ketzēbēss*.

Plat ouragan quarré comme une caisse, *séskitss*.

Espèce de cruche p'r aller à l'eau, *pkenañtss*, v. *psōañtss*.

*Ni éksbéssa*, ce flacon v. g. étoit plein jusq'là, *éksbé*, &c.

Je le mets plein, *nepesana'tsn*; *psañntskə*, remplissez-le.

[PLEURER.]

[400, 401.] Je pleure, *nezaskadémi*, 3. *zas.*, v. *nemasíghé*.  
Je pleure *q'q'* ch. [quelque chose], *nemasídámen*.

Je le pleure, *nemasimañ*; p'r *q'q'* un [quelqu'un], *nemasíghésañ*.

Je le fais pleurer, actione, le battant v. g., *neséssihañ* v. *neséssenañ*, 3. *ss.*; v'bo [verbo], *neséssímañ*.

Je cesse de le faire pleurer, lui faisant peur, *nedé'kšnpañssrañ*.

Je pleure sans sujet, *nepapissapañsi*, 3. *pišsapañss*; qu'as-tu, &c. ? *kégsi, sétpañsian* ?

Je pleure à cause v. g. *q'* ma mère s'en va, *nemañsé*, 3. *mañsé*, nob. *nemañsañ*.

Je te pleure, *kemañsre*, *kemañhərcbena*, *kemañsi*.

Je pleure facilem't, *nemerísemi*.

Je pleure en montant *q'q'* [quelque] chose qui est rude, difficile à monter, *nesésañdasé*.

Je pleure ma malice, *nemasídámen nematse-nasakessañgan*.

Je pleure p'r rien, *nepissapañsi*; item, je fais à pleurer, *nedamptapañsi*.

Je pleure de ce qu'on me va faire mourir, *nedaskšitéha*.

Je ne pleure point de ce qu'on me va faire mourir, *nesañgritéha*.

[PLEUVOIR.]

Il pleut, pluit, *sšgheraññ*; il a pleû, *kisraññ*; il cesse, &c., *éksraññ*.

Il a trop pleû, *ssañmēraññ*; il pleut b'p [beaucoup], *keseraññ*.

Il pleut bien fort, *keseraññ*; tant il pleut, *arghikšraññ*.

Il pleut dans la cab. [cabane], *matšebé*.

La pluie éteint le feu, *nekassé'gsbé skštái*.

Il pleut sur moi, *nebagaderaññami*, 3. *bag*.

*Sšgherañné*, il pleut actuellem't.

Il pleut encore, il est encore à pleuvoir, *añpeteraññ*.

[PLUIE.]

La pluie, m'arrête, *nekesañderaññami*.

Je viens pendant la pluie, *nepétsikegheraññssé*, 3. *bét*.

Je viendrai nonobstant la pluie, *mina'gubasšgheraññghé nepétsi kegheraññssétsi*.

[PLIER.]

Je plie *q'q'* ch. [quelque chose], v. g., linge, &c., *nsréghenemen añsréaséghen*.

—— le bras, *nepikañghipedínési*.

Cela plie, *sdagañghit*, pls. *sdagañghitsr*.

*Štcbéghenwñss*, on le replie en ourle; *nedatebéghenemen*, je le, &c. [?].

## [PLISSER.]

Je plisse v. g. linge, souliers, &c., *nebi<sup>c</sup>kehamen*.

PLOMB, *skaronesks, ksr.*

*Mesapesks skaronskør ni kšénck*, un lingau [lingot] de plomb de cette longueur.

## [PLONGER.]

[402, 403.] Je le mets, trempe, dans l'eau, *nedagšidedsn nebi<sup>c</sup>*, 3. *sd.*

Je le plonge v. g. dans l'eau, nob. *negamēgsuā.*

On me plonge dans l'eau, *netsapencghé.*

Je le plonge, *netsa<sup>c</sup>penā.*, 3. *stsa<sup>c</sup>penāir*, ign. *netsa<sup>c</sup>penemen*.

Je me plonge dans l'eau, *netsapi*, 3. *tsasaps*, imper. *tsasapi*.

Je plonge mon doit dans l'eau bénite, v. g., *netsa<sup>c</sup>spinské*; plonge-le, *tsa<sup>c</sup>sapniské*.

Je le plonge, le jette dans l'eau, *nedagšitsimañ nebi<sup>c</sup>*, &c.

Je plonge dans l'eau, j'y enfonce, *nedagšitsin*.

## [PLUS.]

Il y en a plus qu'il ne faut, *baēmi<sup>c</sup>ré, sémi<sup>c</sup>ré*; il n'y en a pas assez, *nsda<sup>c</sup>ré*, pls. *nsda<sup>c</sup>rar*.

## [PLUMER.]

Je plume un oiseau, *nebeskšipšé<sup>c</sup>harañ*, v. *nebeskšiharañ*.

## [PLUME.]

Plume dont on écrit, *ahasi<sup>c</sup>χighést srgšani<sup>c</sup>gen*.

Plume q<sup>e</sup> les François portent à leur chapeau, *sasigsnak*.

PLUSIEURS, nob. *mesāirok*, ignob. *mesāiredsr*; pluries, *mesāirisi, mesāiredobanir*, v. *desaanir*.

Ils sont plusieurs, nob. *mesāirsak, mesāirsabanik, -rōsaanik*.

PLÛT À DIEU, *amañnté*, v. *sésini*.

## [POCHE.]

Ma poche, sac à pétun, &c., *nepitsipāñdi*, 3. *ap*.

## [POËLE.]

Une poêle à frire, *apañkšésigan*, v. *sararañpsckšahadigan*.

## [POIL.]

Poil de bête, *piēsse*, 3. *apiēssmar*; son poil ē [est] beau, bien fournis, long, *srāvé*; il ne l'est pas, *matsásé*.

Je l'ôte de l'orig. [original] en le coupant, *nepeskšasésighé*; on l'ôte, seu, il faut, *peškšasésañss*.

*Netsi<sup>c</sup>χañ*, j'ôte &c. une peau de chevreuil. Je l'ôte du chevreuil, *netsikšasésighé*.

J'ôte le poil d'orig. [original], de chevreuil, v. &c., avec un fer, couteau à 2 mains, en le raclant sur un bois, *netsikkasésé*.

POING, la main fermée, *ptekširetsi*.

## [POIGNÉE.]

J'en prends une poignée v. jointée, *nenaghe<sup>c</sup>nemen*.

Il m'a donné une poignée, &c., *negsdabsrtsaïnar nekstsiretsaïnar nemireghé*, 2. *nenissabsrtsaïnar*, &c.

## [POINTE.]

*Arakssigan*, des pointes en façons de dentelle qu'on fait autour d'un bois, plat, &c.

J'en fais, *nederakssighé*; à cela, *nederakssemen*, nob. *nederakssañ*.

J'en fais à un arbre p<sup>r</sup> lever l'écorce, *netemikebélighé*.

## [POINTU.]

Cela est bien pointu, *srisskšaañss*, ign. *srisskšai ghen*.

POIS à manger, *ascnnstšiminar*.

POISON, [EMPOISONNER,] *matsinebi<sup>c</sup>zsn*; vel potiùs, *mētsinaañgani<sup>c</sup>nebi<sup>c</sup>zsn*.

Je me suis empoisonné sans le sçavoir, *nemespi*; le sçachant, le voulant, *nemespōresi*; *nemespšreghé*, on.

Je l'empoisonne, sans sçavoir q<sup>e</sup> je lui donne du poison, c'est par accident, *nemespšrañ*, v. *nemespšderañ*. Vid. Empoisonner.

Une rivière, *nebi<sup>c</sup>zsnhamen sips*, v. *nematsinebi<sup>c</sup>zsnhamen sips*.

Je l'empoisonne mêlant q<sup>e</sup>q<sup>e</sup> ch. [quelque chose] dans son boire v. manger, *nemespšmsderañ*.

POISSON, *namés, sak*.

*Mesāirshañnésa*, on en a pris b<sup>p</sup> [beaucoup], soit à la ligne, v. &c., I<sup>a</sup> *nemesāirsha*.

*Nespisisitsir*, est le nom génériq<sup>e</sup> de certains poissons.

Le trident, seu, une longe de fer au milieu de &c., *kaïkskasihigan*.

*Añrasi mesâirebégšak*, il y a bien à la vérité des poisson où je péchois, mais, &c.

En prend-on ? *peθahañnusa* ?

Non, *māda* [*mañda*] *peθañhansiak*, v. *māda* [*mañda*] *peθañhsgšiak*.

J'en prends à la ligne, *nciθa*, v. *añn*, 3. *biθé*.

J'en prends au flambeau, *nsassa* ; j'en darde, *nedestéhañ*.

Poisson boucané, *agšañn*, v. *namessagšañn*.

Écaille de poisson, *sarahaghé*, pls. *gak*.

Aileron de poisson, *stañganes*, *sar*. Vid. Péscher.

Je prends p'r les faire sécher, seu, j'en fais sécher, &c., *nedañmirke* ; j'en vais, &c., *nenañdñmirké*.

Nasse à barer la rivière p'r en prendre, *nēs-sañgan*, v. *tasañgan*.

Espèce de panier fait en capuchon p'r en prendre, *añmékets*.

Les poissons ; —

*Kabassé*, *sak*, éturgeon ; *mañramégss*, *sak*, co'e [comme] des éturgeons, mais petits.

*Mesšamegs*, *gšak*, saumon ; *skš'tam*, *msk*, truite ; *kañmégss*, *gšak*, gros et petits.

*Nahams*, *msak*, anguille ; *ssiganes*, *sak*, très petits.

*Nibañms*, *msak*, presq<sup>e</sup> co'e [comme] des anguilles, sans os, *sañgmañ*, *añk*.

*Añmss*, *ssak*, . . . . ; *mesâi*, *mesak*, assez gros.

*Šañsesu*, *ššak*, barbue ; *mesamégss*, *gšak*, très petits.

*Kikañmksé*, *ksak*, long d'un pié et presq<sup>e</sup> rond ; *apsnañmesu*, *ssak*, petits de la mer.

*Bikésss*, *svak*, assez petits ; *nañnégšésss*, *svak*, petits.

*Megahaghé*, *gak*, bar ; *ketamégss*, *gsāk*, gros.

*Pekañgané*, *ganak*, petits ; *sañgšategšé*, *gšak*, petits.

*Mašms*, *mvak*, un peu gros.

*Ksnssé*, *sak*, brochet.

*Namégss*, *gšak*, . . . .

*Nskamégss*, *gšak*, morüe.

*Peksé*, *peksahak*, huitres.

*Škañderes*, pls. *škañderessañ*, la tête des huitres et autres qui sont dans les coquillages.

*Nañbémeégss*, le mâle ; *skšémégss*, la femelle.

*Šssegañna*<sup>c</sup>, pls. *nak* ; œufs de poisson, il en a, *sssegañnsio*.

Les poissons ont fait leurs œufs, ont niché, ils s'en sont allé, il n'y en a plus, *métañ-mšak*.

[POITRINE.]

Ma poitrine, *nedsreké*, 3. *sd*.

POMME, *tsighéné*, *nak*.

*Pekšatcnañss*, on lui ôte la pellure.

*Tañni éragšaké*<sup>c</sup> *hémañt*, v. *rit* ? où est-ce qu'elle en cherche ?

*Šdékka nederagšaké*<sup>c</sup> *héma*, j'en cherche de ce côté-là.

J'en vais chercher, *nšé*<sup>c</sup> *Ōama*.

Pommes de terre, *penak*.

Je les fais cuire, j'en fais chaudière, *ncnesi-apané*, *ncbagassemañk* *penak*.

PORC-ÉPI, *mañdasesss*, *ššak* ; son poil, *kañsiak*.

PORCEAU, *piks*, *sak*.\*

[PORCELAINÉ.]

Grain noir de porcelaine, *segañbi*, *-biak*. [406, 407.]

Grain blanc, *sañbañbi*, *-biak* ; la rassade, *mañsañbiar*.

De petits fuseaux v. co'e [comme] de petits poissons de porcelaine dont on fait des colliers p'r mettre au cou des petites filles et q<sup>e</sup>q<sup>e</sup>fois [quelquefois] des garçons, *metšširéañtbéssar*, v. *stebesisar* ; 30 vallent un castor.

*Amarsrsak*, co'e [comme] des croissans de lune ; 30 vallent un castor.

*Šañbígan*, *nak*, canon de porcelaine, 8 petits un castor, 6 des g'ds [grands] sont un castor ; les rouges sont les plus estimés.

Le rond q<sup>e</sup> les ho'es [hommes] mettent à leur cou, *pagañrañ*, *rañk*, 1 castor.



Rond des femmes, *paghigan, nak* ; six petits

1 castor, 3 g'ds 1 cast. [3 grands 1 castor.]

Collier de porcelaine où il y a plus de noir *q'* de blanc, *sksaïss* ; où il a plus de blanc, *saïbighen sksaïss* ; il est moins estimé.

Je fais un collier de porcelaine, *nedasksaïsské*.

Tresse de porcelaine, v. p'r lier les cheveux, *assskésébiabi, ak*.

Je les lie avec cela, *nedassskésébi, v. nedassskésébiabi*.

Queue de porcelaine, extrêm'ent large, *pa-taï* ; commune, *taberaïgan, nar*.

Je la mets, *nedapaberaïgan*.

PORTAGE, *snïgan* ; le bout d'en deçà, *sa'sdagsaïni ghemek* ; au bout, &c., *séda-gsaïni ganek*.

Le bout d'en delà, *asassenïgané* ; au bout, &c., *asassenïganek*.

Viens-tu du bout du portage ? *sanasa keda asassenïgané ?*

On commence le portage, &c., *édari nighémek*.

Où on le finit, *édari kisnighémek*.

*Agsaïnighéda is*, faisons ici portage, commençons, c'est le bout d'en deçà, le ici, &c.

*Métaïbéniganik, v. asassenïgané*, au bout de delà du portage.

[PORTE. Vide infr.]

[PORTER.]

Je porte une charge, je fais un voiage, *nepetsits* ; fais-en un, &c., *petsits*.

J'y porte le canot, *nepetsitsn agsïden* ; je fais portage, *nsnighé*.

Porte-le, *petsitašri, v. petsits, 1<sup>a</sup> nepetsitašrin*.

Je porte dans les portages, di'r [dicitur] etiam, *nenasaré, v. nemaïtsésaré, v. nsïasi*.

Je ne porte *q'* peu avec moi faisant voiage, *nenanaïgssé, v. nenanaïghi<sup>c</sup>ra*.

Je ne porte rien du tout, *nemaïntsi<sup>c</sup>ra*.

Je vais quérir sur mon cou, *nenaïtnighé<sup>c</sup>hadn*.

Je le porte sur mon cou, *nsnighé<sup>c</sup>hadn, nob. nsnighéharaiï*.

Je porte 2, *nenisaïbé*.

*Nepesgaïmen, nob. nepesgaïnai kšé, v. g.* je puis le lever, le porter, il n'est pas au-dessus mes forces.

*Pesgaïnaïss, on le peut porter.*

*Nedaïrašmen, nob. rašuri [?], v.* je ne puis le porter, &c.

*Aïrašnaïss, on ne peut, &c.* [Vid. infra p. 409.]

PORTE, janua, *kraïgan* ; j'y frappe, *nedapagssaghité<sup>c</sup>hémen*.

Je l'enfonce, *nebskstétéhémen, 3. abs.*

Je l'ouvre, *nepaïnté<sup>c</sup>hémen, v. nepaïntakámen* ; à lui, *nepaïntakamasaiï nekepetéhémen*. Vid. Ouvrir.

Ouvre-moi la porte, *pépsdémasi* ; ferme-la, &c., *nekepesakámen kepešagahis kepete*.

Je la ferme, *nekepesakamen* ; à moi, *kepesagahamasi*.

Je l'accommode p'r qu'elle joigne partout, *netténctaihadn, v. netténcténamen*.

*Kessataï*, c'est la couverte v. peau, q. [qui] sert de porte.

La porte est fermée, soit à clef, soit de *q'q'* [408, 409.] autre manière, qu'on ne peut entrer, *étsákaïss*.

Elle est fermée, mais de telle manière qu'on l'ouvrît, &c., *kepesagahaïss*.

Elle est ouverte, *païntéhaïss*.

Elle est entièrem't ouverte, *taïsdétté*.

Passe par dessous la porte v. couverte, *tabassikssi, 1<sup>a</sup> netabassikssi*.

[PORTER.]

Je porte *q'q'* ch. [quelque chose], je le c'duis [conduis], *nederšssadsn, 3. sd., v. nemantsadsn*.

Je porte cela partout, *nekišssadsn*.

Je porte avec moi, *nenespsšsaï*.

Porte-le, *aršssads*.

Je le porte, le c'duis [conduis], *nederšssaraï, 3. sd.*

Je porte hardes, &c., *nenespin, 3. sn, nenespsšsaï, 3. sn, negat. mda [manda] nenespsšsésn*.

Je ne scaurois le porter, il est trop pesant, *nedañrašnemen.*

Je le porte d'un lieu à un autre, v. &c., *nekrvssadsn.*

Je lui porte à manger, *nederšssadasaň mitss-aňgan.*

Je le (nob.) porte sur mes épaules, *nenaš-maň, 3. snakšmaňr.*

Je le porte, le transporte ailleurs, *nederagšat-sn* ; on le transporte, *arakštaňss.*

Je porte le livre, v. g., *neksrbssadsn*, v. *nedéksamarsi.*

Je me porte mieux (de ægroto), *nebapaka-marsi, 3. bepak.*

— bien, *nedéksamarsi.* Vid. Malade.

Je me porte bien, je n'ai point de mal, v. d'incommodité, *nsripemaňssi.*

Lorsq' qq'un [quelqu'un] porte entre ses bras dans le coin de sa robbe v. g. du bien qu'on lui a donné, &c., on dit de lui (ironicé) *stsi'tai, 1<sup>a</sup>. nstsesi* v. *métkazédé sdassé.*

*Nenénasapi'tasaň*, je le porte quoiq' je sois plus petit, &c. ; *taňnesits é'to sa sri sdaň-barapi'tasaňr*, v. præt. *-tasainésa?* comment est-ce v. g. q' ce petit chien porte cet enfant qui est co'e [comme] à cheval sur lui ? [Vid. supra, p. 407.]

[POSSÉDER.]

Je le possède, j'en suis le maître, *nenihi'-raňdamen* v. *nenihiraňsitchérdamen.*

Lui, *nenihiraňdamen.*

Tu le possède uniquement, *kenihi'raňsi.*

*Nihiraňsi satzaňnemaňme*, si j'avois q'q' ch. [quelque chose].

Le démon le possède, *matsiniséksr sdapi-taňgsr.*

POUDRE, *pesaňi, ménaňmkipsdé.*

[POUDRIER.]

Le poudricé coule, *ménamkipsdéck* ; il n'est pas, &c., *éssema métaňmkipsdési* ; il l'est, *kisi métaňmkipsdé.*

POU, pediculus, *kem, kemak* ; j'en ai, *neda'-kem.*

Je l'écrase, *nesegsskenaň.*

Je le pouille, je les lui cherche, *nekširamasañ.*

[POULS.]

Pou, pulsus, *ahadarta'kté'ssik.*

Je lui tâte, touche, *neksdaňbé'ghenaň, 3. agsd.*

Le pou bat, *taraňbéktéssin.*

Tu es malade sans doute, car ton pou va bien vite, *kšssagamaresi é'to tai'kai kesañ-béktéssin kcpedin*, v. *pešsaňgšañbéktéssinsk.*

Ton pou est bon maintenant, tu te porte [410, 411.] micux, *ksramarsi é'to nikksañbi* ; ménaň-békté'ssin *ahadaraňbékté'ssik.*

[PROMENER.]

Je me promène, je vas et reviens, *nedéhéss-ssé*, id. *éhissisi nederšssé.* [Vide infr. p. 417.]

[POURRIR.]

Cela est pourri, *métari'kaňn.*

[POURSUIVRE.]

Je le poursuis, *nensšsp'náraň, 3. snss. ign. nensšspcnaden* ; par eau, *nensššhaň, 3. snss.*

[POURVOIR.]

Je le pourvois de tout, *nederimi'raňn éri nadasiht* ; tu le &c., *ked.*, &c., *éri nad* ; il, 3. *sder.*, *-éri nadasihišrit.*

[POUSSER.]

Il le pousse, du pié, *agšakskámen, 1<sup>a</sup>. negšakškámen*, nob. *negšakskasañ.*

Je pousse cela du pié, *neksáksáňmakkamen*, idem ac prius.

Moi étant couché, v. g. et voulant m'étendre je le pousse des piés, *nekšaksáňmakkasañ.*

Je pousse bois v. &c. qui ē [est] où je veux me coucher, je me mets ensuite où il étoit, *nemaňnkamen*, nob. *nemaňnkasañ.*

Je le pousse, manu, *nekšaksnemen, 3. ak.*

Lui, manu, *nekšaksšiharaň, 3. ak.*

Lui, manu, un peu, *nekšogsnaň* ; fortem't, *negšnkšiharaň.*

Je le pousse de la main p'r l'éveiller, *netski-haraň* v. *nebégšiharaň.*

Je pousse cela, *negšakskámen, 3. agšakskámen*, la marée v. g. pousse l'eau douce.

Je le pousse, *negšakskasañ.*

POUVOIR. Peus-tu faire cela ? *keni'tatsn-nasa?*

Je ne puis le faire, *m̄da* [*mānda*] *neni<sup>c</sup> tatssn*,  
v. *nedāūravi<sup>c</sup> tsn*.

Je ne puis me retenir, *m̄da* [*mānda*] *neke-  
skitsn*; fais *q<sup>o</sup>* tu le puisse, *keski<sup>c</sup> t̄s*.

*Neskeskit̄on pegša* éto *nekeskimesi*, je peux,  
&c.

Je ne puis entrer, *nedatséripitighé*.

Je ne puis entrer à cause *q<sup>o</sup>* tout est plein,  
*nedatsérkassi*.

Je ne puis lui rien faire, *nedatsérihañ*.

Je ne puis faire, &c., *nedarséri<sup>c</sup> tsn*.

PRAIRIE, campagne, *babarssksdāi*.

[PRÊCHER.]

[412, 413.] Je prêche, *nekikinshsmasi*; aux ho<sup>es</sup>  
[hommes], *nekikinshmasañk*, &c., sub.  
*kekinshsmasia*.

Il parle p<sup>r</sup> moi, il dit cela p<sup>r</sup> moi en  
prêchant, *nemaughestasāñ*.

PRÈS, propè, *pésst* v. *pesstsisi*; *minagsba*  
*péssské*, quoi<sup>q<sup>o</sup></sup> je sois près.

*Pésstsisi érmssshédidé* v. *ékšaiñssshédidé*,  
étant encore près v. g. au village; *neder-  
emssé* v. *nekšaiñsssé*, &c.

[PRÉCIPITER.]

J'y tombe, cache, *netébagné<sup>c</sup> rra* v. *netép-  
téssin agsneki*.

Je m'y jette, *netébagnéssañ is* v. *netébagn-  
nakañresi*.

Je suis en haut et je le précipite en bas,  
*nedatba<sup>c</sup> kañrañ*.

Je le prens, moi étant en bas, lui en haut,  
v. moi dans la rivière, lui sur le bord,  
*nesikšakañrañ*.

Je l'y jette, *netébagnéssarañe sa*.

Je t'y jette, *ketébagnéssarar*.

Je l'en retire, *negabañmañ*.

[PRÉFÉRER.]

Je le préfère, *nekésaghérmañ*; cela, *nekésa-  
ghérdámen*, *nenegañmérdamen*.

Qu'il ait cela v. mange cela préférablem<sup>t</sup>,  
c'est bien à moi, &c., *nenessasaghérmañ*.

PREMIER, premièrem<sup>t</sup>, *támi*, *ntámi*.

Je suis le 1<sup>r</sup>, v. à moi le 1<sup>r</sup>, *nia ntámi*.

Je marche le 1<sup>r</sup> par terre, *nenikkaiñsssé*,  
3. *nik.*; par eau, *neni<sup>c</sup> kkañni<sup>c</sup> ra*.

Je chante le 1<sup>r</sup>, *nenitamints* v. *ñenikkaiñints*.  
[PRENDRE.]

Je prens ce *q<sup>o</sup>* l'on me donne, je le reçois,  
*nenitšncmen*, nob. *nenitšnañ*.

Je le prens, v. sans qu'on me le donne, *nši<sup>c</sup>-  
kšncmen*; prens cela, *si<sup>c</sup> ksn*; *nedassanene-  
men*, id ē [est] *pita nesañgrenemen*.

Voilà co<sup>e</sup> [comme] je prens ce *q<sup>o</sup>* tu me  
dis, seu, je t'entens de ce côté-là, *kedera-  
gsstšren*.

Je prens v. g. une hache *q<sup>o</sup>* je trouve p<sup>r</sup>  
l'apporter, etiam, p<sup>r</sup> la retenir, *nsténemen*.

Je lui prens *q<sup>o</sup>q<sup>o</sup>* ch. [quelque chose] malgré  
lui, *nemegsghenañ*.

Je le prens en goûtant, *nenitvtamen*.

Je prens v. g. la nappe de communion, *nede-  
réptsn añtsréañséghen*.

Je le prens, je le tire, *nederiphañ*.

Je prens avec les doigts *q<sup>o</sup>q<sup>o</sup>* ch. q. [quelque  
chose qui] est attaché, &c., *nepekšadene-  
men*, n. *nepekšadenañ*.

Je le prens pour un autre, seu, conjungo  
alium cum suâ p<sup>s</sup>'nâ [personâ], seu, in  
suâ p<sup>s</sup>'nâ [personâ] reputatur alio, v. g.  
les S. S. [Saints] Innocens furent pris p<sup>r</sup>  
Jésus, *nedassidércmañ*.

Je prens, j'enlève *q<sup>o</sup>q<sup>o</sup>* ch. [quelque chose]  
soit p<sup>r</sup> le dérober v. garder, v., *nstenemen*.

On a pris, *stemañss*, &c.

Je prens v. g. l'hostie avec la bouche, *neni<sup>c</sup>-  
tsban*; manu, *nenits<sup>c</sup> pañ*.

Je prens de cela, *nstenemen*, nob. *nstenañ*,  
*stenañss*.

Il ne veut rien prendre de moi, *nšikšihšks*.

Tu ne veux rien prendre de moi, tu me  
donne t<sup>rs</sup> [toujours], je voudrais aussi  
te donner, tu ne veux rien, &c., *kšikših-  
hihi*.

Je le prens vite, *nenimiphañ*, ign. *nenimiptsn*.

Je le prens de force v. malgré, soit de la  
main, soit autrem<sup>t</sup>, *nstsiptasāñ*, *nenegs-  
ghenañ* v. *nañm*.

Que ceux qui ont pris *q<sup>o</sup>q<sup>o</sup>* [quelque] chose  
ne l'apportent, *sétenghesañnik*, *pešdsis is*.

*štena<sup>c</sup> rak sdamañk*, on a pris du pétun;  
cela, *stena<sup>c</sup> ré*, *stenañss*, &c.



[414, 415.] Nous en prenons, arrachons, devorons chacun une partie d'un chevreuil, v. g. lorsqu'ils martyrs étoient dévorés par les bêtes, &c., *netzatzébipectaäsalibena*, v. *netzatzébipectaäna*.

Je le prens par le main p'r le saluer, *nederihádasää*.

Je prens difficilem't une chose qui est en haut, *nesisiksääbatsi*.

[PRÉSENT.]

Présens, respectu Dei, *pakitenígan*.

Je fais présens, *nepakiteníghé*; à Dieu, *nepakitenamasää*.

[PRESSER.]

Je le presse, manu, il est dans ma main, *nesapáiretsain*; id ē [idem est] *asäämisi neretsiktüi*.

Je le presse, je lui dis de faire cela, *netsitsigäämäi*.

Je le presse de faire cela, *nensdaävrokkaäraä*; id ē [idem est] *nedääisi nedarokkaäraä*.

Je le presse, manu, *neseckekenemen*, nob. *neseckenaä*.

*Nesapäämenen*, je tiens pressé toile, couvert, où il y a *qf'q'* [quelque] chose, jusqu'à ce *qf'* je l'ai lié, v. g.

Je le mets biens avant tout au fond de la cache, . . . . v. g. *nesé'kaämkenemen skamsnar*, v. g.

Avec le pié, *neseqsskikámen*, 3. ss.

[PRÊT.]

Je suis prêt, v. g. de partir, *ni nemaätsin*.

[PRÊTER.]

Je prête v. g. castor, *nematmihsé, mata'rré*, v. *rak.*; on me, *nematmihéghé*.

Je lui prête, *nememekasihäi*, 3. *enemek*, v. *nematemihäi*, 3. *amat*.

Je te prête, *kenemekasihsr*, &c., imper. *nemakasihäi*, v. *nemekasihäi*.

[PRÉTENTION.]

Ma prétention, mon souhait, *nedatsšäida-mädi*.

[PRIER, PRIÈRE.]

Je prie, *nepäüba'tam*; Dieu, *nepäüba'tamasää ketsiniséskv*.

—— p'r lui, *nepäüba'tamasésää*, 3. *ap*.

On prie, *päüba'tänsv*.

Je laisse, quitte la prière, &c., *nepsniadsn päüba'tamsaägan*.

Je prie du bout des lèvres, *nsskitsipäüba'tam*.

Achève ta prière, *tégšagšipäüba'ta*.

Prière, *päüba'tamsaägan*; il la gâte, *matsitsn päüba'tam*.

Je vas prier, *nenaätsipäüba'tam*.

J'ai coutume de reciter cette prière, *nederipäüba'tamen*.

Je prie N. p'r cela, *nesésinsamaä is stsi*, v. *sa nesésinsöisšésää*.

[PRINTEMPS.]

Le printemps où l'on est, *sígsän*; il ē [est] le printemps, *sigšänšio*; le passé, *sigšäné*; le prochain, *sigšaghé*; no' [nous] sommes au printemps, *nesigšanesinbena*.

[PRISON.]

Je le mets en prison, *nekepesakhaä*.

Je l'en tire, fais sortir, *nedääpekwagahaä*.

[PROCHE.]

C'est proche, *pésst*; je le trouve proche, [416, 417.] *nepéssdérdámen*; loin, *nenaäšérdámen*.

Il est proche, il demeure proche, *pésssdaps* v. *pésstsisä aps*.

Sa cab. [cabane] v. g. est proche d'une autre, une paroi sert p'r les 2, *aänkästé*.

Il est proche le village, *péssstsisä täi sdéné*.

*Aännesskkaätsi*, ne me crois pas si proche de lui, *nenaämaäšermegsn é'to aännesskkaätti*.

*Nenaänaäšérdámen*, je croiois être encore bien éloigné de ce lieu et me voici proche.

[PROCURER.]

Je me procure cela, *nepegšataäsi nstaäbési*.

Je procure, soit des vivres, soit des hardes, je vais à la chasse v. g. p'r cela, *nekadsnadsn*.

[PROFITER.]

Je profite de cela, *nederääbédámen* v. *nstaäbé'dámen*, v. *nemanaséké*.

Je cesse de profiter de la médecine *qf'* tu m'avois donnée, elle m'a fait du bien, mais la maladie ne laisse pas de revenir, *kadossemihääneban nebizsn nedé'ksaäbé'dámen*.

*Kemañmaskimi*, si tu guéris, je profite.  
*Kemañmaskimibena*, nous profitons, si tu guéris.  
*Nemañmaskimegña*, no' p'fitons [nous profitons], si, &c.  
*Nemañmaskimesi kiganné*, je gagne, p'fite [profite], si tu guéris.  
 [PROMENER.]  
 Je me promenne, je vas jusq' à un espace et je reviens, &c., *nedéhéssssé*. [Vid. supra, p. 411.]  
 [PROMETTRE.]  
 Je promets, je lui dis par avance, *nekéttésé*.  
 Je lui promets, je lui dis par avance, *neké-témañ v. maassa nedí rañérrermsk*.  
 Je lui promets, seu, je dis *he !* je lui consens, *neneskshmasañ, neneskshmassi*.  
 [PRONONCER.]  
 Je prononce cela, v. g. le nom de Jésus, *nesedohomen*.  
 Lui, *nesedohañ*; on me prononce, *nesedohéghé*.  
 Je ne puis dire cela, seu, je le dis sans effet sans qu'on fasse, v. &c., *nedañrasi-idamen*.  
 Je ne puis lui dire, seu, je lui dis sans effet sans qu'il fasse ce à quoi je le, &c., *nedañrasi rañ*.  
 Je ne puis lui parler, seu, &c., *nedañrasi-ghersrañ*.  
 [PROPRE, MALPROPRE.]  
 Je suis malpropre avec q' je fais, *nemañmañ-gšitsn v. nenanañbasinaské, messisi kégsi*.  
 Je suis propre, *nebétarokké v. nebékkisritsn*.

[PROTÉGER.]  
 Je le protège, *ndañgskkasésihañ*.  
 [PRUNE. Vid. infra.]  
 [PUISER.]  
 Je puise l'eau, fonti v. fluvio, *neda<sup>c</sup>sihibé*.  
 Je puise dans la chaudière, plat, bouillon, &c., eau qui est dans la cabane, *neda<sup>c</sup>sihemén*.  
*Neda<sup>c</sup>χighé*, je puise de l'eau, me servant de q'q' ch. [quelque chose].  
*Kégsi keda<sup>c</sup>χighé*, avec quoi puiseras-tu ?  
*Ni keda<sup>c</sup>χighé<sup>c</sup>tsn*, tu puiseras avec cela, &c. [Vid. infra.]  
 PRUNE, *kañsakšimin, minak*; pruniers, *kañsakšiminési*.  
 PUCE, *babiks*, pls. *kšak*; elle me pique, *nesagamcke*.  
 [PUISER.]  
 Je puise de l'eau, *nedasiem nebi*, 3. as. [Vid. supra.]

[Page 418 of the MS. is blank.]

[PURGATOIRE.]  
 Le purgatoire, où ils brûlent p'r un tems, *šo* [319.] *nesakazésitsik*.  
 Il y brûle autant qu'il aura été jugé, *kšéni<sup>c</sup>risa, niksninasatkazézin*.  
 [PURIFIER.]  
 La chaudière v. g. purifiée par le feu, *kese-sa<sup>c</sup>raghesañ, v. kesesaraghess, v. kesesañkšépsrañ*.  
 PUS, qui sort des plaies, *meri*.  
 [Pages 420, 421, and 422 of the MS. are blank.]

## Q.

[423.] QUAND, de præterito, *tsighé*.  
 Quand, de futuro, semeras-tu ton champ ?  
*tsighétsenawa kedakkiké ?*  
 [QUARRÉ.]  
 Je coupe planche droittem't, *tétebesaghé*  
*tétebesaghets netétebessaghéssemen, netéte-*  
*béssemen*, 3. st.

La cab. [cabane] v. g. est quarrée, *tétebi-keské*, sub. *-skéghé*.  
 QUATRE, &c. Vid. Nombres.  
 QUELQUEFOIS, *nañnekstsisi, añksañbékki*.  
 [QUE.]  
 Que deviendras-tu, tu refuse tout ? *tañnetse-*  
*nasa ésián ? messisi kégsi kesikañdaman ?*

Que veux tu dire? *q'* d'des [que demandes] tu? *kégsi kesi?*

Que veux dire cela? deviendra-t-on? *taïni ésimek, kégsi asin?*

[QUI.]

Qui a-t-il, qu'est ce *q'* c'est? *kégsi áss?*

Quel ho'e [homme] est ce qui est mort? *ascnaänga mátsinéda?*

Qu'est-ce là? *kégsni, kégsini, nekégss?*

QUELQU'UN, *awënni.*

[QUERELLE.]

Je le querelle, *nekikkaämaä*; ils se querellent, *kikaädsak.*

Je lui répons sans le quereller, *necskémaä.* J'accorde ceux q. [qui] se querellent, *netsi-ghiharaäk.*

Nous no' [nous] querellons toujours, no' [nous] sommes toujours en trouble, *nemaä matsaraberaä'bena*; vous y êtes, &c., *kemaä matsarabéharegsaä*; ils y s't [sont], *matsarabé<sup>c</sup>rak.*

[QUÉRIR.]

[424, 425.] Je vas quérir *q'q'* ch. [quelque chose] par eau, *nenäüthsdsn, awënni naäüsdängs, nob. nenaäüöraä.*

Je vas quérir *q'q'* ch. [quelque chose] par terre, *nemaneskâmen, 3. am., nenaätsi<sup>c</sup>ptsn, nob. nenaätsi<sup>c</sup>phaä.*

Je le vas quérir, *nemaneskawaä.*

Qu'ils allent quérir, seu, qu'ils viennent avec leur charge, *nasaréhédits.*

Je vas quérir *q'q'* ch. [quelque chose] *q'* j'ai laissée et l'apporter sur mon dos, *nenaätsšaré*; p'r lui, *nenaätsšarésaä.*

Je vais quérir sur le dos *q'q'* ch. [quelque chose], *nenaätsšhadâmen, nob. nenaätsš-hamaä.*

Je viens quérir *q'q'* ch. [quelque chose], *nemaneskâmen neniimeskâmen.*

Viens quérir ce *q'* je te veux donner, *nimeska kégsi kadúsi mircra.*

Je vas quérir la bête qu'on a tuée, *nenaäda-do<sup>c</sup>kšé.*

—— le chevreuil tué, *nekstkšé.*

—— l'origanal, *nencgssémss.*

Je vas quérir sur mon cou, *nenaätníghé; naätnígaägšéba*, si vous vouliez, &c.

*Naätnikhedin, naätnikhedimeghé*, on va quérir sur le cou.

*Nedaäbeníghé, v. nepétníghé, pétníghéptaä-sits*, je viens de quérir sur mon cou.

*Nemaätséníghé*, je m'en vas avec ma charge sur le cou.

*Nedakígsníghé*, je porte pesant sur le cou. *Mssak tekígsníghékekš, nob. nsnígharaä*, ne portez pas trop pesant, &c.

*Iésak kaäduk unigarahudits pézckšar kšar kšéuisiritsir, q' 4* en portent un des grands, longs.

Je vais quérir ma charge v. g. v. traîne *q'* j'ai laissée là, &c., *nenaätsadâmen nsiássé. nenaädenassi*, je vais quérir v. g. ma traîne, &c.

[QUITTER.]

Je quitte, *nencgaršé.*

Je quitte cela, *nencgatemen, 3. sneg.*

Je le quitte, je quitte son parti, je m'éloigne de lui, *nekšagsaämaäsaämaä.*

Je le quitte, mets bas, ne m'en mets pas en peine, *nepsníhadsn, nob. nepsníharaä.*

Je le quitte, *nencgáraä.*

Je le quitte, le laisse, *nencgatsiharaä.*

[QUEUE.]

