IMAGE EVALUATION TEST TARGET (MT-3)


Photographic Sciences
Corporation

23 WEST MAN STREPT WEESTIR,N.Y. 14580 (716) 372-4303

## CIHM/ICMH Microfiche Series.

## CIHM/ICMH Collection de microfiches.

The Institute has attempted to obtain the best original copy available for' filming. Features of this copy which may be bibliographically unique. which mey alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.


Coloured covers/
Couverture de couleui
Covers damaged/
Couverture endommagée
Covers restored and/or laminated/
Couverture restaurbe et/ou pellicule
Cover title missing/
Le titre de couverture manque

Coloured maps/
Cartes géographiques en couleurColoured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)
Coloured plates and/or illustrations/
Planches et/ou lliustrations on couleur
Bound with other material/
Relio avec d'autres documents
Tight binding may cause shadows or distortion along interior margin/
La reliure serrée peut causer de l'ombre ou de la distortion le long de la marge intériaure

Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming'
II se peut que cartaines pages blanches ajoutees lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

Additional comments:/
Commentaires supplémentaires:

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procıarer. Les détails de cet exemplaire qui sont peut-etre uniques du point de vue bibliograpisique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.


Coloured pages/
Pages de couleurPages damaged/
Pages endommagdes


Pages restored and/or laminated/
Pages restaurées et/ou pelliculéesPages discoloured, stained or foxed/
Pages décolorées, tachetées ou piqueesPages detached/
Pages détachées


Showthrough/
TransparenceQuality of print varies/
Qualité ind́gale de l'impressionIncludes supplementary material/
Comprend du matériel supplémeniaireOnly edition available/
Seule édition disponible

Pages wholly or partially obscured by errata slips, tissues, etc., have been refilmed to ensure the best possible image/ Les pages totalement ou dartiellement obscurcies par un feuillet d'errata, une pelure, etc., ont été filmées à nouveau de façon á obtenir la meillzure image possible.

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.


The copy filmed here has been reproduced thanks to the genercsity of:

Library of the Public Archivas of Canada

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

Original coples in printed paper covers are filmed ueginning with the front cover and ending on the last page with a printed or illustrated impression, or the back cover when appropriate. All other original copies are filmed heginning on the first page with a printed or illustrated impression, and ending on the last page with a printed or iliustrated impression.

The last recorded frame on each microfiche shall contain the symbol $\longrightarrow$ (meaning "CONTINUED"), or the symbol $\nabla$ (moaning "END"). whichever applies.

Maps, plates, charts, etc., may be filmed at different reduction ratios. Those too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, loft to right and top to bcttom, as many frames es required. The following dlagrams lilustrate the method:

L'oxemplaire films fut reproduit grâce â la gênérosité de:

La bibliothèque des Archives publiques du Canada

Les images suivantes ont 6 tot reprodultes avec le plus grand soin, compte tenu de la condition ot de le nettaté de l'exemplaire filmé, et en conformité suec les conditions du contrat de filmage.

Les exempiaires originaux dont la couverture en papier eat imprimbe sont flimes en commencant par lo premier plat ot en terminant soit par la dernidre page qui comporte une empreinte d'impression ou d'illustration, soit par le second plat, selon le ces. Tous les autres exempleires originaux sont filmés en commençant par la premiare page qui comporte une empreinte d'impression ou d'illustration et en terminant par la derniere page qui comporte cine telle emprointe.

Un des symboles suivants apparaitra sur la derniére image de chaque microfiche, selon le cas: le symbole $\rightarrow$ signifie "A SUIVRE", to symbole $\nabla$ signifie "FIN".

Les cartas, planches, tableaux, etc., peuvent êtra filmés à des teux de réduction différents. Lorsque le document est trop grand pour ôtio raproduit on un seul cliche, il est filmé a partir de l'angle supérieur gauche, de gauche à droite, et de haut en bas, en prenant le nombre d'Images nócessaire. Les diegrammes suivants illustrent la méthode.


## METEOROLOGICAL

# JOURNAL AND REPORT 

RELATIVE TO THE

## 

OF THAT PORTION OF THE

## LOWER ST. LAWRENCE

FORMING

# THE STRAIT OF BELLE-ISLE. 

SECOND EDITION.

COMPILIED BY CAPT. D. VAUGHAN.

## QUBBEC:

PRINTED BY JOSIPH DARVEAU, No. 8 MOUNTAIN HILL.






## METEOROLOGICAL

# JOURNAL AND REPORT 

RELATIVE TO THE

OUBBC: PRINTED BY JOSEPH DARVEAU, No. 8 MOUNTAIN HILL.

## PREFACE.

The establishment of direct steam communication between Canada and Great Britain greatly accelerated the improvement of the St . Lawrence navigation. Previous to 1854, the first year of the subsidising of the Montreal Ocean Steamship Company there were only eight lighthouses from the entrance of the Gulf to Quebec, while now there are sixteen, besides a large increase in the number of buoys to mark the dangerous shoals and rocks which fill the Gulf and River. Amongst the lighthouses established by the government of this Country, none was more required, and none has proved of more real value to the commercial interests of the Province, than that which forms the subject of the following pages.

Before the publication of Captain Bayfields valuable report on the Gulf and river St. Lawrence, issued in London in 1843, by order of the Lords Commissioners of the Admiralty, what was known of Belle Isle was extremely vague and unsatisfactory. Even that work threw little more light on the subject, inasmuch as the compiler acknowledges to have had no opportunity of surveying it, and states unreservedly that his report of it was derived from the statements of "Canadian and American rishermen who had chanced to visit it, and from his own observation at a distance."

Notwithstanding that our author claims to give the first really reliable information concerning this island, it is but fair to add that five years actual residence on the spot only tends to confirm the general accuracy of Captain Bayfields observations and conclusions.

In 1860 that portion of this report contained on the first ten pages was published by Captain Vaughan and met with a reception, in the scientific warld, far beyond his most sanguine expectations. The then honorary directors of the Royal Observatory of Liverpool presented our author with a valuable marine Barometer and Sykes' Thermometer, "as a mark of their appreciation of his valuable contribution to meteorological science." Capt. Orlebar, R.N., commanding the Admiralty surveying schooner "Guluare" also forwarded him various valuable charts; while the commanders of the Montreal Ocean Steamship Company's vessels, almost withont exception, have from time to time communicated in most flattering terms their indebtedness to Capt. Vaughan for the assistance they have frequently derived from his Journal and Reports, in their passage of the Strait. Gratified with such valuable testimony of the appreciation in which his humble contribution to meteorological science is held, and in order to meet the numerous applications for copies of his first edition, now entirely exhausted, he ventures to place a second before the public.

This, it is to be hoped, will be found more systematically arranged, and better adapted for meteorological conclusions, as it includes Capt. Vaughan's Journal for a period of over five years.

In addition to his observations on the currents of the Strait of Belle Isle-the unerring indications of the marine Barometer, and its consequent utility to nautical men, and the necessity for a larger use of Bellbuoys and the best and most economical mode of placing them-there are also appended two lithographic cuts shewing the usual position and dimeusious of the icebergs which are to be seen in the Straitalmost all the year round.

The author is aware that to the general reader the contents of his pamphlet may not prove very attractive, but to the student of meteorological science, and more especially to the masters of vessels sailing to the St. Lawrence he trusts they will be of some slight utility and value-if only for occasional reference.

# CAPTAIN VAUGHAN'S REPORT 

## ON THE

## CURRENTS

OF THE

# STRAIT OF BELLEISLE. 

Belleisle, May 1st, 1860.
Remarks on the winds, currents, ice and ice-bergs, f.gs, \&c., in the struit.
The eurents in the strait and coast are very irregular, more particularly to the south west of this island, and along the Newfoundland coast, and much influenced by the winds.

There is a constant current running down the middle of the strait, from Forteau Light House on the west end of this ishund, and setting out in an easterly, and east by south direction from the light house to the sea, carrying with it out of the strait, the greater portion of the icebergs. This current is much stronger from the 1st of A pril to the middle of July, than at any other season of the year; and this must be owing to the great quantity of water from the numerous rivers along the North Shore that set down into the strait. In the spring of the year, this current runs out of the strait from two and a half to three knots an hour.

When the iee commences to break up in the spring, it takes from three to four days to clear the field ice out of the strait, with the wind from the west blowing a smart top-gallant breeze. Should the wind be from the east, or from any of the points having easting in them, with a strong breeze for a day or two, the ice will be perceived stationary, but with no inward set of the current up the middle of the strait.

At the east end of the island there is a bank laying off, bearing N.E. beetween two and three miles, with from five to seven fathoms of water on it, and three small rocks-iwo of them from six to eight feet above water. I have been told lately, by fishermen from Quirpon Harbour, that there is a portion of this bank which has only two and a half fathoms of water on it. The current sets in from the N.E. very strong, and divides on the bank and the east end of this Island, and a portion of it sets across to the southward, and along the south side of the island until it meets the downward current at the S.W. point where the light-house stands. There are two ripples, one from the bank, and the other from east end of the Island, :ich are very perceptible at times, in calm weather, and more so with a fresh breeze. These rippi. a run fully three miles to the south. Vessels making for the strait coming in from sea, in thick weataer, will very often notice these ripples when they cannot see the island, and masters of vessels may not know the cause of them unless well acquainted. There are no other ripples round the island worthy of notice.

In many instances the sea breaks on this bank, and in the finest weather, with not an air of wind out of the heavens, I have seen six or seven seas which would founder a large vessel, rise up to a fearful height and break; in a few minutes after the sea beeame quite smooth for the remaining part of the day. The fishermen tell me that when the sea rises and breaks in this way, it is generally before a gale of wind from the eastward; and this statement is correct, for I have seen it and taken notice of it myself. There is deep water between this bank and the island.

The current to the north of this island, und along the north shore, sets in from the N.E., about two knots in the spring and summer months, and is much stronger in the fall. It is seldom there is any current setting out of the strait to the north of the Island, in the middle between this and the Labrador coast, unless it is when the wind is strong from the west, for a day or two, and then it is scarcely perceptible unless close in shore. The current, at high water, sets out of the strait for about four hours, and extends four miles off the land. In fine weather I can see from here the different sets of the currents by the icebergs, as the large ones generally ground, and all the smaller

The greater portion of the iecbergs pass into the strait to the north of this Island, s id nearly all pass out to sea to the southward of the $I_{i}$. and with the downward currents and westerly winds; many of them ground on the different bank and remain the greater part of the summer. The strait is mostly elear of these in the fall and during the winter months. Some winters a few may remain aground ; and those that do, increase to a considerable height with the heavy falls of snow and sleet. The latter generally follow after snow storms, and often cause icebergs to increase as much as from 40 to 50 feet in height during the winter.