Queue de castor, *sségsné.*

Je le prens par la queue, *nederenäñ sségsnck.*

Queüe de porcelaine v. très grande, *pa-taän*; commune, *paheraägan.*

Queüe v. g. de chevreux rougie, &c., *ssšar, 1<sup>a</sup>. nssšmar*; di'r [dicitur] de ornamentis, &c., item *tsi<sup>c</sup>takksébiar.*



R.

[426, 427.] [RACLER.]  
Je le racle, *nederékhâmen*, 3. *sd.*, nob. *nederékhâñ*.

[RACINE.]  
Racines, in genere, *satzapkak*; il a racine, *satzapkissio*.

Racine à canot, *sadabi*, *sadâbak*; petites, *sadabisar*.

J'en vas chercher, j'en arrache, *nemana-dâbe*, 3. *man*.

Je le fens par le milieu, *nederadabéôighé*.

Je la teins en rouge, v. &c., *nedsatsadabé*.

Racines, *étsabakisik*.

Racines Françaises, . . . . *penak*.

Racines longues, et assez grosses, elles sont sucrées, *sdsâdsar*.

[RACCOMMODER.]

Je raccommode, j'accommode *q'q'* ch. [quelque chose], *nsrittsn*, 3. *sr*.

[RACONTER.]

Je raconte, *nedañtsemi*, *nederañtsemi*, 3. *aüt*.

Je raconte cela, *nedañdokkañdamen*.

Je lui raconte, *nedañdökkésañ*, 3. *sd.*, v. *nesésittrañ*.

En ce qu'il dit, raconte, il ne s'écarte jamais de la vérité, *sésañtsemisnns*.

On raconte cela, seu, cela est racontable, *aññdokkañregsat*.

Je lui raconte, l'avertis, *q' q'q'* un *ē* [que quelqu'un est] malade, *nedamañmañ*; absolutum [absolutum], *nedamañsé*, 3. *sd*.

Pendant qu'un autre raconte, je prens la parole, je me mets à la traverse, &c., *nsntémañ*, 3. *sntémañr*.

Je lui raconte en passant, &c., *nenasadokkésañ*.

Pendant *q'* un autre raconte, je prens la parole, je raconte, je me mets à la traverse, *nepemetsinañtsemi* v. *pometsinisi nsdâñsin*.

Je raconte mes bonnes actions, *nsrenasake-srsrshssi* v. *nsrañdokkañresì*.

[RADOTER.]

Je radote, *m̄da* [*mañda*] *nsésañdams*, 3. *sé*.

[RAFFRAÎCHIR.]

Les herbes me raffraîchissent, v. g., *nedakha-ghékañgsnar meskikšar* v. *teki-rénhaghé*.

Je me raffraîchis, soit en buvant eau froide, soit en me baignant, soit en lavant mon visage avec de l'eau, *nedakagssimesi*.

[RAILLER.]

Je lui parle, sollicite en raillant, *nedaññ-tsimañ*.

Je raille, *nedaññsé*; raillerie, *aññsésañgan*.

Je raille en paroles impures, &c., *nematsi-aññsé*.

Je le juge ne sçavoir rien faire, (il y a de la raillerie dans ce terme,) *nedaññimañ*.

RAISIN, *ssaghirsmenesar*.

J'en vais chercher, j'en cueille, *nemasiné*, v. *nstsi'tsn*.

[RAISON.]

À plus forte raison, *nega aiaga*.

[RARE.]

Il y'en a là un et là un autre, avec distance, [428, 429.] ils sont rares semé, *pépézeks šmañ*.

[RAMASSER.]

Je ramasse *q'q'* ch. [quelque chose], *nšisa-satsn*; ramasse, *sisasatsn*, nob. *nšisasátasañ*.

Ramasser, v. g. les restes, v. g. du manger, *maëadsks* v. *maïahadsks*.

Il ramasse p'r moi, *nemaëadañgs maëadañ-sšar*, 1<sup>a</sup>. *nemaëadsn*.

Je les ramasse p'r lui, *nemaëadasañ*.

Je les ramasse, nob. *nšisašnañk*, ign. *nšisas-nemenar*.

RAMEAU, branche, de cédre v. sapinage, *sedi*, *sediak*, *sranakónnañ éianrit sdasesanr sdasekannañ*.

[RAMENER.]

Je ramène *q'q'* un [quelqu'un], &c., *nssšés-sárañ*, 3. *sass*.

## [RAMPER.]

Je rampe, marche sur le ventre, *nepemígssi*.

RAPIDE, chute d'eau, *pañnteks*.

Je le saute, *nekaski<sup>c</sup>ra*.

J'y traîne le canot, *nederaiñssgads*.

RAQUETTE de femme, *saumes*, pls. *saïm-sak*.

Raquette, *añghem*, *añghemak*; mes, *nedaïghemak*.

J'en fais, *nederihañk*, *añghemak*.

—— p'r lui, *nederítasañ añghema*.

—— p'r moi, *nederitañsi añghema*.

*Atemaïñ*, ce dont on en fait, babiche, peau.

Je fais des raquettes, scil. la tissure, *nederhañghemé*, 3. *arahañga*.

J'en faisais autrefois, *nedaharahañghemé-héban*.

J'en fais p'r lui, *nederhañghemésañ*.

Elles s't [sont] tissusés, *kishañsák*, 1<sup>a</sup>. *nekishañk*.

La tissure, *arahañghemañgan*.

J'ai des raquettes, *nsdañghemi*.

Le bois de la raquette, *saaksañghemak*.

Je le plie, *nsañkeskási*; je le perce, *nebabéksañghemé*.

Les 2 bois du milieu, *tekeskatęsr* v. *kęskateęsr*.

La babiche du milieu p'r la lacer, *atemanar*.

Étant lacée, seu, le milieu de la raquette, *atemañ*.

Je fais le milieu, *nedapirañghemé*.

La tissure de devant, *sssekateęsés*.

La tissure de derr. [derrière], *ssseęsnes*.

[430, 431.] *Nsdañghemi*, j'en ai, *nederhañghemé*.

*Kishañsák*, 1<sup>a</sup>. *nekishañk*, elle s't [sont] lassées, faites.

*Nenstmé<sup>c</sup>ra*, je marche sans raquette.

Prens tes raquettes, va en raquettes, *añgmahi*, 1<sup>a</sup>. *nedañgmaham*.

La babiche p'r le devant et le derr. [derrière], *skahañghemañssnar*.

Je fais le devant et le derr. [derrière], *net-sa<sup>c</sup>kanghemé*.

Le trou, seu, la bouche, *sdsn*; je le fais, *nederitsn sdsn*.

La babiche qui y est p'r tenir au pié, *nañbesidébi*.

Je passe la babiche dans les trous du bois, *nebesimé*.

Je la passe en faisant la tissure, *nederhañghemé*.

Je la rougis, *nems<sup>c</sup>ksañbékkhíghé*.

Je lie mes raquettes au piés, *nsrsítémekasi*.

Je vas en raquette, *nebemañghemé*, 3. *bem*.

Je t'be souvent en raq. [tombe souvent en raquette], *nenitañstéssin añghemaamañni*.

J'ôte mes raq. [raquettes], *neghékkédañghemé*.

Les miennes sont rompues, sci't le bois, *nekeskanghemé*.

La babiche de ma raquette est rompue, *nedařkasañ nedañghem*.

Je refais la babiche, *nemisshañghemé*.

RASSADE, *mañsañbiar*.

[RASSASIER.]

Je suis rassasié, *némi<sup>c</sup>ppi*; de cela, nob. *nesémippañ*; *ucrémí<sup>c</sup>ppañk penak*, de poires de terre.

[RASER.]

Je me rase la barbe, *netsighitśéhsghé*, 3. *st*.

À lui, *netsighitśéhan*, 3. *st*.

Je me rase les cheveux, *nemssi*, 3. *msss*.

[RAT.]

Rat musqué, *msskśésss*; sa cabane, *sasesé*; rognons de rat mus. [musqué], *msskśésss-iriar*; de castor, *tema<sup>c</sup>kśairiar*; rognon, *siriar*.

Rat, g'de [grande] souris, *mémérañaskana-sé<sup>c</sup>sss*.

[REBROUSSER.]

Je rebrousse, je reviens sur mes pas, *nssśé*, [432, 433.] 3. *sasśé*, v. *nssśé<sup>c</sup>ra*.

Je pense à rebrousser du dessein q' j'avois, *nepctekitěhañmesi*, v. *nssśétěhañmesi*.

RÉCIPROQUEMENT, *nañbi*.

[RECEVOIR.]

Je reçois, *nenitsnemen*, nob. *nenitsnañ*; de lui, *nenitsnemasañ*.

Je le reçois vite, lorsqu'il t'be, *q<sup>c</sup>q<sup>c</sup>* ch. q. t'be [tombe, quelque chose qui tombe]

- d'en haut, je mets ma mains p'r le recevoir, *nenitsptsn*.
- [RÉCHAUFFER.]  
Je réchauffe v. g. un oiseau qui a été cuit, &c., *nekesebëssañ*, ign. *nekesebëssemen*.
- [RÉCLAMER.]  
Je le réclame, implore son secours, *nesi'si-nsámañ*; *nekakésañké*, je demeure malgré, &c.
- [RÉCOMPENSER.]  
Je le récompense, seu, je profite de lui, *nsrañbémañ*.
- Il p'fite [profite] de moi, *nsrañbémeks*; tu moi, *bémi*; je lui, *-mek*.
- [RECONNOÎTRE.]  
Je le reconnois, *nesésinamen*; nob. *nesésinasañ*.
- Il m'entant [entends] avec plaisir, &c., *nšičedañgs*; je l'entens, &c., *nšičedasañ*; je l'entens, *kšičedsr*; tu me, *kšičedasi*; *nšičedamen*; cela me, *asičedamen*.
- [REULER.]  
Je recule, *nedasañgañbasiási*.
- [REULONS.]  
Je marche à reculons, *nedasé'tañsé*.
- [REDRESSER.]  
Je le redresse, *nedénañkámén*, 3. *dén*.
- [REFAIRE.]  
Je le refais, *mina nederi'tsn*.
- [REFROIDIR.]  
*Teki'rañts*, qu'il refroidisse.  
Je refroidis mon manger le soufflant, *neda'kipatañsándamen*.  
—— en remuant, *neda'kbé'hémén*.  
—— en le mettant dans une autre plat p'r qu'il &c., *nedakháma*.
- [REFUSER.]  
Tu me refuse ce q' je te d'de [demande], *kesikkšémén*; je te ref. [refuse] &c., *kesikkšémi*.  
Il me refuse ce q' je lui demande, *nesi'kkšémañ*; je lui, *nesikšémegv*.  
Je refuse, *nesikšémeghé*.  
Je refuse ce qu'on me donne, *neda'sáhamén*, v. *neda'sahadsn*, nob. *neda'saharañ*.
- Mssak si'kšémers'ka*, ne me refuse pas; pls. *si'kšémers'kéks*.
- [REGARDER.]  
Je le regarde, *nederañbadámén*, nob. *nederañbámañ*. [434, 435.]  
Je le regarde du coin de l'œil, *nesékhsrgšañbámañ*.  
Je le regarde — *nekikinamen*, nob. *nekikinasañ*.  
Je le regarde t'rs [toujours] où il va, *nenss-sasañbámañ*, seu, je le suis de veue.  
Je regarde cela avec pitié, en pitié, *nekete-mañgañbadámén*.  
Lui, *neketemañgañbámañ*.  
Regarde en deçà, *našsañbi*.  
Je regarde p'r m'apprendre, &c., *nekikinasañbi*.  
Je suis occupé à le regarder . . . .  
Je regarde par derrière, tournant la tête, *nedañbarañbi*.  
Je regarde par la porte un peu entr'ouverte v. par un trou p'r qu'on ne me voit pas, si non avec peine, *nepssañbi*.  
Je le regarde co'e misérab. [comme misérable], *nedesšinasañ*.  
Je regarde ailleurs, je détourne ma veue, *nedrañbiási*.  
Je regarde derrière moi, par derrière, *nedañbarañbi*.  
Je regarde cela par tout p'r voir si j'y trouverois q'q' ch. [quelque chose] qui fut bonne, &c., et je n'en ai point trouvée, *nesésemínamen* v. *nedañrasikínamen* v. *nesésemínasañ*.  
P'rquoi me regardes-tu si long-tems? *kégsi néssiarañbamían?*  
Je le regarde, moi étant fâché c'tre [contre] lui, *nemssksañbámañ*.  
C'bien [combien] de fois regarde-t-on? v. g. dans une rivière qui va en tournant, &c., *késséta késañmek?* R. [Réponse] *neksdañmek* v. *neksdañms*, une fois, &c.; 2 fois, *nisañmek* v. *nissañms*; 3, *tsaañms*; 4, *iésañms*, &c.  
*Kégséséañbamiar?* 1<sup>a</sup> *nederañbamañ?* p'rquoi me regardes-tu? dit celui qui est regardé.



*Nensdaonbamañ*, à peine le vois-je, et peut-être ne vois-je pas.

*Nensdamiarañbamañ*, je suis occupé à le regarder.

## [RÈGLE.]

Ma règle, seu, je prens p'r règle, *netebesksin*, 3. st., *netebesksdasaiñ*, ign. *netebesksdsu*, *ketebesksdsr tañmì érenasakesian*.

*Netebesksdasaiñ*, je verrai, connaîtraï, ce qu'il sera ; on me dit qu'il sera sage, hé-bien, j'attens p'r voir s'il ne sera pas co'e [comme] auparavant.

## [REGRETTER.]

Je regrette *q'q'* ch. [quelque chose] perdue v. *q'* j'aimois, *nsdérđámen*, nob. *nstsítéhañ*, *đi'r* [dicitur] etiam de nobili, *nsdérđámen arenaiñbei métsinéde*.

Ne regrette pas ton enfant, il est au ciel, *msak sdérđamskkan kenitzañ*, *spemkíghé aps*.

Je le regrette, je voudrois le voir lorsqu'il y a long tems qu'on en est séparé, *nekširšmañ*.

Je regrette mon parent *q*. [qui] s'en va actuellement, v. g. est éloigné, *nemañsaiñ*, 3. am.

Je le regrette s'en allant jusq' à me causer de l'ennui, *nenshsskareks* ; il me, &c., *nenshsskarañ*.

## [REJAILLIR.]

L'eau rejailli, *sísébéktssen*.

## [REJETTER.]

Je rejette cela, *nedasañnemen*, *nedasañérđamen*, 3. sdas., nob. *nedásaiñmañ*, 3. sda.

## [RÉJOUIR.]

Je me réjouis, *nsighérđam* ; de cela, *nsighérđamen*. Vid. Joie.

## [RELEVER.]

Je le relève, *nedañmiki'phañ*, ign. *nedañmikiptsn*, reflex. *nedañmiki'kiphsi*.

## [RELUIRE.]

[436, 437.] Cela reluit, *tará'ksré*, v. *sa'sasaksré'ré*, v. *sasa'ksré*.

## [REMERCIER.]

Je le remercie, je lui fais du bien, *nedaramihañ*, *kégsi mirsghé aramiss*.

Je te remercie, *kedaramiki*, v. *srisni*.

Je te remercie de ce *q'* tu me donnes à manger, *srisni éssamian*.

## [REEMPLIR.]

Je le remplis, *nepesaná'ttsn*, 3. apes., v. *nep-sanipsnemen*, 3. epes., nob. *nepsaiñébéharaiñ*.

— d'eau, *nepessanbahadsu*, 3. pes., de *tsaiñbañ*, de *kessañbs*.

— la chaudière, *nepessanañ'kkšé*, 3. pes.

Je le remplis, *nesésats'tsu*, nob. *nesésotzstaiñsañ*.

Je le remplis, nob. *nepesánarañ*.

*Štsibahrsrgsr eri kadsnet setsi meghirit*, v. g. le renard a *q'q'* un [quelqu'un].

## [REMUER.]

Je remue l'eau v. g. de la main v. avec *q'q'* [quelque] chose, la *sagamité* v. &c., *nedésskañbé'kámen nebi*.

Je le remue, *nederipsdsu*, 3. sd. nob. *nederiphañ*.

— la tête, *nenaiñnañkkšépsi*, 3. nañ.

Je remue, *nemamañdésaghi*, *mémañdésaghit*, *nemamañtsimcdam*, item, *mamañdésagsits*, movet se in sinu.

Remue-toi, dit-on a une p'sõe [personne] qui ne veut pas travailler, *mamañdésaghi'gakkí*.

Je remue v. g. le bras, *nemamañdenemen*.

Il ne peut se remuer, de ægroto, *māda[mānda]* *kisi māñdésaghi'si*, *añrasitts*, *māda[mānda]* *kisi mamañtsisi*.

Voilà *q'* je commence à me remuer, *ni aneghi kisi māñdésaghia*.

## [RENCONTRER.]

Je le rencontre en chemin, *nsnaskasañ*, 3. sn.

Je lui vais à la rencontre par honneur, je le salue actuellement, *nedaptarami'kasañ*, 3. sd.

Je vas à sa rencontre par honneur, *nedaptsikasañ*, 3. sd. ; p'r le décharger, v. etiam, p'r le décharger sçachant qu'il vient bien chargé, *nenañtsšarésaiñ*.

Je vais à la rencontre, *nedaptsikəsi* ; de lui, *nedaptsíkasañ* ; imper. *apitkas*, pls. *apitksks*.

## [RENVERSER.]

Je renverse *q'q'* ch. [quelque chose], l'eau

- q. [qui] étoit dans *q'q'* cho. [quelque chose] sans le vouloir, *negssaté'kamen*, 3. *ag*.  
 Je me renverse, *neghipté'ssin*, 3. *kip*. nob. *neghipté'kasän*.  
 Je suis renversé par le vent, *neghiberañ messgs*, 3. *ghiberañ messgs*.  
 À la renverse, *atsitasisi*.  
 Je renverse en passant, une ch. [chose] qui est debout, *neghipté'kamen*, 3. *aghip*. nob. *-kasän*.  
 [REPENTIR.]  
 [438, 439.] Je me repens, *netäñnersi*, v. *nedäñmâitéhäñ-mesi*.  
 Ce sera trop tard *q'* tu te repentiras, *kesa-ghinésäñdamentsi*, seu, *métsisitsi ketäñnersi*.  
 [RÉPONDRE.]  
 Je répons, *nedäñsitési xighé*.  
 Je répons v. g. à sa lettre, *nedäñsitésikhamasän*.  
 Je ne répons pas de ce qui arrivera sur la grève, v. g., *mäda* [mända] *tégné iv nepétsi-srañmésn sítmek*.  
 Je répons v. g. à ce qu'on me d'de [demande], &c., *nedäñsitésé*.  
 Je le réduis dans la dispute à n'avoir pas le mot p'r me répondre, *neséksähámasän*.  
 [REPOS, REPOSER.]  
 Je me repose, aiant travaillé, v. sine labore, *nedaréséssin*, 3. *aréséssin*.  
 Reposons-nous un peu, *apáda pera*, 1<sup>a</sup> *ncdapin*.  
 Demeure en repos, dit-on à celui qui se fâche, badine, &c., *é'ksihaia*.  
 [REPRENDRE.]  
 Reprends-moi lors*q'* v. g. je ne dirai pas bien, *énasisítamasi*.  
 Je le reprends, &c., *neténasisítamasän*.  
 Je le reprends, le querelle, *nekerahamasän*, v. *nemšksirasémañ*. [Vid. infra.]  
 [REPRÉSENTER.]  
 Je me le représente en sa façon de faire, *nebibinasitéhanmäñ*.  
*Nebibinasitéhanmäñ* *apatssršésaňgan*, je me représente sa fourberie.

- [REPROCHER.]  
 Je lui reproche *q'q'* ch., *q'q'* [quelque chose, quelque] vice, &c., *nedäññimäñ*.  
 Ce *q'* j'ai mangé v. g. me reproche, *neps'-ksérğaňgsn*, *pèmi* v. g. &c.; il me fait mal, *aramadañss*.  
 La graisse v. g. *q'* j'ai mangé me reproche, &c., *nedäñrskssi*.  
 [REPRODUIRE.]  
 Je voudrais être reproduis, être en 2 lieux, *amañté nissšia* v. *amañté nissenšik nhaghé*.  
 Si j'étois reproduis, *nissenšighé nhaghé*.  
 [RÉSERVER.]  
 Je réserve cela, *nenénasérdamen*.  
 ——— p'r lui, *nenénasérdamasän*.  
 [RÉSISTANCE.]  
*Mäda* [mända] *kekerahamaňgsnañ shaghé Jesss*, ô bourreaux, Jésus ne vo' [vous] fait point de résistance p'rquoi &c.  
 [RESPECTER.]  
 Je le respecte, *nenäñnekširermäñ*, je l'estime unique*m't*.  
 Je respecte la prière, *nepañbatam ne xssitsn*.  
 [RESPIRER.]  
 Je respire, *nenéssé*.  
 J'ai peine à respirer, *nesasarañdami'rra*, 3. *sas*.  
 Je retiens ma respiration, seu, de long tems je ne respire, *nedá'séttañrañmi*; id ē [idem est], *nederağšinéssé avagšisi*.  
 [RÉPONDRE.]  
 Il ne peut me répondre, je le mets à bout, *nsrañm'chañ*.  
 [REPRENDRE.]  
 Il reprend, se rejoint v. g. un doit coupé v. écorce d'un arbre, &c., *éniğhen*; *mäda éniğhenš*, il ne, &c.  
 [RESSEMBLER.]  
 Ils se ressemblent, *añérigžak*, v. *sa ériğhit*, [440, 441.] *ni nañbi sderiğhin*, v. *sderinaňgsšin*.  
*Ériğhidéban sderiğhin*, il est co'e [comme] il étoit, &c.  
 Je ressemble, *ni nederiğhin*, 3. *ed.*, v. *ncderiğhi*.  
 Il ressemble à celui *q'* j'ai vû, *ni sderiğhin némiškeban*.

Je le ressemble, *nederasañ*, 3. *sderasañs*; je te, *kedersren*, *kedersr*; tu me, *kederavi*, imperat. pl. *arukə*.

Je ressemble, *nederasaké*, 3. *arašké*.

Je lui ressemble, seu, nous no' [nous] ressemblons, *nedañérighinéna*, v. *nedañérinañgssinéna*, v. *netañérinañgssmañ*; id ē [idem est] *nederenañgssin érinañgssit*.

Il ne se ressemble plus, *piršinañgsssa*.

Qu'il soit co'e [comme] cela, *arighetsga*.

Il y a trop de mots semblables, *ssañnir -tétcbator ketoañganar*.

[RESTER.]

Il ne reste rien, *m̄da* [*mañda*] *kégši ktsi-rési*.

S'il reste *q'q'* ch. [quelque chose], *ktsirañghé*.

[RESSUSCITER.]

Je resuscite, *nedañpitsipé'hvé*; je le resuscite, *nedañpitsipéhési*.

Je me resuscite, *nedañpitsipéhési*.

Il se redonne la vie, *kíghé*.

[RETENIR.]

Je ne puis me retenir, &c., *m̄da* [*mañda*] *nekeskitson*; fais *q'* tu le puisse, *keski'to*.

À peine, v. g. ai-je retenu l'hostie, à peine n'est elle pas t'bé [tombé] de ma bouche, *asakañtsi nemaasamañ hostisin*, seu, *m̄da* [*mañda*] *arakañtsi penirésiar hostisinar*.

[RETENTIR.]

Cela retenti, fait du bruit, *tarokkšésə*.

[RETIRER.]

Je le retire d'entre les mains de celui qui le bat, *nemegsghenañ*, v. *ncpəksatsiretsenañ*.

Je le retire d'un lieu bas, *nšikšiphañ*.

Retire-toi d'ici, v. *aiéma*, v. *aséma*; retirez-vous' [vous], *aiémañks*.

Je me retire, *nedaiéma*, v. *nedaséma*, 3. *aiéma*, 3. *aséma*.

Je retire cela v. g. d'un trou, &c., *neghét-siptsn*.

Je me retire en arrière, *nesa ncdasañganbasíasi*, 3. *asañ*.

Je me retire ue lui, je l'éloigne de moi, *nedaiémátasañ*.

Retire-toi de moi, éloigne-toi de moi, *aiémátasi*.

Il se retire de moi, *nedaiéma'tañgs*.

Retirez-toi de moi, (s'il ē debout,) *aiémañgañbasí'tasi*.

Je me retire dans une cabane à cause du froid, pluie, &c., v. ailleurs où il ne pleut pas, *nenégši*.

[RETOURNER.]

Je retourne des terres, *kepivi nsm*.

Le cerf, v. g. se retourne, *na'stsi peteghigañbasar*.

[RÉTRÉCIR.]

La peau v. g. se retraissi au feu v. soleil, se regrigne, *stsi'té*, nob. *stsesə*.

Drap, peau se retraissi étant mouillée, &c., *stsa'ta'ghi'ré*; de chevreuil, *stšéghi'ré*; elle s'élargit, *siptaghi'ré*, nob. *siptags*.

[RETROUSSER.]

Je me retroussé, je relève ma robbe p'r qu'elle ne traîne, &c., *nedaspéghenési*.

[Page 442 of the MS. is blank.]

RETS, filets, *rhápc*; je les tens, *nederiha'* - [443.] *rañ nederihara* v. *nederihadasa*, 3. *aríarañr*, *ariaré*.

Je les léve, *nedagsāma*; j'y prens poisson, *nbiθa*.

Rets pannier, en forme de capuchon, *añnéketse*; j'en fais, *nedañnéketsiké*.

Je la mets dans l'eau, la tens, *nedagšit-rábé* v. *nekepera*.

[RÊVER.]

Je rêve, en dormant, *nederegšassi*, 3. *arcgssss nederegšassšdi*, 3. *sder.*, v. *argssšdi*.

À *q'q'* ch. [quelque chose], *nsinañbadam*; à cela, *dámen*, *-bamañ*, à lui.

(Les *sansanakets* disent, *nematksaím*, v. *nšinampsi* v. *nederegšam*.)

Ce *q'* j'ai rêvé, . . . . .

Je n'ai pas coutume de rêver, *m̄da* [*mañda*] *neni'tañsi-arekssi*.

Je cherche ce *q'* j'ai rêvé, *nekširašitéhañdamen érgšasiañneban*.

Je rêve à l'Iroquois qu'il no' [nous] tueroit, *nšinañbamshgsk mégsák*.



## [RÉVÉRENCE.]

Je fais la révérence, *nederañghi*, 3. *arañgs*.

Fais-la, *arañghi*.

Je baisse la tête, v. *nenasassiganbaši*.

Je la lui fais, *nederañghítasañ*, 3. *sder*.

## [REPRENDRE.]

Je reprends l'esp. [esprit] après avoir été mort, *nedañbarañmi'ra*.

Je n'écoute point, je ne regarde pas lorsqu'on me parle, *nedatségañssedam*, 3. *atsé*, *nedatsérgañssedamen*, nob. *dasañ*.

## [RÉUSSIR.]

Je réussis, fais bien, *nsrarskké*, 3. *sr*.

## [RICHE.]

Je suis riche, *nsirasighi*, *nemiratséssé*, 3. *sir -mirat*.

## [RIDÉ.]

Je suis ridé, *nedañtkesskádegša*, 3. *añt*.

RIEN, *mañda kégši*; il n'y a rien du tout, *mñdu [mañda] kégvi sésemivi*; cela ne vaut rien, *matsighen iv*.

[444, 445.] RIGOLE, en terre, *pesañbandé*, *ar*; item au visage v. g. de S. [Saint] Pierre, &c.

J'en fais une autour de la cab. [cabane] v. ailleurs p'r faire écouler l'eau, *nepes-ské'hemen sa'kañsi sigšam*.

## [RIRE.]

Je ris, *nedañbedérmi*, 3. *añb*; ou on rit, *édarérmsredímek*.

Je fais rire, *nedañbedérmshé*.

Je le fais rire, *nedañbedérmshañ*.

Je lui souris, *nedañbedérms'tasañ*.

## [RISQUER.]

Je risque avec lui, *nšipenémañ*.

Risquons ensemb. [ensemble], *kšipenedíban*; nous risq' ens. [risquons ensemble], *kšipenedíbena*, 3. *šipenedšak*.

Je risq' avec mes medicines, seu, je les porte t'rs [toujours], *nšipenedamenar nebizsuar*.

RIVIÈRE, *síps ar*; le bas de la riv. [rivière], *na'ivi*; le haut, *náremek*; petite, *tsitsikotgšéss*; grande, *kesski'tegšé*.

Rivière qui entre dans une autre, *érmi'tegšek*.

Rivière q. va droit, *sa'saghi'tegšé*; q. [qui] tourne, *pañbébetketegšé*; qui fourche, *niketaštegšé*, v. *niketstegšé*.

Elle est profonde, il a b'p [beaucoup] d'eau, *teñai*.

Elle est rapide, *kesitssañ*, v. *kesi'tañ*, *menitañ*; elle est basse, *pañgšéss*, v. *pištc-méss*.

L'eau en est claire, *sañbebégat*, v. *sakamebégat*.

*Na'itssañ édari na'itsšak*, où la rivière redescend, &c.

Le détroit de la riv. [rivière], *sésisasághé*.

L'entrée, *pititegšé*; j'entre dans la riv. [rivière], *nesittaham*; l'embouchure, sortie, *sañghedé'tegšé*.

Les 3 Rivières, *médañbéršdensk*.

*Šsañsañañmé*, la rivière qui détourne d'un cap de terre.

Je le passe à l'autre bord de la rivière, soit en canot, soit sur le dos, &c., *nepikagahsrañ*; je vais le passer, *nenañdagahsrañ*, v. *nedañssahsrañ*.

J'arrive à l'autre bord, *netsesagaham*.

Il y a peu d'eau dans la rivière, *métkat*, v. *pañkškat*.

Il n'y en a point du tout, *sésemisi sikarakat*.

La rivière est pleine, b'p [beaucoup] d'eau v. g. au printemps, *pañgasessen*; elle croît, elle ē [est] grosse, *pétañgasessen*; elle décroît, *ssi'kkat*.

En quel état est la rivière? *tañnasa adsttekat?*

Elle a cru v. décré de la moitié, *nérañškat*. A-t-elle bien cru? *pešsañgsinasa pétáñgases-sen?*

Voilà de c'bien [combien] elle a cru, *ni kšéni pétáñgasessen*.

Ruisseau v. rivière qui vient des terre qui ne coule q' d'un côté, *pišibigšé*, v. *armi-bigšé*; d'où elle vient, seu, le commencement v. source, *pišisi*.

*Énága*, quand on est sur la grande terre et q' de l'autre bord de la rivière c'est aussi la g'de [grande] terre.

Je monte la rivière, *neda'kšté'hémen*.

On la monte t'rs [toujours] jusque là v. g., *akstéhaüss.*

On la descent, *na'ipssin.*

ROBE, *nedasse*, 3. *sd.*, v. *nedapsksaümsé*, v. *nasé.*

Robe de castor, *ogsihanak*; j'en fais, *nedagsihanaké*; de marte, *panakesšassak*, v. *épanakesšassak*; robe de chat, &c. Vid. Peau.

Je lui mets une robe, *nedasséhsderüü*, v. *nedassékésaü.*

*Nedapsksaümsé usrtsu*, je m'en, couvre, *nedagsin.*

[RACCOMMODER.]

Je racomme ma robe, *nemishámen*, 3. *am.*

Je la quitte, *nekédenemen*, 3. *aghé.*

Elle est usée, *métsi'rré nedassé*, 3. *mt.*, *sd.*

[ROMPRE.]

Je le romps, nob. *netemenäü*, v. *nepssksnäü.*

Je le romps, manu, *netemenemen nepssksnemen*, 3. *ap.*; *nepssksi'ptsu*, nob. *nepsskerpaü.*

Cela est rompu, *pssksirr'é*, *segsski'rré.*

Le canot est rompu, *temi'rré agšiden.*

Cela est fragile, se rompt facilement, *psskeré*, nob. *psskeríss.*

Rompu, *temi'ré*, de ce qui est long; *pekšéré*, de ce qui est large; *éri ksack niseda temi'ré*, il a été rompu 2 fois autant qu'il est long.

*Pssksi're*, v. *temi're*, etiam de homine, l'épine du dos v. g.

Cela est entier, est mol [?], *sdághé*, nob. *sda-ghis*, v. g. *peksahan*, bois de raquettes.

[RONCE.]

Je me suis planté bois, ronce au pied, v. main, v. corps, *nšéghitsin*, *nšéghinaünar neretsiar*, dans mes mains.

ROND, *saüsiaüghen*, en plat; cela l'est, *saüsiaüghen is*, v. *petegšighen*, boule; je le fais rond, *saüsiaüghenemen*; il le faut faire rond, *saüsiaüghenaüss*, v. *saügheninss.*

Je le fais rond, *nsaüsitstn*, 3. *as.*

Il le faut faire rond en long, *petegšaksäüss.*

Il le faut faire rond en boule, *petegšikemaü-daüss.*

Il le faut faire rond en plat, *saüsiaükemaü-daüss.*

[RONFLER.]

Je ronfle, *netsigšar'é gssi*, 3. *tsi.*, &c.

[RONGER.]

Je ronge v. g. un os, *netsitsigšadámen*, 3. *sts.* *netsitsigšamaü sa vderi*, partie près de l'épine du dos.

Une écorce, *nedrigšagadámen*, *maskšé*, 3. *sd.*

ROSE, fleur, *asckkshésss*, *ak.*

[ROSEE.]

Rosée du matin, *avaüü*, *ssaümasaüü.*

Attens q' la rosée soit passée, *pera'é kšiasats*, v. *paskasats ind. baskasaüü.*

[RÔTIR.]

Je rôtis, me servant d'une corde &c., *nšésé-laps'kšé*, nob. *nšésébaps'ksaüü.*

Je rôtis avec un broche, un bâton pointu, au bout duquel, &c., *ne-lapsnassi*, v. *nepssakšabamégšé*, v. *nedapšsin*, v. *nepessagšabaüü*, 3. *ap.*, nob. *nepesa'kša baüü.*

La broche v. le bois, &c., *psakšabésaünga-na'tteks.*

Fais-moi rôtir, v. g. de la viande, *apsri*, *sios*, v. g., 1<sup>a</sup>. *nedapšraü.*

S'il étoit rôti, *apaüsidé*; il l'est, *abaüss.*

Je rôtis, v. g. un lièvre, *nedabaüü mate-gšésss.*

Je fais poisson rôtir sur les charbons, *nedabamégšé*; chair, *nedabésé*, 3. *abi.*; oiseau, *nedabirésé*, 3. *ab.*; idem *nedapesenassi vios* v. *skamsnar*, &c.

Je fais rôtir, *nedapesené.*

*Nedaboüü*, je le fais rôtir, sub. *éba*, *éban*, *ébanéba*, *ébét ébék*, *ébags*, *ébégs*, *ébéhédit*, *máda* [*mánda*] *ébésá*, *san*, *ébéks*; *nedabaüü néban k. v. dabáüüéban*, -*nepsppan k. k-naüüpan*, 3. *sdabaüüébanir*; imper. *abé*, *abéts*, *abéda*, *abéks*, *abéhédits*, *abaüss*, il l'est, nob.

[Page 443 of the MS. is blank.]

[ROUGE.]

Cela est rouge, *mkšighen is.*

[ROUGIR.]

Je le rougis, *nems'kšatséssmen*, 3. *am.*

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[449.]

## [ROULER.]

Je le roule, *nedatbigšaghēnemen*, v. *nedatebenemen*, v. g. *maskšé*.

Je roule v. g. pierre, arbre, &c., nob. castor v. g., *ghenañ nedatebipsdsn*, nob. *nedatebipsrañ*, v. g. *kšé*; on la roule, *atebipsdañs*.

RUBAN, *sirki*,\* ar.

[\* Probably from the English word *silk*. EDIT.]

## [RUER.]

Je me rüe, *nekširdassi*.

Je me rüe, jette sur lui, *nekširdasañ*; lui sur moi, *nekširdaňsn*.

L'aigle se rue sur le poisson, *akširdasañ sasangan namésar*.

## [ENRHUMER.]

Je suis enrumé, *nsssegšiné*, 3. ss. [Vide supr., p. 219.]

[Pages 450, 451, and 452 of the MS. are blank.]

## S.

## [SAS.]

[453.] Sa, à passer la farine v. le blé groulé, *sia-diminaňgan*.

Je sasse, je la passe, *nesiadimíné*.

Je passe cela, *nesíde*; qu'on le passe, *sia-dañsits*.

SABLE, *néga<sup>c</sup>ks*.

## [SAC.]

Mon sac où je mets mes petits meubles, &c., *nesaghiperaňgan*, 3. ssag.

Sac, *menšté*; mon sac, *nemenšté*, 3. am.

Sac d'une pellure de bois blanc, *pi<sup>c</sup>kañsdé*.

Sac de *sighebiar* q. [qui] n'est point cordé, *ns<sup>c</sup>kenšdé*.

Sac de *sighebiar* bois blanc, *kakinšdé*.

Sac de *sighebiar*, mais de diverses couleurs, *sdé<sup>c</sup>kšénšdé*.

Sac de chanvre, *taghenaim<sup>c</sup>nsdé*; le chanvre, *taghenaik*.

Sac d'une autre espèce de chanvre dont on fait des rets, *rhabinšdé*.

*Sé<sup>c</sup>tagask*, c'est le nom de ce avec quoi on le fait.

Un autre sac c'posé [composé] de *sé<sup>c</sup>tagask*, *kesegsssenšdé*.

Sac de loup-marin, *akikšésnsdé*.

Sac de porc-épi sans figure, *pogañbi*.

Travaillé avec figure, *arañsiaghenügan*.

Sac à pétun, *pitsippañdi*.

Je fais un sac, *nemensdé<sup>c</sup>kañ*, di<sup>r</sup> de o<sup>i</sup>b.

[dicitur de omnibus.]

Fais-en un, *mensdé<sup>c</sup>ké*; fais m'en un, *mensdé<sup>c</sup>kési*.

Je l'ouvre, *nepikainemen*; je le ferme, *nekebsberemen*.

J'y cherche, *nekšira<sup>c</sup>khámen*.

Sac de blé, *nekstskénar*, *nisssskénar*, *tsskenar*, *iésskénar*, *nañnsskénar*, *negsdañs kessskénar*, *arakéssskénédsr*, *tañbasañs kessskénédsr*.

*Késssskénédsrnasa kotzainemen*.

## [SACCAGER.]

Nous sacageons le village, *nesikotéhembena* [454, 455.] *nesikotékémenénasar*, subaud., *matsessar*.

Nous entrons dans le village p<sup>r</sup> tout tuer, *nepitigadassibena*.

## [SACRIFICE.]

Je fais sacrifice. Vid. J'offre.

SAGAMITÉ, *ntsañbañn*; j'en fais, *netsañhé* v. *nenetsañbassi*; fais-en, *ntsañbé*.

J'en fais p<sup>r</sup> moi, *nenetsañpresi*.