The greater number of them ground between this Island and the Island of Quirpon, more than any other part of the strait, during the spring of the year. I have also noticed some of them aground on a bank, outside in the effing, from twenty te twenty-five miles from here. This bunk seems from here, to cross from Cape St. Louis about south. Several of them ground on a bauk abreast of Red Bay, about five miles from the north shove, and run down in a parallel line with the norih side of the Island, to a shoal water bank that lies of about three or four miles The fishermen inform me that there are only iive or six fathoms on some parts of the bank; it lies abont $N$. from Lark Island. I have scen the sea breaking upon this bank on two different occasions, and it was always during fine weather. One day in particular. there was not an air of wind, when six or seven seas arose, twice in the course of an hour, and broke. It is a sure sign of easterly wind when the sea is seen breaking on these banks. It is on the banks I have mentioned that most of the icebergs ground; and masters of vessels should keep a good look out when within or about these banks in thiek wheather, and more especially in the spring of the year, when they are most numerous. The large ones that ground remain most of the suminer, until they get reduced by the heat of the sun and the wash of the sea.

They continue drifting into the strait about the first week of April, and those that pass to the southward of the east end of the Island, seldom get further than abreast of the light-house where they meet the downward current which sets a great many of them aeross to the island of Quirpon, where most of them ground and remain for months. On the 26th day of May 1857, there were thirty six ieebergs in the strait, being the greatest number that was seen at any time that summer. The same year the ice was sufficiently elear for vessels to pass through on the 9th of April. In the spring of 1858, there were, on the thirtieth day of May, four hundred and ninety six iecbergs in the strait and around the Island. Several of them were as high as Cape Bald in the Island of Quirpon, and the smallest were fully 60 feet above the level of the sea! It was the 10th of June before the first vessel could pass through the strait. In 1859 there were, on the 6th day of Mey, two hundred and ninety-six icebergs visible from here, and the field ice was sufficiently elear for vessels to pass through the strait on the 12th of May. During the winters of these years, only two iee-bergs remaine in the strait. I have also remarked that should the winds be-during one third of the month of April, in the latter part-from the west, or from points having westing in them, the strait would be clear of field ice for vessels to pass through in the first week in Miy, if not before, as was the case in the spring of 1857.

It is not the iee which makes in the strait during the winter that blocks it up in the spring,-it is field or heavy packed ice driven in from Davis' Strait, by the N.E. and N. winds, with the constant eurrent setting in from there. The ice from Davis' Straits is also muelh heavier. The ice which makes in the Strait of Belleisle during the winter generally breaks up about the end of Manch, and the strait is clear for some days lefore the ice sets in from Davis' Straits. But, if during the spring, the prevailing wind is from the west, or from points having westing in them-in the month of April-it will keep the iee out from bloeking up the struit.

The fogs are more prevalent with the winds from the east, south-east, and rouna to the southwest. It is seldom there are any fogs with the wind from the $\mathbf{N}$. or from any points having northing in them, and when there is fog with those winds they do not last long. The low dry fogs which are the most prevalent in the spring and summer months, from the 1st May to the end of August, rise from the water and around the icebergs. The season that the ieebergs are most numerous, the more prevalent the low dry fogs are; and they are of longer duration than the wet fogs, which are generally with the wind from the east, southeast and south. Those winds are mostly attended with rain and fog, and extend all over the strait.

In many inslances during these low fogs, the high land on the North Shore, and the tops of icebergs ean be seen from here, as also the mastheads of vessels when the fog is quite thick on deck. When seen in this way, they will appear to be very close when they are often fully ten or twelve miles otf. Very often during the prevalence of the low fogs, I have seen the high land on the north shore, over them; it has then appeared so elose that it might be taken for a part of Island. It is precisely the same with the icebergs; they scem as if under the cliffs when fully iwelve miles distant.

During half the time of the prevalence of these low fogs it is clear along the North shore for some miles on, with a fresh breeze generally off the land, when quite thick up the middle of the strait and along the Newfoundland coast. Masters of vessels when in those fogs in the middle of the strait and to the southward of this island, with a lig't wind or becalmed during the summer
$\qquad$ 1d on
months-may think the fog extends all over the strait, but such is not the casc, for I have seen them frequently from here as I have stated. And in many instances, I have seen vessels sailing along the north shore when it was foggy, and ealm weather up the middle of the strait, and to soutward of this island.

From what I have seen of those fogs on this coast, these fonr years that I have been on the island, I have every reason to think that the fogs which are so freguent on the bauks of Newfoundland, are partly caused by the immense number of icebergs, and the great quantity of cold water that sets out from here und Davis' Straits to the eastward-meeting the warm water from the Gulf stream on the banks, must certainly in a great measure, be the cause of the fogs in that part.

I have frefuently noticed, for days, in warm weather, when the wind is light from the southeast and south; the for coming in from sea along the Newfoundland coast with the current that sets in from the S.st., up as far as Cape Norman, where it meets the downward enrrent setting out of the straits. In the same way when the wind is from the west for a day or two, I have seen the fog enming down the midle of the strait. with the current; and not extending into the $N$. shore.

The warm water coming in from the Gulf and River, and mixing with the cold water and iecbergs in the strait, is, in ny belief, one of the calles of those fogs in calm weather, that are in and around the Island, in the summer months.

It is seldom there are any fogs in the fall. I consider November the safest month in the year, for vessels to pass through the strait. There are but few gales of wind, but few icekergs, and elear weaiher. In that month, the wind is generally from the north. The heaviest gales are from the 15th September to the 15th or 20th of October; and in the summer months the heavicst wind is in or abont the longest day, from the middle of June to the 10 th July; and in all suasons gencrally, the gales are up or down the Strait. It is very seldom there are any heavy gales from the south at any season of the year.

In thick weather with the wind from the westward, vessels making for the strait, coming in from sea, should get the north shore aboard, and pass to the north of this Island; they would have the current nearly all the time in their favo, and less fogs, with the wind at night mostly off the land. I allude more particularly to sailing vessels.

This island is frequently eapped with fog in the summer months when perfectly clear on the water around it and in the straits, so that, at night, it appears like a white cloud. In a similar . way, the fog ve"y often lies around the icebergs. The fogs that cap this island rise, in warm weather, from the number of lakes on it. There are upwards of fifty of them, with deep water in all; those I have sounded; If found to be from five to fifteen fathoms of water.

I remarked, when the Aurora Borealis is seen at night, on this coast, that strong westerly wind follows for three or four days. I have also seen since I have been here, the phenomenon of the Aurora in the fall and winter months, at times extend over all the horizon, and in shape like a round tent, with the different shades of red, and with a fringe-like appearance of all colors at the bottom; and when the different shades are passing and repassing each other, I have noticed a hissing noise. It is generally during fine weather that this phenomenon is visible, and the reflection from it on the ice and icebergs is really a beautiful sight.

The first thing that makes its appearance here in the spring, immediately after the field iee leaves the struit, is the black whale. They come in great numbers, and remain around the Island for about three weeks, when they go ap the strait into the gulf, unless a few straggling ones that remain all summer. 'They generally return about the end of September, and remain hovering around the Island until the ice commences.

## REMARKS ABOUT THE THERMOMETER.

Before an easterly wind, the thermometer rises from 30 to 40 degrees in the short rpace of an hour, aid falls in as short a space. In the spring or the year, the paeked ice extends to an easterly direction twenty miles outside Carpo Island, and remains ten or twelve days. After the chanuel through the Strait is clear, vessels making for the Strait should bring the light-house to bear due west. This course will be the first chmmel clear of ice in the spring of the year.
METEOROLOGICAL REPORT, FROM 1st MAY, 1859, TO 31st MAY, 1860.


| Saturday, 14th... |  | Blowing strong with fog and rain. 10 A.M.-Wind W, with fog. 3 P.M.-Clear weather. One Schooner $\mathrm{r}^{2} 8 \mathrm{~s}^{2}$ d going N . One crystal chimney broken...... | 15156 | 29.10 | 29.16 | 29.30 | 34 | 42 | 38 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sund |  | Blowing atro breaze with clear weather. One crystal chimney brok | 156 | 29.40 | 29.49 | 29.59 | 28 | 36 | 33 |
| Monday, | Variable | With light airs and clear weather. 6 A.M.-Fog. W. blowing heavy | 142 | 29.60 | 29.60 | 29.50 | 28 | 37 | 33 |
| Tuesd | W N W | Blowing strong with clear w | . 163 | 29.54 | 29.54 | 29.54 | 30 | 43 | 32 |
| Wednesday |  | Writh strong breeze and clear weather. One crystal chimney brok | 184 | 29.54 | 29.50 | 29.49 | 35 | 43 | 35 |
| Tharsday, | W | With a fresh breeze and clear weather. 3 P.M.-Winds increased to blow strong, with fog | 8176 | 29.44 | 29.47 | 29.4 | 31 | 49 | 37 |
| Friday, 2 | W | Blowing fresh with wet fog. 3 A.M.-A shift of winds to N.E., and blowing strong with snow |  | 29.50 | 29.67 | 29.70 | 30 | 36 | 2 |
| Saturday | Va | With light airs and fine iveathe | 177 | 29.74 | 29.79 | 28.84 | 28 | 45 | 33 |
| Sunday, |  | With a fresh breeze and clear weather... | 180 | 29.60 | 29.60 | 29.50 | 31 | 45 | 32 |
| Monday, | S W | blowing a strong breeze, with hazy weather. 6 P.M.-Winds yeered to W, with fog and heavy rann |  | 29.43 | 29.20 | 29.20 | 31 | 42 | 40 |
| Tuesday |  | With a fresh breeze, and fog. 10 A.M.-Clear weather. 2 P.M.-Fog. 6 P.M.Clear weather. | 20167 | 29.30 | 29.39 | 29. | 35 | 42 | 37 |
| Wednesday, 25th.. | N N W | With a fresh breeze and clear weather. 4 P.M-A sudden shift of winds to E , and blowing fresh.. | 150 | 29.57 | 29.64 | 29.64 | 40 | 47 | 34 |
| Thursday, 2 | E | With slight breeze and clear weather. $8 \mathrm{~A} . \mathrm{M}-\mathrm{A}$ shit of winds to W, blowing | 152 | 29 | 29 | 29.39 | 36 | 42 | 40 |
| Friday, 27th ..... | Variable | With light airs and clear weather. At 6 P.M. - A steamship passed, inward bound, the first vessel that passed through the Strait this spring. Three men from Quirpon Harbor came across to the Island, this forenoon; they have been short of provisions," and in great distress for the past six weeks; I supplied them with some bread and pork, \&c. One Schooner passed going $\mathbb{N}$......... | 180 | 29.57 | 29.64 | 29.70 |  | 44 | 41 |
| Saturday, | S E | Blowing a fresh breeze, with hazy weather. 11 A.M.- Wet fog. 6 P.M.-Winds S.W., with rain and fog. |  | 29.59 | 29.49 | 29.4 | 2 | 38 | 40 |
| Sunday, 29th |  | Blowing a fresh breeze, with fog. 2 P.M.-Clear weather. 6 P.M.-Winds W, blowing strong, with fog. | 20.120 | 29.3 | 29.34 | 29.30 | 41 | 56 | 42 |
| Monday, 30th | N N W | With slight breeze and fog. 9 A.M.-Clear weather, blowing strong from W. Four Brige and two Schooners passed, going to the North Shore." 8 P.M.-Fog |  |  |  |  |  |  | 40 |
|  | W | Blowing heavy, with clear weather. 8 A.M.-A steamship passed, outward bound. <br> Two Brigs passed going N. |  | 29.24 | 29.29 | 29.30 |  |  | 40 |