Fais m'en, *ntsañpri*; je t'en fais, *kenetsañprer*.

Je mets au commencem't un peu de farine dans l'eau p<sup>r</sup> le faire bientôt bouillir, *nederíhadsn*, nob., seu dans la chaudière, *nederihadasañn* v. *nedañšahadasañn*.



## [SAGE, SAGESSE.]

Je suis sage, *usrnasakesi*, 3. *sr.*

Il est sage, ne visite point, ne badine point, travaille t'rs [toujours], *sañness*.

Je suis rempli de sagesse, je n'ai q' la sagesse p'r partage, *nepé'kinsi*, d'r t'tum [dicitur tantum] de Deo; tu es, in subj., *pé'kinsiän*, 3. *pé'kimsit*.

Je deviens to' [tout] d'un coup sage, aiant été long tems fou, *nesésäüdamira*.

## [SAIGNER.]

Je saigne d'une blessure v. de o'i [omni], *nstsiksâghesi*. Vid. Sang.

Je saigne du né [nez], *neneki'tana*, 3. *neg.*, *sañsan nepskeskšéhañ*.

Je le saigne, *nedagadamasäi*, 3. *sd.*; au bras, *spedinek*; au pié, *skañ'dek*, absolutum, *nedagadamasi*.

Je te saigne, *kedagadamsr* v. *msren*.

On me saigne, *nedagadamäñhé*; je saigne, *nedagadamassi*.

Je me, *nedagadamöñsi*.

Lancette, seu ce de quoi on se sert, *dagadamäñgäñ*.

Plie ton bras, *mésiassis pekañné*, 1<sup>a</sup> *nepikas-nemen*.

Appuie le, laisse le t'ber [tomber] sur le mien, *manenisi psné nepedinek* v. *nepedinek tésst*, 1<sup>a</sup> *netéstsn*.

Ne le tiens pas ferme, *mosak merikenemskan*, 1<sup>a</sup> *nemerkenemen*.

La veine ne paroît pas, *mäda* [*mända*] *nami-higssisi kaitss*.

Le sang sort, *stiskšaghess*.

Je lie le bras, mets la bande, *nedassitabere-mañ*.

S'il se délie, tu le relieras, *pesksikšaghi'ré* v. *pesksikšaghirañhé*, *kederaberemen*, is *kederaberemen pedin*.

Crains-tu la saignée? *kekšitaérdamennasa tagadamañvudin*.

[SALER.] Vid. Sel, pag. 461.

Je le sale, *nesäüränschamen*, 3. *ss.*, nob. *nesäüränschañ*.

Cela l'est trop, *ssañmi säüränschañss is*.

SALIVE, *neseseks*.

## [SALUER.]

Je le salue, *nedarami'kasañ*, 3. *sd.*; je te, *kedarami'ksr*, &c.

Je le salue p'r l'am. [amour] d'un autre, *nedarami'kamasäi*, p. [pour] v. g. *Pierar*, p'r Pierre.

*Nedarami'kamañgs* p. [pour] *Pierar*, il me salue p'r Pierre.

[Page 456 of the MS. is blank.]

SANG, *ba'gakkäñ*; mon sang, *neba'kka*-[457.] *nsm*, 3. *ab*.

J'en jette par la bouche, *baga'kkañ nstsia-ds*; *ksts.*, 3. *stsi*.

Je lui étanche le sang, *nekepiskšébi'rañ*.

Je suis ensanglanté, *nebakkani'si*, 3. *baga'kkanšio*.

Je suis tout couvert de sang, *nemesigšaghesi*, 3. *mesigšaghess*.

Le sang est étanché, cesse de couler, *é'kšikšägat* v. *é'kšitssan*; ne cesse, &c., *mäda* [*mända*] *kisi é'ksitssanši*.

## [SANGLOTTER.]

Je sanglotte, gémis, *nenesagšaräñmi*, 3. *snes*.

## [SANGSUE.]

Sangsue, *pabésk*; q. [qui] boit le sang, *pékkamesemit*.

## [SANS.]

Un ho'e [homme] sans soucis, q. [qui] ne se met en peine de rien, *pañgšiči-arenanbé*.

## [SANTÉ.]

Je suis en bonne santé, *nsripemañši*, 3. *sr*.

SAPIN, *pspskai'hiks*; les branches, p'r couler dessus, &c., *sediak*.

## [SATISFAIRE.]

Je satisfais à qq'un [quelqu'un], *nedasighi-hañ*; p'r lui, *nedasighi'tasésäi*.

SAUMON, *mesksaméks*, *kšak*.

SAVON, *arégnašésäñgan*; je savonne, *nedarégnemen*.

SAUTERELLE, *tzañres*, *sak*.

## [SAUTER.]

Je saute, *nederikdäi*, 3. *arikdas*, v. *nekeöi*, 3. *kšaš*.

Je saute sur, *nekširdasi*, 3. *kšir*; sur lui, *nekširdasäi*, 3. *akšir*.

Je saute en bas, *nepenikdäi*, 3. *ben*.

Je saute à cloche-pié, *nenapargaändé'ksmi*,  
3. *nap*.

Je saute de glace en glace, *nederikdäi*, *pká-  
mik*.

Je t'be [tombe] un peu loin, *nebaghesin*.

[SAVOIR. Vid. infra.]

[SAUVER.]

[458, 459.] Je me sauve, fuis, *nepsrésé* ; je le fais sauver,  
&c., *nepsrésé'çai*.

Je me sauve, j'apporte la nouvelle en me  
sauvant, *nepétsi'phsé*.

*Snabiksánsikedain*, la souris v. g. se sauve  
de l'attrape.

Je lui donne espérance à son cœur qu'il  
sera sauvé, *nekighésúsérmañ*.

Je me sauve de lui, je l'évite, &c., *nepsrañ*.

Je le tiens sauvé, je le veux sauver, *neki-  
ghésérmañ*.

Je me tiens sauvé, *nekighésérsi* v. *nekighé-  
sérmesi*.

Ce par quoi tu sauve, salutaire tuum, *keki-  
ghésésáŋgan*.

L'esclave s'est sauvé, *peskams sa é'to*, 1<sup>o</sup> *ne-  
kadasipeskami*, d'r t'tùm [dicitur tantùm]  
de mancipio.

Je le fais sauver, je le délie p'r cela, &c.,  
*nepeskamsdérañ*.

*Nepsreks aséóss*, il m'échappe, se sauve ; 3.  
*apsregr aséssssar*, il lui échappe, il  
sauve.

[SAVOIR.]

Je sçai cela, *méséárdamen*, 3. *ses* ; nescio,  
*nedasánerdamen*, *dámen*, nob. *térmañ*.

On le sçai sûrem't, *pobétérmegsat is*.

On sçai de moi sûrem't, *nepobétérmégssi*.

Je le sçai distinctem't, *nekinasérdamen*.

Je veux tout sçavoir et tout voir, *neni'táisi-  
pébétsisésérdíghé*.

[SCIE, SCIER.]

Scie, *psipodasaŋgan*, *psipodaŋgan*, *temipo-  
daŋgañ* ; je le scie, *nedemipsádsn*, 3. *sd*,  
*nepsipsádsn*, *psipodañsits*, nob. *nepsipo-  
dasáñ*, *psipodsnets*, S. Barth.

[SÉCHER, SEC.]

Je le sèche, au feu, *nekesabéghisemen*, *neke-  
sabessmen*.

Étant mouillé, je le fais sécher au feu, *nebé-  
gssásámen*.

Il est sec, séché, *kespáte*, nob. *kesepasss* ;  
au soleil, *kizsssek stsipá'té* ; au feu, *sk-  
tâik stsipá'té*.

Les bœufs v. g. sèchent une petite rivière  
en buvant une fois, *kassssk pézekáda ka-  
dessemihididé ssikahadsnañ sipsssis*.

Je le sèche buvant t'te [toute] l'eau qui est  
dans la cruche, v. &c., *ussikahadsn*, 3. *ssik*.  
*Aïmirkáñ*, on fait sécher poisson v. viande  
au feu, soleil.

*Nedaïmirkáñ*, v. *nedaïmirké*, je fais sécher  
chevreuil, v. g., v. poisson.

*Aïmirkémeghé*, au sèchement, &c.

Je fais sécher cela, *nesiphámen*, nob. *nesi-  
phañ*, *sipaássar*, v. *kespasáñssar*, v. *nekese-  
pascmen*, nob. *nekeseposemañ*, nob. *kese-  
passs*.

SECOND, seu, tout auprès, *ni ksa'risi*.

Je suis le 2<sup>o</sup>. *nia na'ksa'risi*, 3. *égma na-  
'ksa'risi*.

[SECOUER.]

Je le secoue, *nebaséghihadsn*, 3. *ab* ; la  
nége, *nebasáñriakiadsn*.

Secoue la nége q. [qui] est sur toi, *basáñ-  
riakssi* v. *kstéssi*.

Je secoue la poassière v. g. d'un habit, &c.,  
*nepaséghihadsn*, v. *nebasihadsn* ; secoue  
là, *basihads*.

Il la faut secouer, *paséghihadañss* v. *basiha-  
dañss*.

[SECOURIR.]

Je le secours dans sa nécessité, en lui don- [460, 461.]  
nant vel'vivres v. meuble, &c., *nenabatsi-  
hañ*.

Nous nous entre-secourons, soit p'r jeu, soit  
p'r euillir *q'q'* [quelque] en co'un [com-  
mun], *nekess'kañnéna*, *késs'kanda si-  
tzekkédida*.

Je le secours, *nsitsokkémañ*, ign. *nsitsokké-  
damen* ; secours-moi, *sitzokkemi*, abs'tum  
[absolutum], *nsitsok'égghémi*.

Je secours v. g. celui qu'on veut tuer, et suis  
cause qu'on le laisse, *nepskšarshmasin*.

Je le délivre de la mort, &c., *nepskšarshañ*.

## [SEIN.]

Je porte dans le sein, *nebimsri*.

Je remue dans le sein, *nemaüdésaghi*.

Je le met dans mon sein, *nedaraümsénemen*,  
imper. *araümséni*, nob. *nedaraümsénaü*.

SEL, *säüraüsiéié*; il é [est] salé, *säüraüsié-  
häüss* v. *säüraüsetéhäüss*.

## [SALER.]

Je sale cela, *nesäüraüsiéhamen*, v. *nesäüraü-  
setéhémen*, nob. *nesäüraüsiéhaü*.

[SEL. Vid. supra.]

[SEIN. Vid. supra.]

## [SEMER.]

Je sème, *neda'kki'ké*. Vid. Blé.

## [SENTIR.]

Je le sens, olfacio. Vid. Flairer.

Cela sent mauvais, *matsimaügsat*, nob. *mat-  
simaügs*, v. *maskimaré*, très mauvais.

Bon, *srimaügsat*, nob. *gs*.

## [SENTINELLE.]

Je fais la sentinelle, je regarde, &c., *nedes-  
ksibi*, *nedaskubitsn*, 3. *sksibs*, nob. *nedas-  
ksipihäü*.

[SEOIR. Vid. infra, p. 463.]

## [SÉPARER.]

Je me sépare de lui, *nebagaütsiraüsaü*, (d'un  
ho'e [homme] v. g. q. [qui] quitte sa  
femme, et puis la repret et puis la quitte  
p'r un tems, &c.)

Je les sépare se battant, je c'duis [conduis]  
l'un d'un côté, l'autre de l'autre, *nenet  
zatzcbssaraü*.

Je le sépare, mets à part, *netzatsibéremaü*.

Je ne puis me séparer de lui, je suis attaché  
à sa p'so'e [personne], *nekesaüdermaü*.

Je le crois séparé, je les sépare in intellectu,  
*netzatzébérdamen*, nob. *netzatzébéremaü*.

SERPENT, *sksk*, *sksgak*.

Serpent à sonnettes, *sisiksé*, *sisikSak*; la  
sonette, *ssigSian*; la peau, *srahaghé*.

Progenies viperarum, disoit Jésus, &c.,  
*sksgak kenighihaüregsba*.

*PaübébtgakSat abasi*, qui é [est] en serpent-  
ant.

En serpentant, *paübébtghisi*, v. g. chemin,  
&c.

*Paübébtgaüstsessen*, un chemin q. [qui]  
serpente, v. g.

*Sasaghisi*, tout droit, en coupant droit ce  
chemin qui serpente, v. g.

*Nesagsssé*, je vais tout droit coupant ce  
chemin serpentant.

## [SERRER.]

Je le serre, manu, v. g. *nesckekenemen* v.  
*nemerkenemen*, *neretsi*, 3. *ssek.*, *srets*.

Je le serre la main, *nesckekenäü arcaübe*  
v. g., v. *nemerkenaü*.

Serre-moi la main, *segkikeni* v. *merikeni*.

Je tiens ma main serrée sur moi, sur mon  
sein v. g., *nedassitenemaüsin*.

## [SERVIR.]

Je t'ais p'r serviteur, *nsdo'paümihemin*  
*khaghé*.

Je le sers, illi ministro, *nensdenaü*, absolu-  
tum, *nensdenakké*.

[Page 462 of the MS. is blank.]

Je me sers de cela, *nedasékkäin*, 3. *sd.*; [463.]  
sers-t'en, *asé'kké*; je m'en sers actuelle-  
m't, *nedäiptasikkäin*.

Il se sert de cela p'r travailler, *sdarokké-  
käin*.

*KégSi io arasékétaüss?* à quoi doit on s'en  
servir?

De quoi te sers-tu, servi [?], p'r faire cela?  
*kégs ésékkassa érukkané?*

Je le chausse, *nedasémeuaü*, v. *nedasémsde-  
raü*, de nob. 3. *sdase*, &c.

## [SERVANTE.]

Elle est servante, *susdenegsr*, v. *snénašnegsr*.

Je suis servante, *nsds'paümiéskæmmeks*.

## [SEUL.]

Je suis seul, *nenekstsiüni*.

Je viens seul, *nenektsi'ra*, v. *nenekstssé*,  
3. *nekstssé*.

Je m'en vas seul, *nemaüsiénekSi'tssé*, 3.  
*maü*.

SEULEM'T, *sibisi*; seize, six, vid. les  
Nombres.

## [SEVRER.]

L'enfant est sevré, il cesse de teter, *é'ksi-  
täün*, 1<sup>a</sup> *nedé'ksi'ta*.



Je le sèvre, *nedé<sup>c</sup>kšitasän*.

[SEOIR.]

Cela te sied bien, *kedébekañgsn*, 1<sup>a</sup> *nedéb.*, &c.

[SIFFLER.]

Je siffle, *nekšikšsem*, 3. *kšik.*, contre [?] *nekšikšssmäñ*.

[SIGNE, SIGNER.]

Je fais le signe de la croix, *nedaskahésa<sup>c</sup>tekskäñmesi*. Vid. Croix.

Je me signe dans la lettre, *nedavikšši*, 3. *avik*.

Je fais signe à *q'q'* [quelqu'un] de loin, je lui montre, *nederšigañdamasän*, 3. *šd*.

[SINCÈRE.]

Je suis sincère, fidèle, *nesañbenasakesi*.

[SŒUR.]

Ma sœur, ait mulier, *nitsé<sup>c</sup>késs*, 3. *sitsé<sup>c</sup>késsar*, v. *nitsesékéssa*, 3. *sitsesékéssar* v. *nedärenm*, ait mulier.

T'tes [toutes] celles-là s't [sont] sœurs, *sitsékéssdsak*.

Ma sœur, v. aînée, v. cadette, (ait vir,) *nebañnem*, 3. *abañnemnar*, v. *aphañbenmsmar*. Vid. Parentée.

[SOIF.]

[464, 465.] J'ai soif, *nekadašsemi*, 3. *gad*. ; je bois, *nekadšsemi*.

J'ai une extrême soif, *nesäñkstäikadašsemi*, v. *nesäñkstäiañbañgšé*.

J'ai soif de cela, *nekadašsemzañdamen*.

[SOIN.]

J'ai soin de lui, je l'accommode bien, *nsrihañ*.

Je lui rends tous les services, v. il me refuse t'rs [toujours], *nedéhérasikañ*.

J'ai bien soin de lui en voyage, v. g., *nsañsrssaräñ*.

[SOIR.]

Le soir, la nuit, *pesedé*. Vid. Nuit. Il ē [est] soir, *pesedašio*.

Je viendrai ce soir, *nebatsi pesedéghé*; nota illud v'bum [verbum] *pesedéghé* usurpatum sine augmento, seu accentu, signat t'pus [tempus] futurum; cum augmento,

signat præteritum t'pus [tempus], *pésedéghé baiéppan*.

Il est soir, *srañgšio*.

Je revois le soir, je ne suis pas mort [?], je revois le jour, *nedatsé<sup>c</sup>kšsin*; *nsrañkššin*, je revois le jour, &c. c'est p'r le soir.

SOLDAT, *sssemañgancs*, *sak*; l'es tu? *kessemañganessšinasa?*

[SOLEIL.]

Le soleil se réfléchit là, il y fait chaud, &c., *kizss stébassemen* v. *téba<sup>c</sup>täi kizus stsi*.

Le soleil, *kizss*.

*Taänenasa é<sup>c</sup>to adstkiegat?* (respondet huic), quelle heure est-il?

Il est bientôt jour, *pésssté<sup>c</sup>kšat*; il est jour, *tsé<sup>c</sup>kšat*.

*šémañban uéhi<sup>c</sup>ré*, il paroît un peu.

Il rebrousse, *sasšé*, v. *ossäñ*.

*Ni aneghi spirassit*, il commence à éclairer.

*Néhi<sup>c</sup>ré*, il est levé; *nibalssšé*, il marche, avance.

*Paskšé*, au milieu, midi.

*Era<sup>c</sup>sek kizss*, *ahara<sup>c</sup>sek*, jette des raions.

*Pedegšssé*, *uasé<sup>c</sup>kšé*, *añremasé<sup>c</sup>kšé*, v. *smañdañdé*, près de se coucher.

*Neki<sup>c</sup>ré*, il est couché.

Le soleil est là, *ni sdañ*; où ē [est] il? *täñi édañt?* étant là, *täñdé kizss*.

Il éclaire, *pagadassem*; il m'aveugle, *neda-gadassi*; *sdékka éškša täñde nia édsti añbksnä*.

Il est couvert de nuages, *assšks* v. *nekahšks kizss*.

[SOLLICITER.]

Je le sollicite à *q'q'* [quelque] chose, je lui dis absolument, *nedatsšimañ*.

L'ayant sollicité à me raconter, v. pécher, v. &c., il fait difficulté, mais le pressant il m'obéit, il me raconte v. pêche, v. &c., *neké<sup>c</sup>spskáharäñ*.

*Neké<sup>c</sup>spskahareks*, je lui obéis, &c., ut superius.

[SOMMEIL.]

J'ai sommeil, *nekadšxi*, 3. *kadšxs*.

Que j'ai sommeil, *kadoxines täñi*.

Songe, somnium, *areksssdin*, ig. -*tadamen*.

[SONGER.]

Je songe, *nederegšassi*. Vid. Je rêve.

J'ai songé qu'il arriveroit *q'q'* [quelque] méchante aventure, *nšinañbádam*.

J'ai songé qu'il m'arriveroit, &c., *nšinañbamesi*; à lui, *nšinañbamäñ*.

[SONNER.]

[466, 467.] Je sonne la cloche. Vid. Cloche.

[SORTIR.]

Je le fais sortir par la crainte *q'* je lui c'se [cause], c'est p'r cela qu'il sort, *nšnsdél'-pañšrañ*, v. *nšnsdél'saräñ*.

Nous sortons, *nšnsdañbañsibena*, *sigšäñmekstsi*, t'tùm [tantùm] in plur. 3. *sd*.

Je sors de la cab. [cabane], *nemañtsi*, *nšnsdésé*, 3. *nšnsdañbañsšak*, ils sortent de l'église, &c.

*Ési'ré*, v. *si'ré siadiminañganek* v. *nšnstek*, cela sort du passoir v. du sac, &c.

*Ési'rar skansnar*, le blé en sort par des trous, v. feuilles [?], &c

Je le fais sortir, je l'envoie promener, ut ita dicam, *nšnsdaharañ*, 3. *sn*.

*Šésékšäñsé*, il demeure dedans, ne sort pas, je l'empêche de sortir.

*Täi nedari šésékšäñsé nečaskadémañgan*, v. *nšnsššérđamsañgan*, je voulois pleurer v. me fâcher, mais j'empêche *q'* ne sortent mes pleurs v. ma fâcherie.

[SOUFFLER.]

Je souffle contre lui, *neps'tasañmañ*, ig. *nepstasñdamen*.

Ce bois verd qui est au feu souffle contre moi par le bout, *nepstasañmšks*; *nštsitšmęsn*, il me fait *tsi tsi tsi*; *nštsitšmañ*, je lui fais *tsi tsi*, &c.

Je souffle dans mes mains p'r les échauffer, *nekissarañ metamenar neretsiar*.

SOUFFLET à feu, *psdasañgan*; je souffle, *nepsđasé*, 1<sup>a</sup>. *nepsđasé*. Vid. Feu.

Soufflet, il est souffleté, *gaskigšétéhañ*.

Je lui en donne, *negaskigšétéhañ*, 3. *agas*.

Je lui donne un soufflet, *nebabaghiádasäñ*.

Je souffle v. g. vessie, *nepstasañdamen*, nob. *nepstasañmañ*.

*Neda'sétañra'tamen*, je fais entrer mon souffle dans le calumet, chalumeau.

[SOUFFRIR.]

Je souffre le feu qu'on m'appliq', *nsrerđamen éri métkazézimek*, *ksr.*, *éri métkazézšrek*, 3. *sr.*; *éri métkazézst*.

Je souffre b'p [beaucoup] j'ai une étrange aventure, *nesaghiné*.

Je le fais souffrir, *nesaghipnarañ*.

Je le fais souffrir, je le tourmente, *nemamégahañ*.

Je souffre patiemment cela, *nedaññhérdámen*; de lui, *nedaññhérdamasäñ*.

Tu en souffriras d'une étrange manière, tu le paieras en enfer (v. g. de ce *q'* tu te mocq' de Dieu), *kesagañšrgšntsi araimki ne twini ari* v. *kesaghinésañdamentsi*.

Je souffre beaucoup d'une chose qui fut si fâcheuse, *netsi'ramadámen*.

*Psđedasákšé is abasi*, ce bois fume au feu.

*Nepsđedasákšsi*, il fume c'tre [contre] moi, j'en suis incommodé; impropre di'r [dicatur] v. ironicè, *nepstasañmšks*.

[SOUHAITER.]

Je souhaite b'p [beaucoup], *nšsmérđamen*, v. *nepasañdamen*.

Je souhaite *q'q'* ch. [quelque chose], *nepañšérđamen*; avec ardeur, *nedatsšérđamen*, v. *nedatsšitsn*.

Je souhaite v. g. d'aller, *nedassañdamen*.

Mon souhait, ma prétention, *nedatsvañdamšdi*.

Il y a long tems *q'* je souhaite de le voir, *nañsat ni kekširsmercn*.

Je le souhaite, le désire &c., *nekširsmañ*.

*Pañ'ské*, 1<sup>a</sup>. *nepañ'ské*, di'r [dicatur] de pue-ro, il souhaite dehors d'aller là v. là, &c., *nederipañ'ské* v. *nederipañ'skañ*, 3. *sđerip.*, idem, v. *nederitss'kañ*, 3. *sđeritss'kañ*, v. *tss'ké*.

*Gakisañšak*, ils souhaitent ardem't v. g. leurs village.

*Gakisañšé gakke sá*, tant il souhaite, &c.

[SOULAGE.]

Je le soulage v. g. une ame du purg. [purga-

toire], en priant D. [Dieu] p'r elle, *us-rañbêöcräñ*.

Je le soulage en *q'q'* [quelque] manière dans sa maladie lui parlant, *netsikiharäñ*. *Netsikiharegsn*, je me sens comme soulagé par ce qu'il me dit.

[SOUPIRER.]

Je soupire après le blé, v. g., *amaüté sdaskamsnmia*, abs'tum [absolutum], *nedagšighémi*.

[SOUPÇONNER.]

Je le soupçonne de m'avoir pris v. caché *q'q'* ch. [quelque chose], *nedagšimañ*.

On soupçonne v. g. le jongleur d'avoir fais mourir, v. g., *agšimañ metesrens*, &c.

[Page 468 of the MS. is blank.]

[SOULIER.]

[469.] Soulier François, *ascennstssákessen, nar*, v. *arenekessen, nar*, sauvage.

— sauvages, *mkessen, nar*; mon soulier, *nemkessen, nar*.

Mes souliers s't [sont] percés, *nedas'káma*; s't [sont] usés, *nemétkáma*.

J'en fais, *nemaksenké*, 3. *kescni'kké*.

*Nisskskenagadsr*, deux paires.

Je les raccommode, *nemi'sakisené*.

Je les cous, *nedaskšamenar*; je les plisse, *nebi'khamen*.

Les courroies, *tatasagšancñbi*.

Je les fais boucaner, *népassénemen*; fais-moi, &c., *passemasi nemekessenar*.

Mes souliers s't [sont] durs, *kesšaskedar nemekessenar*.

Je les frotte étant durs, *nenskéghenemenar*.

Je les mets, *nedaséni*, 3. *aséms*.

Je les quitte, *nekedékesené*.

Je les mets sécher étant mouillés, *nedéksdkésené*.

Plis, frongure du soulier, *pekaigan, nak*.

Je les plisse, *nepikhámen*, di'r [dicitur] etiam de panno v. quolibet alio.

[SOURD.]

Je suis sourd, *negaghé'psa*, 3. *gag.*, sé.

[SOURCIL.]

Sourcil des yeux, le poil, &c., *mañmañ*; mon, *nemañmañ*.

*Nemañmañ mañsi're*, va, marche, signe de *q'q'* [quelque] salutation, &c.

[SOUTENIR.]

Je soutiens le malade p'r l'aider à marcher, *netsitsnañ*, 3. *st*.

Le fort de l'église v. g. et le fort des sauvages se soutient, s'entra'aide, p'r la défense, *srinisštar vvir*.

SOUVENT, *añksañbékki* v. *nainekstšisi*.

[SOUVENIR.]

On se souvient de cela, *mikšitéhañdañsv*.

Je me souviens de cela, *nemi'ksitéhañdlamen*, nob. *-hañmañ*.

*Ma* [mañda] *nemi'ksitéhañdamssnar, négar*, v. *nemi'kséremañ*.

Je me souviens, *nemi'ksitéhañmesi*.

Je le fais resouvenir, *nemiksrañéhañ*.

[STÉRILE.]

Elle est stérile, *ptšss*, di'r t'tum [dicitur tantum] de l'original stérile; de muliere, *ptšsskšas*; de viro, *ptššsñbaa*.

[Page 470 of the MS. is blank.]

SUAIRE, ce dans quoi on ensevelit, *šisé* [471.] *ghenigan*.

Le St. Suaire, *ni Jessš šiséghenessa*.

[SUCER.]

Je suce cela, (les *sasan, nesisibadamen, sisi-badañss*) v. *nesinebégadamen*, nob. *-béga-mañ, sinebégadañss*.

Sucez de blé d'Inde, *sipskenañgan*; je le suce, *nedassipskáné*.

SUCRE, *sšgar\**; je trouve en cela le gout du sucre, *nessgarítamen*.

*Kedassgarem*, ton sucre, seu, tu en as.

J'en fais, *nessgarikké*.

[SUER.]

Je sue, *ncdañbesési*; le feu me fait suer, *skstáik nstšiañbesésé*.

Je sue en mangeant, *mitsiañné nebañpeséppi*.

SUERIE, *sakahigan*; j'y sue, *nsakáhama*.

[SUIE.]

La suie de la cheminée, *piratái*; il y en a, *piratáia*.

Je l'ôte. Vid. Cheminée.

[\* From the English, *sugar*. EDIT.]



## [SUFFOQUER.]

Je le suffoque, . . . , *nekeskedsnénañ*.

## [SUGGÉRER.]

Je lui suggère, *nsi'tamasañ*, 3. *asi*.

## [SUIVRE.]

Je le suis, sequor, *nensssskasañ*; de veue, *nensssañbamañ*.

Je le suis *q'q'* [quelque] part qu'il aille, *nenssspenarañ*.

SUISSE, espèce d'écureux, *aniksses, sak*; écureux, *mi'kéé*.

## [SUPERBE, SUPERBEMENT.]

Je suis superbe, (de viro,) *nebañrañbañ*, *nebañredsn*; (de muliere,) *nebañrsksañ* v. *nebañredsn*, 3. *bañrsksas*.

Je pense superbement, *nepañredonšitëhañsi*.

## [SOUHAITER. Vid. supr.]

[472, 473.] *Nekšari'ra*, j'ai une g'de [grande] joie de voir celui qui je souhaitois, &c.

## [SUPPLIER.]

Je supplie, *nesismañsi*; lui, *nšisinsamañ*.

Je supplie p'r les ames du purgatoire, *nšisañ-ssšesañk nañsatakazšitsik*; abs'tum [absolutum] -*gšghémi*.

Je le supplie avec des termes gagnans, *nšisinañšmañ*.

*Kégs stsi sisinsañšmian*, dit v. g. une mère à son enfant q. [qui] l'appelle mère afin d'avoir à teter, v. quasi diceret, Ce n'est pas sans sujet *q'* tu m'appelles mère, &c. On s'en sert aussi dans les conseils lorsqu'on veut, &c., *kesañsinañšmereba*.

## [SURMONTER. Vide infra.]

## [SURPASSER.]

Je surpasse, *nenegañmihšé*; *nenegañsadsak*, ils se surpassent.

Je le surpasse, surmonte, *nenegañmihañ*, v. *nenegañmkasañ*.

*Negañmihšrañné kégsi kemiri*, tu me donneras *q'q'* ch. [quelque chose] si j'ai plutôt fait, v. dit cela, *q'* toi.

## [SURMONTER.]

Je le surmonte, *nesinihañ*, ign. *nesini'tsn*; surmonte-toi, *sinihšsi*.

J'étois vaincus sans toi, *n'sinihšghéhébanba mda [mañda] kia*. Vid. Vaincre.

## [SURPLUS.]

Un de surplus, on se sert de tous hormis un, un de reste, *ktsi'ré*.

## [SURPRENDRE, SURPRIS.]

Je suis surpris de cela, *nedañsaghérdámen*.

Chose suprenante, *añsaghérdaminañgs*, 1<sup>a</sup>. *nesaghestasañ*.

Je suis surpris de ce *q'* tu me dis, de ce *q'* je t'entens dire, *kesaghestsr, kesaghinsdšren*.

Je suis surpris de ce qu'on me raconte v. g. étant autrem't *q'* je n'espérois, *neksa'ri'ra*, *kšariraines tañni*, quelle surprise, &c., *neksarirasémeghé*.

## [SUSCITER.]

Je suscite, les Iroquois v. g., *nekakésšmañk mégsak*.

Je le, *nekakésšmañ*.

[Pages 474 and 475 of the MS. are blank.]

## T.

[476, 477.] [TABAC. Vid. Pétun.]

TACHE, labes; cela est taché, *psagatsi'té*, nob. *psagatsess*, pls. *pépsagatsi'té*; je le tache, *nepepsagatsesemen*, v. *nepesagatsesmen*, nob. *nepesagatsesañ*.

## [TAIRE.]

Je me tais, taceo, *netsikápi*, 3. *ts*.

Je le fais taire en lui faisant *q'q'* ch. [quelque chose] p'r cela, *netsighiharañ*.

TALON, *magsañn*; mon t. [talon], *nagsañm*, 3. *sagsañm*.

TAMBOUR, *paksraigan*; j'en bas, *neda-pagšašri*.

[TARIR.]

Le ruisseau, l'endroit où l'on puise de l'eau, est tari, *sikkaaäns*.

Il ne sera tari de long tems, *sipkisikkaaäns*.

TASSE, *tašsemšdi*, ar.

[TÂTER.]

Je tâte de cela, &c. Vid. Goût.

[TÂTONNER.]

Je tâtonne, *nekširs nemen*.

[TARD.]

Je suis venu trop tard, v. g. p'r la messe, *nemétsikssi*.

[TEINDRE.]

Je teins cela, le faisant bouillir, *nedatsemen*, nob. *nedatsesañ saradé*; on le teint, *atse-saäns*.

Je teins, faisant bouillir, *neda<sup>t</sup>saäwé*; en rouge, *nedatsádabé*.

*Nedatsa émksnak*, je teins des euilliers, *nedatsesaäsa*, je teins une euillier seulem't, avec *sedí*.

*Nstéghebiar*, je teins des *sighebi*.

*Nedatsesarabé pikkaämar*, espèce de chanvre.

[TÉMOIN.]

Je prens v. g. Dieu à témoins, je nie q' j'aie fais cela, et il ē [est] aussi vrai qu'il y a un D. [Dieu], &c., *nenespihihšsü k'ks*.

TEMPÊTE, *kesäntgší*; a cessé, *é<sup>t</sup>ksike-saäntgší*.

[TEMPS.]

Je connois le tems qu'il sera, seu, le jour, *neséš<sup>t</sup>namen sa<sup>t</sup>kamé*.

Il fait beau tems, beau jour, *srikizegat*; mauv. [mauvais], *matsikizegat*.

Il y a long tems, *naänsat*; il n'y a pas long tems, *kétsikaänsé*.

Pensez q'q' tems q' vo' [quelque tems que vous] voudrez, c'est t'rs [toujours] devant, *aänsaänsämadšghé*, id. ē [idem est] *našdasamek aänsaänmekni*.

Je ne croiois pas qu'il fût encore tems, v. g. de venir, q' le tems n'étoit pas encore assez long, *nederitéhänsihiban eskša é<sup>t</sup>to ksnat*.

*Penčtsaänsi* v. *penčtsaänsisi*, v. *petsenaänsisi*, long tems.

*Penčtsaänsšsé*, v. *petsenaänsšsé*, il est long tems à venir.

*Pénetšaänsikisighék* v. *pétsaänsighék*, il demeure long tems à croître.

*Penčtsaänsigs*, eet enfant est long tems à croître.

TENAILLES, *nimeskštäiavéigan*.

[478, 479.]

[TENIR.]

Marie tenoit justem't le livre, et l'endroit du livre, &c., *méaänsnek*, 1<sup>a</sup>. *nemaänsnemen*, je tiens cela justem't là.

[TENTATION.]

Tentation de J. [Jésus], *anbannšits srir pnapksr ni sskitrann Jesssar matsks panbatami sigamigsk pita spemek — sdiraär — penikdäi mdhaba kesék-tésins, kenitšnegsktsi angeriak, &c., ne minu amantsarann pita ari mššpadenek ni ed-trann ššankšghé*.

[TERRASSER.]

Je le terrasse, jette à terre, *kik nederakkäin*.

[TERRAIN.]

Le terrain n'est pas égal, *māda [mānda] tētebakumighési*.

Le haut, *ketsemekšakamighé*.

Le bas, *šänrkamighé*; je l'applanis, *nšrék-kéhihghé*.

[TERRE.]

La grande terre sur le bord de la mer, v. g., *ketakamigs*.

Terre, *ki*; en terre, par terre, *kik*; sur cette terre, *is<sup>t</sup>kkik*.

Sous la terre, *araämkkik*.

Terre q. [qui] a été brûlée, où il n'y a plus q' des broussailles, *tšega<sup>t</sup>ta<sup>t</sup>ks*.

À terre, en bas, *metsisi*.

Je vais dans les terres, v. g. à la chasse, v. &c., *kepisi neda*.

J'en reviens, *kepisi nsm*.

Je vas dans les terres pour peu de tems, *nekiskéni*.

Je pense à y aller, &c., *nekisitéhänsi*.

La terre produit, *ššaänsksr, ššankké<sup>t</sup>rar mes-sisi kéššššar*.

On engraisse la terre p'r la faire mieux porter, *pakkikaän*.  
 Je l'engraisse, j'y mets *q'q'* [quelque], &c., *nedapikké*.  
 Cette terre, où nous vivons, v. g., est misérab., *iski ketemainghesin*.  
 L'endroit où on traverse les terres p'r se rendre dans un lac v. rivière, v. p'r aller en *q'q'* [quelque] endroit, *kepaüssesek*.  
 C'est là où il coupa, &c., *sétsi kepaüsdédeban*.  
*Nekepänbaüsbena*, nous coupons, no' [nous] traversons, &c.  
 Je coupe, je traverse les terres, &c., *neki-pssé*.  
 La terre sur le bord du fleuve, seu, le rivage, terrain, *nesaüki<sup>r</sup>ré* v. *pencaüki<sup>r</sup>ré*.  
 La terre qu'on brûle p'r qu'elle soit bonne, et qui est bonne à cause du feu, &c., *sskikkedé*; *sskikkesaüsu*, on la brûle, &c.  
 La terre tombe, v. g. le printemps, celle qui est sur le bord, *pekšateké<sup>r</sup>ré*.  
 La terre t'be [tombe] v. montagne, *kétkéäss*.  
 La terre est en pente, *atsi<sup>r</sup>tasaüké*.  
 De l'eau où je suis, je vas à terre, *nenända-gaüsé*.  
 TÊTE, *metep*; ma tête, *netep*, 3. *etep*.  
 La tête d'un ho'e [homme], *arenaübaaütep*; d'un orig. [original], *musaütep*.  
 D'un cerf, *marvsaütep*; d'anguille, *nahamsaütep*, &c.  
 Le dessus de la tête, *manaüsksaütep*.  
 Tête de mort, *tsipanaütep*.  
 Je lui coupe la tête, *netemigusaü* v. *netemigšé<sup>r</sup>haraü*, *netemigšétéhaü*.  
 Je lui dis de faire à sa tête co'e [comme] il voudra p'r moi, je ne m'en mêle plus, *nšé-kaütsimaü*.  
 Casse-tête, *pa<sup>r</sup>kšé*.  
 Je baisse la tête, je la courbe, *nedatsitattš-kšési*, v. *nenasaskšébi*, v. *nenavaskšégaübasi*, 3. *nav*.  
 Je la baisse en marchant, *nenasaskšési*.  
 Je lui fais baisser, pencher, v. g. p'r l'oindre, *nenasaskšénaü*.  
 Je la lève, *nedaspikšéši*; lève-la, *spikšéši*.