Powder consumed this month- 3 ponnd shots fired, 483 pounds. Number of shots 161 .
Number of Argand Cotton Wicks, used this month, 4.
METEOLOGICAL REPORT, \&c.-(Continued.)




| Wednesday, 15th. Thursday, 16th... | Variable. | With light airs and clear weather. Ten Brigs and six Schooners passed, going to the North Shore. At 2 P.M., a Ship inward bound, 5 P.M., winds S, W., with rain; saw the remains of a wrecked vessel floating along the Island of Quirpon. <br> Blowing heavily, with fog and rain occasionally. $4 \mathrm{~A} . \mathrm{M}$.-Hazy weather. $9 \mathrm{~A} . \mathrm{M}$. <br> Winds veered to W, blowing a gale, with fog and rain. 6 P. M.-Less wind with clear weather. 11 F. M.-A shif of wind to N.E. One crystal chimney broken. |
| :---: | :---: | :---: |
| Friday, 17th | N E | With light breeze and clear weather. 9 A . M. - A. shift of wind to S.W. Twelve Brigs passed during the day, going to the Notb. Shore. |
| Saturday, 18th | SSE. | With a fresh breeze and hazy weather. Four Schooners passed, going to the North <br> Shore, 2 P. M.-The wind veered E.S.E., blowing a gaie with rain and fog. |
| Sunday, 19t | E | Blowing a gale with fog and rain.: 2 A. M.-Less wind. 6 A. M.-A ahift of wind to W., blowing a gale, with fog and rain. At noon, slear weather. One crystal chimney broken. . |
| Monday, 2 | W | Blowing a strong breeze with hazy weather. $4 \mathrm{~A} . \mathrm{M}$.-Fog. $9 \mathrm{~A} . \mathrm{M}$.-Clear weather with a shift of wind to N. E., blowing strong |
| Tuesday, 21st. | Varia | With light airs and clear weather. A Steamship passed at 5 A. M., outward bound.. |
| Wednesday, 22nd. |  | With a fresh breeze and hazy weather. 1 P. M.-Heavy r |
| Thursday, 23rd... | Variable. | With light airs and fog occasionally. 9 A. M.-Clear weather. 2 P. M.-Light wind from E. 9 P. M.-A shift of wind to S. W. |
| Friday | W | Blowing heavy with clear weather. $6 \mathrm{~A} . \mathrm{M}$.-Fog winds increasing to a gale....... |
| Saturday, | W | Blowing a gale with rain. 2 A . M.-Less wind with clear weather. Calm during the afternoon. |
| Sunday, 26th. | Variable. | With light airs and fog occasionally. Two Schooners passed, going to the North Shore; the Steamer Napoleon arrived here at 3 A . M. with stores for ihe lighthouses. |
| Monday, 27 tim | N N W | With strong breeze and clear weath |
| Tuesday, | W | Blowing strong, with clear weather. A Steamship passed, outward bound, at 3 A. M. <br> $8 \mathrm{~A} . \mathrm{M}$. - Wind increased to a gale, with hazy weather. |
| Wednesday, 29th. | W | Blowing strong, with hazy weather. 3 A. M.-F'og.. 5 P. M.-Clear weather. Two Schooners passed, going to the North Shore. |
| Thursday, 30th. | S W | Blowing fresh, with clear weather. Eight Schooners and two Brigs passed, going to the North Shore ; and a Steamship, inward bound, at 9 P. M. 11 P. M.Heavy rain.. |


METEOROLOGICAL REPORT, \&o.-(Continued.)



| $\infty$ | 7 | $F$ | － | 8 | ¢ | 8 | 58 | 4 |  | 以号 | 5 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | \％ | 5 | F | $\stackrel{+}{1}$ | 8 | 16 | CO | － 2 | 우규꾸 | ¢ | $\stackrel{1}{7}$ | $\underset{\sim}{1}$ |
| N i | $\begin{aligned} & \text { No } \\ & \text { से } \\ & \text { से } \end{aligned}$ | ＋ | $\begin{aligned} & 0 \\ & 0 \\ & \dot{\alpha} \end{aligned}$ | $\begin{aligned} & \infty \\ & \underset{\sim}{4} \end{aligned}$ |  | \％ | $\begin{aligned} & \text { SO } \\ & \dot{4} \\ & \dot{A} \dot{4} \end{aligned}$ | $$ |  |  |  | － |
| N － | $\begin{aligned} & \text { W్ల゙ } \\ & \stackrel{\rightharpoonup}{\circ} \end{aligned}$ | $\begin{aligned} & \text { +1 } \\ & \dot{\sim} \end{aligned}$ | $\begin{aligned} & \text { Fi } \\ & \text { Wi } \end{aligned}$ | $\begin{aligned} & \text { R } \\ & \text { \% } \end{aligned}$ | － | $\begin{aligned} & \text { H. } \\ & \underset{\alpha}{2} \end{aligned}$ |  |  |  | $\begin{aligned} & \text { స్ } \\ & \text { స్ స్ } \end{aligned}$ |  | ¢ |
| ¢ －1 － |  | $\begin{aligned} & \underset{\sim}{\circ} \\ & \stackrel{\sim}{\circ} \end{aligned}$ | $\begin{aligned} & \mathscr{F} \\ & \stackrel{\rightharpoonup}{\circ} \end{aligned}$ | $\begin{aligned} & \text { Q } \\ & \text { à } \end{aligned}$ |  | ¢ |  | $\circ$ <br> $\stackrel{\circ}{\circ}$ <br> R |  | $\begin{aligned} & \text { స్ ম్ } \\ & \text { ค్ దे } \end{aligned}$ |  | － |





 Blowing strong with heavy rasins．Four Schand this stmmer．．．．．．．．．．．．．．．．．．．．．．．．．
 With a light breeze

 With a fresh breeze and clear weather．Captain Dunn left here this norning for
 Schooners passed going to the South，and three Schooners going North．． Blowing heavy with clear weather．The Steamship Hungarian passed inward bound

a
N N
 casionally during the day．The Steamer Napoleon arrived here this morning at 6 A．M．with workmen to repair the Lighthouse． 8 P．M．－Winds increased

 Blowing strong with hazy weather．At 11 A．M．fog and rain． 8 P．M．－Clear weather，
 outward bound，and eight Schooners going S．and one Brig going N．At 7


 light airs and 1og． 10 A．M．－Winds E with hazy weather． 11 A．M．－The
steamer Napoleon left for Quebec with the workmen that came to repair the Lighthouse；fog during the afternoon．Twenty－eight schooners passed in the forenoon，going S
Blowing strong with wet
Blowing fresh with fog． 4 P．M．－A sudden shift of winds to W．blowhg strong with
Blow