Je me gratte la tête, *neketsogaüdebé<sup>r</sup>nesi*.  
 Je suis cause qu'il a mal à la tête p'r l'avoir battu, *nepeskšé<sup>r</sup>tehaü*.  
 Il marche la tête baissée, *atsi<sup>r</sup>taškšéssé*, 1<sup>a</sup> *nedatsi<sup>r</sup>taškšéssé*.  
 Je penche la tête étant debout, *nedatsi<sup>r</sup>taškšégaübasi*.  
 Je le laisse faire à sa tête, v. le tenant, v. g., je le laisse aller, &c., *netsighi<sup>r</sup>tasaü*; *ketsighi<sup>r</sup>tsr*, je te.  
*Mssks*, le castor, loup-marin, &c., lève la tête hors de l'eau; *kamegs*, il se recache.  
 [TETER.]  
 L'enfant tête sa mère, *sigasssar snsnaü* [480, 481.] *maür*, 1<sup>a</sup>.  
 Je la tête, *nsnaümaü*; cela, *nensnaüdámen*.  
 J'allaité, *nenssaü*.  
 Je lui donne à teter, *nensraü*, (*nsni*, tête, tête-moi.)  
 Je tète, ait puer, *nensni* v. *nededarita*.  
 Je le sèvre, cesse de lui donner à teter, *nedé<sup>r</sup>kšitarau*.  
*Ša dakkepegša éksa pemi<sup>r</sup>taüt?* tête-il encore?  
 Je cesse de lui donner à teter en aiant un autre dans le sein, item, sans en avoir, *nedstsinéau* v. *nepsekaršnaü*.  
 [TIRER.]  
 Je tire du fusil sur qq'un [quelqu'un], *nepéskam*, 3. *apéskaür*; *asenni péskak?* q. [qui] tire?  
 C'tre [contre] un arbre, *abasi negeskam*.  
 Eu volant, *nenitštéhaü*.  
 Lui, *nebarhaü*, 3. *abarhaür*.  
 On tire, *péskaüss* v. *péskedé*.  
 Je me tire en haut étant couché, *nedaspesin* v. *nedaspi<sup>r</sup>gšsin* v. *nedaspi<sup>r</sup>gssi*, imp. *spigssi* v. *spesin*.  
*Asa<sup>r</sup>sin*, tire-toi d'un autre côté, du côté des piés, v. g.; *tabasesin*, en bas du côté des piés.  
 Je manq' en tirant, *nebarhíghé*, 3. *arahíghé*.  
 Tire-bourre, *kéthígan*.  
 Je tire *q'q'* ch. de *q'q'* [quelque chose de quelque] endroit, *nensdenemen*.  
 Je le tire du feu, *nekítkazénaü*.



Il me tire par la robbe, *negheréghiphks*.

Je lui tire l'oreille, *nšikšaiŋragsénaü*.

Je le tire d'un lieu soutairain, *nšikšaiŋbék-haü*.

Je le tire v. g. de la cave, cache, *nsdsssadsn araümsi*.

Je le tire, moi étant en bas et lui en haut, *nepenekaüraü*.

Je te tirerai en bas lorsq<sup>e</sup> tu iras au ciel, *kepenakaüreŋtsi spemkik aiäü'ané*.

Je le tire en haut, *nšiksnaü v. nedaspi-gsnaü*.

*Kepeskampesanas* ? as tiré, scil. tué ?

*Nepeskamshsan niseda v. péskághé*, j'en ai tué 2, v. &c.

Je tire, manu v. g., une épine, bois, du doit v. *q<sup>e</sup>q<sup>e</sup>* [quelque], &c., *nekétenemen*.

Avec les dents *q<sup>e</sup>q<sup>e</sup>* ch. [quelque chose], *nekétatámen*.

*Ni sšin S. Thomas, namitasanné kési késté-haüsis* *pisineskaüné, ertéhansisa srésaüganek neba aiaga nsranmselamen, &c. Kina Thomas kési hestéhansianneban pisineské értéhansianneban nerésanganék musak miüna ketzasermikan.*

TISON, *pskskazédé, ar.*

[TOMBER.]

Je tombe d'en haut, *nepeni<sup>e</sup>ra*, 3. *peni<sup>e</sup>ré*.

Je le laisse t'ber [tomber] dans sac, ouragan, vase, &c., nob. *netebakkoü*.

*Nepenaçonü*, je le laisse t'ber [tomber] de haut.

Je tombe par terre, *nšéktessin v. neghipte<sup>e</sup>s-sin v. nederetéssin*, 3. *aritéssin*.

Je te fais tomber, *nšéktéssímaü*.

Je tombe un peu loin, *nebaghesin*.

Je t'be [tombe] dans l'eau, *netsašpi<sup>e</sup>ra*.

Je t'be [tombe] à la renverse, *nedénatsinc-téssin*.

Je le fais t'ber [tomber] en le heurtant, *negšagsiharaü*.

Je le laisse t'ber [tomber] par mégarde, je le laisse t'ber [tomber], *nebarenemen*, nob. *nebarenäü potanie kandak, nebanégsmemen*, idem ; 3. *ab*.

Un arbre est t'bé [tombé] sur moi, *nekasa-sghi*, 3. *kasašgs*.

Cela est t'bé [tombé], *peni<sup>e</sup>ré* ; dans la feu, *ketsesétéssin*, nob. *ketsesésš*.

Je t'be [tombe] mort, *nekšérkšiné* ; je t'be [tombe] en glissant, *nsasscté<sup>e</sup>kka*.

Une cabane est t'bé [tombée], *šigsaiümé* ; *messisi sskksraümsené*, par le vent.

Je le fais tomber, *nepeni<sup>e</sup>haraü v. nepeneté<sup>e</sup>-simäü*.

*Pengaiüki<sup>e</sup>ré*, la terre t'be [tombe], se détache du bord de la rivière, v. g., le printemps.

*Tsana<sup>e</sup>täi*, elle s'arrête dans sa chute, rocher, v. g. &c.

Je le laisse tomber de ma bouche, *nebaradámen*, nob. *nebarámaü*.

Je le laisse t'ber [tomber] de ma main, *neba-* [482, 483.] *renemen*, nob. *nebarcaü*.

Je lui fais t'ber *q<sup>e</sup>q<sup>e</sup>* ch. [tomber quelque chose] sur lui, *nesegsskit<sup>e</sup>haü*.

Cela est t'bé [tombé] sur moi, *nesegsskité-hsgen*.

Je t'be [tombe] sur lui, *nesegssketé<sup>e</sup>kasaü*.

*Nšéktéssin*, je suis tombé.

C'est cela qui m'a fait t'ber, *nenaübiskšaham*, v. *hamen*.

Il est t'bé v. eau v. mangeait [manger] dans mon canal de respira'on [respiration], *neségšami*.

Je lui fais t'ber, seu, j'en suis cause, *neségšamsraü*.

*Sš<sup>e</sup>kší<sup>e</sup>ré*, v. *peni<sup>e</sup>ré meghi* v. g. la gale tombe.

*Sš<sup>e</sup>kší<sup>e</sup>ré*, *šigsaiü*, la cab. t'be [cabane tombe].

Je fais, je laisse t'ber un peu d'eau, du doit v. g., *nepesakbétsn*.

Sur lui, sur la langue v. g. du mauvais riche, *nepesakbétsasaü*.

TONDRE, p'r allumer, &c., *tsiksaiüngssaks v. iksaiüngssake*.

[TONDRE.]

Je le tonds, *nemssaü* ; je me tons, *nemšsi*.

TONNEAU, *mairikíršs, sak*.

TONNE d'écorce, *šaiüšántšénigan*.

## [TONNER.]

Il tonne, *pédañghiags* ; tonnante, *pédañghíghé* ; il faisoit tonnerre, *pédañgsppan*.

L'éclair, *sa<sup>s</sup>sañbigšak*, v. *pesaksrahasšak* *pédañghiak*, *stseskasisasañbigak pt* [?] *addi pédañghiak*, voilà l'éclair, il va tonner.

## [TONNERRE.]

Le tonnerre est t'bé [tombée], *pédañghiags ariké<sup>s</sup> kkašak*, v. *pédañgs*, -*gšio*, sub. *pe-dañghisik*.

*Nsústé pédañghiak aneghi nanitsmeghi sasambigsé hédidé nettai tsibatekskañ ni-keba stsi mda* [mañda] *kegsi arihigshsdiks pedañghio*.

## [TORCHER.]

Je le torche, &c., *nekasschámen*, nob. *nekasscháñ*.

## [TORT.]

On me fait tort, on m'a perdu v. g. ma fille q. [qui] est morte faute de secours, *nšéghihšghé*.

Je lui fais tort, &c., *nšéghiháñ* ; ig. *nšéghit<sup>s</sup>*, je gâte, je perds cela.

## [TORDRE.]

Je tors, je file, *nederetakníghé*, ig. *nighitsn*.

TORTUE, *tsrebé*, *bak* ; son écaille, *amikenaks* v. *varaghé*.

TÔT, bien-tôt, *tébné*, *tébnétsi*, *kégañ*, v. *né<sup>s</sup>héni*.

## [TOUCHER.]

Je le touche v. g. l'oreil avec salive, *nepesagummasañ*, v. *sañ*, &c.

Je le touche, tango, *nesañmenemen* ; lui, *nesañmenañ* ; me tango, *nesañníps<sup>i</sup>*.

Je le touche au corps, *nekšakšétésaghenañ*, v. *nenanañsésaghenañ*.

Je touche cela, tâtonnant v. g. un sac s'il y a q<sup>q</sup> ch. [quelque chose], *nekstenemen*.

Je ne suis point touché de cela, *nekikanitéhaidamen*, v. *nekikanérdamen*.

Je ne suis point touché de ce qu'on, &c., *nekáñkañkérdamen*.

Je touche, tête le pou, *nekstañbéghenañ*.

Je lui fais toucher v. g. reliques, je les lui appliq<sup>q</sup> et puis les retire, *nedasitenemasañ* ; -*mañgon*, il me ; *msr*, je te.

*Nenañsipsn nahghé*, v. g. je le touche, gratte, prent en le touchant.

*Nematsisañmpssi*, je me touche mal.

*Nepa<sup>s</sup> tatañskáhasi*, je mets mes mains, &c.

## [TOUPIE.]

Espèce de toupie q<sup>q</sup> les enfans f<sup>t</sup> [font] tourner, &c., *aripodañgan*.

Je la fais tourner, *nederipsdsn* ; fais la tourner, *aripšré*. [484, 485.]

## [TOURMENTER.]

Je me tourmente avec les ongles, *nedañmbédaskiretsési*.

Je le tourmente, *nemamégahañ*, ign. *nemamégatsn*.

Je le tourmente, l'afflige, lui suis importun, *nsnemiháñ*.

Je suis assez tourmenté, je le suis au-delà, *nšémañbési* ; di'r [dicitur] etiam de cibo.

Je tourmente son père, *nemamégatasañnar ami<sup>s</sup> tañgssar*.

*Nsniadasañnar kégssar*, je lui ai perdu q<sup>q</sup> ch. [quelque chose.]

## [TOURNER.]

Je tourne en canot, *neksdegš<sup>i</sup>ra*, v. *nekskañvé*.

Je le fais tourner, *neksdegšité<sup>s</sup> kkasañ*.

Tourne cela dans ta main, *ksrbipsds*, I<sup>a</sup> *neksrbipsdsn*.

Il faut le tourner co'e [comme] rôti, &c., *ksrbipsdañss*.

Je tourne en marchant, *nšañšiañsé*.

Je tourne autour de l'arbre, *nekistañgšéps<sup>i</sup>*.

Je me tourne changeant de place, étant couché, *neksrbaké<sup>s</sup> sin*, v. *neksrbé<sup>s</sup> sin*.

*Ksrbaskipsdañss*, tourner le rôti v. g. pendu à une corde, *neksrbaskipsdsn*, nob. *neksrbaskipsrañ*.

Je le tourne sans dessus dessous, je fais q<sup>q</sup> ce qui étoit en bas soit en haut, *neksrbat<sup>s</sup>* ; particula, *ksrbisi* ; nob. *neksrbarañ*.

Il le faut tourner, *ksrbetañss* v. *ksreperañ*.

TOURNE-SOL, *kisskaññak*.

TOURTE, *prés*, *préssak*.

TOUT, *messisi*, *nekikkañisi*.

Par tout, *kisi* v. *papañmisi* ; *kisdaš*, il visite par tout.

[TOUSSER.]

Je tousse, je fais hé, hé, *nssksâraïmi*, 3. *sss.*,  
*édori sskâraïmiritsir*, &c.

[TRAHIR.]

Je le trahis, Judas v. g. Jésus, *nenebakadâ-  
saï*.

[TRAÎNE. Vid. infr.]

[TRAITER.]

Je traite, *ne'ta'taïsé*; cela, *netatâïsaï*,  
*netataïsé'tsn*; lui, *netataïséhaï*.

*Bga'ké'to mda* [*mânda*] *aïsadisi*, est-ce qu'on  
ne traite pas cela? le donne-on p'r rien?

*Ga'kia aïsads* v. *aïsadssa*, on le veut, &c.

Je traite en cachette le bien d'un autre p'r  
en tirer moi-même le profit, *co'e* [comme]  
si c'étoit le mien, *nekemstataïsé'tsn*.

Je traite p'r gagner *q'q'* [quelque] chose,  
*nedataïsasi*.

— cela p'r en retirer du profit, *nedata-  
ïnsasi'tsn*.

*Nebaëmerstemen*, je le veux plus qu'il ne  
m'a couté.

*Baëmerstaïss kégsi*, on le vend plus.

*Bsaïmerstaïss*, on le vend trop, &c.

Je vends au même prix qu'à Kebek [Qué-  
bec] v. g., *nederhamasin*, v. *si*.

Je lui donne au même, &c., *ni t'hamask*;  
à toi, *nî éhamâra*, 1<sup>re</sup> *nederhamasâ*, v.  
*nshâmasâ*.

TRAÎNE, [TRAIN, TRAÎNER,] *sdaï-  
banasks*, *ksr*; je traîne, *nsdaïbé*.

*Matsipsdé*, elle glisse mal, difficilement, *mat-  
sipsss*, *sripsss*, &c.

J'en t'be [tombe] en defaillance, *nesaïks-  
tâinasi*.

Je le traîne, *nsdaïtsimaï*, 3. *sd*.

Je fais une traîne, *nsdaïbanaskské*. Traîne,  
chariot. Vid. Chariot.

Traîne d'une peau de chevreuil, *sdaïbaïgan*.

*Bdaïbéhaïsé*, on en fait une traîne.

Je la charge, *nsraïbaïdikké*.

J'en ai une, *nsdaïbaïnaasks*, neg. *m̄da* [*mān-  
da*] *nsdaïbaïnaaskés*.

Je le traîne, le tenant par la main, lui étant  
à terre, *nepemaïdaïtsipha*.

Je le traîne par terre, *nsdaïtsimaï*, ig. *ns-  
daïtsitsn*.

TRANCHE. Vid. infr. p. 488.

[TRANSPARENT.]

*Basi-namihiḡsat*, on le voit transparentement;  
quoiqu'il soit dedans *q'q'* [quelque] chose,  
on le voit &c.

*Basisi*, transparemm't.

*Basaïbadaïss*, *basaïbamegsé*, couverte v. g.  
on voit à travers.

*Nebasaïbadamen*, nob. *ncbasanbamaï*, je le  
vois à travers.

Q. *ē* [qui est] transparent, *ésaïbamēḡsek*;  
cela l'est, *ésaïbamegsé*, v. *éhézzatté*.

*Éhezatté pirask*, le papier l'est, lorsque le  
soleil, &c.

[TRANSPORTER.]

On transporte v. g. la pallisade, *aïtekaha-* [486, 487.]  
*daïss*.

Si on transportoit cela, *aïtekahadsmeḡkéba  
is*, 1<sup>re</sup> *nedaïtekhadsn*.

[TRAVAILLER.]

On travaille, *aro'kkedin*.

Je travaille, *nedarokké*; p'r lui, *nedarokké-  
saï*; p'r moi, *nedarokkéhési*.

Je travaille beaucoup, *nemesaïraro'ké*.

Je travaille bien, *nsrarokké* v. *neni'tansta-  
rokké*; mal, *nematsarokké*.

Sçais-tu travailler? *kesésérdamennava cra-  
rokkâïm*?

Je suis fatigué du travail, *nesasarokké*.

Je travaille tout le jour, *nenikékarokké*.

Je suis long à travailler, *nedabaïgarokké*.

Remue-toi, dit-on à *q'q'* un [quelqu'un] qui  
ne veut pas travailler, *maïdésghi gakkî*.

Un homme v. femme q. [qui] travaille t'rs  
[toujours], &c., *saïsaïbaa*.

*Nsékarakké*, j'ai gâté *q'q'* ch. [quelque  
chose] *q'* je travaillois v. aliquo modo  
perit meâ c'sâ [causâ], &c.

[TRAVERS.]

Je vas de travers, en serpentant, v. g. hâcce  
fig. [figurâ] *~~~~~*, *nebaïbébetegsssé*.

Vid. Particulas *Peteghisi* et *Pemetsinisi* et  
Part. *É'saïraghisi*.\*

\* [At the end of the French part of this Dict.  
EDIT.]



Cela est de travers, *aïssa'té is.*

Je l'y mets, *nedaiïssa'tsn.*

[TRAVERSER.]

Je traverse sans m'arriver, *nesaiïssé, saïsaï-si nepemssé.*

[TREMBLER.]

Je tremble, *nenaiïghip'ssi v. namaïtsip'ssi.*

Je le fais trembler de peur, je lui fais peur, *nesékpaï'sraï.*

Le terre tremble, *nénénkip'sdé ki. v. nenem-kamighip'sdé v. maïtsip'sdé ki v. sig'saïm.*

Tremble-terre, *kšig'san.*

[TREMPER.]

Je trempe cela dans l'eau, *netsäpëncmen,* nob. *-penaï.*

Je trempe dans le bouillon, la graisse, *nesc-kshghé.*

Je mets tremper, blé, linge, &c., *nedagšit-deden.*

*Nedagšitsimaï peksahaï, v. g.,* je la mets tremper, &c.

[TRANCHE.]

[488, 489, 490.] Trencher p'r la glace, item, gouge, ciseau à pierre, à bois, *éskan.*

[TRIER.]

Je trie, *nemeghenassi.*

Je le trie, *nemegheneman,* nob. *nemeghenaiï.*

Je trie, cultro, choisis le plus beau v. g. de la peinture, *nemeghenaïmkahaï šráman.*

[TRISTE.]

Je suis triste, *nssikérdam;* je l'attriste, *nssikérdamihaiï,* actio'e [actione]; v'bo [verbo], *mimaï.*

Je sèche de tristesse, *nesikérdam,* 3. *sik,* seu, je suis extrêm't triste.

[TRIPES.]

Les trippes ho'is v. a'alis [hominis v. animalis], *srághesi, sraghesiar.*

Trippes de roches, *kaïghé'ssunak.*

[TRISTE. Vide supr.]

[TROMPER.]

Je trompe, *nepatssr'sé,* 3. *pat.;* lui, *nepatss-raï.*

Je le trompe, je lui fais tourner la tête, v. g. v. l'appliq' [?] p'r qu'il ne me voie pas prendre ce qu'il a, *nsnig'sé'sraï.*

Je le trompe, je lui dis q' je ne ferai pas une chose, étant cependant résolu de la faire, *nencsakadámen,* nob. *nencpakadasaï,* v. *nsripakadasaï.*

Voilà comme je trompe &c., *ni éri nebaïia;* toi, *nebaïian;* lui, *uebaït,* impf. *ni cri nebaïneban;* toi, *nebaïüasa,* &c., *nederineba,* 3. *sderinebaïm.*

Moi qui le trompe par réponse, *éssenaérincboïmi,* 2, *-nebaïani,* 3, *nebaïtsi.*

*Messivi kegsi kederinebaïm,* tu te sers de tout p'r me tromper par réponse.

*Messisi kegsi nederinepakadaïngsn,* &c., je le trompe, je le supplante en sa demande, je lui dis v. g. qu'il n'aura pas ce qu'il demande, qu'il ne le veut pas vendre v. g. parceq' j'ai envie de l'avoir, de lui de mander, de l'acheter, *nedléhét'simaï.*

J'emploie mon esprit p'r le tromper, je dis v. fais q'q' ch. p'r [quelque chose pour] le tromper, *nencpakadasaï.*

Je cherche q'q' [quelque] moiën p'r le tromper, *nencpakadámen,* et ensuite, *nencpakadasaï.*

Je le trompe je lui dis, Allons là, & je le mène ailleurs, *neksaiïsipchaï.*

Je ne trouve rien p'r le tromper p'r faire valoir ma cause, *nedatsérineba.*

TROMPETTE, *bibisaï;* j'en joue, *nebi-bi'sé.*

TROP, *ssaïmi;* il y en a trop d'eau, v. g. *ssaïmérct nebi.*

[TROU.]

Trou dans le bois, à la cabane, &c., *tétaïsaragat,* pls. *-gakir,* nob. *tétaïsarághess,* v. *éhésaiïrághess.*

Il y avoit un trou, *tétaïsaragatsssa,* &c.

Trou dans la terre par où les souris viennent v. g., *aremanragat,* pls. *gakir,* nob. *aremaïrághess.*

Je mets ma main dans un trou, *nepisi-neské.*

Trou dans la glace p'r pêcher, *tasaï'gan,* nar.

Je passe v. g. babiche par le trou, &c., *ne-*

*désaraügaübéghemen*; passe cela, &c.,  
*ésaraügaübégheni*.

## [TROUBLER.]

Je trouble l'eau, *nebibghebégghiadsn*, *nebibghebégghemen*, v. *nebibkebe'khámen*.

Elle [est] troublée, *bibghebégghí'ré*.

Je me trouble en parlant, *negaügorásdské*, v. *nkaásdské*.

Je le trouble, lorsqu'il parle, je lui fais oublier, &c., par ce *q'* je lui dis, *nskasi-maü*.

Je l'offense par ce *q'* je lui dis, *negagaüsi-maü*.

## [TROUER.]

Je troue *q'q'* eh. [quelque chose] instrumento, *nedésibada'jámen*, v. *nebat'jámen*; on le troue, perce de part en part, *ésaraghi-tédaüss*.

## [TROUVER.]

Je trouve ce *q'* j'avois perdu, *neméskamen*, nob. *neméskasaü*, *séniaüanéban*, 3. *ames*.

Je trouve dans mon esp. [esprit] ce *q'* j'avois cherché long tems, &c., *nemikasitéhaü'damen*; on l'a trouvé, *meskaüss*.

À peine le trouvais-je, *nekéskasaü*.

Je ne l'ai pas trouvé, l'aïant cherché, *nesés-semadonatsn*, nob. *neséssemadonahaü*, v. *nederadenahaü*, v. *nesisadsnahaü*.

Je trouve peu après avoir creusé, *nemikshaü*, v. *kskéhaü*, peu, une poire de terre.

J'ai fais une bonne trouve, je suis heureux d'avoir trouvé cela, *nedaskamesi*.

Je me félicite de l'avoir trouvé, *nenabatsi-hssi*.

[491.] TRUITE, *skstam*, pls. *skstamsk*, *skstamsk*.

## [TUER.]

Je tue, *nenirké*, *kenirké*, *n'rikké*, 3. pl. *nrikkak*.

Je tue cela, *neni'tsn*; lui, *neni'raü*; je me, *neni'rasimesi*, iem, je me tourmente, v. *nemesaü*, oiseau, bête, castor, &c.

Celui qui tue par profession, *kadonnkévinns*.

Je le veux tuer, prendre, *nekadsnaraü*.

Je vais p'r le tuer, battre, &c., *nenauüskasaü*.

Le cri d'un ho'e q. [homme qui] apporte la nouvelle de ceux qui ont été tués en guerre, *nenckahsghebena nia sibisi némi-hiégs*.

*Nenekatésghébena Igrismaünak* \* *nia sibisi némihiégs*, les Anglois no' [nous] ont tous tués, il n'y a *q'* moi &c.

No' [nous] entrons dans le village p'r tous tuer, *nepitigadassibena*.

Je tue en cachette, *nekiminké*; lui, *nekimín-naraü*.

C'bien [combien] a-t-il tué de chevreuil? *kessetánasa messighéssa*?

J'ai tué un chevreuil v. orig. [original], 1<sup>a</sup> *nemessighé*.

Il en a tué 2, *nisssskerasé*; 3, *tsssskerasé*, &c.

Il en a tué un, *messighé*, v. *nekstkrasé*, *nsdstkšakerasé*; 4, *iésttkšakerasé*, &c.

Il a tué un ours, *negsdskskrasé*, 1<sup>a</sup> *nenegsdsskskrasé*; 2, *nisskskrasé*; 3, *tsskskrasé*; 4, *iéskkrasé*, &c.

*Nedaümasit'haü*, je l'ai blessé et bien et cependant je ne l'ai pu avoir, &c.

Il ne tue plus rien lors mē'e [même] qu'il blesse les bêtes, et c'est un signe (disent ils) *q' q'q'un* [que quelqu'un] doit mourir, *psé'kamaü*.

Je ne tue plus, on m'a charmé par *q'q'* [quelque] maléfice, *nemehéghé*.

Je [?] tue son père, *neni'tasaüna ami'taügsar*; on l'a tué, *ntasaünébána*, 3. *sni'raür*.

[Pages 492, and 493, of the MS. are blank.]

[\* An imitation of our word *Englishman*; in the singular, *Igrismaü*, and in the plural, *Igrismaünak*. See under the word *Blé*, p. 60-61, a similar formation, *igriskarnar*, *English corn*. EDIT.]

## V.

[VAIS, Je.]

[494, 495.] Nous allons diversem't, en divers lieux, *nesisésébena* v. *netzatzébsssébena*.

(Hæc inferiùs scribenda.)

Je vas de pensée v. g. au ciel, *nepétsitêhañsi* *spemkik*.Je désire d'aller v. g. à Kébec [Québec], *nederibañshké*.Je fais co'e [comme] lui, *nsitsi'rémañ*, je me joins à lui, je l'accompagne.Je vas, je m'en vas, *nemañsi*.Je vas là, *nemañ neda*, *nemañ nederssé*.Où est-il allé, de quel côté? *taini éragñi-rañt*?Je vas le<sup>s</sup> plus vite q' je peux, avec em-pressement, *nsisizañsé*.Je vas sans aucun empêchem't, *nesañkassé*.Je vas plus loin, je passé la ville, je passe outre, *nebaemkamen sdené*.Je vas devant, *nenikañssé*.Je vas avec plaisir, volontiers dehors, ailleurs, *barisi ari nebañskké*.Je vas plus loin, je ne m'arrête pas là, *neke-skamssé*.Je vas là tout droit sans m'arrêter ailleurs, *nenénekemañdssé* v. *nesañsésé* v. *nesasagssé*, rien m'empêche, tout de suite, &c. *Sañsaisi nemantsi sasaghisi*, rien ne m'empêche de m'en aller, &c.Je l'évite, je ne vas pas où il est, *neke-skami'kasañ*.*Nekeskamssé*, j'évite, je ne vas pas où il est quoiq' proche.Je vas où les autres vont, *nedersdañ*, 3. *sdersdañ*, *nedersdebena*, &c., imper. *arsdé*, *arsdét*, *arsdéd*, *arsdék* *arsdéhédits*, subj. *érsda*, &c., *ni nedasé'kkañ*, *érstedimek*.VACHE, bæuf, *kass*, *ssk*.\*VAGUE, *tegs*, *tegsak*.

[VAINCRE.]

Je le vains, surmonte à mon tour, *nedañsi-tésinihañ*.Il te vaincra, *kedañsitésihigsn* v. *kemétsinkañgs*. Vid. Surmonter.Nous voulons tous avoir le dessus, nous voulons l'emporter sur les autres, *necké-kerahamañsadibena*.Je pense de moi q' je vaincrai, seu, q' je suis vaillant, &c., *nekinérmesi*; id. è [idem est] *nekinañbaèrmesi*.VALLÉE, *mémékédéné* v. *mémékkañsi*.La montagne, *spemañsk* v. *pemadené*, &c., v. *sssañsk*.

[VALOIR.]

Que vaut cela? *tainnasa arañsado*? potest addi quidlibet.Je te donne v. g. cela p'r cela, l'un vaut l'autre, le prix est compasé, je te donne l'équipolent, *tébañsadak*.Est-ce donc q' ces ch. [choses] vallent plus? *baemañsadsaknasa*?Cela ne vaut rien, *kesa'io* v. *sa'io*, pls. *sa'isrir*; nob. *kesasa* v. *sa'ea*, præteritum, *saagakke séghé*, *saagakke sañga*.Ce n'est pas assez, tu ne me donne pas tant q' je te donne, le prix n'est pas encore égal, *éssema tébañsadiak*.Il est rude, difficile, cher, à vendre, *sahakamass*.

(Négdsmskšasds, c'est la valeur de 4 frans.)

[VEILLER.]

Je veille, *msañsañbi*.Pendant q' tous le monde dort je veille, *messisi kašrediné nia nsañsañbi*. Vid. Éveiller, Dormir.

[VENDRE.]

Je vends. Vid. Traitter.

[VENGER.]

Je me venge, *nedarsda*, 3. *arsdañ*; de lui, *nedarsdasañ*; p'r lui, *nedarsdasésañ*.

[\* See the word Bæuf, pp. 22, 23, and the note upon it. EDIT.]



— de lui, je lui rens la pareille, *nedāñ-sitēnañ*.

Je me venge de cela, *nedaredsañdamen*.

[VOULOIR.]

Je le veux, *nšigañdam*.

Je ne le veux pas, *nesigañdam*.

*Érermšct, érermšéhédit érermšémšétsik*, ce qu'on veut, veulent, &c.

[VENTRE.]

Gros ventre, soit d'idropisie soit p'r être enceinte, *mádé*; j'ai, *nádé, kádé*, 3. *sádé*.

VENIR.

Je viens, *neba*; de là, *nsmen*, subj. *sma*, 2. *séman*; *nsāism*, v. *men*, v. *nsāisdssé*; imper. *saišma* v. *saišdssse*; d'où vient-il? *tañni šek?* venant &c., *séghé*; ils, *séms-hsdit*.

Viens, *na'si*; venez ici, *na'smsks*; viens dans *q'q'* [quelque] tems, *nañkékéna'ksm*.

Je viens ici v. par terre v. par eau portant les meubles, &c., *nepédédé*; ne portant rien, *népetsi'ra*.

Il vient ici, *is abañ*; cela vient, *baiañmšio*.

Je viens de la chasse de l'orig. [original], *nedāñbabañmssé*.

D'où viens-tu? *tañni séman*, pls. *sémégs*, *tañni sédagssan sédagssakš?* de là, *sa'nsn*, v. *sakksnsm*.

[VENT.]

De quel côté vient le vent? *tañdékka séderuñsék?*

Il vente, *keserañsmen*; de ce côté-là, *sdékka sderañsmen*.

Le vent est bon, *sraañsmen*; mauv. [mauvais], *matserañsmen*.

Il fait un vent chaud, *kesitérañmpsen*.

Le vent vient, *péderañmpsen*.

Le vent entre, *pitighérañmpsen*.

Vois s'il y a du vent dans ce canot, vase, &c., p'r voir s'il coule, s'il y a un trou, *ksdara'ta*, 1<sup>a</sup>. *neksdará'tamen*.

*Māda* [*mānda*] *kisisdaratañsisi*, on ne peut voir, &c.

Il faut le nétoier au vent v. g. ce blé, le vent jettera loi[n] les pailles, les gousses, &c., *ksksrañmpsedāñs*; je le, &c., *neksksrañmpsedsn*.

Il fait vent en tourbillon, *añhañpskšérañmpsen*.

*Nepétsenami*, v. *nekeserañsmenami*, j'ai le vent, il fait vent dans ma marche, marchant.

*Nepétsenamibena*, nous avons le vent, &c.

[VÉRITÉ.]

Il ne s'écarte point de la vérité, *sésaītsemsiñs*.

VERMILLON, peinture, *šrámañ*.

Cherche-en pour moi, vas en chercher p'r moi, *ksirasahi šraman*, 1<sup>a</sup>. *neksirasahañ*.

Je le fais cuir au feu, *nedapiramané*.

Fais en cuir p'r moi, *apiramanési, nedapiramanésañ*. Vid. Peinture.

[VERRUE. Vid. infra.]

VERS, long co'e [comme] la main, *védi*, [498, 499.] *sédiak*; j'en ai, *skogak není'regs*; petits vers, *ské'sis*, &c.; vers q. [qui] sont sur la chair, v. g. *ps'kšé, kšak*.

VERRUE, *saaghíghen, mak*.

*Nesaaghikemiretsa*, j'ai verrue aux mains, 3. *saaghikemiretsé*.

[VERS.]

Un vers, versus, d'un chant, le p'r [primier], *šétsi manenintšmek*; la fin, v. *édštsi tsañnaraiñm'tanek*.

[VERSER.]

Je verse, manu, *nessgnemcu*.

Je lui verse dans la bouche, eau, bouillon, &c., *nesskekamasañ*.

VESSIE, *skšé*; j'y mets de la graisse, *nepišipemé*.

[VÊTIR, REVÊTIR.]

Je le revest chandem't, *nekisšasésañ*.

J'ôte ma ceinture, *neséssébágssin*.

[VUE.]

J'ai la veue courte, *nenikañbi*; je ne le pers point de veue, *nenénasañbamañ*.

J'ai bonne veue, *nsradasañbi*, v. *nsrañraghi-gša*.

VEUF, *sigšit*; veuve, *sigšksšé*.

VIANDE, *sios*. Vid. Chair.

[VIATIQUE.]

Je lui donne l'extrême onction, *metsšsara nepañba'tami-mšihañ*.

## [VIE, VIVRE.]

Il se redonne la vie, *kighé*.

Je lui donne la vie, *nekighéhañ*.

Je lui donne la vie, le fais vivre, *nepemañs-siçañ*.

C'est à cause de cela q<sup>d</sup> je vis, *nsdañssi*, v. *nsañsdañssi*.

Je crois d'avoir la vie, *nekighésérmcsi*, v. *sersi*.

Je rends la vie, *nekighétsn*.

Cela me fait vivre, vivo p<sup>r</sup>ter [propter] illud, *nsañsdañssvañdamen is*.

Je vis avec lui de sa vie heureuse, *nñtsiare-nañbañmañ*.

*Nepétañssi*, je viens avec [?] la vie.

*Asemctsc känduk ni pétañssit ?* qui est qui vivra v. g. jusqu'à ce tems ? &c.

## [VIEIL. Vide infr.]

Je suis vieux, *nemirssessi* ; qui est vieux, *mérssessi*.

Viellard, *mersses*.

Je suis vieille, *ncsinéssssi* ; q. [qui] est vieille, *sénésssi* ; vieille, *sinésssi*.

## [VEUVE.]

Je suis veuve, *sinésésssi*, *nesigsskai*.

## [VIEUX.] Vide supra.]

Il est vieux, il ne peut plus aller nul part, *métañdam*, 1<sup>a</sup>. *nemétañdam*.

VIERGE, *ksssihsské*, 1<sup>a</sup>. *nekssihsskai*.

[500, 501.] VILLAGE, *sdäine* ; j'y viens, *ncha sdäinek* ; j'y vas, *nederssse sdénck*.

Je vas à un autre village, *nederssse kodak sdéné é<sup>c</sup>tek*.

Il n'y a encore point de village, *éssema sdenaïsi*.

No' [nous] qui demeurons dans le me'e [même] village, *négsdakairszenaëg*.

2 villages se joignent, *mañsdäinahak*.

No' [nous] sommes dans le me'e [même] village, *nemañsdäinaëbena*.

Nous sommes de pls. [plusieurs] nations dans le village, *nekañkëssitscbakamigsbena négstsdäinaëg*.

Les villages des Abnaquis, *Narankamigsk epitsik arenañbak*.

*Nañrañtsak*,\* *Aimesskkañtti*, *Pañnasañb-skek*, *Nessañakamighé*, à St. Fran. [Français] de Sales ; les ho'es [hommes], &c., *snéssasakamighéviak*.

## [VIN.]

Du vin, *mé<sup>c</sup>ksampak*.

## [VIPÈRE.]

Progenies viperarum, *sksgak kenighihañre-gzba*.

## [VIVRE.]

Je vis, *nedarenañbañ*. Vid. Vie.

Je vis bien, seu, je n'ai point faim, je ne suis point malade, &c., *nnañsrañssi*.

Je vis long tems, *nosibiné*, je meurs difficilem't.

VIS-À-VIS, *tetebisi*.

*Tétebikaghé* v. *tétebeskasikaghé*, l'étoile v. g. étant vis-à-vis de l'étable de Bételhem.

*Netétebi<sup>c</sup>kamen*, je suis vis-a-vis de cela.

VISAGE, *tsiseks*.

J'ai le visage gelé, *nesisegsé*.

Je marque sur mon visage la joie q<sup>d</sup> j'ai, *nedaramigsé<sup>c</sup>rré*.

Je change de visage, *nepirsigsé<sup>c</sup>rra*.

Je lui arrache le visage, *nepessaghigsénañ*.

Je lui voile le visage, *nedassrañgshañ*.

J'ôte les taches de mon visage, *nekassigshé-hssi* v. *nekesigshé*.

Je les ai ôtées, il n'y en a plus, &c., *nepikigshé-hssi*.

## [VISER.]

Je vise, je mire, *neksaksédäñkham*, 3. *kša*. [502, 503.]

Je le vise, *negshéssañkamasañ*.

Je donne où je vise, *nemessdamen*, nob. *nemessañ*.

## [VISITE.]

Je visite, *nedsdäi*, 3. *sdas*, subj. *sdaia*, *sdaian*, &c. Vid. particulam *Sañbisi*.

Je visite venant de loin, *nstsihsé* ; lui, *nstsihañ*.

Je viens de loin p<sup>r</sup> le visiter, *kstsihsr* ; tu moi, &c., *kstsihi*.

[\* The name of the Indian village, on the river Kennebec, where the author of this Dictionary resided ; still called *Norridgecock*, from the Indian name here given. EDIT.]

On vient de loin p'r no' [pour nous] visiter, *kstsihíghé'bea*, 1<sup>a</sup> *nstsihíghé*.

J'ai communié, Jésus m'a visité, *nstsihíghs Jesss*.

Je visite un malade, *nemasazañbamañ*, in g're [genere], *nemasasañbi*.

Je le visite, *nedsé'kasañ*; je te, *kedsé'ksr*, v. *-ksren*.

Je viens de loin le visiter, *nemesseds'kavañ*, v. *nestsstsihañ*.

[VIVRES.]

Les vivres, *mitssañgan*; je suis chiche à l'égard des vivres, je les épargne, *nesaa-ghesi*.

Les vivres sont en commun, *mañsisi mitssañgan*.

J'ai beaucoup de vivres, *mesâiret mitssañgan satzainema*.

J'en cherche, *nekširshmitsché*.

J'en cherche, co'e [comme] chevreuils, &c., *nenatebi*; *kenatebikañmañ*, vo' en cherch. [vous en cherchez].

Je ne trouve point mes vivres, *nekširstemen mitssañgan*, nob. *nekširemañ*.

Je cherche, je procure des vivres, *nekadsna'tsn mitssañgan*.

Je prens des vivres p'r le voiage, *neníma*, 3. *námañ*; p'r moi, *nenimaresi*; je lui en donne, *nenimarañ*; j'en fais, j'en prépare p'r lui, *nenimasaniikkésañ*; *stenañssar nimarimeghebanigar*, on a pris ce qu'on m'avoit donné p'r mon voiage; j'en embarque, *nimañvañ nepssi'tsn*; j'en vais chercher, *nenátepi*.