METEOLOGICAL KEPORT，FROM 1st MAY，1859，TO 31st MAY ，1860．

|  | $\begin{aligned} & \text { 题 } \\ & \text { 号 } \end{aligned}$ | ＇pesuns | － | $0_{0}^{\infty} 9$ | ベき | \＄ | 안 | 7 | 0 | \％ | ${ }^{\circ}$ | 9 | $\underset{\square}{7}$ | ¢0 | ¢゙ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ＇u00N | $\underline{6}$ | $\cdots$ | ¢ | \％ | 产 | ค | ¢ | J | $\stackrel{\circ}{8}$ | 8 | $\pi$ | ¢\％ | $\bigcirc$ |
|  |  | ＇2epauns | 守 | 7 7 | 5\％ | \％ | ¢ | 7 | ¢ | \％ | ग | च | 0 | $7 \%$ | 5 |
|  |  | ＇7asung |  |  |  |  |  | $\begin{aligned} & \text { O- } \\ & \text { స్ } \end{aligned}$ |  | $\begin{aligned} & \hline 8 \\ & 0 \\ & \text { 耳 } \end{aligned}$ |  | $\begin{aligned} & \hline 8 \\ & \infty \\ & \infty \\ & \text { No } \end{aligned}$ | ＋ | $\begin{aligned} & \text { Wo } \\ & \underset{\sim}{\boldsymbol{\omega}} \underset{\sim}{\circ} \end{aligned}$ | ＋ |
|  |  | ${ }^{\prime} \mathrm{OOON}$ | ※゙ | 范 | $\begin{aligned} & \text { Oo } \\ & 410 \\ & \text { Ni } \end{aligned}$ | $\begin{aligned} & \text { M } \\ & \text { N } \end{aligned}$ | $\begin{aligned} & \text { ద్ } \\ & \text { స్ } \end{aligned}$ | $\begin{aligned} & \stackrel{8}{4} \\ & \dot{A} \end{aligned}$ | $\begin{aligned} & 9 \\ & \text { i } \\ & \text { i } \end{aligned}$ | $\begin{aligned} & \text { N } \\ & \text { な } \end{aligned}$ | $\begin{aligned} & \text { సi } \\ & \text { సे } \end{aligned}$ | $\begin{aligned} & \dot{N} \\ & \dot{\alpha} \end{aligned}$ | $\begin{aligned} & \infty \\ & \infty \\ & \infty \\ & \text { か } \end{aligned}$ | $\begin{aligned} & \text { Co } \\ & \text { N } \\ & \text { N } \end{aligned}$ | $\underset{\underset{\sim}{\circ}}{\stackrel{\Theta}{\circ}}$ |
|  |  | ＇2staung | W ¢ ¢ |  |  | $\begin{aligned} & \text { 耳 } \\ & \text { ค } \end{aligned}$ |  | $\begin{aligned} & 9 \\ & \text { O } \\ & \text { A } \end{aligned}$ | $\begin{aligned} & 9 \\ & \stackrel{1}{4} \end{aligned}$ | $\begin{aligned} & \text { ి̣ } \\ & \text { คे } \end{aligned}$ | $\begin{aligned} & \dot{1} \\ & \dot{\AA} \end{aligned}$ | $\begin{aligned} & \text { क్ర } \\ & \infty \\ & \infty \\ & \hline \end{aligned}$ | $\underset{\sim}{\infty}$ | $\begin{aligned} & \vec{\alpha} \underset{\sim}{0} \\ & \alpha, ~ \\ & \alpha \sim \end{aligned}$ | $\stackrel{8}{\substack{\text { c } \\ \text {－}}}$ |
| иәум '88ддәqә0I |  |  |  |  | $\cdots$ | F | क | 6 | ${ }^{-}$ | 18 |  |  | ＊ | ： | $\infty$ |
| \％\％u！pasy sun！ |  |  |  | $\pm$ |  |  |  |  |  |  |  |  | － |  |  |



$$
\text { Flannel used this month } 22 \frac{1}{2} \text { yards-on hand } 22 \frac{1}{2} \text { yards. }
$$

Concentric Wicks used this month, $1 \frac{1}{k}$ yard.
Cylinders broken this month, 2.

135 shots fired, this month, 2 pounds each, making 270 pounds of powder.
Oil used this month, 30 gallons.-Quill Tubes 135-on hand 590.
Number of Argand Cotton Wicks, used this month, 6.
METEOROLOGICAL REPORT，\＆c．－（Continued．）

| OCT．， 1859. | Direction <br> of <br> Wind． | REMARFS． | Rise and Fall of the Barometer． |  |  | Thermometer Outside． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 范 |  | 灾 |  | \％ | 宮 |
| Saturday | N | With a fresh breeze and clear weather．At noon wind $W$ ，with a strong breeze． Two Schooners passed，going S，in the forenoon． | 29.50 | 29.40 | 29.34 | 27 | 40 | 35 |
| Sunday， | S | Blowing fresh with rain． 10 A．M．－Fog；wind SW．One crystal chimney bro | 29.19 | 29.19 | 29.00 | 36 | 42 | 38 |
| Monday， | S W | With sligit breeze and wet fog． 3 A．M．－A shift of wind to ESE，blowing strong with fog and heavy rain． 4 P．M．－The wind shifted to W；blowing a gale with clear weather． | 28.80 | 28.59 | 28.50 | 38 | 45 | 36 |
| Tuesday，4th | W | Blowing a gale with clear weather． 6 P．M．－The wind veered to NNW，the gale moderating | 28.44 | 28.50 | 28.80 | 36 | 42 | 3 |
| Wedneaday， 5 | N W | Blowing fresh with clear weather；wind light and variable during the afternoon． Three Brigs and one Schooner passed，during the day，going S． | 29.3 C | 29.40 | 29.50 | 35 | 46 | 36 |
| Thursday，6th． | ESE | Blowing heavy with hazy weather． 4 P．M．－Wet fog．Three Brigs passed during the day，going S；at 6 P．M．the wind increasel to a severe gale．One crystal chimney broken | 29.39 | 29.30 | 29.09 | 32 | 42 | 36 |
| Friday，7th． | E | Blowing a perfect hurricane with rain and hailstones．4 A．M．－Sudden shift of wind to WSW，blowing equally as heavy a gale with rain．At noon the Barometer was down to $27-50$ ，which is lower than I have seen it since I have been on this island | 27.80 | 27.90 | 27.90 | 32 | 36 | 33 |
| Saturday，8th | W N W | Blowing a heavy gale with rain． 3 P．M．－－The gale moderated a little，with clear weather． | 28.30 | 28.50 | 28.80 | 30 | 40 | 3 |
| Sunday， 9 | N W | Blowing a strong breeze with clear weather；wind light and variable during the afternoon． 3 P．M．－One Schooner passed going S． | 29.40 | 29.59 |  |  |  | 36 |
| Monday，10th | N E | Blowing etrong with clear weather． 4 A．M．－Heavy snow． 7 P．M．－Clear weather． | 30 | 29.39 | 29.40 | 29 | 32 | 30 |
| Tuesday，11th | W | Blowing tresh with clear weather．At 6 A．M．the steamship North American passsed outward bound，and two Schooners going to the S．One crystal chimney broken． | 29.40 | 29.30 | 29.30 | 28 | 36 | 3 |
| Wednesday，12th． | W | Blowing fresh with clear weather．One Schooner passed going to the $\mathbf{N}$ ；a vessel bottom up，passed close and dritting out to sea，she appeared to be coppered， and about one hundred feet long．A 8 P．M．a shift of wind to E，with a strong breeze | 29.19 | 29.14 | 29.10 | 30 | 40 | 30 |
| Thursday．13th． | N N W | Blowing fresh with clear weather． 4 P．M．－A Steamship passed，inward bound | 29.39 | 29.40 | 29.40 | 30 | 32 | 30 |
| Friday，14th． | S W | Blowing strong with clear weather． 6 A．M．－Snow． 3 P．M．－Heavy rain and fug． | 29.20 | 29.09 | 29.00 | 27 | 30 | 29 |
| Saturday，15th．． | S W | Blowing strong with wet fog． 4 A．M．－The wind veered to NW． 11 A．M．－Clear weather． 5 P．M．－Fog，with a light breeze． $\qquad$ | 28.90 |  |  |  |  |  |


| Sunday, 16th. Monday, 17th | N F N N W | Blowing heavy with fog. 9 A.M.-Clear weather. Two Brigs and four Schooners passed, going to the S , during the day. <br> Blowing strung with clear weather. 8 A.M.-A Bark passed, outward bound; two Brigs and two Schooners passed, going to the S. At 4 P.M. the wind veered ENE. At half-past 9 P.M. the stearmship-Hungarian, Captain Jones, passed outward bound. | 9 4 | 4 5 | 29.00 | 28.90 | 28.99 | 30 26 | 32 | 28 30 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tuesday, 18st | E N E | Blowing strong with clear weather. 6 A.M.-The wind veered to E, blowing heavy <br> with sleet and fog; at ioon, heavy rain. |  |  | 29.49 | 29.44 | 29.40 | 30 | 32 | 30 |
| Wednesday, | E | Blowing strong with fog occasionally. 9 A.M.-Heavy rain and fog. One crystal chimney broken. |  |  | 29.19 | 29.10 |  | 31 | 39 | 36 |
| Thursday, | ESE | Blowing strong with fog and rain. | 24 |  | 28.90 | 28.90 | 28.90 | 35 | 37 | 36 |
| Friday, 21st. | E S E | Blowing a fresh breeze with rain and fog. 2 A.M.-A shift of wind to SW, blowing a strong breeze with clear weather. 3 P.M.-The wind veered to SE, blowing a heavy gale with rain. 10 P.M.-A sudden shift of wind to $W$, the gale increasing. |  |  | 29.10 | 29.19 | 28.80 | 33 | 38 | 34 |
| Saturday, 22n | W | Blowing a very severe gale with rain. 5 A.M.-Clear weather, the gale moderating |  |  | 29.19 | 29.24 | 29.24 | 35 | 43 | 37 |
| Sunday, 23rd | N W | With a fresh breeze and clear weather. |  |  | 29.29 | 29.29 | 29.30 | 36 | 39 | 35 |
| Monday, 24th. | Variable. | With light airs and clear weather. Two Brigs and one Bark passed, outward bounu at 7 A.M., and two Brigs going S. 5 P.M.-Wet feg. | 7 | 3 | 29.30 | 29.29 | 29.29 | 30 | 37 | 34 |
| Tuesday, 25t | S E | With a light breeze and wet fog. $\dot{3}$ A.M.-Snow and fog. 11 A.M.-Clear weather. Wet snow and thick weather during the afternoon. |  |  | 29.10 | 29.09 | 29.09 | 29 | 37 | 30 |
| Wednesday, 26th. | E S E | Blowing a strong breeze with fog. 10 A.M.-Clear weather. 1 P.M.-The wind increased to a gale, with wet snow. At 3 P.M., the steamship Nova Scotian, Captain Borland, passed, inward bound. 11 P.M.-A shift of wind to SW, the gale moderating, with clear weather. One crystal chimney broken. | 21 |  | 28.89 | 28.80 | 28.50 | 28 | 34 | 29 |
| Thursday | S W | Blowing strong with clear weat |  | 3 | 28.50 | 28.69 | 28.79 | 26 | 35 | 30 |
| Friday, 28th. | S S W | Blowing strong with clear weather. 7 A.M.-A shift of wind to $\mathbf{E}$, blowing a gale with snow. 11 A.M.--The wind veered to NE, blowing a severe gale with snow and hailstone. 8 P.M.-Less wind with clear weather | 11 |  | 28.50 | 28.39 | 28.50 | 23 | 31 | 25 |
| Saturday, 29th... | N E | Blowing strong with clear weather. G A.M.-A shift of wind to NW, with wet snow. 4 P.M.-The wind veered to NNE, with wet fog occasionally. 8 P.M.-The wind increased to a gale, with sleet. |  |  | 28.50 | 28.65 | 28.60 | 29 | 35 | 30 |
| Sunday, 30th | N E | Blowing a gale with sleet. 1 P.M.-Less |  |  | 28.70 | 28.90 | 29.04 | 30 | 36 | 29 |
| Monday, 3lst | N W | With a strong breeze and clear weather |  | 3 | 29.29 | 29.30 | 29.30 | 27 | 30 | 25 |

Flannel used this month, for cartridges, $22 \frac{1}{3}$ yands.
Corcentric Cotton Wicks used this month, 11 yard.