UNIVERS, *pépankamíghék*.

Nous ne faisons qu'un, lui et moi, *nepézekši-néna*.

Les 2 chaines de S. Pierre v. g. se rejoignent à une, aiant été mises l'une près de l'autre, *ksa'risi psnañk nettái apézekšinañ*.

[VOYAGER.]

[504, 505] Je voiage, *nekisssé*.

Je vais de ville en ville, *nekišdañ sdáinañksk*.

[VOILE.]

Voile de canot, *tsibéghihígan*; je la mets, *nesi'éghihíghé*.

Je la hisse, *nenimekhíghé*, imperat. *nimék-híghé*, v. *nimékhamañda*.

Je l'abbas, *neneséghihadíghé*, imperat. *nesé-ghihadañda*.

Je l'ôte, *neneséghihadsn*.

Je vas à la voile, *nesibéghihíma*.

Le mat, *tsibéghihibanakšcm*; le hisse, *sikšé-ghiaradígan*.

[VOILER.]

Je lui voile le visage, *nedassrañgšéhañ*.

[VOIR.]

Je le fais voir d'aveugle qu'il étoit, *nšañbi'-žañ*.

Je vois, je ne suis pas aveugle, *nšañbi v. nepesksadañsañbi*.

Je vois, *nenamihšé*.

Je le vois, *nenami'tsn v. nesésittsn*, nob. *nenamihan*, 3. *sn*.

Je fais voir, montre, *nenamitršé*; à lui, *nenamittrañ*.

Je le vois de près, *nepšsssañbamañ*.

Je souhaite avec empressement de le voir, *msisi-ákkasañ*, v. *nšnemitéhañmañ*.

Je le vois obscurement, *nšnemérmañ*.

J'ai un extrême désir, de le voir, *nesañkštái-kširšmañ*.

Je le vois entièrem't, *nemesañbamañ*.

Je viens voir dans la cab. [cabane] s'il y est, ce qu'il fait, *netepenavíhañ*, abs'tum [absolutum] *netepenasañbi*, *nekikírasañ aps é'to*, ign. *netepenasí'tsn*.

Je vais voir si ce soulier v. g. sera propre à mon pié, *netepinamen*.

J'ôte ce q. [qui] m'empêche de voir, *nebañ-nañgšési v. nepaskañgšési*.

Vois cela, regarde-le, *kina*, 1<sup>a</sup> *nekikinamen*.

Je pénètre, je vois à travers qq' ch. [quelque chose], *nedáisañbadamen*.

Je le vois obscurément, *nensremañbadámen*, nob. *nensremañbamañ*.

Je le vois, le salue p'r la dernière fois, *nematsitéremañ*.



*Amaresin*, on a veu les pistes v. *q'q'* [quelque] chose entendu qui marque v. g. l'ennemi, &c.

*Nedamaresi*, je l'ai veu, &c. ; si on a veu un ho'e [homme], il dit *nenamihsé*.

Je vois, je revois de quasi mort *q'* j'étois v. m'éveillant, *nedapskaäraghigšési*.

Je vois, *nenami'ta*, 3. *nami'taä*, d'un aveugle, v. g., v. qui a mal aux yeux.

*Maändanasa kenami'tan*, dit-on, v. g. à celui qui a mal aux yeux, il dit v. g. *mésiassis nenami'ta*.

Je cherche de veüe, *neksirasäibi* ; lui, *neksirasäibamä* ; cela, *neksirasäibadämen*.

*Na'stsi ari pésäibiags* v. *pésäibimck*, d'iei là *q' no'* [nous] voions, où s'étend une veüe, &c.

Je le vois sans empêchm't, *nesäinkasinasä*.

Je le vois à travers un trou, *nesäibadämen*, 3. *es.*, v. *nedésäiragaäbadämen*.

*Kesighinsr*, je prens plaisir à te voir danser, v. g. v. &c. *ksrinsr*, 1<sup>a</sup>. *msighinasä*, v. *nerinäsä*, *pémegaät* v. *pémegaätsik*.

VEÜE. Vid. Veüe.

[VOLER.]

Il vole, volat, *pemitsi'ré*, 1<sup>a</sup>. *nepemitsi'ra*.

*Netši agša matsena sipsis*, j'ai songé *q'* je voloie co'e [comme] un oiseau.

*Amaänté tsia*, je voudrois voler, &c.

[Page 506 of the MS. is blank.]

[VOMIR.]

Cela me fait vomir, *nesekagšikaängsn*.

[507.]

Je vomis, *nesekagši*, 3. *sek* ; cela, *nesekagši-tamen*, nob. *nesekagši'tasaä*.

[VRAI.]

Je dis vrai, *nsräämé*.

Je dis vrai de lui, *nsrääméä* ; il voit qu'on dit vrai de lui, il est c'vaincu [convaincu], *sräämésérmess*.

Je ne m'écarte jamais de la vérité, *nesésäitsemšinnši*.

Je connois qu'on a dit vrai de lui, *nsräämésérmaä*.

VERILLE [Vrille], p'r percer, *pimenigan*.

[USER.]

Cela est usé, *métsi'rré*.

J'use mes souliers, *nemétkämen* ; ils le sont, *métkäššar*.

[VUIDER.]

Je vuide le sac, v. g., je mets ailleurs, &c., *nesigšénemen menšté*.

Il y reste encore *q'q'* ch. [quelque chose], *éskšakenasa is mitšes*.

[YEUX. Vide Yeux, p. 293.]

[Pages 508, and 509 of the MS. are blank.]

## A D D E N D A .

[The following lists of words, Nos. 1, 2, 3, all in Father Rasles handwriting, are on detached pieces of paper, preserved in the Dictionary. ЕДИТ.]

[No. 1.]

*Basšé-si'taüss*, on reprens ce verset [?], v. g.  
*Nederaängssi*, j'ai des parens.  
*Nepessihadassi*, j'écorche.  
*Arésada'sin*, on parle &c.  
*Nenaütesadassi*, j'y vas &c.  
*Nenaütesadsn*, cela.  
*Kenasadésr pemega*, je te chante, danse.  
*Nšigañbsé*, j'aime le jus, potage.  
*Essäisi tai*, il ē [est] sur le bord de la montagne.  
*Atsisi*, *nedatšikisitsn*, id ē [est] *nemañsiki-sitsn*.  
*Nsresida'ks'ké*, je fais bien un manche.  
*Messisi nederadnassi*, j'ai cherché par to' [tout].  
*Kikibi'ra*, tu as sommeil, tu dors par reprise.  
*Sagaskesse*, poux d'original.  
*Nenandaniñksra*, je viens vendre.  
*Nenandaniñsé*, je viens acheter.  
*Bimksé*, 1<sup>a</sup> *nebinkša*, je panche naturellem't la tête sur un côté.  
*Säksisi*, debout; *metsinisi*, de travers p'r chassis, v. g., *pemetsinakstar*, v. *pemetsintar is ketéba'kañu*, tu mets cela p'r offrande.  
*Nektsiarsesi*, je m'éprouve.  
*Esi tsitañsé*, 1<sup>a</sup> *netsitañsé*, je vais en arrière.

*Kstsisiba pera*, si tu voulais essayer au para'nt.  
*Šačtsisi*, l'un plus avant q' l'autre.  
*Šačttäits*, qu'il soit ainsi.  
*Nšiččtsn*, je l'y mets.  
*Šdägaim*, il fait beau, chaud pendant l'hivers.  
*Pemetsinsse*, il marche de travers.  
*Asičhé*, mets des chauçons, nippes, &c.;  
*témañrsain*, seu, *māda* [*mānda*] *essegñéisi*.  
*Nenekatséhañ*, je l'eteins v. g. le tondre q. ē [qui est] noble [?].  
*Kstsihsskse*, *na'smsks*.

[No. 2.]

*Mañsagšatsks*, mettez bien un . . . . lieu.  
*Nemañsagšatsn*, je le mets . . . .  
*Nemañtsegsatsn*, je le tire plus avant, v. je viens de quérir ma charge, v. *nedaniñšaré*.  
*Nenasarésañ*, je la porte p'r lui.  
*Abaniñmssañgan*, où l'on va.  
*Šassé'ghen*, v. *šaiñbighen*, blanc.  
*Nenkabi'phañ*, v. *nedapiphañ*, je le fais asseoir, je le prens p'r le faire asseoir.  
*Nesasišana*, je suis las de cela, je ne le prens pas.  
*Nenérañsi'tsn manste*, *kaidap*, je les fais la moitié.

*Nensghenañ*, v. g. il y a q'que [quelque] chose de moi dans une cabane, je le vas quérir &c., je dis à la p'so'e de la cab. [personne de la cabane.]

*Kensghener*, je te depouille, ut ita dicam, de ce q' tu as de moi.

## [No. 3.]

*Skighen is e'iañsa asenni*, cela est frais q' q'q'un [quelqu'un] v. bête a été là.

*Psipeneghé arígs*, il ē cōe [est comme] *psipen*.

*Nenegatenemen*, je ne le tenois pas bien au commence'nt, sed nunc je le tiens bien.

*Nskavihadsn*, je mêle cela avec &c., *nskavihadsnar nedaskamsnmar tai sdaskamsnmar* v. *nekéks<sup>c</sup>radahadsnar*, 1<sup>a</sup>. *nekéks<sup>c</sup>radáhadsn*.

*Nesisérdam*, je m'ennuie de ne pouvoir travailler moi qui ai coutume v. &c.

*Nenesbeghesi*, v. *nemissbeghesi*, je suis mouillé.

*Nesasts*, je suis las de faire cela.



## P A R T I C U L Æ .

### A.

- [510.] [1] *Aaügsaümmisi*, incomparablem't plus *q'*, s'p'r di'r c'parativè [semper dicitur comparativè] ad alia. *Aaügsaümmisi kaükesa-reinaügsat Jesss shaghé saüsrassémsinaügsat*, le corps de Jésus paroît b'p [beaucoup] plus éclatant *q'* ne paroît une lumière. Ex par'la [particulâ] *aügsaümmek*, au de-là. *Aaügsaümmassem-sinangsat Jesss shaghé sa eda'sem v. nsdaüassem*, seil. *kizss*.
- Aani*, c'est donc cela ; lorsqu'un raconte à un autre v. enseigne quelque endroit à un autre q. [qui] n'y a pas été, celui-ci dit, *aani*, ha c'est là ! oui-da, je conçois, &c.
- Aaügsaümmisi nedéhéréks v. nedaügsaümmimeks*, il me dit ce *q'* j'ai fait v. g. depuis long, et ainsi lui parlant il m'en dit t'rs [toujours] davantage, &c. ; *nedaügsaümmaüntsemi*, je raconte ce qui est au de-là, qui n'est pas arrivé.
- Aëtaghisi v. saüsiba*, part. gratum animum testificans alicui in aliquâ necessitate versanti ; *saüsibakki v. aëtaghisi kisitasané*, pleut à Dieu *q'* j'achève ; *aëtaghisi siba nedireghé kepssi'hsren*, dit-on à celui qui g'de [a grande] envie de s'embarquer.
- Aëtaghisi êto nekads'tamen is*, dit celui qui voit b'p [beaucoup] de vivres v. g. n'arrive il pas *q'* j'ai envie de &c., par dérision.
- Agäümmisi*, de l'autre bord de la rivière ; *arag'sag'saümsaüsi*, du bord où est, *éna-ga*.
- Agäüvisi*, v. *pissisi* ; *agaünsisi kedi'ripessa kedaübenksr*, c'est en vain *q'* tu m'as dit, je te paierai puis<sup>q'</sup> tu ne le fais pas.
- Ahaütsi v. ahaütsisi*, v. *ahaüteghikksi*, de plus en plus ; *ahaütsi negaümihsisi*, surpasse-toi de plus en plus ; *ési ahaütsisi mssk'seredam kizegalki*, il se fâche tous les jours de plus en plus ; *ahaüteghikksi saügmänsihé ne tanní ari*, rends g'es [graces] de plus en plus éternellem't.
- Agäié*, compassio'is part. [compassionis particula] et maximi doloris &c. ; dicens v. g. *aguic*, di'r [dicitur] ab alio *agäiépa sétsi*, *aghépa sétsi*, &c.
- Agána*, atsi.
- Aghá*, c'passio'is part. [compassionis particula.]
- Ag'sa*, dit-il, v. dit-on ; *mansse ag'sa*, il a faim, dit-il.
- Ag'sadaré v. -ri*, admira'o'is part. [admirationis particula], *ag'sadaré ! sítésaütsik shi akésssssainän !* bon Dieu, c'bien de c'pagnous [combien de compaguons] avec qui ils vont !
- Aia*, admira'o'is et c'temptûs [admirationis et contemptûs], *aia azégs sa*.
- Aiaga, aiajaga, aga*, Dieu sçait co'e

[2, 3.]

- [comme], Dieu sçait c'bien [combien] Dieu sçait si; *aiaga v. netsi*, alors.
- Aiôtœni*, id ē [est] *peſſaſſi kesina asskamisi*. *Nedaiotemirdâmen v. nenidamika-dâmen*, id ē [est] *nemesâiritsu kégſi*, j'amasse beaucoup; *nedaiotemipaſſér-dâmen*, je le désire beaucoup; *sda-iotemitéhaïr* *vrir*, il le bat b'p [beaucoup], &c.
- Aksdâisi*, à la montée de la rivière, &c.
- Akstéhaïss*, on monte la rivière, on va contre le fil de l'eau; *nedakstéhémœn*, je la monte, &c.; *sderakstaimaï*, les poissons la montent par là.
- Amanté v. sésini*, plût à Dieu; *amanté ketemaïghermian nesang*, *Jesss kégaï mét-sinainé!* plût à Dieu q' tu aies pitié de moi à ma mort!
- Amessaützi*, il est bien tems, oïi vrain't, justem't! *Amessaützi ba nsuitzaininéna!* oïi vrain't no' [nous] aurons un enfant! (dit Zakarie, v. g.) *Ni amessaützi bé-iaïan pesdé*, il ē [est] bien tems d't venir, je t'avois dit à midi et le soleil est bas, &c. *Ni amessaützi maïtsian*, tu pars eufin, tu pars seulem't, les autres étant partis. *Amessaützi nsuitzaininéna*, disent ceux qui étant mariés depuis long tems sans enfans, lorsq' ils en ont un, Enfin no' [nous] en avons, &c.
- Aïmétsa saaghinaïss*, cet oiseau v. g. est certainem't difficile, &c.
- Aïmé'tsi kesaaghihi*, tu m'as fait un g'd [grand] tort, d'avoir perdu mon canot, v. g., n'ayant pas d'autre.
- Aïmétsi*, *aïmétsigakki*, v. *taikagakki*, *aïmétsi kesaghestr*, *kesaghindsren*, ce q' tu me dis, ce q' je t'entends dire, &c., me surprend certainem't beaucoup.
- Amptaisi* (vid. *Aïptaisi*), v. *né'raïvi* (vid. *Né'raïsi*), qui est au de-çà.
- Amptsi*, pendant v. encore; *amptsi païba'tam*, il prie encore, il est à prier; *amptssédé*, lorsq' il marchoit; *amptsi'pe*, il est encore actuellem't à manger; *amptsi-miri*, donne m'en davantage;
- amptsi penasimék*, au milieu du combat.
- Amstseghé*, même; *amstseghé maïda nenami-haïsn*, je ne l'ai pas m'me [même] vû, (bien loin v. g. de l'avoir dérobé).
- Aï*, *aï io*, *aï ioppa*, et puis, et puis cela, et voilà.
- Aïaïngsaïmisi*, v. *aïaïngsaïmisi*, v. *aïaïngsaïmadſghé*, v. *aïaïngsmadſghé*, c'est au delà qu'on ne dit et qu'on ne croit.
- Aïaïngsmadſghé kematsenasakesi*, tu es toujours plus méchant, tu l'es [?] plus qu'on ne dit, &c.
- Aïbagasisi*, à couvert de q'q' [quelque] chose qui fait qu'on ne le voit pas; *aïbagasſsé assks*, Jésus montant au ciel, une nuée empêche qu'on ne le voit, &c.; *sderiaïbagassainabasik*, v. *pna-pesksk*, en marchant il arrive vis-à-vis d'un arbre v. pierre qui le cache; *nedaïbagasakaï*, je le mets à couvert, je me mets devant lui de sorte qu'on ne le voit pas.
- Aïneghi*, à l'instant, la première fois, &c.; *aïneghi kisitsnésa*, dès qu'il eut achevé cela; *ni aïneghi sa némihsk*, voilà la première fois q' je le vois; *ni aïneghi nepétsi'ra*, je ne fais q' d'arriver; *némihsghé sa aïneghi pi'ta ksïromskeban*, *taï'ka nsigherdamsheban*, dès q' je vis celui q' je désirois, &c.
- Aïngsaïmek*, en de-là.
- Aïngsaïmsöé*, c'est maintenant si jamais, v. si jamais; *pêrabâin aïngsaïmsöé sésighit-tssa asésésitéhaïnes taïni*, si jamais le cœur, l'affection (de Marie v. g.) a eu une cruelle atteinte; *agſaïmsöétsi meseghirané kërenasakesi* v. *matsenasakesi*, dit-on d'un enfant né; *isdari manssémek*, *agſaïmsöé é'to asassnaghé manssaïn*, on a faim ici, mais bien plus là; *amstseghé isdari ptahaï*, *aïngsaïmsöé é'to nemaïmesairok*, on en prend ici où il ne vient pas, il faut qu'il y en ait b'p [beaucoup] là; *is sdaïnaï namessak*, *agſaïmsöé é'to nemaï, asak*,

il y a ici du poisson, il y en aura bien davantage là; *aügsaümsöë nia pänsérdama arakéiganar éri kénskér-megsak*, lorsqu'elles s't [sont] à bon marché, hæc particula renferme du mépris; *aügsaümsöë sa éssamerags*, dit-on d'un qui n'a pas coutume de donner à manger quoiqu'il ait b'p [beaucoup] de vivres; voilà p'rquoi il dit *aü . . . . mesâinaügsat taümi sékpaühsrik*; *aügsaümsöë nia séghesia*, dit un qui n'est point du tout craintif, mais p'r lors il a peur, parceq' le sujet de sa crainte ö [est] de valeur; *aügsaümsöë päüvérdama maskesc nemémesaghi<sup>c</sup>ra*.

*Aügsnikki*, puisq', part. [particula]; *kektemaüghérmissi Jesss, aügsnikki kisi pitigan nhaghé*, tu auras pitié peut-être de moi, puisq' tu es venu dans moi; *kedatssi<sup>c</sup>tsa aügsnikki érkSé<sup>c</sup>sian*, tu procure le hoquet q' tu fais, tu te fais étternuer; *scedarinamihainai<sup>c</sup> éto aügsnikki ériráhadit*, il faut qu'ils les aient vü, puisqu'ils s't [sont] alio [?]; *satzainemen é<sup>c</sup>to temahiganar aügsnikki miresk v. aügsaümsöë*, un v. g. à qui le père a donné une hache, est dit par un autre, Il faut q' le père en ait puisqu'il t'en donne; *miri tsé<sup>c</sup>ksaks, mda [mäüda] netzainemssn, kederéméröhsban nemirektsi, aügsnikki é<sup>c</sup>riaüneban kmirerertsi; kadasi possak é<sup>c</sup>to sghik, aügsnikki pékskéhédit stsräü*, ceux-là sans doute veullent s'embarquer puisqu'ils joignent, &c.

*Aüermisí ari*, v. *aüremi, netaüü ari*, ne netaüü ari taüü, in æternum; *nedäüermisighérdantsi*, je serai c'ntinuellement joieux.

*Aüinka*, voilà justem't; *ní aüinka mda [mäüda] nesisn*, c'est justem't ce q' je ne dis pas.

*Aünkasi*, v. *aünkasisi*, l'un après l'autre per successio'em; *nedäünkasinmak*, mes descendans; *nsräümerdamen véséssi aünkasi päüba<sup>c</sup>tamsinné<sup>c</sup>di*, je crois qu'il y

a une véritab. église q' no' [nous] avons par succession.

*Aükki*, mais.

*Aüksaübékki, näünektsisi*, parfois.

*Aüürri*, particula ornativa.

*Aüpetsi v. mina*, encore.

*Aüptsi*, in compositione; *aüptsipps*, il ö [est] à manger; *aüptarrokké*, il ö [est] à travailler. Vid. superiüs, *Ampsi*.

*Aüptaüsi v. néraünsisi*, à moitié, v. g. à moitié chemin, il est à moitié plein; *asptaüsi nenamihai<sup>c</sup>*, je l'ai vü en chomin; *aüptastar, aüptastéghé*, sac, plat, à demi plein; *nedäüptasräü*, je le remplis à moitié.

*Aüراسi*, à la vérité, &c.; *aürasgakki nsrérdamen, nedäürasittsuki*, à la vérité je voudrois bien cela, mais je ne puis le faire; *kekiktorgakki aüراسi*, je veux bien t'obéir, &c.; *mda [mäüda] pegsa keghersraüsi? aüراسiga pessangsi neghersraü ssskebisaghinäügs<sup>c</sup>ss pegsa*, ne lui as-tu pas parlé? oui, je lui ai parlé fortem't, mais inutilem't tant il ö [est] difficile; *aürasitasané is érokkaiüra, nabisi kemi<sup>c</sup>ksmi*, si tu ne peux faire ce q' je te donne à faire, avertis-moi dabord; *nekadasi pssihüban, aüراسi nikksaübi nepirsitéhäüsi*, je voulois m'embarquer, sed nunc muto, &c.

*Aüremi*, la continuation d'une action.

*Taüü éremi<sup>c</sup>raüit?* où continue-t-il d'aller? *éreminipek*, pendant l'été; *éremitagsaüghik*, pendant l'écoulem't de l'automne; *éremsoedümek*, pendant qu'on va, &c.; *éremimaütsaredümek*, pendant qu'on s'en va; *éremikikédümek*, pendant qu'on sème; *nedéremié<sup>c</sup>ksoraümi*, je rends l'esp. [esprit].

*Sésdatéghé pesighire<sup>c</sup>tsi*, s'il est l'un contre l'autre, il se fendra; *sésstisivi srtar*, l'un c'tre [contre] l'autre.

*Aüsitäüsi*, l'un sur l'autre; *nedäüsité<sup>c</sup>tsn*, je les mets l'un sur l'autre; *aüsitétasané mäüdahatsi pesighirési, aüsitétaüssar*.

[6, 7.]



*Añsitaisi*, en échange, à la pareille.

*Añssisi*, de biais, de travers.

*Añsokké*, ensuite.

*Añtarghikkši*, infinem't, (ex v'bo [verbo] *añtarghikkšn*; *añtarghi'ksts*, une citrouille v. g. petite q<sup>e</sup> je ne cueille pas, aiant la pensée quand'elle sera crüe, q<sup>e</sup> elle demeure co'e [comme] cela; *Jesssga añtarghikkši messriakéd ssaghinésañgamar*, c'est Jésus q. no' c'se [qui nous cause], procure, des biens infinis, par ses souffrances.

*Añttari*, là.

*Añsaisi*, d'un côté; *añsaisi ksti'çssañr sse*, on le raille d'un côté; dès 2, tu le raille, *ketitasai'çssañn*.

*Apitasi*, in c'posi'ne [compositione], v. *sskittsisi*, couvertem't, par fraude; *Herode apitasi ghersrañ n'rsłtsi sañgmañ*, Hérode parle aux 3 rois en déguisant ses sentimens; *nepitasighersrañ*.

*Apisi*, étant assis; *skaisi*, étant debout; *asitegsakkaisi*, étant à genou.

*Ara'*, admira'o'is part. [admiratiois particula]; *ara'io sérítôégsssa*, Dieu sçait c'bien [eombien], v. ô c'bien [combien] heureuse fut v're [votre] aventure (ô Marie); *ara'sghik sérir'iteghik, nisna mda [mānda]*, il n'y a q<sup>e</sup> ceux-là qui soient heureux, p'r nous no' [nous] ne le sommes pas.

[8, 9.] *Aragšagšañmsaisi*, de l'autre bord de la rivière; *agañmisi*, de l'autre bord; *aragšisi*, de ce côté-là, de l'autre côté; *stsedé'ka nederagssañn*, j'irai de ce côté-là; *arakaïsi*, de ce côté-là, v. *sdékke*, d'une main v. bras v. g. ou de l'autre, seu, de l'un ou de l'autre, separem't.

*Araksé*, &c. peut-être, sans doute; *araksé kia kederasé'kañsin*, ce pourroit bien être toi, c'est sans doute toi q. [qui] as fais cette faute; *araksé nia nederasé'kañsiañnban*, vo' [vous] direz peut-être q<sup>e</sup> c'est moi qui ai fait cette faute; *araksé é'to kemssksérdam?* n'est ce point

peut-être q<sup>e</sup> tu te fâche? *araksénasa kegss tamí sañgmañsérdamags?* q<sup>e</sup> ehanterons no' [nous] done en p'r [premier] lieu? *arakséna baïé, araksé tañni añsit*, v. *ésit*, il viendra donc encore sans doute, q<sup>e</sup> pretend-il donc faire?

*Araré*, particula improbans aliquid q'd [quod] fit, &c.

*Arenakaïsi*, à la droite; *pañtsisi*, à la gauche.

*Areni*, v. *narasisi*, sans dessein, mais &c.; *areni* v. *narabisi stesni*, il fait cela sans dessein; *areni nedśdaï*, je visite sans dessein, sans prétendre autre ch. [chose]; *nšigañdamen añrasi nepañbatamen, areneki nepatsśreks matsiniséks*, à la verité j'aime bien la prière, &c., mais le démon me trompe; *areni sdamañ*, du petun eo'un [commun], du païs; *kedareni asénni*, v. *nsisi*, tu n'est pas un ho'e [homme.]

*Ari*, *dari*, v. *nañsat is stsi Kébékari*, il y a loin d'ici à Kébék [Québec]; *na'stsi ari mda [mānda] kegśi añsi*, d'ici là, il n'y a rien; *Marikké'ari*, chez Marie; *kia ari*, avec toi; *neksdañs kekéssšibena kia ari*, no' [nous] sommes b. [bien ?] avec toi; *matsena*, ad modum illius; *ne-présa aneghen ari mék kétemañghesitghé*, M. donna, offrit 2 tourterelles co'e [comme] celle quæ sordida est.

*Arighési nededarokkañn nesi'tsi'ra, neda-* [10, 11.] *pi*, prétendant faire autre chose; *ari-ghési*, part. desperaōis [particula desperationis] posse aliquid fieri, et aliud cogitantis, prenant un parti, ne pouvant réussir dans l'autre.

*Arihisi, arérdañss tañni érighek, arighets; arihiperañss netsr*, id ē [est] feré *mda [mānda] nekrahamañsn*, on se sert sans cesse de mon canot sans me rien dire, je ne les empêche pas, je les laisse faire, *nedarchitéhsghé*, id ē [est] *arihisi nebaitéhsghé mda [mānda] neda'rsdañn; assebañsi*, sur le bord à fleur; *pesiktébi assebañsi*, fens cela à fleur de bois sur

le bord; *nedasseba'tsn*, je mets une parois, écorce d'une cabane, &c.; *nedarchiméghe*, id ē [est] *arihisi nekikkaiméghe*, *māda* [mānda] *neskstemañ is arghikkīsisi*, dans cette espace, tu le trouveras, je l'ai vus v. g. &c.

*Aritebat*, quo tandem illud? comment ça va-t-il *g̃*? *kég̃si é'to aritebat iò nhaghéna sikhinamassa?* comment *g̃* s'est il pû faire *q'* vo' [vous] agréates nos p'so'es [personnes] (ô Jésus.)

*Asiteg̃sakkāisi*, étant à genou; *apisi*, étant assis; *skāisi*, étant debout.

*Assamisi assamenaghisi*, dans l'île où je demeure, de deçà au bout; *assamenigané*, je vais v. g. à l'île au bout d'en deçà; *asassenaghé*, ceux qui demeurent à un bout de l'île; *asassenaghisi*, opposé directem't au bout où je demeure; *métnaghéghé*, ceux qui demeurent au bout de l'île, *éri ksnék*.

*Asé'taūisi*, d'une façon directement opposée v. g. au lieu de me servir de la pointe d'une éguille je me sers de la tête; *asé'tanarenādsé*, p'r dire v. g. *nemanssé*, j'ai faim, il dit *kemaussé*, &c.; *nedasé'taūisé*, je marche à rebours, à reculons, &c.; *nedasé'taūrokké*, je travaille à rebours, &c.; *érmaūisi*, d'une façon directem't opposée mais d'une autre opposition, v. g. je me sers du dos du couteau p'r le frapper v. p'r &c., au lieu de me servir du trenchant, *érmaūisi nedagāiñ*, v. *nedasé'kañ*.

*Atsitasisi*, à la renverse; *atsitsisi*, v. *épe-māisi*, au bout v. g. de l'autel &c.; *atsisi*, v. *mānsivi*, *utseda atsivi aramāi-skañ*, on les dit tout de suite quasi tout à la fois; *atsisi nebagasts*, je fais tout cuire tout à la fois; *atsisi nebagassemañ nsrké*, je fais cuire un chevreux tout à la fois; *atsi'tasivi*, à la renverse; *atsi'tasi'ré*, il t'be [tombe] à la renverse la tête la p<sup>o</sup>; *dakki is dakki sa dakki*, p'r ce q. [qui] est de

cela p'r ce qui est de celui-là, &c.; signat etiam, dis-je, lorsqu'on se reprend n'ayant pas dis justem't la p<sup>o</sup> fois, v. g. c'est Pierre qui a fait cela, *Jacq' dakki*, *Jacq'*, dis-je &c.; c'bien [combien] en a ces tues? R. [Réponse,] 4, *iésak*, s. *nāññsak dakki*, 5, dis-je, &c.

*Asakañtsi*, à peine; *asakañtsi neba*, à peine suis-je arrivé.


*Azsktañge*, cela tient de la folie.

*Asassisi*, plus avant, derrière; *asassadene*, au dé-là, derrière la montagne; *asassenaghisi*, derrière l'île, de l'autre bout de l'île, en large.

## B.

*Baberstsisi*, d'espace en espace, v. g. je me repose v. je mets, plante *q'q'* [quelque] chose &c.; *baberstsisi nedapi*, v. *nebaberstapi*, *baberstsisi tskedé*, ce bois est vite brulé, il en faut mettre d'abord d'autre.

*Baēmisi*, v. *baēmisi*, v. *saēbi*, pro gradu superlativo et c'parativo.

*Basisi*, v. *é'sañraghisi*, vid. *é'sañraghisi*; *basi-namihig̃sat*, on le voit transparent, &c.; *basañbadāñss*, *basañbamegsé*, une couverte, v. g. où on voit à travers; *nebasañbadamen*, je le vois à travers, nob. *-bamañ*; *bimskīsisi*, de travers; *nebimskī'stn*, je fais cela de travers du côté qu'il ne faut; *nebimskī'sakesneké*, je fais ce soulier de travers, &c.; *bimskī'ré ag̃siden*, v. g. allant droit, tout d'un coup il va de travers, hæc figura .

*Baraghissisi*, *sskitsisi*, un peu; *baraghessse*, id ē [est] *baraghissi sressss*, il s'est un peu coupé, &c.

## D.

*Da*, indicat admira'o'em; *da*, *sderesinda*, vois, voiez comme il est couché; *sde-*

*retängssinda*, écoutez co'e [comme] il parle, &c., ce qu'il dit; *arigšésinda*, voyez quel visage il fait; *éramimekda*, co'e [comme] on, il me regarde; *aübsdaitda*, *sdaitda*, co'e [comme] il visite, &c.; *aredsnkétda*, co'e [comme] il répond, parle, &c.; *ké'sihiditda*, voyez c'bien [combien] il y a, v. g. de poissons.

## E.

*É*, postpositum v'bis v. no'ib. [verbis v. nominibus] sign'at [significat] actualitatem actionis v. &c.; *ssgherainé*, il pleut actuellement, *psainé*, *pemeregšitané*; *neketámen*, *neketamené*, *gherenainé*, on porte actuellement la hache v. g. *pekšatsi'ré sipilé*, &c.

*Édaga*, *édagasé'kaüsiméghe*, ch. [chose] étonnante, capab. d'en donner.

*Édari*, là, ici; *išdari*, ici; *édari paüba'tamek*, où l'on prie.

[12, 13.] *Édstsi*, ni *édštsikkimaüt*, id est ni *édštsi kakékimaüt*, c'est p'r lors q' (Dieu v. g.) lui inspire, &c.; *édšdermiakel Jesss*, *sđerérmaü é'to angeria?* J. [Jésus] estime-t-il autant les anges qu'il no' [nous] estime?

*Égaüsi*, in c'posit. t'tüm [in compositione tantüm], v. *pišsisi*; *égaüsimanasé'ka*, c'est en vain q' je me sers de cela, *nüda* [maüda] *štaübémegšatsi*.

*Éhésokké*, tour à tour.

*Égšani*, tout entièrem't; *nsdégšanimiraük arenämbak*, je donne à tous; *nedégšamisritsnar kégšssar*, j'accommode tout.

*Éhéiasasisi*, de deux l'un, interrompu par un, v. g. en contant v. dans les figures, &c.; *éhéiasasisi kizegakki nekakékimaük awaüšsak*, v. g. de 2 jours l'un, j'enseignerai les enfans; *éhéiasasisi asižäüšs*, il faut peindre l'un blanc, v. g., l'autre rouge, et puis blanc et rouge, &c., v. de nob.

*Éhésokké*, tour à tour.

*Éidasisi* v. *ipemaisi*, au bout, aux 2 bouts de q'q' ch. [quelque chose]; *éidasas'tar menahanisar*, *naüšisi ketsimenahäm*, il y a 2 petites îles à chaque côté d'une g'de [grande].

*É'ksaübi*, in compos. . . . .

*É'ksi*, cessatio'em sign'at; *nedé'ksitéhäüsi*, je cesse de penser; *nedé'ksihäü*, je cesse de lui faire q'q' ch. [quelque chose]; *kedé'ksassairer*, je cesse de l'aimer; *é'ksaübi*, ni *é'ksaübsšst*, on la vü, il est en marche; *neda'ksaübsšsté*, je suis en marche, *éksaübsšsté*, &c.

*Ékksné*, puis, et puis, idem etiam ac *tšsi*, absolutum't, *kaüghéga* v. *sesi*; *ékksné ketzaštänim*, et puis l desobéit v. ne faut-il pas qu'il desobéisse? *ékksné azsgšäüganis täümi?* quelle folie v. g. de parler ainsi; *ékksné kšaükštaërda*, absolutum't, crains cela; *ékksné pegšasa sribäükséhäüt?* p'rquoi le bat-il toujours? *ékksné kesä* v. *kesi kikkaüredsak*, p'r *kikkaüdsak*, tu dis toujours, &c.

*Épegšatsi*, c'salitis part. [causalitatis particula], quapropter, jusque-là que; *pe-metsinisi sdé'ka nederinamihaü* v. *ucpe-metsininamihaü*, je le vois à côté vis-à-vis de moi; *pe-metsinisi sdé'ka nederšsaü*, j'y vais, ut figura  $\Delta$  indicat,  $\Delta$  ( ) —  $\Delta$

*Éremi*, qui va laissant, coulant; *éremi é'ksarämmit*, qui va rendre l'esprit; *éremekizegat*, aujourd'hui, ce jour qui coule.

*Érsé*, peut-être, peu s'en faut, quasi, à peu près; *éršétsi baié*, peut-être qu'il viendra; *eršé nšéktéšsin*, peu s'en est fallu q' je ne sois tombé.

*Ércghikkšsi*, tant il est, &c.; *ércghikkšsi srenasakesissa*, *pi'ta Sang. Marie*, *tébat-basa asenni areni phainem sdereghikkšsi srenasakesin*, tant a été Ste [Sainte] Marie, il appartient bien à aucune autre femme de l'avoir tant été; *sdereghik-*



*kšī azsghin sa*, tant il est fou; *érghik-kšī sésañdaghé*, tant il est sage; *kedereghikkšī kesaañsin*, q'tum [quantum] bonus es; *ésséma tégne ni erghikkšīssi nsesérdamssn*, je n'en sçais pas la moindre chose, non pas me'e [même] autant q' cela.

[14, 15.] *Éri*, en tant q'; item *ni éri nipeghé*, il y a un an depuis l'été; *ni ére'sanrian ni éri psghé*, depuis l'hivers; *ni éri sigraghé*, &c., *ni éri pesedéghé*, le soir devant celui d'hier.

*Éssa*, *nia éssa nesésinamen*, *niokke māda* [mānda] *nesésinamssn*, vraiment c'est bien à moi de lire, non je ne le puis pas, *nia pe;šaba éssa v. aiago nesésinamen amstseghé kia māda* [mānda] *kesisinamssn*.

*Ésañraghisi v. basisi* (vid. *Basisi*), à travers un trou, pénétrativè; *nedésitêhañdamen v. nedésañraghitêhañdamen*, je passe à travers de pensée; *ési'ré ne/leritéhan-ssañgan*, ma pensée pénètre; *ésssé*, pls. *ésssak*, les plumes v. g. d'un cousin passent à travers, sortent, &c.

*Ési*, v. *sési*. v. *é'sena*, à t'te [toute] occasion, ainsi t'rs de me'e [toujours de même]; *é'sena arihiné éri srérdamoni*, fais-nous à t'te [toute] occasion ce q' tu voudras.

*Éserisi*; *kia éserisi kemañsé'ráhaban*, no' [nous] étions dans la même égalité, rang, et toi tu es, allez le premier, &c.; *nedeseréssé*, seu, *ésserisi nederéssé*, je vais devant les autres, je quitte le rang.

*É'sséma*, pas encore.

*Énasisi*, avec ressemblance d'une chose à un autre; *nedenasi'tsn*, seu, *énasisi nederi'tsn v. netécbi'tsn*, je fais v. g. un soulier co'e [comme] l'autre, &c.; *éhénasi-sóaham*, le canot v. g. allant heurter c'tre [contre] une pierre, il le détourne par un coup d'avirons; *érsé neksskañsé ni netéhénasi-sóahamen*, j'ai failli à fournir, je me redresse, je pare, &c., par un coup d'avirons; *nedénavi-sittamasañ*, je le redresse, lorsq'il

a dit un mot p'r un autre, ou qu'il n'a pas bien prononcé; *éhérasisi*, de mieux en mieux; *nedéhérasit'sn*, id ē [est] *éhérasisi, nederitsn*, je le fais de mieux en mieux, *éhérasitasañné neba stsi srighck*.

*Éssisi*, par échange, v. *añsitañvi*; *ésáatañtida*, troquons; *nedéssatañsé*, je donne par échange, je troque; *nedéssatañmañ*, contre lui; *nedéssatañtibena*, nous troquons.

*É'tassisi, é'tassi*, tous les jours sans manquer; *é'tassisi na kepoñba'tam sésspañsékki, pesedéghé atsi?* pries-tu tous les jours sans manquer le matin et le soir?

## G.

*Ga*, insertum penultimæ v'borum v. no'i'um [16, 17.] [verborum v. nominum] v. etiam postpositum, sign'at absentiam v. mortem præteritam; *métsinak*, ils meurent, *me'tsinégak*, ils sont morts; *métsinébanik, métsinébanigak, métsinésaanigak psšak*, ils s'embarquent, *psšgak*, ils se sont embarqués; *édamsbánik, édamsbanigak, &c.*, *mansssak, manssségak, sdasé'kañnañga*, ils s'en servent (de absentib.); *nsemñga, sañga*, c'est lui qui n'est pas ici, &c., *tañni nedaskamsnemegar, nedapenimegak v. nepenegak, nesítegar, nerétsigar*, lorsq' j'y ai froid, &c. *Ga* sign'at etiam affirmatam; *nenasa?* n'est pas cela? *niga*, oui, c'est cela; *asenni kisiñgssa is?* qu'est-ce qui a fait cela? *Pierrega*, v. g., c'est Pierre, &c. *Ga* sign'at etiam de grâce: *aba-siga ni*, donne-moi de grâce, je te prie, ce bois; *tséksaksga ni*, donne-moi, prête-moi de grâce ce couteau; *táitsga ni*, laisse-le là, &c.

*Ghé*; *Jesssseghé*, apud Jesum; *Joannesghé*, chez Jean.

## I.

*Iaha*, hortativa part. [particula], *iaha, iaha*, ça ça partons, &c., *iésmäi*, &c., *nemäi*.  
*Eidasisi*, en 2 endroits; *éidasaps*, il en est 2 endroits; *éitasisi*, d'un côté et d'autre, moi étant au milieu v. g.

*̄ri*. V. *Aüptsi*.

*Isiganüsi*, v. *naüsäisi*, à moitié en long; *ps'ksisi*, à moitié en large; *isiganüsi sisibigs*, il est paralitiq<sup>e</sup> de la moitié de son corps depuis la tête aux piés.

*Ittasi spetàinensk*, ces soleils (v. g. Jésus et Marie) éclaireront et la nuit et le jour.

*Isksäüsi éttasisi*, des 2 bouts; *ittasi-gherené is*, prens cela des 2 bouts, tien-le par les 2 bouts; le soleil commençant sa carrière le matin, si le soir au lieu de se coucher il recommençoit sa carrière co'e [comme] il a fait, &c., matin, di'r [dicteur] *ittasikat, niseda kiskat pézksa kizks*.

## K.

*Kadási*, in subj. *kédasi*, nota futuri, vel potiüs ad exprimendum je veux, item, afin q<sup>e</sup>; *kederérmer māda* [mānda] *kadási kesésāndam asskamisi*, je crois q<sup>e</sup> tu ne seras jamais sage; *kia Jesss kenireghé'heban k'édasi kighéhiéghé*, on vo' [vous] a fait mourir, J. [Jésus], afin de no' [nous] donner la vie; *nepāiba'tam kadási*, v. *nekadasipāiba'tam*, volo orare; *nekedapsi'pa*, j'ai désir de pétuner; *kédasi mssksérdamāini nkerahamāisi*, lorsq<sup>e</sup> je suis sur le point de me fâcher, je m'arrête; *kekadasi msskséremi é'to?* je crois q<sup>e</sup> tu te veux fâcher contre moi?

*Kā'ké'si*, combien de choses; *kemírercn ka'ké'si né'sa, aritéhānsiāné, amāité ka'ké'si né'sa ni kesseta mi'ksitéhān-mera!* je t'offre tout autant de fois q<sup>e</sup> je respirerai, en souhaitant qu'autant de

fois je le ferai, autant de fois je me souviens de toi.

*Kamaütsi, mirnin*, ho, ho, tu n'as pas laissé de prendre du poisson, v. g. oui-dà tu as bien pesché; *kamaütsikki kcsāng-māüba*, vous ne laissez pas d'être c'sid-étab. q<sup>e</sup>q<sup>e</sup>ues méprisab. v. g. q<sup>e</sup> vo' [considérable quelques méprisables v. g. que vous] paroissiez à l'extérieur.

*Kāüdak*, par ex'ple [exemple.]

*Kāüdak*, ornativa part. [particula]; *is kāüdak* v. *kāüdakba, asēmi mirak?* pour ce qui est de cela? à qui le donnerai-je? *kégšitsi kedasé'kaün?* *is kāüdak*, de quoi te serviras-tu v. g. p'r faire cela? de cela par exemple.

*Kāñghéga, kāñghéghi, kāñghéghé*, continuellement, v. *nēnekemaütsisi*.

*Kāñghima, ni, kāñghima ssin*, id ē [est] *ni ssin*; *kāñghima véghé sani'ré*.

*Kanisi*, v. *bégšasisi*, idem ferè sign'at ac *barisi*, accedit ad illius sign'ationem; *nekikanérdam* id ē [est] *kanisi nederérdam*, je m'attendois à autre chose q<sup>e</sup> cela, v. g. on me querelle, *tai'ka'tai*; *nekikanérdamshuban*, je m'attendois plutôt qu'on me l'auroit, v. g.; *māda* [mānda] *téguc nederitéhānshuban, nekikkaméghétsi -barisi nederérdams*, &c. &c.; *kanisi, nederarokk'*, on me commande de faire une chose; je m'attendois à faire autre chose.

*Kāc'ksüsi*, v. *nekstsgheüsi*, une nuit; *nissgnisi*, 2 nuits; *tssgnisi*, 3 &c.

*Ké*, part. [particula] sign'at ex; *kétsiniséskšinnskké kétsiniséskšinnms*, ex deo deus; *bagada'smšinnskké bagada'smsšinnms*, ex lumine lumen; *nhaghakké ketétebérmér*, je t'estime autant q<sup>e</sup> ma p'sōe [personne.]

*Kégāi*, v. *néheni*, bientôt, sur le point, &c.; v. *méssi*, en corps et en ame, est adverbium notans uniō'em [unionem] etiam in aliis reb. [rebus]; *keghisi ossisi māütsaraüsa spemkik Marie*, en corps et en ame.

[18, 19.]

*Kéhera*, certainem't.

*Kémitsebaisi*, sans rien ôter; *kekisi*, nonchalamment, sans rien ôter, &c.; *kekarahagaisi kekisi nemshaük pnuak*, je mange les poires de terre sans ôter la pelure, &c.; *kekisi nedassar netsa'pi nobik*, je me baigne sans ôter mes habits; *nekekimekesné'sin*, je me couche sans ôter mes souliers, *nekekikesné'sin*, *nekeskesné'sin*.

*Kéni*, à la vérité; *neketemañghesesi moudaki nesaaghir damrsu Jesss stsi*, je te désobéissois, je t'étois rebele.

*Késaghi*, préférablem't; *késaghérmer*, je te préfère, seu, *késaghi kederérmer*, je pense de toi préférablem't; *késaghi stañbédamsda*, profitons de cela préférablem't aux autres.

*Késsada*, lorsqu'on a fait ce qu'on a pû en une chose, et qu'on ne sçait pas si on y a réussi; *kekerahamañsipesanasa matsitéhañsiáné?* t'es-tu retenu lorsqu' tu avois ces méchantes pensées? R. [Réponse.] *késsada kañkessada*, j'ai fais tous mes efforts, mais je ne sçai pas si, &c.; *késsadalakki añañmiklia*, je tâche, je fais mes efforts p'r me relever.

*Késsadé* v. *késsadaisi*, quand on no' [nous] feroit mourir avec Jésus, dit S. Thomas, no' [nous] serons heureux, &c., *minagsba késsadé nercraghinagsé koriritebenatsi*, &c.

[20, 21.] *Késébétañsi*, étant réchauffé, chaudem't; *tagñatsisi*, gélém't, froidem't.

*Kési*, part. [particula] *pi'ta kési*, id ē [est] *bañmisi*; *pi'ta kési bagadasem kizss*, il est très brillant, &c.; *pi'ta kési msssañregsss*, *kesermegsss*, &c., il ē [est] très aimable, &c.; unde *nekesi'ra*, 3. *kési'ré*, je vas très vite, &c.

*Kesiba*, hé-bien, bien; *kesibatsi kenamittsn*, hé-bien, bien, tu le verras si v. g. la ch. [chose] n'arrive pas ainsi.

*Késseta*, c'bien [combien] de fois.

*Késspené*, v. *minagsi*, lorsqu'une fois, *sikañdaghé kañdak asenni arokkañ*, il lui ē

dit, *késspenétsi*, *bañktéhsrañné taika'tai kepapesañkutésr*, si une fois je te bas, je te battraï tout ton sous; *késspené nemañbaañné*, si une fois j'étois là, je &c. dit un q. [qui] ne veut pas aller là; *késspené mitsesiañni-nepapesañsipítsi*, dit v. g. un malade, si une fois je mange, je mangerai b'p [beaucoup]; *késspené pe-zeksa ki'tasade matsks ésitsi kekiketasañ*, si une fois, semel, écoute le démon, tu l'écouteras t'rs [toujours].

*Kétsasai*, p'r rire, par raillerie, par semblant, *kétsasai nemsskésérdam*.

*Kétsisi nekadossemi* v. *nekitsssemi*, je bois à la chaudière, &c.; *kétsisi nsighibena namessak éhidit*, no' [nous] demeurons tout proche où il y a du poisson.

*Kétañsi*, . . . .

*Kétté*, v. *maassa*, in antecessum, avant, auparavant; *io maassa kederitsn*, fais cela auparavant; *ké'tté aragñermañ kedañsaghiriten nekstena kadási*, on pense (v. g. de Marie) tu auras q'q' [quelque] jour une aventure c'sidétab. [considérable.]

*Kézasai nesin*, je le dis du bout des lèvres &c., seu, désobéïssamment; *kézasai nesin*, je le dis du bout des lèvres; *kézasai negherssi*, je ne parle pas franchem't, &c., hinc *neketrasérdam*, &c.

*Ki*, part. [particula] on me dit v. g. regarde est-ce là ce q' tu avois perdu? je lui dis, *nikki*, c'est cela mē'ē [même]; tu n'as pas fait ce q' je t'avois fait faire, il me dit, *nikki nederarokkañ*, id ē [est] *ni édstsi sderarokka*, voilà q' je te vas faire, &c., je te permets v. g. de faire v. d'acheter cela, *mssakcki asenni mirié-gats*, mais ne le donne à p'sō'e [personne]; *tssisi nemireks Jesss nstañbédamsañgan vrañméttsnki kégsi idaghi*, illud *ki* sign'at ear, &c.

*Kikatsssi*, v. *senstsis*, le long du bord de la rivière, soit par eau soit par terre; item *kikatsisi*, contre q'q' ch. [quelque chose], joignant q'q' [quelque] chose;



- psné is kikatsisi abasik*, v. *kikatsa'kšé*, mets cela contre ce bois, joignant ce bois, v. un pié de ce bois.
- Kigaisi*, tout vivant; *kigaisi sdabannar tsre-bar*, il rôti une tortue t'te [toute] vivante.
- Kikisi*, contre la parois, arbre couché, v. g. contre les écorces de la cabane; *kikemek*, &c.
- Kimisi*, en cachette.
- Kinaängsi*, au moins; *kinaängsa nssebigšanin*, au moins q' je répande des larmes, voiant v. g. Jésus en croix; *kesikanitam arokkanñ*, *kinaängsi si'tsi'raïané pañba'tameghé*, tu ne veux pas travailler, du moins assiste à la prière; *kinaängvi*, du moins; *kinaängsba kemétsinéheban éri-raïasaané*, &c.
- Kinasi*, *kinusisi* (eu *kira* &c.) distinctem't, specialem't; *sañga kañkkinasérmañsi*, p'r celui-là, on n'en sçait rien de distinct.
- Kiradaïsi*, v. *ks'radaisi*, avec mélange; *ki'tamsisi*, v. *ki'tamsaingan*, *ki'tamsisi nedasirighé*, j'écris écoutant; unde *nekiktam*, j'écoute.
- Kisi*, cela est fait; *kisi mañtsša*, il est parti; *kekisissgnebañsinasa* ? es-tu batisé ? *kisi* oui, v. *nekisissgnebañsi*.
- Kisi*, v. *papañmivi*, partout; *kisdas*; il visite dans t'tes [toutes] les cab. [cabanes], *kistañsi*, v. *sésisñivi*.
- Ksarivi*, *ksa'ri*, proche, in comp. [compositione]; *nskSarirasémañ*, je lui donne une joie proche la sienne, &c.; *neksarinamihañ*, je le vois auprès de moi.
- Kšaksanmañsi*, *ns'pañsi*, éloignement, ut ita dicatur; *nekšaksanmañbi*, je suis assis un peu éloigné; *neus'pébi*, je suis assis un peu éloigné; *nekšaksanmañssé*, je m'éloigne, &c.; *kšaksanmañsi nederssé*, je m'éloigne un peu, v. *nekšaksanmañsé*; *kšaksaksaisitsi sa'ari nemesairesameghé*, depuis maintenant jusq' là, on me donnera t'rs [toujours] plus, &c.; *nibañrañmihaiñ peghé stsi kšaksaksaisi*
- sa ari ka'šankisekat*, depuis noël les jours croissent, &c.; *kšaksaksaiñi sa ari mesaireusr abasiar*, il y en a peu ici mais en tirant de ce côté-là on en trouve beaucoup; ~~.....~~ hoc lignum v. g. *kšaksaksaiñi keské*, il est étroit au un bout et va t'rs [toujours] en augmentant, il est large à l'autre.
- Ks'askša'risi*, d'espace en espace, ce qu'il faut, pleinem't l'un après l'autre, (no' [nous] trouverons à la fin tout v. g. ce q' no' [nous] souhaitions); *ksasagsisi is* v. *kšasaksts is peni*, mets cela en arrière, retire-le, il est trop près du feu, v. g.; *kšasagšabi*, retire-toi en arrière, assois-toi plus en arrière.
- Kšaksai*, *kšaksai tépté*, v. in imperat. *téptets*, rempli tout cela q' . . . . . [22, 23.]  
*kšaksai psañtar skamsnar*, le vaisseau . . . . . étoit entièrement ras, plein de blé, est vuide [?] nunc; *ksaksai psañtets*, v. *psañmabits*, &c., qu'on le remplisse d'une mē'e [même] sorte de blé, v. de alio &c.
- Ksrbaskisi*, en tournant no' [nous] le verrons v. g. quand nous aurons doublé l'anse, q' no' [nous] aurons tourné, &c.
- Kšéni*, si long tems; *kšéni asañnermian*, quoi tu as été si long tems sans me connoître ? *ksnisi*, pendant cette espace de tems; *ni ksnisi māda [mānda] sañbi-ksssa*, il a été aveugle pendant ce tems-là.
- Kšérbisi*, en le faisant tourner d'un autre côté, in respectu alterius; *kšérbisi nemireghen*, on me donne cela p'r le donner à un autre; *kšérbisi nemirañ*, &c. je lui donne ce qu'on m'a donné p'r lui.
- Ks'radaisi* v. *kiradaïsi*, v. *kassadaïsi*, in comp. [compositione], *ks'radé*; avec mélange, v. *kessadaïsi*; *neks'radénemen*, je mêle cela avec &c.; *kessadén'rañ sañgmañ*, le capitaine est mêlé parmi les tués.
- Ksrbisi*, sans dessus dessous; *neksrba'tsn*,

je le tourne sans dessus dessous v. g. le rôti, je mets le haut en bas &c., nob. *neksrbaräü*.

*Ksrani*, perquam verissimè.

*Kstasisi*, par détachem't, de travers, séparer't, &c. ; *kstaštégšé*, rivière, ruisseau qui se détache de la g'de [grande] &c. ; *kstasisi tãï armaïragat*, le trou est bien avant dans terre.

*Kstsisi*, éssaiement, éprouvem't, &c. ; *kstsisi nederitsn* v. *nekstsi'tsn*, j'essaie, j'éprouve, &c. ; *neda'kstsitanen*, je goûte cela, j'en tâte, nob. *neda'kstsipañ*, *neda'kstsitamasañ*.

## M.

*Maänsi*, tout droit, v. *tãikamisi* ; *nemaäns-kãmen*, je vais la tout droit, j'y tire tout droit ; un qui a trouvé le but de l'affaire, les autres ne l'ayant pû trouver après de g'des [grandes] délibérations, il est allé là tout droit, *amaänsiteberstemn*, v. *-amaänsi-sittanen*.

*Maassa*, v. *ké'tté*, in antecessum.

*Ma'mirisi*, *nemamirncmncn agšiden*, étant sur de la vase je le tire dans l'eau de peur qu'il ne se gâte sur la vase ; *nemamir-tsn*, je tire q'q' ch. [quelque chose] qui étoit contre une muraille, v. écorce de la cabane, et le mets au milieu v. à peu près ; *nemamirssé*, étant dans un bocage, lieu où il y a des arbres, je vas dans une plaine ; *nemamirssé*, les ho'es [hommes] v. g. étant assemblés, moi avec eux, je sors p'r aller ailleurs.

*Mañda*, part. negat. [particula negativa], non ; *m̄da* [mañda] *nenamihãnsi*, je ne l'ai pas vû ; *nsinihšghéhébanba m̄da* [mañda] *kia* v. *égma*, j'étois vaincu sans toi v. sans lui.

*Mañmetsits*, v. *metsësara*, p'r la dern. [dernière] fois.

*Mañmañšisi*, grossièrement ; *nemañmañšit-*

*tsa*, je fais cela grossièrement, sans façon, &c.

*Mañsi*, v. *mañsisi*, ensemble ; v. *mañnsisi*, *nemañsnemen m̄tsaangan*, v. g. je le mets ensemb. [ensemble], &c. ; id ē [est] *mañnsisi nepsnemen*.

*Masisi*, de loin ; *masisi neghersrañ* ; je lui parle de loin, v. *nemasighersrañ*.

*Manenisi*, sans réflexion, sans mystère, tout d'un coup.

*Matsna*, v. *tchãnrasi*, c'parao'is part. [comparationis particula].

*Megsdarisi*, sans mélange d'aucune chose, &c., idem ac *mkstsisi* ; *šétsitsi megsdarisi sésésši ketoangan*, afin q' tu n'aies unquam't q' des belles paroles sans mélange, &c.

*Mesaghesidañsi*, v. *mémésaghis*, aiant les piés v. le corps nud.

*Mémékãisi*, v. *méméké'sághi*, en bas, dans la vallée.

*Mesghikkši*, idem ac *ahañsi*. Vid.

*Mesetsãisi*, tout entier, de o'i di'r [omni dicitur], je le fais cuire tout entier, je le prens, &c. ; *messisi*, v. *nekikkañsi*, v. *keghisi*, tout, &c.

*Mesikañtsisi*, *nekstena*, vulgò additur *tañni*, [24, 25.] ce sera q'q' [quelque] jour, ce sera quand il pourra, je ne sçai quand ; *mesikañtsisi tañni sañkasinšra*, ce sera q'q' [quelque] jour &c., q' je te verrai (Jésus) sans aucun empêchem't.

*Meskasat*, v. *saqgat*, il est difficile, il est de conséquence.

*Me'tonaskisi*, finalem't ; *nemétanaskisi'tamen is*, je ne dis plus q' cela, &c. ; *métanaskisi*, finalem't, achèvem't ; *nemétanaski-pãñba'tam*, je finis ma prière, &c.

*Métañtsisi*, v. *šigasãñtsisi*, volontiers, avec plaisir, &c. ; *nemétañtsisi'pi*, je mange avec plaisir ce qui est bon, je le cherche, je suis gourmand ; *métañtsisi šigasãñtsisi nekadssemi*, &c.

*Métsimisi* v. *asskamisi*, toujours ; *kemetsi-*

*minigs*, un enfant qui semble toujours naître et qui ne naît jamais.

*Metsinai*, v. *petsinai*, à découvert.

*Metsitsi*, finalement, *metssassara*; *mimétsike-töänganhédiks*, qui non faciunt finem loq'di [loquendi].

*Métsisi*, v. *métsisitsi*, trop tard; *métsisitsi ketaiméresi*, ce sera trop tard q' tu te repentiras.

*Métsisi*, à terre, en bas, coucher v. g. où il n'y a point de cabane, seu, à l'enseigne de la lune.

*Mikasi*, v. *ninhi*, d'une manière singulière, singularitatem notat; *Marie mikasi kédasi snitzaimit*, q. [qui] devoit enfanter d'une manière singulière.

*Minagsba*, v. *negadahari*, n'importe, quoiq'; *minagsba msskšermiáné*, n'importe q' tu te fâche contre moi; *mminagsba kikaümiáné ési mi'ksméraüni, askkamisi ketsi kemi'ksmer Jesss stsi*, quoiq' tu me querelle lorsq' je t'avertis, je t'avertirai t'rs p'r l'amour de Jésus; *minagoba sarakkisi matsitéhänsiáné, mda [mända] kepa'tänsé künsi, nabisi kerahamaüsiáné*, quelques méchantes pensées q' tu aies d'abord, tu ne pêches pas, si incontinent tu les repousses, tu te retiens; *minagsba kegän métsinäné. ats ga is kemi'ksmerca érg'hikkši is mi'ksmera*, quand je serois sur le point de mourir encore alors je t'avertirois, quod te moneo, usq' adeo bonum est id quod te moneo; *minagsba arami'kašghé asskamistsi nemsskšermekš*, quand je l'irois saluer, il sera t'rs [toujours] fâché contre moi.

[26, 27.] *Minagši*, lorsqu'une fois cela est, v. *ksšpenémina* v. *minusisi*, encore; *minagši arok-kaéigšé mssak idamskšeks nesasarokké*.

## N.

*Napisi*, vite; *napisi keba*, reviens vite.

*Náia*, [par ticula] admiración. [admirationis], de surprise.

*Na'isi*, en bas de la rivière soit par eau soit par terre; *nená'usssé*, j'y vais, soit par eau soit par terre.

*Näighé*, pour lors, lorsq'.

*Naüka*, n'est-ce pas; *is è'to sighimaneban naüka*, voilà peut-être ce q' tu agréois, n'est-ce pas, on nous veut battre? v. g. je dis à mon compagnon, *késsé'kaüda naüka?* entr'aidons-nous, n'est-ce pas?

*Naükaisi*, dans peu de tems; *naükaüssi*, dans très peu; *naügaüdsi*, dans q'q' [quelque] tems, pas long tems après; *mälahutsi naügaüdsi netse nabaün*, je ne tarderai pas à venir.

*Naükaklé*, dans peu de tems; *naükaklétsi baüsak*, ils viendront dans peu de tems.

*Nauucktsi*, v. *-tsisi* v. *ksti anksänbékki*, par fois.

*Naütsi*, in comp. t'tüm [compositione, tantüm] motum sign'at; *nenäütsigheršran*, je vais lui parler; *kenäütsinamišr*, je viens te voir; *suäütsipaüba'tam*, il va prier.

*Naütsisi*, le milieu, au milieu.

*Narasi*, *nedasé'kkan*, il ne vaut rien, mais faute d'autre je m'en sers.

*Nerasisi*, franchem't, avec liberté; *narasisi-keghersrer* v. *kenorasighersrer*, je te parle avec liberté.

*Naremek*, en haut de la rivière; *naremek neda*, &c.

*Nasatsisi*, en passant; *nenasatsinstsihük tsighemak*, en passant je cueillirai des pommes; *nenasatändökkésän*, je lui raconte en passant, en m'en retournant; *nenavatsiarami'kasöütsi*, je le saluerai en passant.

*Nega üaga*, à plus forte raison.

*Negaünié*, c'est une vieille coutume; *negäüni arenäübuk*, les anciens; *negäüniävé anastšts*, q' les anciennes coutumes soient anéanties.


*Negadahari* v. *minagsba*, n'importe, &c. [28, 29.]

*Nega, täüni épit!* on me dit, *néga épit*, il est là; je dis, *nekka apüts, atsitsi neman*



- neda*, qu'il soit là, qu'il y demeure, je ne laisserai pas d'y aller; *nekka ari pèsstapidé, isba érihek*, car s'il étoit proche, je lui ferais cela, &c.
- Nekkañ*, *nekikañsi* v. *messioi*, universellem't; *nekkañ-n<sup>c</sup> tatsinnsi-ketsiniséska*, Deus universè o'ip'tens [omnipotens].
- Nektsisi*, uniquem't, v. *megsdavisi*.
- Nekstema* v. *mesikañtsisi*, *q<sup>q</sup>* [quelques] jours ensuite, in posterum.
- Nekemi*, facilem't; *nekemat* v. *neghemat*, il est facile; *kenemi-siuitaunganak*, tes faciles victoires.
- Nenekemañtsisi* v. *sañsaivi*, tout de suite, sans interruption de jours, d'années, &c.; *nenekemañtsisi*, tout de suite; *māda [mañda] neuckemañtsi-si<sup>c</sup> tañtsisi*, il ne faut pas dire cela tout de suite, il se faut arrêter là, v. g. &c.; *nenekemañdaramstañs* v. *sañsérastañs*, l'air de ce chant est tout de suite, &c.
- Nénisisi* v. *éhézokké*; *nenisisi nederitáhañsi is aritosañné*, je suis en doute; *nenisé-sitéboñsi nenisésitéboñdamnar nisersr*, &c., je suis en doute lequel je ferai, &c.
- Népéras*, préférablem't, c'est cela en particulier, c'est justem't; *népéras* arokkān, tu travailles préférablem't, seu, toi *q<sup>q</sup>* n'as pas coutume de travailler, tu travailles p'r venir à bout, v. g. &c.; *isnava kégsi? nepéras kénskérdamñam*, qu'est-ce donc *q<sup>q</sup>* cela? c'est justement ce *q<sup>q</sup>* tu ne dois pas mépriser; *népéras* msssañri-an ézghia, moi *q<sup>q</sup>* n'ai point d'esprit préférablem't tu m'aimes; id. [idem] *kéhéraga msssañrian nedazoghikki*; *népéras* kikkañmian nāighé stsi msssañrera, c'est justem't moi *q<sup>q</sup>* tu querelles, et moi cependant *q<sup>q</sup>* t'aime; *népéras* arokket patrioñs? p'rquoi travaille-t-il?
- Né<sup>c</sup>rañsisi*, v. *amptasisi*, qui est en de-çà; *Jesss ne<sup>c</sup>rañsi arañkik aiéssa*, J. [Jesus] alla en un lieu dans la terre *q<sup>q</sup>* est au de-çà de celui des dannés; *nérañsi*, par le milieu; *nenéras* tsu, je divise cela par le milieu; *nérañsi netemcsañ nahams*, je divise par le milieu, &c.; *nerañsi nedi<sup>c</sup>rañ*, id est *bepassisi nedi<sup>c</sup>rañ*.
- Nésañma*, doucem't; *nésañma gherssi*, parle bas, &c.; *nesañmtéhañ*, je le bas légèrem't.
- [Page 30 of the MS. is blank.]
- Nesspi*, caracterem indicat, *nespisi ssgkerañna*, il pleut et grèle en même tems, v. *nespebésseu ssghetaññ tñi siksré*.
- Ntsasisi tñi nedakkikkañna*, mon champ ē [est] au milieu, v. *nansioi*.
- Netsi*, p'r lors.
- Nitait* tñitsga ni, *abasi ni*, v. *abasiga-ni, na<sup>c</sup>sden*.
- Ni*, *nikki, nega*, c'est cela, c'est fait, voilà, &c.
- Nikkaññisi*, devant, par avance; *nenikkaññssé*, je marche devant.
- Nenikkaññints*, je chante devant, je commence le p'r, &c.
- Niaga* v. *niagiaga*, v. *netsi*, p'r lors.
- Nibaññisi*, de nuit; *nenibaññsé*, je marche la nuit.
- Ninhi*, v. *mikasi*, singularitatem notat; *ninhihañmat*, toi (Marie), *q<sup>q</sup>* enfante d'une manière ineffable; *ninhimekdaba taini Marie ni késsit phāñnem*, qui pourroit dire entre c'bien [combien] de femmes Marie se trouve, &c.
- Nisisi*, tous deux; *nisisi nederitsnar*, je les fais tout 2.
- Nsdaññisi*, en de-çà, v. *nevaédérémañ* v. *nénsdaéremañ*, tu ne pourras faire cela, &c.; *nsaédérémañ*, (pro *nsdaññisi nederérmañ*), j'ai des pensées peu justes de lui, seu, je pense de lui en de-çà; *neusdaññersi*, je me crois indigne, je juge de moi en de-çà; *nsdaññasérmañk*, on ne peu leur persuader, on leur persuade en de-çà.
- Nsrñisi*, à l'aveugle.
- Ntami*, premièrement, le p'r [premier]; *kia ntami*, commence-toi, fais cela le p'r [premier], v. g.

## P.

- [32, 33.] *Pa*, part. [particula], *agaié*, *agaiépa sétsi*, *sé'kenaängs*, *sé'kénaängs pa sétsi*, &c.; *sa'taikknasa?* R. [Réponse], *sa'taik-képa messisi ni arighen*; R. [Réponse], comment y en auroit-il, puisq' tout est semblable à cela, scil. une méchante terre, &c.
- Pañsitsisi*, au de-là du rapide, de la chute d'eau; *nšighibena*, &c.
- Pañtsisi*, à la gauche; *arenakañsi*, à la droite.
- Paghé*, *paghé arenañbes tañni?* q' d'ho'es [hommes]! *paghé namessis tañni?* q' de poissons!
- Pakaisi*, un peu.
- Pakañtsisi*, *pakatsisi*, loin de nous, à l'écart; *amañtsinésa pakatsisi ári*, il s'en alla bien loin de nous.
- Pañbébetghisi*, en serpentant; *pañbébetgañš-dessan*, chemin qui va en serpentant; *sasaghisi*, tout droit; *nesagšssé*, je vais tout droit, je coupe ce chemin serpentant.
- Pañgšisi*, purem't, sans mélange; *pañgšisi sios nemtsi*, v. potiùs *nepañgšadamen*, je ne mange q' de la viande.
- Pañšidañkisi*, au dessus de la montagne.
- Papañmisi* v. *kisi*, par tout.
- Patsi* v. *pisšisi*; *patsi é'to kederérmañ sa é'to*, c'est en vain q' tu penses q' c'est lui; *patsi nepitsip-nemen*, je mets cela en un lieu, croiant le mettre à un autre; *nederérdam patsi ni psnema* v. *piššisi nederérdam iv é'to psama*.
- Pegša*, donc, &c.; *ni pigša idama*, ce n'est pas cela q' je dis! est-ce donc ce que je dis!
- Pekagañsi*, par le milieu, v. g. la hache est rompue par le milieu de travers; item, je passe la rivière par le milieu; *pekagañsi* v. *nepikagañsé*.
- Pemetsinisi arok sts* v. *pemetsints*, met cette écorce, bois, couverte de plat, de travers; *saktsisi*, de long; *saktsais*, &c.; *pem-*
- tsinisi* v. *pemañvi*, de travers, je vais, v. g. en un chemin et je vois qq'un q' va dans un autre de travers; *pemetsinañtsems*, il se jette à la traverse, pendant qu'un autre raconte, lui prend la parole; v. *pemetsinisi sdsañsin*.
- Pemi*, id ē [est] *añtsi*; *pemapañss*, v. *añ-ptapañss*, il est à pleurer, &c.
- Pcnetsañsi* v. *pcnetsañsi* v. *pcnetsañsi*, long tems; *pcnetsañssé* v. *pcnetsañssé*, il demeure long tems à venir; *pénetsañsi-kisighék*, *pétsañsighék*, il est long tems à croître; *pcnetsañsigs*, cet enfant est long tems à croître; *nabigs*, il croît vite; *tsrbé*, dit-on à un qui demeure long tems à croître; *presis*, à celui qui croît vite.
- Pēra*, de grâce, *pera mēni*, de grâce allons un peu; *pañba'ta pera*, prie auparavant q' de faire cela, v. g.; *mssak pera kégš* *riégats*, *pera kšina tepitéhañda*, ne lui dis rien q' tu n'aies bien pensé auparavant.
- Perabain*, *perabañmeghe*, peut-on dire c'bien [combien], &c.; *perubain sēsšsinnšis kejšsssissemēna!* potest-ne dici q'm [quam] exquisitus h'o [homo] sit Jesus noster!
- Perano*, cela très particulièrement; idem ac *pi'ta srahami*; *sa perana srenasakess*, les autres, v. g. s't [sont] sages, mais lui b'p [beaucoup].
- Pesagañsi*, obscurément; v. *peseghisi*, *pcsega'tai*, il est obscure ici dans la maison.
- Pessañgsi*, beaucoup, fortem't; *nepessuñks-téhgghé*, on me bat beaucoup.
- Pctaghisi*, de travers, v. g. qui coupe la ligne a; 
- nepetegšssé*, v. *nepeské*, v. *nepeskesse*, je vas dans le chemin qui en coupe un autre; *nepeteghitéhañsi*, j'ai des pensées de travers.
- Piri*, *pirši*, novitatem indicat; *piri maské*, une nouvelle couverte; *piri sañgmañsi-ssadin*, ce nouveau et illustre festin.

- [34, 35.] *Pirsisi*, sur le bord du chemin ; *pirissi nebemssé!* je marche sur le bord, &c. ; *nepirsamadamen nhaghé*, je ne ressens point, mon mal est co'e [comme] si mon corps étoit celui d'un autre,  
*Pis̄sisi*, v. *taëgāisi*, en vain ; v. *agāisivi*.  
*Pi'ta*, tenet locum superlativi ; *pi'ta sān-grāi is*, cela est très fort.  
*Ps'k̄sié*, une moitié en large ; v. *temisi temi-abāim*, un demi-pain, &c. ; *ps'k̄sisi*, v. *ps'k̄siāisi*, à moitié en large ; *isiganisi*, à moitié en long ; *ps'k̄sisi nedaḡsin*, je m'en couvre de la moitié en large ; *isiganisi sisibigs*, il est paraliq<sup>o</sup> de la moitié de son corps depuis la tête jusqu'aux piés.

## S.

- Saēbi*, v. *baiēmisi*, beaucoup plus, grandem't très fort, &c.  
*Sāisi*, nonchalamm't ; *sāisi pits*, mets cela dans le sac, sans l'accommoder, sans le lier, simplem't co'e [comme] il est.  
*Saēghi'ré*, il n'est pas ceinturé, il va à la négligence ; v. additur *sdassé*, v. g. &c.  
*Saktsisi*, de long, v. g. une écorce, bois, couverte, &c. ; qu'on mets en long, *saktsisi araksts*, v. *saktsa'ts* ; *pemtsinisi*, de plat, écorec, v. g. bois, couverte, &c. ; *pemtsinisi araksts* v. *pemtsints*.  
*Ssani*, strictè, beaucoup ; *ssani nenaverda kepāiba'tamsāngan*, garde étroitem't ta prière ; *ketzastāns̄s̄ppa ssani srāiméhssu?* peut-on refuser sa foi à celui q<sup>o</sup> strictè, verè dicit de seipso.  
*Sanbisi*, franchem't, sans feinte ; *m̄da* [mānda] *nesāns̄bivé*, id ē [est] *m̄da* [mānda] *ks̄manesisn*, v. *m̄da* [mānda] *nesānibigherssi*, je dissimule, je dis avec feinte ; je ne lui dissimule pas, *nesānibigersian*, id est *ks̄ina nidi'rān* ; *sānbisi nemirān*, lorsq'on m'a donné à manger, pétuner, &c., j'en mange un peu, et je le donne à un autre, &c. ; *sānbssé*

*sdamāngan*, elle va de main en main, &c. ; *sānbssao m̄tssāngan*, le manger va de l'un à l'autre ; *sānbisi miredin*, on se donne de main en main ; *nesānbsdāi*, venant, arrivant de q<sup>o</sup>q<sup>o</sup> [quelque] part je visite avant q<sup>o</sup> d'entrer dans ma cabane ; *nesānbsdāi*, je visite dans une cab. [cabane], et puis dans une autre, &c.

- Sānkasi*, v. *arighési*, hé-bien, je resterai, v. g. je n'irai pas à la chasse, puisqu'on me dit demeurer.  
*Sānkasi arap̄itsga nibān kizss*, hé-bien, qu'on laisse, qu'on ne le regarde pas le soleil de la nuit p'r jetter, v. g. les regards un autre, &c. ; *sd̄ānek sānkānikhidit*, enfin ils arrivent à la ville.  
*Sānktā̄isi*, où il finit d'être ; rivière, v. ruisseau, entrant dans un autre, endroit où il entre, *sānktā̄isi*, hæc figura,



- Sānsaisi*, v. *nénkemānt̄sisi*, tout de suite, sans interruption de jours ou d'années, &c. ; *sānsaisi nemānt̄si*, rien ne m'empêche de m'en aller ; *nesānsésse*, id ē [est] *sānsaisi nepemssse*, je vas là tout droit, &c. ; idem *sasaghisi*, *nesasagssé*, je vas là sans m'arrêter nulle part, sans empêchem't.  
*Sāntā̄isi*, v. *kekissāntā̄isi*, jour de fête.\*  
*Sānsé*, part. [particula] exhortatoria, v. precatória, ça, de grâce ; *sānsé arakkéks*, ça travaillez ; *sānséba ketemānghérmiāné*, si tu voulais bien, v. ai de pitié de moi ; *sānsé arérmān*, *ascn̄ni é'ta kenamihān*, pense-t-on de Zakarie, v. g.  
*Sarakkisi*, tout à coup ; *ni sarakkisi*, voilà q<sup>o</sup> to' [que tout] à coup, &c. ; *nesarkiné*, il meurt tout d'un coup.  
*Sasaghisi ap̄étsnar abasiar ksa'risi kerānganek*, il apporte les arbres tous entiers, &c. ; *sasaghisi*, qui va tout droit, *ne-*

[\* From the French, *Saint*. EDIT.]



*tsasagssé*, je vais tout droit coupant le chemin qui va en serpentant; *païbébtghisi*, en serpentant, &c.; *sa'saghitégšé*, rivière qui va droit.

[36, 37.] *Sasisi*, lassem't; *nesasraskke*, je suis las de travailler; *nesasimanessé*, las de faire du bois.

*Séssi*, v. *mésiassimis*, très peu.

*Sésébagsisi*, sans être ceinturé; *nesésébagsin*, j'ôte ma ceinture v. g. p'r dormir, &c.

*Sési*, v. *ési*, continuellement, et t'rs et t'rs [toujours et toujours], et ainsi t'rs de m'ê [toujours de même].

*Senotsisi*, près, le long du bord de la rivière, soit par eau soit par terre; *senstsisî araksdaïn*, il va le long du bord, &c., v. *kikkatsisi*.