240 shots fired, this month, 2 pounds each, making 480 pounds.
Oil used this month, 36 gallons.-Quill Tubes 240 -on hanc 350 .
Number of Argand Cotton Wicks, used this month, 4.
Cylinders broken this month, 3.
METEOROLOGICAL REPORT, \&o.-(Continued).


METEOROLOGICAL REPORT, \&c.-Continued.


| Wednesday, 14th. | W | Blowing fresh with clear weather. The Strait and as far seaward as cen be seen from here is one shept of ice. I shall- not again refer to the field ice until it breaks up in the spring. | - 1 | 29.89 | 29.90 | 30.00 | 12 | 15 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Thursday, 15th | S E | Blowing fresh with clear weather. | . 3 | 29.8 C | 29.60 | 23.59 | 15 | 27 | 26 |
| Friday, 16th.. | S E | Blowing fresh with rain and fog. From this date I discontinue to exhibit the light. 8 P.M.-A shift of wind to $W$ with clear weather. | 3 | 29.39 | 29.30 | 29.40 | 24 | 30 | 28 |
| Saturday, | W N W | Blowing fresh with clear weather. 4 P.M.-A shift of wind to N E with a light breeze |  | 29.50 | 29.70 | 29.80 | 22 | 25 | 21 |
| Sunday, 18th | E |  |  | 29.60 | 29.40 | 29.39 | 19 | 13 | 13 |
| Monday, 19th | E | Blowing a gale with snow. 8 A.M.-Less wind with wet hazy weather. |  | 29.39 | 29.40 | 29.44 | 20 | 25 | 22 |
| Tuesday, 20th | Calm. | With wet snow. 2 P.M.-A light breeze from NW with snow |  | 29.10 | 29.10 | 29.10 | 23 | 28 | 27 |
| Wednesday, 2 | Calm. | With wet fog. 1 P.M.-Wind E. 4 P.M.-Blowing a gale with snow. 11 P.M. Wind veered to NE with clear weather. | 2 | 28.90 | 28.54 | 28.39 | 26 | 25 | 24 |
| Thursday, 22n | N E | Blowing a gale with snow. 6 A.M.-Less wind from NNW with clear weat | 2 | 28.69 | 28.70 | 28.80 | 23 | 27 | 23 |
| Friday, 23rd. | N W | With a fresh breeze and clear weather. 3 P.M.-Wet snow, 10 P.M.-Clear we |  | 28.80 | 28.80 | 28.89 | 22 | 20 | 17 |
| Saturday, 24th | N W | With a light breeze and clear weather. 10 P.M.-A chift of wind to SE w | 2 | 28.94 | 28.94 | 28.94 | 5 | 7 | 3 |
| Sunday, 25th.. | E | Blowing a gale with snow. 4 P.M.-Less wind. |  | 28.39 | 28.30 | 28.30 | 10 | 15 | 17 |
| Monday, 26th | N E | Blowing heavy with showers of snow. 2 P.M.-Wind N |  | 28.60 | 28.79 | 28.90 | 13 | 10 | 6 |
| Tuesday, 27th. | N E | With a fresh breeze and wet snow. 11 P.M.-Blowing he |  | 29.09 | 29.00 | 28.94 | 7 | 15 | 12 |
| Wednesday, 28t | E | Blowing a heavy gale with snow. |  | 28.79 | 28.60 | 28.60 | 10 | 12 | 8 |
| Thursday, 29th. | N E | Blowing a gale with snow. 3 P.M.-Less wi |  | 28.80 | 28.99 | 29.14 | 7 | 16 | 12 |
| Friday, 30th... | N.E | With a light breeze and clear weather..... |  | 29.34 | 29.39 | 29.39 | 15 | 28 | 25 |
| Saturday 3lst. | S S E | With a light breeze and snow...... |  | 29.1 ¢ | 29.10 | 28.99 | 24 | 25 | 24 |

Concentric cotton wick consumed this month, $1 \frac{1}{2}$ yards.
Argand cotton wicks consumed this month, 4.
METEOROLOGICAL REPORT, \&o.-(Continued.)


METEOROLOGICAL REPORT, \&o.-(Continued.)


METEOROLOGICAL REPORT, \&o.-(Continued).


| Wednesday, 21st.. | W | Wit |  | 29.30 | 29.40 | 29.50 | 30 | 33 | 38 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Thursday, 22nd. | S | With a strong breeze and fog |  | 29.49 | 29.49 | 29.90 | 31 | 38 | 33 |
| Friday, 23rd. | S E | Blowing strong with wet fog |  | 29.10 | 29.09 | 29.00 | 31 | 35 | 30 |
| Saturday, 24th... | S SE | Blowing strong with wet fog. $10 \mathrm{~A} . \mathrm{M}$.-The wind veered to S with rain. 4 P . Wind W with clear weather. |  | 28.99 | 28.90 | 28.90 | 28 | 33 | 29 |
| Sunday, 25th. | S W | Blowing a fresh breeze with fog and wet snow. il A.M. -The wind veered to W blowing strong with clear weather. | 5 | 28.70 | 28.74 | 28.90 | 27 |  | 27 |
| Monday, 26th. | W | Blowing a freeh breeze with clear weather. | 5 | 29.00 | 29.10 | 29.20 | 27 | 33 | 27 |
| Tuesday, 27th. | Variable. | With light airs and clear weather | 5 | 29.30 | 29.30 | 29.30 | 6 | 32 | 26 |
| Wednesday, 28th.. | Variable. | With light airs and clear weather | 5 | 29.20 | 29.20 | 29.20 | 23 | 34 | 27 |
| Thursday. 29th | S W | With light breeze and fog. 11 A.M.-Clear weathe |  | 29.00 | 28.90 | 28.80 | 24 | 33 | 29 |
| Friday, 30th... | W N W | Blowing heavy with clear weather, showers of snow during the afterno | 5 | 28.70 | 28.79 | 28.90 | 17 | 18 | 16 |
| Saturday, 31st. | W N W | Blowing strong with clear weather, the five icebergs that I have noted in the log have been aground all winter since the fall, but have increased considerably from the the heavy falls of snow and sleet. | 5 | 29.00 | 29.00 | 29.09 |  | 16 | 3 |

Stores consumed this month.-2 Gallons of Oil.
METEOROLOGICAL REPORT，\＆o．－Contimed．

| APRIL， 1860. | $\left\lvert\, \begin{gathered} \text { Direction } \\ \text { of } \\ \text { Wind. } \end{gathered}\right.$ | REMARKS． | Rise and Fall of the Barometer． |  |  | Thermometer Outside． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 8 | 灾 | 安 | 告 | 感 |
| Sunday，1st | S E | Blowing heavy with snow． 10 A．M．－Clear weather．From this date I commence to exhibit the light． | 28.90 | 28.90 | 29.00 | 12 | 22 | 21 |
| Monday，2nd | S W | Blowing strong with clear weather． 3 A．M．－－Light snow and fog． 11 A．M．－Clear weather． 8 P．M．－Rain and fog occasionally，and blowing strong from W． | 28.80 | 28.81 | 28.79 | 22 | 32 | 29 |
| Tuesday，3rd | W | Blowing strong with rain． 4 A．M．－A sudden shift of wind to $\mathrm{N} . \mathrm{E}$ ，blowing a gale with snow． 2 P．M．－Less wind from N with clear weather． 5 P．M．－A shift of wind to W ，blowing strong．There has been a deal of packed ice driven into the Strait from the N by the last gale of NE winds．． | 28.60 | 28.8 C | 28.99 | 15 | 17 | 14 |
| Wednesday，4th． | W S W | Blowing heavy with clear weather．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．${ }^{\text {b }}$ ．${ }^{\text {b }}$ | 29.19 | 29.14 | 29.19 | 12 | 29 | 24 |
| Thursday，5th ． | N W | With light breeze and a clear weather．Calm during the afternoon．．．．．．．．．．．．．．．．．．．．${ }^{6}$ ． 6 | 29.20 | 29.15 | 29.19 | 21 | 27 | 22 |
| Friday，6th．． | E NE | Blowing strong with clear weather．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 6 ． 6 | 29.30 | 29．3． | 29.40 | 17 | 23 | 21 |
| Saturday，7t | ENE | Blowing a strong breeze with clear weather．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 6 | 29.44 | 29.49 | 29.50 | 20 | 25 | 22 |
| Sunday，8th | Calm | With hazy weather．9 A．M．－Strong breeze from W with clear weather．．．．．．．．．．．． 1 l 6 | 29.40 | 29.40 | 29.40 | 26 | 31 | 23 |
| Monday，9th | S W | With a fresh breeze and clear weather．9 A．M．－Wet snow． 5 P．M．－A sudden shift of wind to NE，blowing a gale with snow． $\square$ | 29.30 | 29.29 | 29.10 | 26 | 33 | 26 |
| Tuesday，10th． | N E |  | 29.29 | 29.39 | 29.40 | 10 | 26 | 23 |
| Wednesday，11th | S W |  | 29.40 | 29.30 | 29.10 | 21 | 28 | 25 |
| Thursday，12th．．． | S W | With a light breeze and snow． 9 A．M．－A shift of wind to NE blowing a gale with snow． 5 P．M．－Clear weather with less wind．． | 28.90 | 28.90 | 29.19 | $2{ }^{2}$ | 26 | 18 |
| Friday，13th．．． Saturday，14th． | $\begin{gathered} \text { Variable. } \\ \mathbf{S} \end{gathered}$ | With light airs and clear weather． 2 P．M．－A fresh breeze from SW． Blowing strong with hazy weather． 3 P．M．－The wind veered to SE，with light snow． 6 P．M．－A Brigantine passed，going to the $S$ ，the first vessed that passed here this spring | 29.39 29.20 | 29.40 29.19 | 29.40 29.00 | 6 22 | 24 | 20 20 |
| Sunday，15th | ES E | Blowing a strong breeze with snow． 8 A．M．－Clear weather． 10 A．M．－Snow． 6 P．M．－A shift of winds to W，blowing a gale with snow | 28.60 | 28.40 | 28.29 | 26 | 29 | 24 |
| Monday，16th | W N W | Blowing a gale with snow． 3 P．M．－Clear weather．Three Brigs and two Brigaritines passed going to the S． | 28.60 | 28.60 | 29.20 | 23 | 33 | 27 |
| Tuesday，17th． | W | With a light breeze and clear weather． 3 P．M．－Blowing strong from SW．Two brigs in sight seal fishing． | 29.49 | 29.59 | 29.40 | 17 | 39 | 27 |
| Wednesday；18th． | S S E | Blowing strong with clear weather． 2 A．M．－The wind increased to a gale with snow． 4 P．M．－Less wiod with fog． $\qquad$ | 29.00 | $28.94$ | $28.94$ | 26 | 30 | 26 |

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline Thursday, 19th.. \& S S E \& Blowing strong with fog. 6 A.M.-The wind veered to E, blowing a gale with wet snow. 4 P.M.-Less wind with fog occasionally. \& 18. \& 28.70 \& 28.70 \& 28.80 \& 25 \& 33 \& 37 <br>
\hline Friday, 20 \& S E \& Blowing a strong breeze with fog occasionally. 10 A.M.-Four Brigs and six Schooners passed to the $N$ seal fishing. \& \& \& 29.29 \& 29.40 \& 25 \& 30 \& 28 <br>
\hline Saturday 21 \& S E \& With a light breeze and clear weather. 7 A.M.-The wind veered to ENE, blowing heavy with wet snow. 3 P.M.-Heavy rain. \& \& 29.20 \& 29.1! \& 29.19 \& 24 \& 33 \& 30 <br>
\hline Sunda \& E \& Blowing heavy with fog. 10 A.M.-Heavy rain. 4 P.M.-The wind veered to NE, blowing a gale with sleet. \& \& 28.99 \& 28.9 \& 28.19 \& 33 \& 33 \& 31 <br>
\hline Monday, 2 \& E \& Blowing a severe gale with thick weather and snow. 8 A.M.-Rain. 11 P.M.Clear weather with less wind. \& \& 28.40 \& 28.54 \& 28.50 \& 33 \& 35 \& 30 <br>
\hline Tuesday, 24th. \& E \& Blowing strong with clear weather. 4 A.M.-Fog, rain and wet snow occassonally... \& 19. \& 28.54 \& 28.59 \& 28.70 \& 30 \& 33 \& 29 <br>
\hline Wednesday, 25t \& N E \& Blowing strong with wet snow and thick weather \& 20. \& 28.70 \& 28.70 \& 28.69 \& 30 \& 34 \& 30 <br>
\hline Thursday, 26th \& EN E \& Blowing a strong breeze with wet snow and thick weather occa \& \& 28.79 \& 28.79 \& 28.80 \& 29 \& 37 \& 33 <br>
\hline Friday, 27th... Saturday, 28th \& $$
\left\lvert\, \begin{gathered}
N E \\
\text { Variable. }
\end{gathered}\right.
$$ \& Blowing strong with hazy weather. 4 P.M.-Clear weather............................... With light airs and clear weather. The Strait is completely blocked up with packed ice driven in by the late $E$ and NE wind. The Strcit had been sufficiently clear of field ice for vessels to pass through it from the 18th March to the 24th \& \& 29.10 \& 29.24 \& 29.40 \& 28 \& 38

39 \& 29 <br>
\hline Sunday, 29th. \& Variable. \& With light airs and clear weather. 2 P.M. - A A . . . . . . . . . . . . . . . \& \& 29.50 \& 29.50
29.50 \& 29.59
29.50 \& 25 \& 39
36 \& 30
28 <br>
\hline Monday, 30th \& W \& With a fresh breeze and clear weather. 3 A.M.-Fog. 6 A.M.-Hazy weathe This month has been the most stormy that has been all Winter \& \& 29.49 \& 29.44 \& 29.44 \& 25 \& 31 \& 30 <br>
\hline
\end{tabular}

249 shots fired, 3 lbs each, making 747 of powder.
METEOROLOGICAL REPORT, \&o.-(Continued.)


$\square$
-

#  <br> ON THE <br> CURRENTS <br> OF THE <br> <br> STRAIT OF BELLEISLE. 

 <br> <br> STRAIT OF BELLEISLE.}

Hearing so much said of the dangers of the Strait of Belle Isle, I think it my duty to make a few remarks, having spent five years and thirty-seven days on that Island, and having had during that tinue an opportunity of visiting the greater number of harbours on the coast of Labrador, from Cape St. Charles to Quebee, which are numerous, and not more than ten miles apart, each harbour from Cape St. Charles to Mingan, and each of these harbours have a safe anchorage for coasting and fishing vessels, and many of them have safe anchorage for the largest vessels, which can be be proved by referring to Admiral Bayfield's Chart, or book of Directions. And in the great extent of this north coast there are only three light-houses, one at Pointe des Monts, one at Pointe Amour at Forteau Bay, and one on Belle Isle Island. There is not on the whole extent of this coast a single beacon on any of those headlands or entrance to the different harbors, or a buoy on any of the dangerous rocks or shoals below pilot water, unless a few beacons on Anticosti. Now, I beg to suggest if there were bellbuoys near the different dangerous rocks and shoals, there would not be somany casualties. I would say there ought to be one on the Perroquets, one on the South Maquers Ledge, near Cape Whittle, one on the Mure, or St. Mary's Roek, outside grand Mascatina, another at the south end of Greenby island at west entrance straits of Belle Isle, and another on the Manicouagan shoal. It may be remarked with reference to these bellbuoys, that the cost of laying them down in spring, and removing them in the fall, would be very trifling, as there are inhabitants living ashore and abreast of these points, who with little else to do, at those seasons of the year, who would attend to them for very small remuncration. I have no hesitation in stating if there had been a bellbuoy on the Perroquets, neither the Clyde nor North Britui would have been wrecked on them; and as there is sufficient water on either side of the zocks named, for vessels of the largest class to pass, so that with a sharp look out a vessel would have timely warning from the tolling of the bell to put her helm a-starboard or port, as might be required to clear any of those recks, as the shoal water extends but a short distance on either the south or north sides of the roeks named.

Beacons at the entrance of the different harbours and headlands would be of the greatest assistanes to the number of vessels along this coast engaged in the fishing and coasting trade, as also to vessels bound to or from sea, for, in many instanecs the fogs or thick weather, which are so prevalent on the north coast, elear away for a short pariod, when the high lands in the rear are generally covered with fog; and there is so much samenness along the coast and the entrance to several of the harbours so named, that these beacons would enable masters of vessels to know their position. I have also, in many instances, seen vessels nearly through the Straits blown out to sea, when eaught in the heavy westerly winds, and were there beacons or buoys at the headlands, masters of vessels woild run for these harbours, and bring up until the gale abated sooner than be blown out to sea; and these same vessels that I speak of, kept too close to the Newfoundland coust. 'The masters, in such ease, sould not have been well aequainted with the Straits; they should always make short boards along the north shore, and not stand further to the southward than midehannel, to ayoid the downward current and the thick weather which is so frequent along Newfoundland coast. In one instance, out of severai that I have seen, was a ship and two barks. They were, at eight o'elock in the morning, fully twenty miles to windward of the Island, when the wind from the west increased to a gale, and at four o'clock that afternoon the ship and one of the barks were about five miles outside of the east end of the Island, under close reef-topsail and courses, drifting out to sea. The other bark kept close in with the north shore, making short boards, and bolding her $0:=n$ until night, when she got the wind off the land, (this is generally the case when the wind is
from the West) which helped her through the Straits before morning. The ship and bark that kept the south shore aboard were fully fifteen miles outside the Island at daylight next morning. There being then less winds, the ship beat into the southward of the island, and the bark to the north -consequently, in the evening, the bark having still kept the north shore, she was fully twelve miles to windward of the ships, although the ship sailed three feet to the bark's two. This will show shipmasters not aequainted, the advantage of getting the north shore aboard when beating into the Straits of Belle Isle. As I have before stated, in my former report on the rorth shore in 1860, there are less foys and better anchorage in many of the bays and harbours along the coast should masters of vessels require them, and there are fishermen at all these bays on the coast who would pilot vessels into safety for a small sum ; and any master of a vessel that once entered any of these harbours, would not require a pilot the second time, for they are generally of easy access, or even withont pilots masters of vcssels could enter these harbours if they were properly beaconed.

These beacons should have direction-boards on them, so as to direct shipwreeked sailors where inhabitants were to be found ; for in all these bays and harbors, there are people settled, and living daring the year. I bog now, for the information of ship masters, to make a few remarks respecting the sunken icebergs, which I paid particular attention to the last year I was on the Island The smaller the icebergs appear above water, the greater the danger is in approaching them, for they have long, shelving, solid ice, extending under the surface of the water, from four to eight hundred feet, and some of them more. This I ascertained, by sounding on an iceberg that grounded near the light-house, about three and a half miles E.S.E. of the light. It remained aground from the middle of May until the 28th of June, when it got reduced by the washing of the seia, and drifted off the bank it was aground on, in thirty-three fathoms of water. When first seen by me, there was a small portion of it above water about thirty feet high, and one hundred feet at the level of the sea. This portion above the water, was washed away in a lew days after I first perceived it. It was quite visible from the light-house, as the water over the iceberg appeared a light green, and around it the water was a dark green. When I passed over it in my boat, I sounded with an oar, and found about four feet. I did not, when in my boat, perecive any difference in the color of the water until I eame close to it. I would strongly recommend ship masters, when in the locality of these icebergs, to keep a man at the mast-head; he will see in time the different colors of the water, to enable the vessel to keep clear of the iceber $r$, and from deck of the vessel, the different shades would not be perceptible in time to change the vessel's course. The second sunken ioeberg I had an opportunity of examining, was driven into the Bay on the 18th of August, 1861. It grounded within four hundred yards of the landing, in thirty-one fathoms of water, and remained for about ten diys, when it broke in two, and turned right over. The only way I can describe this sunken iceberg, is by giving a sketch of it.