*Sésémisi*, *sésemisi métsi'ré is*, cela est entièrement fini; *m̄da* [*mānda*] *tégné sésemisi*; *sésemisi srenasakess*, il est très sage, il n'a pas le moindre méchanceté; *sésemisi nemssasürcks*, il m'aime; *sésemisi nekeneskércks*, il me mépris, &c.

*Sipisi*, enfin; *sipisi Jesus sésasürera*, enfin je sçais maintenant q' je t'aime, ô J. [Jésus]; *sipisi sésādam*, il commence à avoir de l'esprit.

*Sissaisi*, d'un côté et d'autre; *taïni éragširahadit*? où s't [sont] ils allés? *sissaisi*.

*Skaisi*, étant debout; *apisî*, étant assis; *asitegšakkaisi*, étant à genou.

*Skēna*, *mssak skēna sani' rakits*, dit-on à un qui a coutume de perdre; *skēna m̄da* [*mānda*] *ascnī nēda'samañ*, de tous tems j'ai coutume de donner à manger, mais dès maintenant je ne donne plus, *skēna nikkšāib*; *skēna gakkī é'kšimsskšérda*, dit-on à un qui a coutume de se fâcher; *skēna kerepi*, fais vite, &c., *skēna nabssé*.

*Skisi*, crument, étant cru, non cuit.

*Skšāiik*, le dernier, v. *sléšghé*; *skšāiik pemssé* [?], *gherss*, il marche, il parle le dernier.

*Spetaïsi*, de jour; *nibaïsi*, de nuit; *nedaspetšsé*, je marche de jour; *nenibaïsse*, de nuit.

## T.

*Tagaghisi*, v. *sikšisi*, jusq' là; *tagaghisi tamagan*, la marée monte jusq' là; *tagaghisi sétkisia*, ma terre prend jusq' là; *spemkik sikhérdaïtsit tagaghivî iskkik*, qu'on se réjouisse depuis le ciel jusq' à la terre; *tagaghikkšinañgsat stēbērdamsaŋgan*, son domaine s'étend autant v. g. depuis le ciel jusq' à la terre.

*Tagassissî*, peu, v. *bagawssi*, v. *pakišisîsi*, *sa'késis*.

*Tagšatsivî*, gélément, froidement; *m̄da* [*mānda*] *neckisimitsesi tagšatsivî*, je ne puis manger ce qui est froid; *kesebētaïsi*, chaudement, étant réchauffé.

*Tagišisî*, tous 2., ensemblem't; *tagvnaēghēba*, *tai'ka nsraïbēdamen*, si nous pouvions mourir tous 2. (ô Jésus), ce me seroit un g'd [grand] avantage.

*Tāi*, est conjunctio; *Marie tāi Joseph*, M. [Marie] et Joseph.

[Page 38 of the MS. is blank.]

*Tai'ka*, *tai'ka'tāi*, *tai'kaga'tāi*, certainement, à la vérité, &c. [39.]

*Tāikamisi*. Vid. *Maañsi*.

*Tāïna*, quiconq'.

*Tāïneba*, car enfin, comment; *tāïneba kaïdak šētsi manenisi sramsedsra*? comment pourrai-je croire à l'aveugle, sans autre c's'déra'on [considération]?

*Tāïnedā*, v. *tāïni nekikinamēnga nî* v. *pera nekikināmen*, *tāïnedā nekikināmen*, apporte cela q' je le voie; *kisi sraïmēhaït tāïnedā saïga*, après qu'il lui eut dit vrai de q'q'un [quelqu'un], on ne sçait ce qu'il devint.

*Tāïnēga*, v. *sāta*; *sāta baāndé*, v. *tāïnēga baāndé*, *tāïni éragširaït*? *tāïnēga*, où est-il allé? je ne sçai v. qu'en sçai-je?

*neghersraütsenosa sa? taïnega kia*, lui parlerai-je? c'est à toi de voir, tu feras ce q' tu voudras; *taïnega maütsiaüné, ara apiäüné*, je ne sçais si je m'en irai ou si je resterai; *taïnega sghik kadási sanaüdamshsdidé, mssak kia sanaüdamskkan*, si ceux-là veulent être fous, ne le sois pas toi; *taïnega aünerside, taïnega māda [mända]*, peut-être qu'il se repentira, peut-être q' non; *taïnega érshetsi sigäüdamsk*, peut-être ne le voudrontils pas.

*Taïnäghé*, de tout tems, v. *ne taïni stsi*.

[40, 41.] *Taïni, taïni aiäüan*, quo vadis? *taïni se<sup>c</sup>man*, unde venis? *kesaünsines taïni*, quis dicat q'm [quam] bonus sit? *arcnaübes taïni!* ô c' bien d'ho'es [combien d'hommes]! *késérmerg taïni*, diei-ne p't q'tum [potest quantum] te aestimamus! *Tari*, là; *tari sikhérdamshsdit*, là, ils ont la joie.

*Tébatbas, tébatbas kia kemsskšérmer*, tu ne mérites pas q' je me fâche contre toi; *tébatbasa baiüraübao*, c'est bien à lui de s'en faire aceroire; *tébatbasa sésaüdam*, on ne peut pas espérer de lui qu'il soit sage; *tébatbais kikhdari sikhérdäüss, pi<sup>c</sup>to spenkik sikhérdäüss*, les joies de la terre sont bien e'parables [comparables] aux joies du ciel; *tébatbas nia neni<sup>c</sup>ta<sup>c</sup>tsn*, il ne m'appartient pas de faire cela.

*Téhaüvasi*, v. *matsena*, e'para'ois part. [comparationis particula].

*Tégné*, part. [particula] negativa, *māda [mända] tégné kégši*, rien du tout; *tégné pézeksda*, au moins une fois.

*Tégnéda*, celui-là aussi.

*Tékéghisi*, froidem't; *tekéghisi nedagšün*, je suis habillé froidem't; *tekénisi*, à la gelée, au froid, mettre q'q' [quelque] chose dehors p'r qu'il gèle, &c.

*Témesaüsi*, universellem't; *nctemé<sup>c</sup>saübi*, je suis universel, par tout; *témesaükiskšé-pian*, toi q. [qui] es par tout, &c.

*Temisi*, v. *ps<sup>c</sup>kšisi*, la moitié en large; *temigabaüan [?]*, un demi-pain.

*Tésenisi*, étant couché, assis; *skänsahé tésenisi*, chante étant couché.

*Tétebisi*, à l'égalité, égalem't.

*Tsebisi*, séparém't, *tsatsebisi*.

*Tsi*, nota futuri; *nemaütsi*, je m'en vas; *nemaütsitsi*, je m'en irai.

*Tzatzébisi*, séparém't.

[42, 43.]

*Tsasisi*, avec perte; *nenesasipeskam*, j'ai tiré et j'ai perdu ce q' j'avois mis dans le fusil, je n'ai rien tué; *nenesasiadsnar skarsnsksr*, j'ai perdu mon plomb en tirant, je n'ai rien tué.

*Tsepisi ssgheraüin*, il t'be [tombe] de la pluie mêlée avec la grêle.

*Tsigaüsi tsigaüsi*, malgré, à contre cœur; *tsigaüsi maütsšak*, ils s'en vont malgré qu'un en ait; etiam, ils s'en vont malgré eux, contre leur gré.

*Tsighisi*, sans rien dire, en silence.

*Tsi<sup>c</sup>tamisi*, jointem't, joint ensemble; *tsi<sup>c</sup>tama<sup>c</sup>té*, cela joint bien; *tsi<sup>c</sup>tama<sup>c</sup>tar srür psikasksr*, bien jointes; *netsi<sup>c</sup>tama<sup>c</sup>tsn*, nob. *netsi<sup>c</sup>tama<sup>c</sup>raü*.

*Tsitsitaüsi*, v. *tsitsitaü*, de plus en plus, plus fortem't, plus parfaitem't; *tsitsitaü ksssihskšäio*, elle en devint plus vierge, (v. g. Marie enfantant Jésus.)

*Netsi<sup>c</sup>tsi<sup>c</sup>ta<sup>c</sup>ra*, je vais là de plus en plus, je fais cela de plus en plus.

*Tsšäü*, mais apropos.

*Tsbatäi*, oui, vrain't; *tssbatäi arsdäü*, oui vrain't il se vengera.

*Tsšü*, v. *vittasü*, absolum't; *tsšü is kedertsn*, il faut q' tu fasse absolum't cela.

*Tzatzébisi, tzebisi*, séparém't.

8.

*Sansiaüsi aresaüts*, idem ac *sésišnisi*, &c.

*Sakaüsi*, autour, v. *sésišnisi*.

*Sanaskšisi*, au bout v. g. d'un arbre, seu *sanaskšansksk*, au bout, d'en haut d'un arbre; *sanaskširetsi*, au bout du doit; *sanaskšri<sup>c</sup>tan*, au bout du né [nez]; *sanaskšininim*, de l'épi; *sanaskšäürs*, de

la queue; *sanasksañnämisi*, au bout de la presq'île; *sanasksañnämék*, au bout de la presq'île; *kesañsañms*, la terre de la presq'île; ils y demeurent, &c., *asighñañ kšésañsañmék*, v. *kšésañséik*.

*Šaŋga*, lui absent v. mortuus.

*Šasaghésio*, v. *ghéio*, vacuè.

*Šasagañsi*, inaniter; *vasagai-mensté*, un sac vuide; *sasagheiañsi sañsdšérsšinnasak sasagañsi gšagšaññeremat*, ceux q. [qui] s'estiment de c'séquence [conséquence] tu penses d'eux qu'ils s'en aillent sans rien emporter, divites dimittis inanes.

[44, 45.] *Šañsañghenasi*, doucem't, en repos; *sañsañghenasi arits*, fais cela en paix; *nesañsañghenasi-arenañbañ nikksañbi*, je vis maintenant en repos.

*Šañsiañsi*, en rond de plat, co'e [comme] assiette, &c.; *sañsiañsi aritañss*, v. *sañsiañghenañss*, v. *sañsikemañdañss*; *petegšisi arikmañdañss* v. *petegšikemañdañss*, il le faut faire rond en boule.

*Šañsibakki*, v. *aėtaghisi*, gratitud. part. [gratitudinis particula]; *sañsibakki ketemañghérmiáné*, c'est une grâce q' tu me ferois si tu voulois avoir pitié de moi; *sañsibakki* v. *aėtaghisi kisitasañné*, si je pouvois achever cela, seu, plút à Dieu, &c.

*Šassañsi*, rebroussem't d'un autre côté.

*Šassénemañsi*, au flambeau, avec une lumière; *ušihé sassénemañsi*, il va quérir de l'eau portant flambeau.

*Šédagši*, de ce côté; *tañni šédagšsa?* de quel côté viens-tu?

*Šdagšisi*, de là ici; *šlékka šdagšisi nsmen*, je viens de là.

*Šdassamek*, en de-çà, v. *na'sdagšisi*.

*Šdši*, hors du co'un [commun]; *šdši-asennsts*, un ho'e [homme] hors du co'un [commun]; *šdšiasañsis*, un enfant de c'séquence; *sañsdšérsšinnasak*, ils s'estiment gens de c'séquence.

*Šéghé*, alors.

*Šé'kənañgs*, hélas.

*Šésañdamisi*, sagement, avec esprit; *šésañdam*, il a de l'esprit.

*Šémi*, q'tum satis, pleinem't; *nega tañni séminaségssa'ga*, lorsq' vo' [vous] l'au-rez vù autant q' vo' [vous] l'avez sou-haité.

*Šésébisi*, en haut v. g. Jésus q. [qui] sera dans l'air p'r juger, &c.


*Šésiñisi*, v. *sa'kaññi*, v. *kistañsi*, v. *assebañsi*, tout à l'entour, autour, &c.

*Šéséssi*, noblem't, choisim't; *neséséssihañ*, je l'embellis, illustrier [?].

*Šésépsághi*, v. *špemsadsk*, en haut, en degré.

*Šésini*, v. *amañté*, plút à Dieu; *kinañgsi gakteba*, *šésini gakteba pétasañsaané*, si du moins j'avois apporté cela.

*Šisizañsi*, avec empressem't; *nsisizañsé*, je vais avec empressem't; *šisizarrakks*, allez au plus vite; *šizañkizogatk*, voilà le jour q. [qui] va bientôt finir.

*Šésisasisi*, l'endroit qui est étroit, aiant v. g. les 2 bouts large, hæc v. g. figura fluminis ; *šésisasághé*, l'endroit de la rivière qui est étroit et puis s'élargit &c.; *šésisasañragat*, un trou large au commencement't, et puis étroit et puis large; *šésisasikemañdañss*, un chandelier v. g. il le faut large et puis étroit et puis large.

*Šétsi*, c'salitatis part. [causalitatis particula], [46, 47.] c'est pourquoi; *agaiépa šétsi*, v. g. dit-on à celui qui a dit *agaié*, *šékənañgs šétsi*, &c.

*Šibisi*, v. *məgsdarisi*, seulem't.

*Šits*, ornativa part. [particula], *sabasits matsinañgsšess*, v'raim't ouï, hæc sordida erit (v. g. quæ peperit pulchritudinem); *ne šits ésiañsa*, à quoi pensai-je donc? &c.

*Šitsi*, simul, in comp. t'tùm [compositione tantùm].

*Šittasši*, v. *tšši*, absolom't; *sittasši ksrañmé*, garde ta parole en ce q' tu me dis.

*Šrahami*, car enfin, mais bien plútôt, &c.

*Šsskasisi*, à l'insçu, sans qu'on l'ait vù, sçache, il a pris q'q' ch. [chose] v. g.; *nsskašinanahañ*, je le vois et ne me voit pas; *nsskasañbamañ*, je regarde, cherche les



- oiseaux sans en être veu p'r les tirer v. g. ex terrâ, eux sur la rivière.
- Šskañtsi*, *ts'kšiharañtsi*, il l'éveille, &c.; *ts'kšiharšghi*, je l'éveille le touchant, secouant, &c.; *tsksiharetsi*, il est éveillé de lui, &c.; *ts'ksirahaditsi*, il l'est de plusieurs, &c.; *pesaŋsi tsksiharé*, éveille le le touchant, secouant, &c.; non di'r [dicitur] *sskañtsi ts'kšiharé*, &c.
- Šssaisi*, sur le bord de *q'q'* [quelque] chose; *ssšégsnek*, id ē [est] *ssšaisi agsnek*, sur le bord de la cache.
- Šrisni*, cela est bien, grand merci.
- Štseskasisi*, à la rencontre; *štseskasitširak*, les oiseaux v. g. volent à ma rencontre; *nštseskasinamihañ*, je le vois à ma rencontre [rencontre], &c.
- Šsskebi*, *sskebi pegša ksrenasakesi*, car enfin tu es sage; *sskebi kša'rirasémañt*, *ghersrañt*, peut-on dire, v. ho [?] quelle nouvelle joie il leurs cause en leurs parlant; *ksskebi pegša kebañšrenši*, q'tum [quantum] ū [?] vero v. g. ingenio vales; *ssskébéršk pegša*, co'e [comme] s'ils étoient peu.
- Šsskisi*, v. *ntami*, *ssskisi érenaübair'idé snitzañnar*, c'est son p'r enfant, voilà la p're fois qu'elle enfante; id ē [est] *minasisi*; de nouveau, *ssnsski mirera nhaghé*, je te donne de nouveau ma p'so'e [personne]; *ssskiasañsis ghérenavasañsit Marikkédari*, ce nouvel enfant (scil. Jean Bap.) venant de naître est porté par Marie; *ssskiarañsis, ni aneghi érenaübait*.
- Šskitsisi*, dehors, à l'extérieur, au dessus de *q'q'* ch. [quelque chose]; *nsskitsipañba'tam*, je ne prie *q'* du bout des lèvres, &c.; *sskitsimatžassésé*, il est malhabillé à l'extérieur; *sañsskitsi matsighéssiégs araksé*, vous n'avez *q'* l'extérieur de petits misérab.; *nsski'tapi*, je suis assis dessus.
- Štsi*, à cause; *Jesss štši nedarokké*, je tra- [48, 49.] vaille pour l'amour de Jésus.
- Kikatsisi* v. *senštsisi*, le long du bord de la rivière, soit par eau soit par terre; item *kikatsisi*, contre qq. ch. [quelque chose], joignant qq. chose; *psuné is kikatsivi abasik* v. *kikatsa'kšé*, mets cela contre ce bois, joignant ce bois, v. un pié de ce bois.

Horum in v'bis [verbis] repertorum significatio.

*Assr*, sign'at [significat] multipliciter; *kégši assredšak*? quid factitant? *kégšsits assrdinésa sdâinck*? quid ergo factitatum ē [est] in vico?

*Da*, indicat admirat'ionem.

*Ba*, *ketemañghérmianéba*, si tu voulais bien avoir pitié de moi.

*Ga*, *nedarami'kasangatsi*, hé-bien, je le saluerai; *émgaga*, c'est lui-me'e [même.]

*Ghé*, *Jesusghé*, *Marikké*.

*Gšé*, *gšérré*, indicat la mine, le visage; *siaghigšérré*, *q'* ton visage soit un peu riant.

*Kša'ri* novam lætitiā indicat; *nekša'rirasémañ*, je lui cause une nouvelle joie.

*Mamirisi*, sign'at initium alicujus actio'is v. rei; *mémirkizekak*, dès le c'mencement de ce jour.

*Šiakka*, *sia*, lætitiā notat.

*Ni*, pro *né* in subj. multipliciter indicat; *ési sssikérdaméni*, *mikšitéhaimé Jesss*, t'tes [toutes] les fois *q'* tu te voudras, souviens-toi de J. [Jésus.]

*Nš*, habitudinem indicat.

*Pétsi*, locum ad quem indicat.

*Tši*, nota futuri.

. . . . de nouveau; *nšnsski mirera nhaghé*, moi q. [qui] te donne de nouveau ma p'so'e [personne].

SUPPLEMENTARY NOTES AND OBSERVATIONS

ON

FATHER RASLES' DICTIONARY OF THE ABNAKI LANGUAGE  
IN NORTH AMERICA.

BY THE EDITOR.

Father Rasles in one of his letters, dated at *Nanrantsouak* (Norridgewock) the 12th of October, 1723, and published in the *Lettres Édifiantes*,\* makes the following general remarks upon the Indian languages and his mode of studying them :

“ On the 23d of July, 1689, I embarked at Rochelle ; and after a tolerably good voyage of about three months, I arrived at Quebec the 13th of October of the same year. I at once applied myself to the study of the language of our savages. It is very difficult ; for it is not sufficient to study the words and their meaning, and to acquire a stock of words and phrases, but we must acquaint ourselves with the turn and arrangement of them as used by the savages ; which can only be attained by intercourse and familiarity with these people.

“ I then took up my residence in a village of the *Abnaki* nation, situated in a forest which is only three leagues from Quebec. This village was inhabited by two hundred savages, who were almost all Christians. Their huts were in regular order, much like that of houses in towns ; and an enclosure of high and close pickets formed a kind of bulwark which protected them from the incursions of their enemies. . . . .

“ It was among these people, who pass for the least rude of all our savages, that I went through my apprenticeship as a missionary. My principal occupation was to study their language. It is very difficult to learn, especially when we have only savages for our teachers.

\* *Lettres Édifiantes et Curieuses, écrites des Missions Étrangères par quelques Missionnaires de la Compagnie de Jésus*, vol. xxiii, p. 198.

“They have several letters which are sounded wholly from the throat without any motion of the lips; *ou*, for example, is one of the number, and in writing, we denote this by the figure 8, in order to distinguish it from other characters. I used to spend a part of a day in their huts to hear them talk. It was necessary to give the closest attention, in order to connect what they said and to conjecture their meaning. Sometimes I succeeded, but more frequently I made mistakes; because, not having been trained to the use of their gutturals, I only repeated parts of words, and thus furnished them with occasions of laughing at me. At length, after five months' constant application, I accomplished so much as to understand all their terms; but that was not enough to enable me to express myself so as to satisfy their taste.

“I still had a long progress to make, in order to master the turn and genius of their language, which are altogether different from the turn and genius of our European languages. In order to save time, and to qualify myself to exercise my office, I selected some of the savages, who had the most intelligence and the best style of speaking. I then expressed to them in my rude terms some of the articles in the catechism; and they rendered them for me with all the delicacy of expression of their idiom; these I committed to writing immediately, and thus in a short time I made a *Dictionary*, and also a Catechism containing the principles and mysteries of religion.”\*

The *Dictionary* here mentioned was, without doubt, the identical manuscript which is now, for the first time, printed in the present volume. The author has left no other account of it; nor has he, either in the work itself or in his Letters given any other explanation of the characters of his alphabet, than the short remark above quoted respecting the sound which he calls a *guttural*, and which he denotes in his Letter by *ou*, and the figure 8, but in his Dictionary by the character *s*, borrowed from the Greeks.

The MS. is a small quarto volume, in Father Rasles' own handwriting; and on the first leaf the author has made the following note, which is placed at the head of the present edition: “1691. Il y a un an que je suis parmi les sauvages, je commence à mettre en ordre en forme de dictionnaire les mots que j'apprens.”\* Immediately below this, on the same page is added, in an old handwriting, the fol-

\* Lettres Édif., ubi supr.

† “It is now a year that I have been among the savages; and I begin to set down in order, in the form of a Dictionary, the words I learn.”



lowing: "Taken after the Fight at Norridgewalk among Father Ralle's Papers, and given by the late Col. Heath to Elisha Cooke Esq. — Dictionary of the Norridgewalk Language." It is understood to have been presented by Mr. Cooke to the Library of Harvard University, to which valuable collection it now belongs.

Some years ago I gave a bibliographical account of it, which was published in the Memoirs of the American Academy, as an Appendix to an Essay on a Uniform Orthography for the Indian Languages of North America; to which the reader is referred.\*

This Dictionary is now printed from the original in Father Rasles' handwriting, and with as much exactness as was practicable. His abbreviations of words are retained, though, in all cases where an unpractised reader of French or Indian would be at a loss, they are explained by printing the abbreviated word or phrase at full length, in brackets, immediately after the abbreviation.

Lest the numerous errors of orthography and accentuation in the *French* part of the work should be ascribed to the carelessness or ignorance of the Editor, it is proper to apprise the reader, that such of them as are properly errors, and not the authorized orthography of the age when Rasles compiled his work, have been suffered to remain, from a desire of scrupulously following the manuscript.

It should be farther observed, that the leading words of each article, which are printed in capitals and between brackets, have been added by the Editor, in order to lessen, in some degree, the extreme inconvenience which would have been experienced in using the work without such aid. In all other instances, also, every addition by the Editor is printed in brackets.

The manuscript was evidently begun upon the plan of first filling up the *right hand* pages of the book, and reserving the opposite ones for subsequent additions. Most of these blank pages were afterwards either partly or entirely filled with additional matter; many of them, however, still remain blank. This state of the MS. will explain to the reader the reason why the paging in the margin of the present edition is double, as [2, 3.], &c. As the additional words on the *left hand* pages belonged to different places on the *right hand* pages and required to be inserted under their respective heads, it would have been impracticable, and contrary to the author's own plan, to have printed the pages consecutively; it was thought best to consider the corresponding right and left pages as constituting a single entire page, and

\* Mem. Amer. Acad. vol. iv. p. 358, First Series.

to affix the double numbers as abovementioned. Those readers who may wish to consult the manuscript will now be able to do it with great convenience by means of this marginal paging.

In general the MS. is fairly written, and perfectly legible; a few places, however, are quite illegible; and, where this is the case, there is of necessity an hiatus in the printed copy; of which the reader is apprized by a series of periods placed in this manner, . . . . Where a word was not wholly illegible, but the reading doubtful, a note of interrogation is placed immediately after it, in brackets, thus [?]. Many passages, which at first defied the keenest eye-sight, were subsequently restored by the application of the tincture of nut-galls. The discovery of numerous obscure readings is due to the critical sagacity of my friend, Mr. Charles Folsom, A. A. S., whose indefatigable care also detected many errors, which would otherwise have remained unobserved.

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*The Alphabet used by Rasles.*

The Author's *Alphabet* requires a brief explanation. Being a Frenchman, he naturally adopted the French alphabet; and, as a general rule, the reader will, therefore, pronounce the Abnaki words as a Frenchman would. There are, however, some sounds in the language, which are not known in the French; and for these he added certain characters and diacritical marks to the common French Alphabet. It is not quite certain, that we can at this day determine what were the precise sounds intended by those additional characters; but by the aid of the living dialects of the Delaware or Lenápe family, we can make approximations which will be sufficient for the purposes of general philology.

The following is an accurate list, I believe, of all the different letters and characters used in this Dictionary; with an explanation of their several powers, as well as I am able to determine them:

*a, b, d, e, g, h, θ, i, j, k, m, n, ñ, o, p, r, s, ss, t, s, χ, z; âi, ãi.*

To these should be added the mark of aspiration ( <sup>ˆ</sup> ) which frequently occurs in the middle of words.

It will be immediately perceived, that in conformity with the general character of the North American languages, some of our *labials* are wanting in this alphabet. The letters *f* and *v* do not occur; which is also the case in the kindred dialects of the Delaware family. The liquid *l* is also wanting, *r* being used instead of it; which is just the reverse of some other dialects of the Delaware. This interchange of *l* and *r* is a leading dialectical distinction among many of these languages. The remaining letters of our alphabet, *e*, *g*, *x*, and *y*, were probably omitted intentionally; their places being supplied by *s*, *k*, *ks*, and *i*.

The powers of the common Roman letters in this alphabet are, as above observed, the same with those in the French language. In regard to the others the following particulars are to be noticed.

The Greek  $\theta$  and  $\chi$  are doubtless to be sounded as in the Greek language. In some instances the  $\chi$  is substituted for *kh*; as, for example, under the word BALANCE, the Indian word was first written *tebaübékligan* (with *kh*), but this was afterwards erased with a pen, and *tebaübé<sup>ˆ</sup>χigan*, with both the aspirate and the  $\chi$ , substituted for *kh*.

The letter *ñ*, with a diæresis, is employed to express the usual simple sound of *n*, in those cases where, if not thus distinguished, it would have the nasal sound of the French language, as in *an*, *en*, &c. The double letters *ss* are also employed for the same purpose; as, in the word *pinss*, under ÉPINGLE.

The Greek character *s*, as above observed, is called by Rasles a *guttural*; but by this term he only means, that the lips are not used in uttering it; in other words, he calls it guttural merely in contradistinction to *labial*, and not to denote that strong, rough sound which in popular language is called guttural and is found in the Spanish and Oriental languages. On comparing those words in which it occurs, with the corresponding ones of the kindred dialects, the Massachusetts and the Delaware, there can be no doubt that it represents the same elementary sound which, in the Massachusetts dialect, Eliot denoted by *OO* and *W*, and in the Delaware, Mr. Heckewelder denoted by *W*; and of which, he observes, that "before a vowel it sounds the same as in English; before a consonant it represents a *whistled* sound of which I cannot well give you an idea on paper."\* The aspirate (<sup>ˆ</sup>) was probably used as in Greek. The circumflexed diphthongs *âi* and *ôï* seem to be used as the French *ai* and *oui*. In one instance I have observed it to be used for the *e* in *messe*, which is written in Abnaki, *mâïss*. I observe an

\* Correspondence between Mr. Heckewelder and Mr. Du Ponceau, in the Transact. Histor. and Lit. Committee, &c. p. 397.



irregularity in the use of the kindred letters *g* and *k*; and in many words, which he first wrote with *g*, he afterwards substituted the *k*. In the same manner the author, in revising his Indian words, frequently changes *b* into *p*, and the reverse.

In this connexion a remark may be made upon some of the regular dialectical distinctions observable in languages of the Lenápe stock.

It was remarked by Roger Williams, as early as the year 1643, for example, that the word *anùm*, a dog, had the following forms in four different dialects:

“ <i>Anùm</i> ,	the	<i>Cowwaset</i>	}	dialect.”
<i>Ayim</i> ,	the	<i>Nariganset</i>		
<i>Arùm</i> ,	the	<i>Qunniapiuck</i>		
<i>Alùm</i> ,	the	<i>Necpmuck</i>		

To which he adds a remark, that is deserving of notice, as refuting an erroneous opinion of that day, which has been preserved by most writers on this subject: “So that,” (says Williams) “although some pronounce not L nor R, yet it is *the most proper* dialect of other places; contrary to many reports.”\* A similar observation is made by Eliot: “We in *Massachusetts* pronounce the N; the *Nipmuck* Indians pronounce L; and the *Northern* Indians pronounce R.”† Conformably with this remark, it will be perceived that in the present Dictionary, which gives us a dialect of the *Northern* Indians, the R is constantly used, while there is no word in which L occurs.

An attention to these established differences is indispensable to a just comparison of the various dialects, and the useful application of such comparisons to the purposes of philology; and it will enable us to detect affinities, where at first view there may be little or no appearance of any resemblance. “We should be very careful,” as Mr. Du Ponceau justly remarks, “how we ascribe a want of analogy to Indian derivations; although it may not be always observable at first sight, it will be discovered by those who investigate the subject with the necessary attention.”‡ An example or two will illustrate these remarks. The letter *R*, as we have seen, is a characteristic of the Abnaki dialect; as, for instance, in the word *aremss*, a dog, in the Delaware, L is used, and they would accordingly say, *n'dallemous*, my dog; the *n* being the inseparable personal pronoun, here signifying *my*. In Abnaki, *mirars* is the *tongue*; and in the Massachusetts dialect, — which takes the N instead of R, — the same word becomes *meenán*, as written according to our English orthography, or *minañ*, as it would be according to the orthography of

\* William's Key, ch. xvii, p. 106, London ed. 1643.

† Eliot's Ind. Gram. p. 2.

‡ Notes to Zeisberger's Delaware Grammar, p. 83.

Rasles. Again, in Abnaki, the word *nsrighi*, — in which the letter *n* is the first personal pronoun, — signifies *I am beautiful, fine, good, &c.*; and, if according to the general rule, we substitute *l* for *r*, and *k* for *gh*, (at the same time dropping the pronoun) we have the Delaware radical *wulik*, of the same form and import with the Abnaki word. In the same manner, we have the abstract term *beauty, goodness, &c.* in Abnaki, *srighisaŋgan*; and in Delaware, with the dialectical differences, *wulissowagan*. The numeral *five*, which in Abnaki is *barencsk*, in the Delaware is *palenach*; between which two words we may trace an affinity in the same manner, though at first view their resemblance is not obvious. So the numeral *ten*, in Abnaki is *mtúra*, and in Delaware, with the *l*, becomes *tellen*. This interchange of *l* and *r*, it may be added, is also common in various languages of Europe; of which the Spanish and Portuguese languages afford numerous examples. The Spanish words *obligado, flaco*, etc., in Portuguese become *obrigado, fraco*, etc.

The advantageous use of the present Dictionary and other philological materials of the kind, will demand the more labor and attention, in consequence of their having been collected by individuals of different nations, — principally German, French, and American writers; each of whom naturally adopted his own alphabet as far as it could be used. Without a constant attention to these national differences of orthography, many words, which are in fact the same in different dialects of the same family, will appear so totally unlike, that they may be taken to belong to languages wholly different from each other. No general reader, for instance, would take the Massachusetts Indian word for *meat* or *flesh*, which is *weyaus*, as Eliot writes it, to be the same with the Abnaki word *ouios*; yet they are intended to represent the same Indian word.

To those persons, who have not given particular attention to the structure and peculiarities of the American Languages, it may not be unacceptable to be informed of some of the results obtained from the investigations already made, and to see how far those results are confirmed by means of the present Dictionary. The remarks on this subject will be very brief.

1. *The Animate and Inanimate Forms of Nouns and Verbs.* It is now familiar to every philologist, that in the North American languages nouns are not classed according to genders, or sexes, but under the two generic divisions of *animate* and *inanimate* objects; and their plurals are formed according to that classification. In the ancient Massachusetts language, for example, the plural of the *animate*

nouns was formed in *og* or *ok*, and of *inanimate* nouns in *ash*; as *wosketomp*, a man, *wosketompaog*, men; in which plural it is to be observed, that the *a* is only thrown in for the sake of euphony; \* for, strange as we may think it in savages, the Indians, as Eliot says, observed “a curious care of euphonic.” † He afterwards adds, particularly; — “there be also *suppletive syllables* of no signification, but for *ornament* of the word; as *tit, tin, tinne*; and these, in way of elegance, receive the affix which belongeth to the noun or verb following; as *nuttit, kuttit, wuttit*,” &c., ‡ which we should now write *w'tit, k'tit, w'tit*, &c. In the same dialect the *inanimate* nouns formed their plural in *ash*; as *hussun*, a stone; plural *hussunash*, stones. So in the Delaware, the *animate* plurals are generally formed by *ak*, and the *inanimate* by *all* or *wall*; as, *lenno-wak*, men, *achsiu-all*, stones. In the Abnaki also, the plural *animate* ended in *ak*, but the plural *inanimate*, in *ar*, which is in analogy with the Delaware *all*, by the usual dialectical interchange of *l* and *r*.

2. According to this principle of classification, the *verbs*, as well as the nouns, have two forms, called conjugations; the one applied to animated objects, and the other, to inanimate ones. Examples of this may be seen in the present Dictionary under *AIMER* and various other verbs.

3. *The verbs TO HAVE and TO BE.* It is a general characteristic of the American languages, that they have neither of these verbs in the abstract, European, sense. Their verb *to have* always conveys the idea of possession; and *to be*, that of a particular situation of body or mind. § Father Rasles, it is true, has given the French verbs *avoir* and *être*, and accompanied them with an interpretation in the Abnaki language. But, upon examining the phrases annexed to them, and in other parts of the work, we shall find that they had not the abstract signification of the European verbs.

4. *Specific or concrete Character of the Indian Verbs.* It is observed by Mr. Heckewelder, that the Indians are more in the habit of using particular or specific terms than generic ones; and, hence, as he remarks, when he first began to ask them the names of objects, he found himself much embarrassed by their answers. “I would point to a tree,” says he, “and ask the Indians how they called it; they would answer, an *oak*, an *ash*, a *maple*, as the case might be, so that I found in my vocabulary more than a dozen words for the word *tree*. It was a good while before I found out, that when you asked of an Indian the name of any thing, he would always give you the specific, and never the generic denomination.” ||

\* Eliot's Indian Grammar, p. 9.

† *Ib.* p. 6.

‡ *Ib.* p. 23.

§ Zeisberger's Delaware Grammar, p. 49.

|| Correspondence with Mr. Du Ponceau, p. 437.



The Indian *verbs*, accordingly, partake of this character, and have specific forms applicable to the particular thing which is the object of them. Thus, for example, the verb *to wash* (under L<sup>A</sup>V<sup>E</sup>R in this Dictionary) appears in various forms according to the object and the person in question ; as,

*Nekesígsa*, I wash my face.

*Nekesigšénan*, I wash his face.

*Nekesírtsa*, I wash my hands.

*Nekesírtsénan*, I wash his hands, etc.

Similar examples may be found in various parts of the present work.

5. *The general and particular, or limited, Plural.* The Indian languages generally, if not always, have two forms of the *first person plural*; the one being unlimited, like our own plural, and the other limited, or restricted to a particular number of persons. In the Delaware family, the *general* plural is denoted by the pronominal prefix *n'*, which imports, *we in particular, our family, our nation, &c.* But, when no such distinction is intended, the first person plural is denoted by *k'*. This division of the plural number was not understood till it was explained by Mr. Heckewelder in his Correspondence with Mr. Du Ponceau.\* The latter also traced it out in the Massachusetts dialect, though it had not been mentioned by Eliot; † and we have now, I think, proof of its being found in the Abnaki; for which the reader is referred to the word CORPS, and some other articles in the present Dictionary.

Many other observations might be made upon the philological results to be obtained from an attentive examination of the present Dictionary ; but the occasion does not admit of them. I will only add, that besides philological facts, we may derive from it no inconsiderable information of the history, habits of life, and modes of thinking, of the Indian inhabitants of this Continent. We see, for example, proof of their having had their first intercourse with our English ancestors, in the fact, that nearly all the common foreign words adopted by them are English, and not French ; as, *kass*, cows, under ANIMAUX ; *mañni*, money, under ARGENT ; *igriskarnar*, English-corn, under BLÉ ; *kabits*, cabbage, under CHOUX ; *pikess*, pigs, under COCUON, etc. ; while their terms relating to religious worship are obviously taken from the language of their *French* Catholic teachers, whose mode of worship has prevailed among them. Thus the present work, when examined with attention, will prove to be of no small value in the history of this remarkable people, as well as in the study of their languages.

\* Correspondence, p. 429. † Mr. Du Ponceau's Notes to Eliot's Indian Grammar, p. xix.

# STATUTES

OF THE

AMERICAN ACADEMY OF ARTS AND SCIENCES.

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## CHAP. I.

### *Of Officers.*

1. There shall be a President, a Vice-President, a Corresponding Secretary, a Recording Secretary, a Treasurer, a Vice-Treasurer, and a Librarian or Keeper of the Library, which officers shall be annually elected by written votes, the day next preceding the last Wednesday in May.

2. If either of the Secretaries, the Treasurer, or the Keeper of the Library die, resign, or be removed during the year, the vacant office or offices shall, at the next meeting of the Academy, be filled by written votes for the remainder of the year.

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## CHAP. II.

### *Of the President.*

1. It shall be the duty of the President, and, in his absence, of the Vice-President or next officer in order, as above

enumerated, to preside at the meetings of the Academy ; to summon extraordinary meetings of the Academy, upon any urgent occasion ; and to execute or see to the execution of the statutes of the Academy.

2. The President, or in his absence the next officer, in order as above enumerated, is empowered to draw upon the Treasurer for such sums of money as the Academy shall direct.

3. Any deed or writing, to which the common seal is to be affixed, shall be signed and sealed by the President, when there-to authorized by the Academy.

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### CHAP. III.

#### *Of the Secretaries.*

1. The Corresponding Secretary shall keep the letter-book, shall record all letters addressed to the Academy, and deliver the originals to be filed to the Recording Secretary ; and at each meeting, the Corresponding Secretary shall read such letters, as have been addressed to the Academy since the last meeting.

2. The Recording Secretary shall have charge of the charter and statute-book, journals, and all literary papers belonging to the Academy ; and all letters, after they have been recorded, shall be kept by him on file. He shall keep a record of the proceedings of the Academy at its meetings ; and after each meeting is



duly opened by the presiding officer, the proceedings of the last meeting shall be read, by the Recording Secretary.

3. Until the further order of the Academy, it shall be the duty of the Corresponding Secretary to transmit to every Fellow thereof residing in foreign countries, one copy of each volume of Memoirs hereafter published, as soon as convenient.

4. Any Fellow of the Academy residing without the limits of Massachusetts shall be entitled to receive one copy of each volume hereafter published, by applying personally, or by written order, for the same within two years after such publication.

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#### CHAP. IV.

##### *Of the Treasurer and Vice-Treasurer.*

1. The Treasurer and Vice-Treasurer shall give such security, as the Academy may require, for the trust reposed in them severally.