[^0]\[

$$
\begin{aligned}
& \text { Level of the water. The point under water from } 6 \text { to } 700 \text { feet. } \\
& \text { Level of the water. This point under water } 280 \text { feet. } \\
& \text { This line above water after capsizing } 7 \text { feet. } \\
& \text { Line over water after capsizing } 10 \text { feet. } \\
& \text { This vertical line shows where it broke in two pieces. } \\
& \text { From } 40 \text { to } 50 \text { feet above the level of the Sea. } \\
& \text { Depth of water } 9 \text { feet. } \\
& \text { " } \\
& \text { " } \\
& \text { " } \\
& \text { " } \\
& \text { " } \\
& 61 \\
& \hline 1
\end{aligned}
$$
\]

Many persons are under the impression that the greater number of icebergs drift into the Strait of Belle Lele. It is not the case. For the ten icebergs that enter the Strait, there are fifty pass
to the southward, in the locality of the Banks of Newfoundland and Cape Race, and in the track of vessels bound to and from the St. Lawrence, and other North Americal ports. And these icebergs that drift to the southward, are much the smallest, for the banks in the offing, outside Belle Isle Isliand, intereept the largest of them. I have seen as many as a hundied at a time, aground on this bank, in the month of May, and some of them half a mile long, and fully four hundred feet above the level of the sea. And there is every reason to believe that many of the number of missing ships, that we hear of every year, are lost on these icebergs, in the vieinity of the banks. I would, in all instances, recommend vessels bound into the Strait, after the 15th of June, to pass to the north of the Island, and kecp the north shore aboard, until clear of the Strait, as the fogs generally come on so quickly along the Newfoundland coast. As I have stated, in my former report, that fully half the time of these fogs, up to the middle of the Strait and along the south coast, it is clear along the north Shore, and I have been told by fishermen from Newfoundland, that the fogs are more prevalent during the summer months on the banks and locality of Cape Race than along the Labrador coast.

The most essential places for lights, in the Strait, would be, one on South Battle Island, and one on Cape Norman, on the Newfoundland coast. Each of these light-houses, as also those on the coast, should have fog-whistles attached to them.

The fog-whistle is much superior to the gun, as I have often, during my time on Belle Isle, heard the fog-whistle of the Mail-steamers quite distinetly, and could scarcely hear the report of the gun fired by them at the samc time. If these fog-whistles were adopted, and at the different light-houses, beacons and entrances to the harbors along the Labrador coast, they would save many lives and a great deal of property

After heavy gales of wind from the Eastward which very often last from four to six weeks in the fall and spring of the year, the water is forced up in the straits, gulf and river, that tides do not ebb more thas half its ordinary fall, in moderate weather as it does during the summer months.

And the moment wind shifts to the W , or those points having westing in them the current comes down with great force and is influenced by the wind, through those different estuaries; should the wind above mentioned come from the "North West" or W.N.W. the current sets much stronger on the south shore both in the straits of Belle Isle and the gulf of St. Lawrence, I would therefore recommend to ship masters, in the trade, to make allowances in their course, either in, or outward bound, taking notice of the above remarks. I would also remark that during my time on "Belle Isle," I found the compass very much affected by local attraetion, as there is a great quantity of iron ore on the island. This I mentioned to Captain Olebar of the R. N. when surveying round the Island in 1859, he said he found I was correct, at the same time said it was the first time he rad landed on the Island although he had been round the Island with Admiral Bayfield during the summer they were surveying on the coast of Labrador, but never landed on Belle Isle. As in many instances, masters of vessels have not much time to look over their charts or book of directions, in thick blowy weather, I will now give them the courso and distance $N$ latitude and $W$ longtitude of the Labrador coast from Cape St. Lewis to the light ship in the Traverse, as also from St. Paul's Island up the gulf to the said Lightship taken correctly from Admiral Bayfield's chart and book of directions.

Any shipmaster who pays proper attention to his marine barometer, is certain some hours before to get positive indieation of an approaching change in the weather in sufficiert time to horten sail. During my residence of 5 years on the Island, I found this unerringly to be the oss.
P. S.-It was neglected in the proper place in this report to state that on the east end of Red Island, nore perhaps than at any other point of the St. Lawrence a Bellbuoy was required. Here more lives have been sacrificed and more property lost annually than in any other part of the river.


METEOROLOGICAL REPORT, \&o.-(Continued.)

| NOV., 1860. | Direction <br> of Wind. | REMARKS. | Rise and Fall of the Barometer. |  |  | Outside. <br> Tinermometer |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 帚 | $\begin{aligned} & 8 \\ & 8 \\ & 8 \\ & 4 \end{aligned}$ | 䔍 |
| Thursday, 1st.... | W | Blowing heavy with clear weather. 7 A.M.-Wet fog. 8 P.M.-A sudden shift of wind to NNE with clear weather. | 29.39 | 29.30 | 29.29 | 35 | 40 | 37 |
| Friday, 2nd...... | N N E | With a fresh breeze and clear weather. 7 P.M.-A shift of wind to NW with light breeze. | 29.79 | 29.80 | 29.80 | 27 | 30 | 27 |
| Saturday, 3rd.... | W | With a fresh breeze and clear weather. 10 A.M.-A steainship passed outward bound | 29.60 |  | 29.40 | 5 | 37 | 35 |
| Sunday, 4th. | Variable. | Wah light airs and clear weather............................................................. | 29.50 | 29.5! | 29.59 | 29 | 37 | 35 29 |
| Monday, 5th..... | S W | With a light breeze and clear weather. 6 A.M.-Fog. 4 P.M.-Clear weather. 10 <br> P.M.-Fog $\qquad$ | 29.39 | 29.29 | 29.20 | 31 | 38 | 36 |
| Tuesday, 6th | W | With a light breeze and fog. 6 A.M.-Clear weather. 9 A.M.-Fog. 1 P.M.Clear weather. | 29.29 | 29.30 | 29.39 | 35 | 39 | 36 |
| Wednesday, 7th.. | E N E | With a fresh breeze and clear weather. 4 P.M. A steamship passed outward bound. 3 | 29.59 | 29.60 | 29.69 | 34 | 40 | 35 |
| Thursday, 8th... | E | Blowing a strong breeze and clear weather. . . . . . . . . . . . . . . . . . . . . . . . . . . . . | 29.69 | 29.69 | 29.59 | 30 | 34 | 32 |
| Friday, 9th...... | E | Blowing heavy with rain. 3 A.M.--The wind increased to a gale. 9 A.M.--Wet fog | 29.40 | 29.39 | 29.39 | 32 | 38 | 36 |
| Saturday, 10th.... | S E | Blowing a gale with rain and fog. ................................................... 24 | 29.30 | 29.30 | 29.30 | 35 | 39 | 38 |
| Sunday, 11th.... | ESE | Blowing heavy with fog and rain. 3 A.M.-Clear weather. 9 A.M.-Fog occasionally. 3 P.M.-The wind increased to a gale with fog. | 29.20 | 29.20 | 29.19 | 37 | 38 | 36 |
| Monday, 12th. | E | Blowing a gale with rain. 7 P.M.-Thick weather. . . . . . . . . . . . . . . . . . . . . . . . . . 6 . 6 | 29.00 | 29.00 | 28.90 | 36 | 36 | 35 |
| Tuesday, 13th.... | E | Blowing a gale with rain and thick weather occasionally.......... .................... . 13 | 28.55 | 28.90 | 29.00 | 35 | 37 | 36 |
| Wednesday, 14th. | $\underset{\mathbf{E}}{\mathbf{E}}$ | Blowing heary with hazy weather. 3 P.M.-Heavy rain......................... 13 | 29.19 | 29.19 | 29.19 | 34 | 37 | 36 |
| Thursday, 15th... | E | Blowing heavy whih hazy weather. Steamship passed outward bound at 8 A.M..... 2 | 29.10 | 29.10 | 29.10 | 32 | 36 | 35 |
| Friday, 16th...... | E | Blowing heavy with hazy weather. 3 A.M.-Rain. 8 P.M.-Heavy sleet with thick weather. 11 P.M.-Clear weather. | 28.90 | 28.80 | 28.70 | 35 | 33 | 32 |
| Saturday, 17th... | E | Blowing strong with clear weather. 8 A.M.-Rain. 11 A.M.-The wind veered to NE, hlowing a gale with showers of snow. $\qquad$ | 28.50 | 28.49 | 28.39 | 31 | 30 | 29 |
| Sunday, 18th..... | N E | Blowing heavy with clear weather. 3 A.M.-A shaft of wind to NNW with a fresh breeze | 28.49 | 28.50 | 28.64 | 29 | 31 | 30 |
| Monday, 19th.... | W N W | Blowing strong with clear weather. 4 A.M.-A shift of wind to NE. 5 P.M.-The wind veered to SE with a fresh breeze and fog. | 29.00 | 28.90 | 28.89 | 25 | 30 | 29 |