2. The Treasurer shall receive officially all moneys or sums of money, due or payable, and all bequests or donations made, to the Academy ; and, by order of the President or presiding officer, shall pay such sums as the Academy shall direct ; and shall keep an account of all receipts and expenditures.

3. All moneys or sums of money, which there shall not be present occasion to expend, shall be put out at interest on such securities, or otherwise disposed of, as the Academy shall direct.

4. The Treasurer shall keep a separate account of the income and appropriation of the Rumford fund, and report the same annually.

5. The Treasurer's accounts shall be annually audited by a committee appointed by the Academy for the purpose.

6. In case of the death, resignation, or removal of the Treasurer, the Vice-Treasurer shall discharge his duties.

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## CHAP. V.

### *Library and Cabinet.*

1. It shall be the duty of the Librarian, or the Keeper of the Library, to take charge of the books, to keep a correct-catalogue of the same, and to deliver books to the Fellows of the Academy.

2. Any Fellow of the Academy may have at any one time three volumes from the Library.

3. Books may be kept out three calendar months, and no longer; and every person shall be subjected to a fine of twenty cents a week, for every volume retained beyond that time.

4. Every person, who takes a book from the Library, shall give a receipt for the same to the Librarian or his Assistant.

5. Every book shall be returned in good order, regard being had to the necessary wear of the book with good usage. And if any book shall be lost or injured, the person, to whom it stands charged, shall replace it by a new volume or set, if it belong to a set, or pay the current price of the volume or set, to the Librarian; and thereupon, the remainder of the set, if the volume belonged to a set, shall be delivered to the person so paying for the same.

6. All books shall be returned to the Library for examination, at least one week before the annual meeting. And every person then having one or more books and neglecting to return the same, as herein required, shall forfeit and pay a fine of one dollar.

7. At the meeting of the Academy in May, a committee shall be chosen to examine the Library, and make report of its condition at the next annual meeting.

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## CHAP. VI.

### *Of Meetings.*

1. There shall be annually four stated meetings of the Academy, viz. on the last Wednesday in January, the day next



preceding the last Wednesday in May, the second Wednesday in August, and the second Wednesday in November, to be held at the Hall of the Academy in Boston.

2. The President shall have power to call extraordinary meetings of the Academy, at such time and place as he shall see fit.

3. Seven Fellows shall constitute a quorum for the transaction of business of every description, which may come before the Academy.

4. The meetings of the Academy shall be advertised in the public papers, by the Recording Secretary.

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## CHAP. VII.

### *Of Fellows.*

1. No person shall be elected a Fellow of the Academy, unless proposed and recommended by one or more Fellows, who shall subscribe their names to the recommendation upon the nomination-list. The name shall stand on the nomination-list at least during the interval between two statute meetings, previous to the election. Three fourths of the votes given shall be necessary to constitute a majority for the admission of a member; and when three fourths shall amount to less than seven, then seven votes shall be necessary. Should any person, on balloting,

not be admitted, his name shall be removed from the nomination-list; but may at any future period be placed upon it again for a new nomination.

2. Each Fellow residing in the state of Massachusetts shall pay annually two dollars to the Academy.

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## CHAP. VIII.

### *On Literary Performances.*

1. The Academy will never express its judgment on literary performances or memoirs submitted to it.

2. The President, Vice-President, and Secretaries, with such others as the Academy may think fit to join, shall constitute a Committee of Publications, to which Committee all memoirs submitted to the Academy shall be referred.

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### RUMFORD PREMIUM.

In conformity with the last Will of Benjamin Count Rumford, granting a certain fund to the American Academy of Arts and Sciences, and of a decree of the Supreme Judicial Court for carrying into effect the general charitable intent and purpose of Count Rumford, as expressed in his said Will, the Academy is empowered to make from the income of said fund, as it now exists, at any annual meeting, award of a gold and silver medal,

being together of the intrinsic value of three hundred dollars, as a premium, to the author of any important discovery or useful improvement on light or on heat, which shall have been made and published by printing, or in any way made known to the public, in any part of the Continent of America, or any of the American Islands; preference being always given to such discoveries as shall, in the opinion of the Academy, tend most to promote the good of mankind; and to add to such medals, as a further premium for such discovery and improvement, if the Academy see fit so to do, a sum of money not exceeding three hundred dollars.

For this purpose a standing Committee is appointed annually by the Academy in May, to consider and report on all applications for the Rumford Premium.



FELLOWS  
OF  
THE AMERICAN ACADEMY  
OF  
ARTS AND SCIENCES

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**Members resident in Massachusetts.**

☞ A star attached to the name of a Member, indicates that he is deceased.  
When no name of a place is annexed to the name of a member, his residence is understood to be in Boston.

A.

- \*John Adams, LL. D., *Quincy.*
- John Quincy Adams, LL. D., *Quincy.*
- \*Samuel Adams, LL. D.
- \*Thomas Boylston Adams, A. M., *Quincy.*
- Washington Allston, *Cambridge.*
- Rev. John Allyn, D. D., *Duxbury.*
- \*Fisher Ames, LL. D., *Dedham.*
- \*Nathaniel Appleton, A. M.
- \*Nathaniel Walker Appleton, A. M.
- \*Rev. Noah Atwater, A. M., *Westfield.*

B.

- \*John Bacon, A. M., *Stockbridge.*
- \*Loammi Baldwin, A. M., *Woburn.*
- Loammi Baldwin, A. M., *Charlestown.*
- Rev. Aaron Bancroft, D. D., *Worcester.*
- \*Rev. Thomas Barnard, D. D., *Salem.*
- \*Josiah Bartlett, M. D., *Charlestown.*
- \*William Baylies, M. D., *Dighton.*

- \*Rev. Jeremy Belknap, D. D.
- Jacob Bigelow, M. D., *Prof. Mat. Med.*
- \*Timothy Bigelow, A. M., *Medford.*
- George Blake, A. M.
- Nathaniel Bowditch, LL. D., F. R. S.
- \*James Bowdoin LL. D.
- \*James Bowdoin, A. M.
- \*James Bowdoin, A. M.
- \*Theophilus Bradbury, A. M.
- Gamaliel Bradford, M. D.
- \*Thomas Brattle, A. M., *Cambridge.*
- Rev. John Brazer, A. M., *Salem.*
- Charles Bulfinch, A. M.

C.

- \*George Cabot, A. M.
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## ERRATUM.

Page 212. Mean for the Winter of 1825, instead of 40,41, read 30,41

CAMBRIDGE:

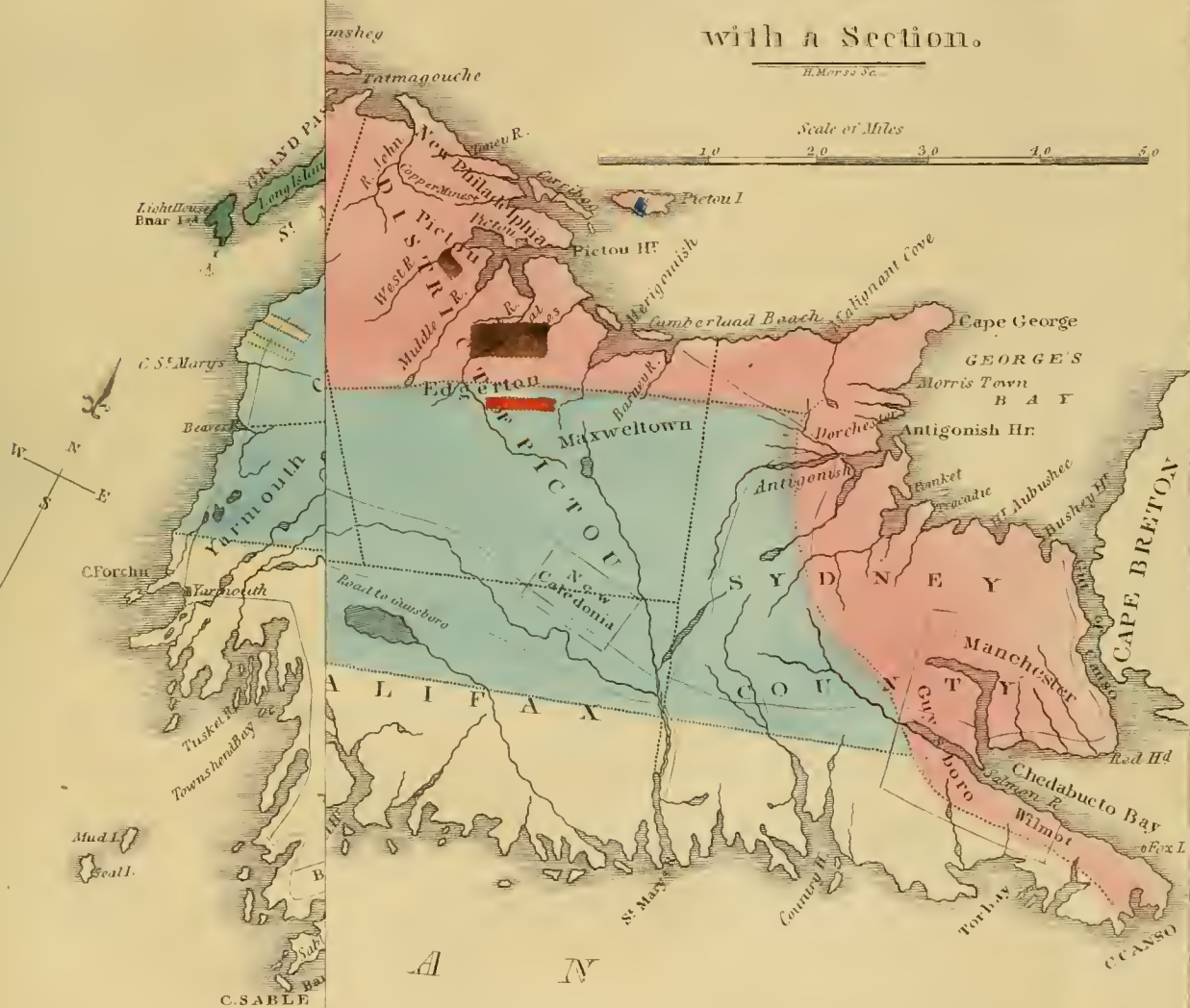
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A NEW  
**GEOLOGICAL MAP**  
 OF THE PENINSULA OF  
*Novæ Scotia*

with a Section.

H. Morris Sc.

Scale of Miles



Redd Grey Sandstone alternating with blue & red shales containing impressions of Vegetables, belemnites, &c.  
 Porphyry dykes  
 Beds of coal  
 Amalgamated  
 Alluvium  
 Trap hill

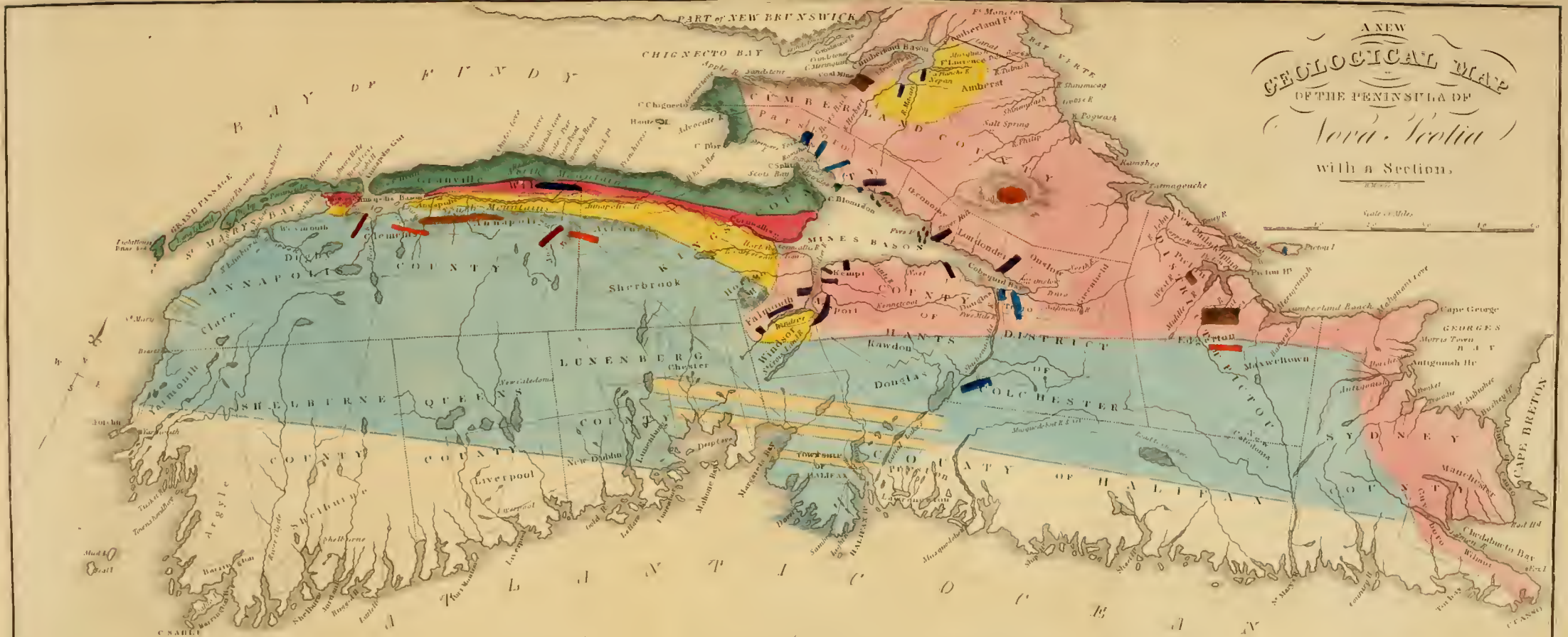


Halifax  
 Halifax Pt  
 60 Miles



A NEW  
**GEOLOGICAL MAP**  
 OF THE PENINSULA OF  
*Nova Scotia*  
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Scale of Miles



*Index of geological colors to the Map & Section.*

- |                           |                          |                           |                         |                           |                                |                              |                             |                          |                                 |                               |
|---------------------------|--------------------------|---------------------------|-------------------------|---------------------------|--------------------------------|------------------------------|-----------------------------|--------------------------|---------------------------------|-------------------------------|
|                           |                          |                           |                         |                           |                                |                              |                             |                          |                                 |                               |
| Red of Iron ore - stratum | Green of Devonian strata | Red of Iron ore - stratum | Blue of Devonian strata | Yellow of Devonian strata | Light green of Devonian strata | Dark blue of Devonian strata | Dark red of Devonian strata | Brown of Devonian strata | Light yellow of Devonian strata | Dark green of Devonian strata |

*Section crossing the Peninsula from Halifax to the Bay of Fundy in direction of the line on the Map*







VIEW OF THE HARBOUR OF THE CITY OF THE SOUTH SEAS



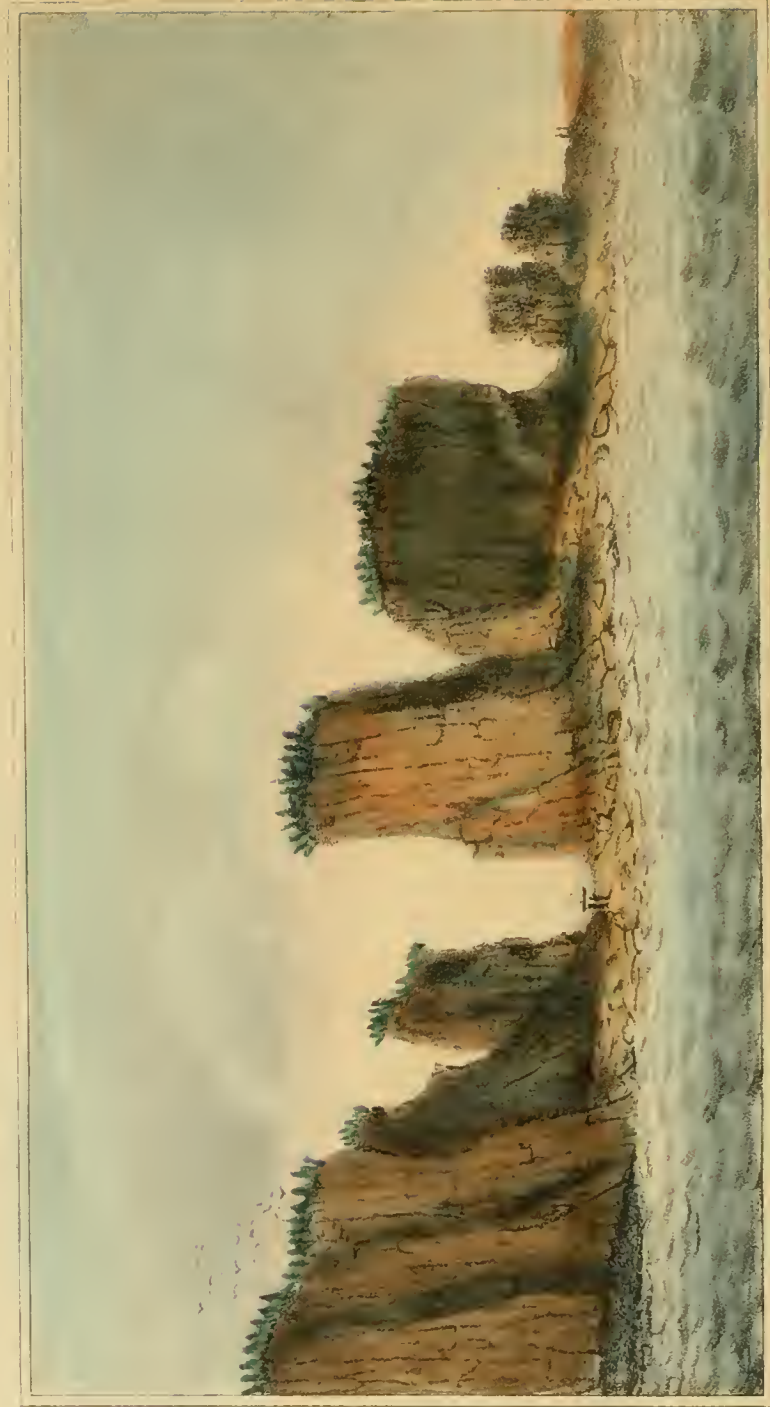


VIEW FROM THE ENTRANCE OF THE BASIN OF MINES,  
*From the Atlantic Ocean.*









*From a Sketch by C. L. Jackson.*

VIEW OF THE DETACHED MASSES OF TRAP ROCK, AT THE SOUTH WEST EXTREMITY OF PARTRIDGE ISLAND.



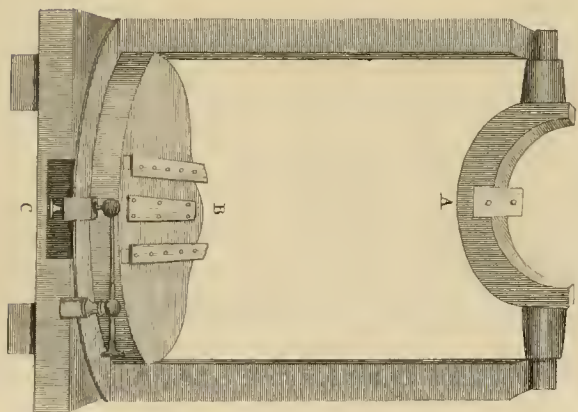
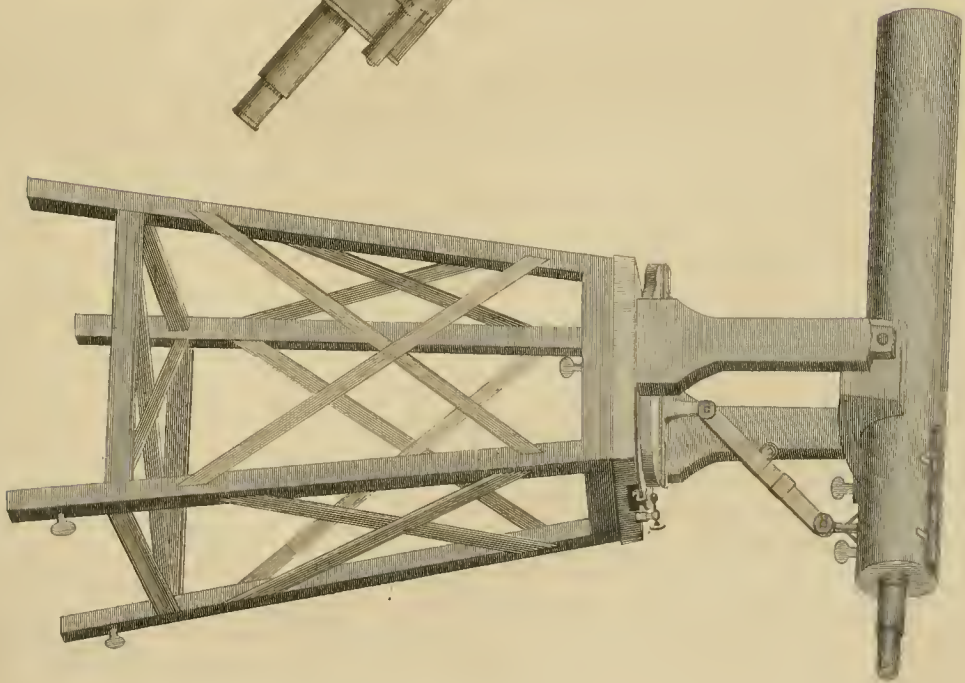
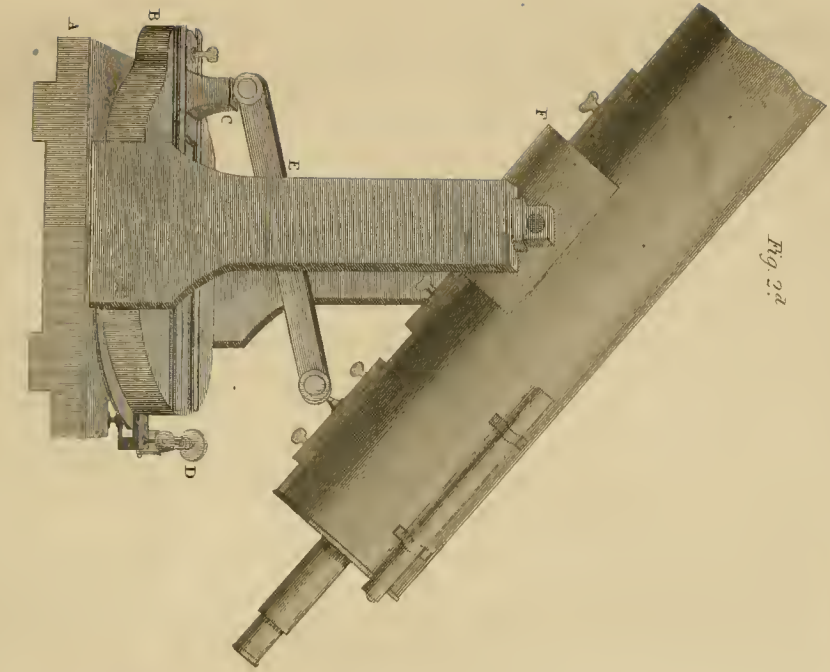
*From a Sketch by C. T. Jackson*

VIEW OF THE ISLANDS ON THE NORTHERN SHORE OF THE BASIN OF MINES.

*Pendleton & Lithgow & Co.*









SPLICING MACHINE

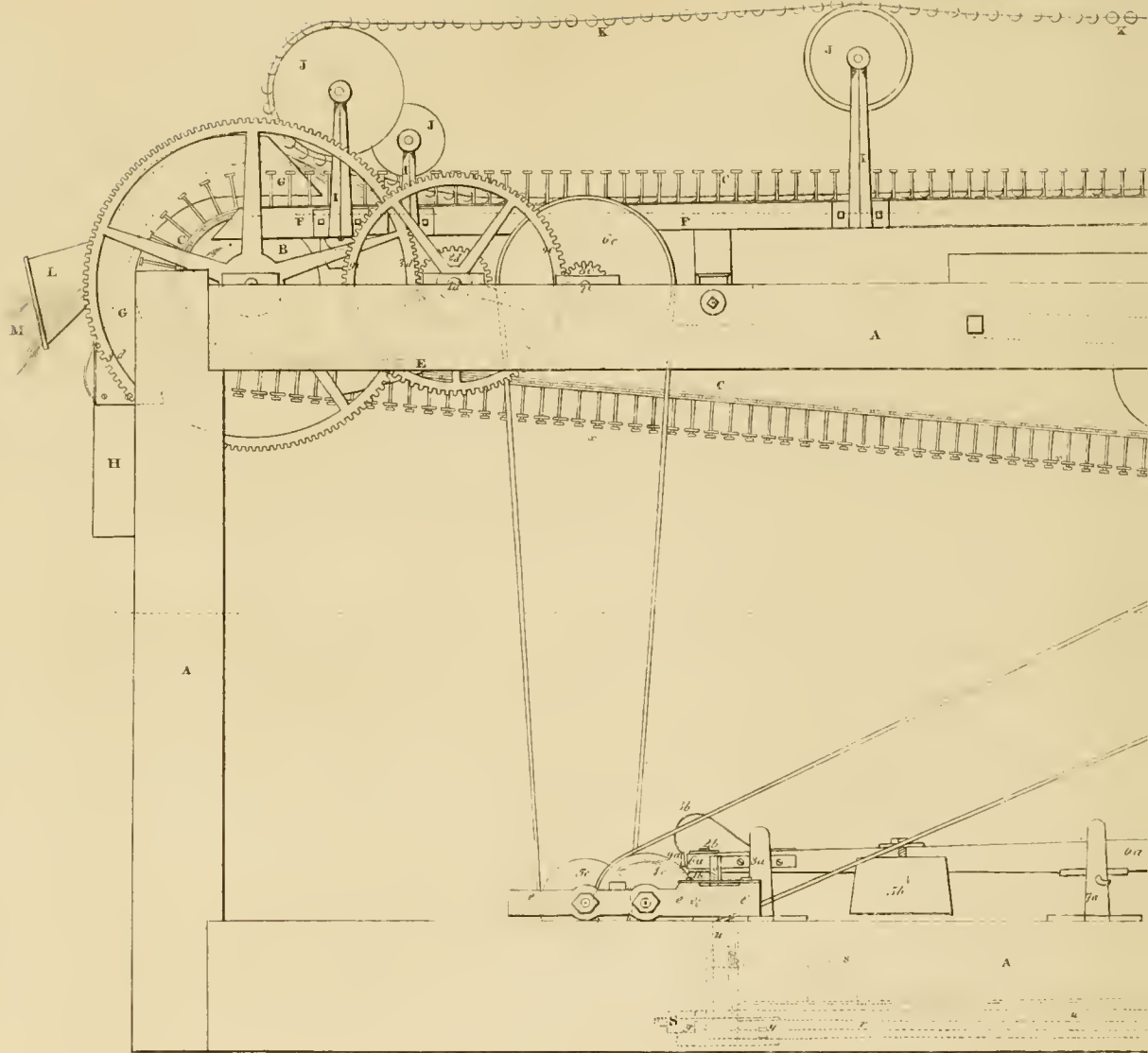
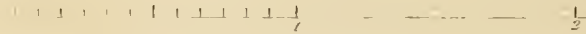


Fig 1

Scale of Feet





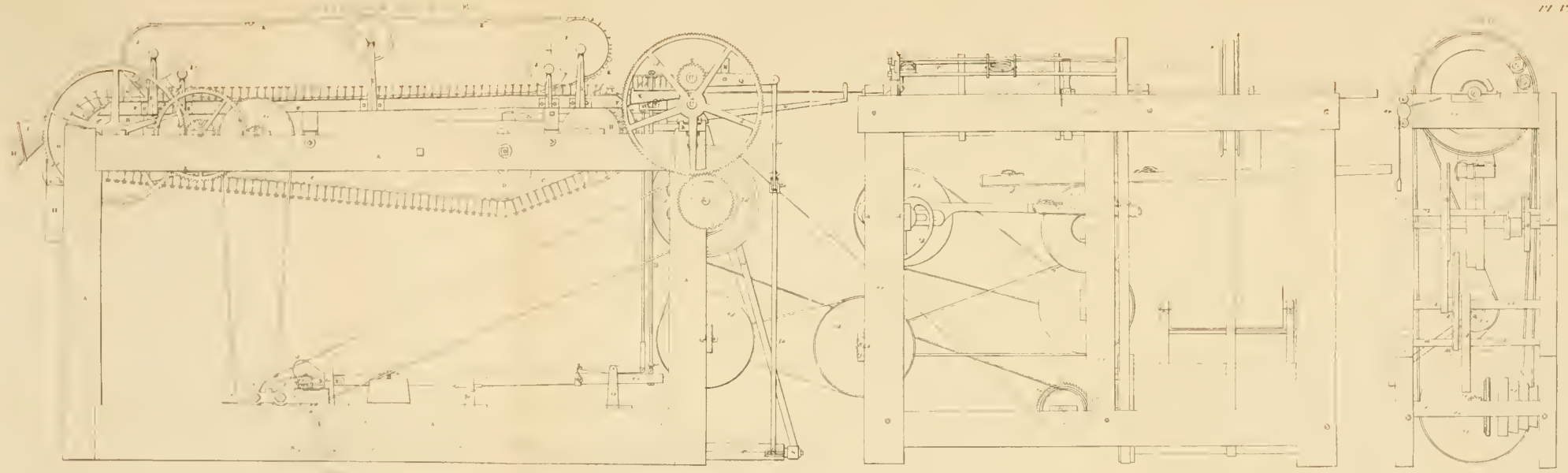
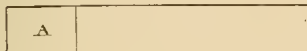
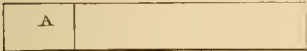
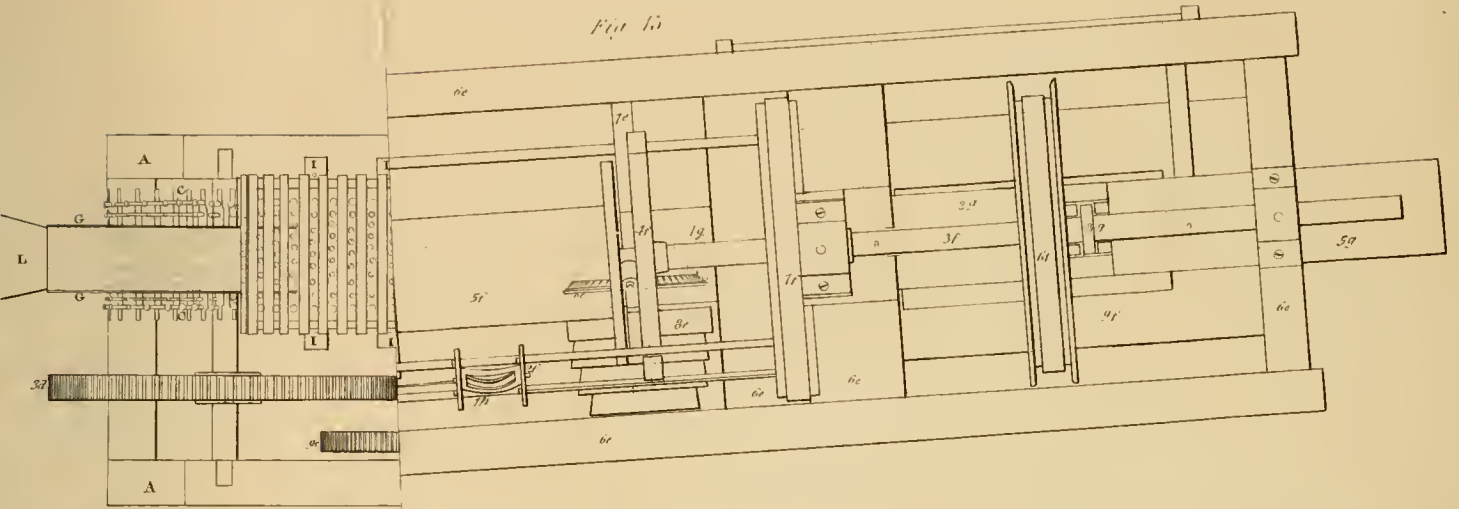
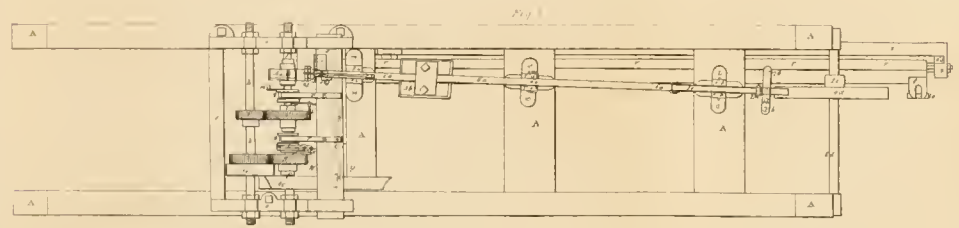
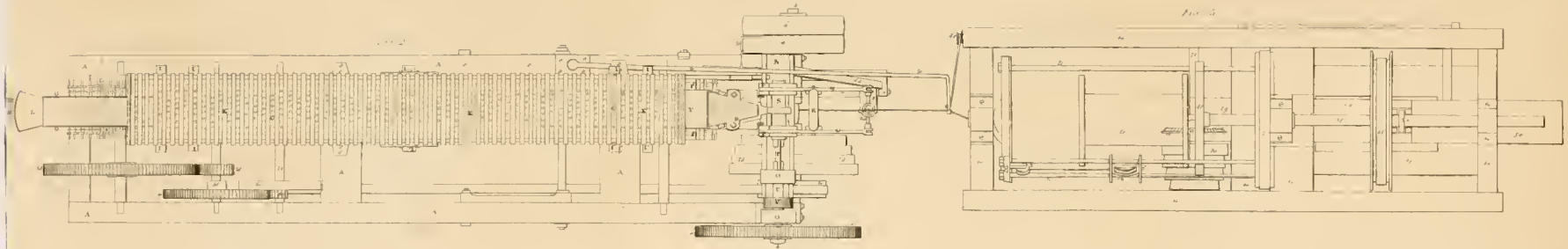


Fig. 13



SPINNING MACHINE.





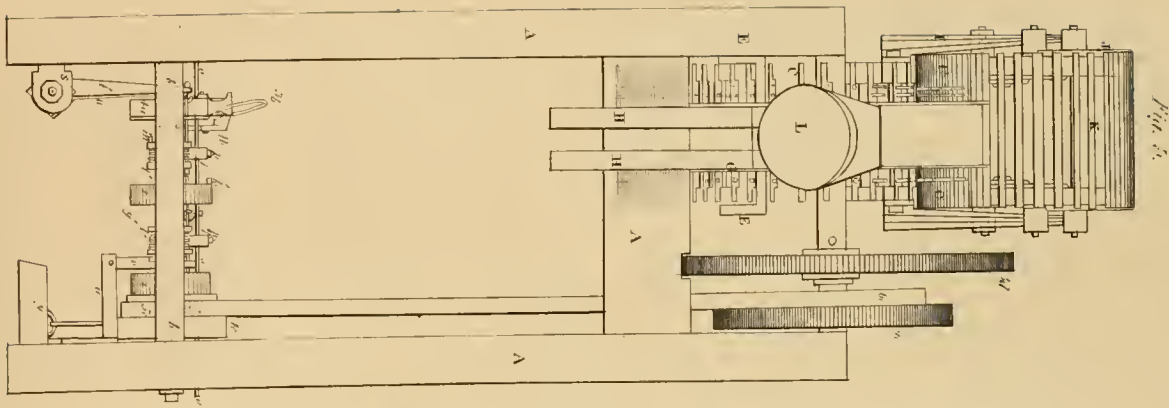


Fig. 1.

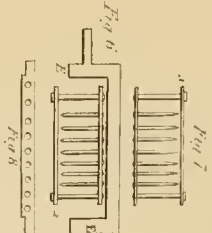


Fig. 6.



Fig. 12.

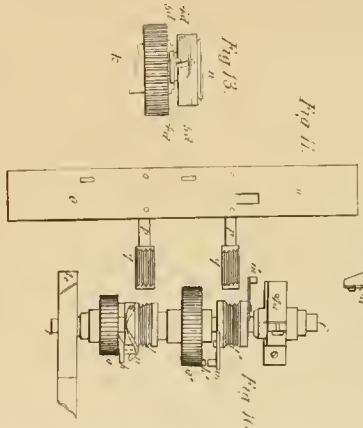


Fig. 10.

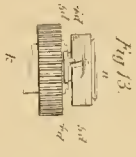


Fig. 13.

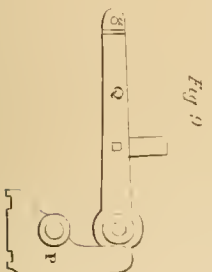


Fig. 9.

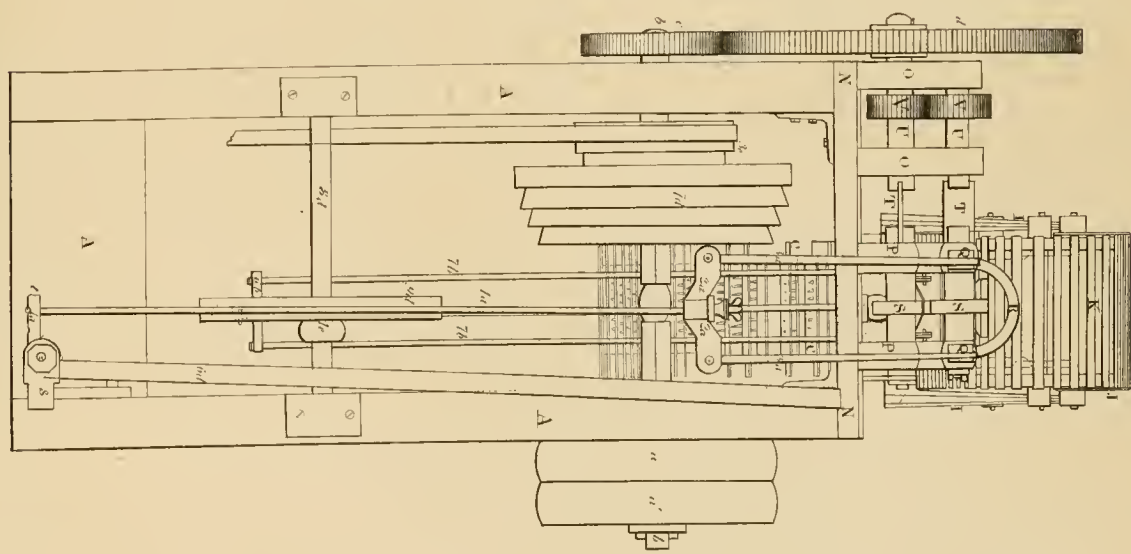


Fig. 4.







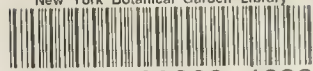








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