METEOROLOGICAL REPORT，\＆o．－Continued．

| DEC．， 1860. | Direction <br> of Wind． | REMARKS． | Rise and Fall of the Barometer． |  |  | Thermometer Ontside． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 定 | 号 | 灾 | 总宮 | 发 | 遃 |
| Saturday，let | ENE | Blowing beavy with clear weather．9 A．M－Hazy weather | 29.09 | 29.20 | 29.29 | 29 | 35 | 32 |
| Sunday，2nd． | ESE | Blowing heavy with hazy weather．．Jí A．M．－The wind increased to a gale． 4 P．M． |  |  | 28.79 | 31 | 34 | 30 |
| Monday，3rd． | E 8 E | Blowing heavy with snow． 3 P．M．－The wind veered to NE，with showers of snow occasionally． | 28.60 | 28.60 | 28.60 | 29 | 32 | 30 |
| Tuesday，4th | N E | Blowing atrong with clear weather． 9 A．M．－Wet hazy weather． 3 P．M．－Clear weather． | 28.59 | 28.69 | 28.79 | 28 | 32 | 30 |
| Wedneaday，5th．． | S S E | Blowing a fresh breeze with clear weather． 9 A．M．－Wet hazy weather．．．．．．．．．．．．． 12 | 29.00 | 29.00 | 28.90 | 29 | 33 | 31 |
| Thursday，6th ．．． | ESE | Blowing a gale with wet snow． 4 P．M．－Clear weather with less wind． 7 P．M．－ Snow． $\qquad$ $20 .$ | 29.40 | 29.20 | 29.10 | 30 | 32 | 30 |
| Friday，7th． | N E | Blowing a strong breeze with clear weather | 29.00 | 29.09 | 29.10 | 27 | 30 | 27 |
| Saturday，8th | N | With a light breeze and clear weather | 29.10 | 29.09 | 29.09 | 17 | 24 | 18 |
| Sunday，9th． | N ${ }^{\text {W W }}$ | With a fresh breeze and clear weather．．．． | 29.20 | 29.24 | 29.24 | 5 | 14 | 10 |
| Monday，10th． | W ${ }_{\text {W }}$ | Witl a light breeze and clear weather． 10 A．M．－Blowing strong．．．．．．．．．．．．．．． | 29.29 | 29.20 | 29.20 | 5 | 20 | 16 |
| Tnesday，11th． | W 8 W | Blowing strong with clear weather． 4 P．M．－The wind veered to SSE，blowing a gale with snow． | 29.10 | 28.99 | 28.70 | 16 | 26 | 23 |
| Wednesday，12th．． | SSE | Blowing a gale with snow． 5 A．M．－Less wind from W． 8 A．M．－The wind iscrear sed to a severe gale with showers of snow occasionally． | 28.10 | 28.10 | 28.20 | 22 | 27 | 22 |
| Thureday，13th．．． | W | Blowing a severe gale with clear weather．1 A．M．－Less wind． 4 P．M．－Blowing a gale with showers of snow． | $28.70$ | $28.70$ | 28.60 |  | 24 | 22 |
| Friday，14th． | W． 8 W | Blowing a gale with clear weather． 2 A．M．－Less wind with a fresh breeze． 4 P．M． <br> －Blowing heavy． | 28.70 | 28.70 | 28.60 | 17 | 21 | 16 |
| Saturday，15th．．． | $\mathbf{N}_{\mathbf{W}}$ | Blowing strong with clear weather．From this date I discontinue to exhibit the light． | 28.69 | 28.80 | 28.90 | 14 | 16 | 8 |
| Sunday，16th．．．．． | N N W | With a fresh breeze and clear weather．When the Thermometer is below sero I simply put the letter B ，with the figares to denote it． | 29.39 | 29.44 | 29.50 | 3．B． | Zero |  |
| Monday，17th． | N W | Blowin a light breeze with clear weather． 7 A．M．－The wind veered to WSW，with now． 10 A．M．－Clear weather． | 29.20 | 29.14 | 29.19 | ， | 24 | 22 |
| Tuesday，18th．．．． | N W | With a freeh breeze and clear wcather． 10 P．M．－Blowing hear | 29.0 | 28.99 | 28.49 | 2．B． |  | Zero |
| Wednesday，19th． | N W | Blowing a gale with snow． 9 A．M．－Less wind． 2 P．M．－Wind from E，with clear weather． | 28.50 | 28.70 | 29.00 | 6 | 20 | 19 |



 거우웅우융융ㅇ웅


 గ్ల유우욲


| Thursday, 20th.. | NE | (Blowing heavy with clear |
| :---: | :---: | :---: |
| Friday, 21 st..... | $\stackrel{\text { E }}{\text { S }}$ | With a light breeze and wet ha |
| Saturday 22nd... | S | With a fresh breeze and clear weath |
| Sunday, 23rd.. | ${ }^{\mathbf{S}}$ | Blowing strong with wet hazy weathe |
| Tuesday, 25th. | $\mathrm{S}_{\mathrm{E}} \mathrm{S}_{\mathbf{S}} \mathrm{E}_{\mathrm{E}}$ | Blowing heavy with wet fog |
| Wednesday, 26 th. | ESE | Blowing a atrong breeze with wet hazy weather. 3 P.M.-Blowing heavy with sieet. |
| Thursday, 27 th... | ENE | With a strong breeze and light snow....... 4 P.M.-Wind E , with clear weather... |
| Friday, 28th.. |  |  |
| Sunday, 29th. | N N E | Blowing a fresh breeze with clear weather. 2 P.M.-A light breeze from. |
| Mondey, 30th.. | W ${ }_{\mathbf{W}}^{N} \mathbf{W}$ | With a fresh breeze and clear weather. |

METEOROLOGICAL REPORT，\＆o．－（Continued．）

|  |  | Rise and Fall of the Barometer． |  |  | Thermometer Outside． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { 号 } \\ & \text { 品 } \end{aligned}$ | $\begin{aligned} & \stackrel{\rightharpoonup}{\mathbf{D}} \\ & \stackrel{\rightharpoonup}{D} \\ & \stackrel{\rightharpoonup}{\mathbf{n}} \end{aligned}$ | 䒼 | ¢ | 帯 |
|  |  | 29.00 | 29.10 | 29.10 | 10 |  | 5 |
|  |  | 29.10 | 29.09 | 29.00 |  | Zero | 2 B |
|  |  | 29.20 | 29.30 | 29.34 | 9 B | Zero | B |
|  |  | 29.24 | 28.90 | 28.80 |  | Zero | 2 |
|  |  | 29.10 | 29.10 | 29.10 | Zero |  | 5 |
|  |  | 29.10 | 29.10 | 29.10 | 3 | 5 | 5 B |
|  |  | 29.20 | 29.20 | 29.24 | 10 B | 8 B | 12 B |
|  |  | 29.30 | 29.29 | 29.29 | 15 B | 9 B | 10 B |
|  |  | 29.19 | 29.19 | 29.29 | 12 B | 6 B | 8 B |
|  |  | 29.39 | 29.39 | 29.34 | 5 B | 10 | 15 |
|  |  | 28.50 | 29.29 | 28.20 | 17 | 32 | 35 |
|  |  | 28.50 | 28.80 | 28.90 | 15 | 16 | 14 |
|  |  | 29.09 | 28.70 | 28.59 | 12 | 7 | 3 |
|  |  | 28.84 | 28.99 | 29.00 | 3 B | 10 | 8 |
|  |  | 29.14 | 29.19 | 29.10 | 9 | 12 | 11 |
|  |  | 29.19 | 29.10 | 29.10 | 9 | 13 | 11 |
|  |  | 29.10 | 29.09 | 29.09 | 2 B | Zero | 3 B |


| Saturday, 18th.. | N N E | Blowing heavy with clear weather. No clear water to be seen in the Strait or as far seaward as can be seen from here. I shall not again notice the field ice until it breaks up in the spring. | 29.84 | 29.80 | 29.79 | 8.B. | 1.B. | B. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sunday, 19th | N N W | Blowing heavy with light snow, and thick hazy weather. 8 A.M.-Shift wind to E, blowing a gale with heavy snow.. | 28.59 | 28.50 | 28.39 | 2.B. | 11 | 10 |
| Monday, 20th |  | Blowing a gale with heavy snow. 7 A.M.--Less wind with wet snow................ | 28.34 | 28.34 | 28.34 | 12 | 30 | 27 |
| Tuesday, 21st. | N E | Blowing strong with cloudy weather. 10 A | 28.34 | 28.39 | 28.40 | 23 | 27 | 25 |
| Wednesday, 22nd.. | N E | Blowing heary with clear weather. | 28.70 | 28.80 | 28.84 | 16 | 19 | 17 |
| Thursday, 23rd. | NE | Blowing strong with clear weather.... | 29 | ${ }_{29.50}^{29.10}$ | 29.19 | 1 | 14 | 1 |
| Friday, 24th. | N ${ }_{\text {N }} \stackrel{N}{\mathbf{N}} \mathbf{W}$ |  | 29.49 | 29.50 | 29.50 |  | 5 | 2 |
| Sunday, 26th | S W | strong with snow. <br> With a light breeze and wet snow. 4 A.M.-A sudden shift of wind to NE, blowing a severe gale with snow. 3 P.M.-Clear weather. 8 P.M.-The gale moderated. | 29.30 28.50 | 29.10 28.79 | 28.90 28.99 | 15 | 11 | 3 |
| Monday, 27 | N E | Blowing a fresh breeze with clear weather. | 29.29 | 29.30 | 29.20 | Zero |  | 4 |
| Tuegday, 28th | E | Blowing a fresh breeze with clear weat | 29.14 | 29.10 | 29.09 |  |  | 7 |
| Wednesday, 29th.. Thursday, 30th.. | $\stackrel{\mathbf{E}}{\mathbf{N}}$ | Blowing a light breeze and clear weather. <br> With a light breeze and snow. 1 P.M.-Clear weather with light variable winds <br> during the afternoon | 29.09 | 29.10 | 29.14 29.24 | 9 | 15 | 11 |
| Frday, 318t. | S E | Blowing a gale with snow. 3 P.M.-The gale moderated with a shift of wind to WSW, and clear weather. | 28.50 | 28.40 | 28.49 | 14 | 25 | 2 |

METEOROLOGICAL REPORT，\＆o．－（Continued）．

|  | $\left\lvert\, \frac{\cdot \operatorname{rgosung}^{2}}{\frac{\cdot 400 \mathrm{~N}}{}} \frac{\text {-8suuns }}{}\right.$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\underset{\sim}{\sim}$ |  |  |  | ตinio |  |  |  |
|  |  |  |  |  |  | 管が品 |  | व ट्रूमळढ |  |
|  |  | $\begin{aligned} & \text { 앙 } \\ & \text { बे } \\ & \text { से } \end{aligned}$ | हैल लिक ํㅗ̇ํ | $\begin{aligned} & \text { Op } \\ & \text { No } \\ & \text { Non } \end{aligned}$ | $\begin{aligned} & 8.8 \\ & \text { oे } \end{aligned}$ |  | $\begin{aligned} & \text { స్ } \\ & \text { స్ } \end{aligned}$ | \％ले สัనిన్ બં | $\stackrel{9}{9}$ |
|  |  |  |  | $\begin{aligned} & \underset{N}{N} \\ & \underset{\sim}{\infty} \end{aligned}$ | $\begin{aligned} & \text { 푼 } \end{aligned}$ |  | $\begin{aligned} & \ddagger \\ & \text { థi } \end{aligned}$ | চ্ল্লচ্লিপ্প <br>  | ＋ |
|  |  | $\begin{aligned} & \text { B్ర్ } \\ & \text { థ్ } \end{aligned}$ | ®్గిస్లి <br>  |  | $\begin{aligned} & 8 \\ & \stackrel{8}{\circ} \end{aligned}$ |  |  |  | ¢ |


METEOROLOGICAL REPORT, \&c.-(Continued.)


METEOROLOGICAL REPORT，\＆c．－Continued．

| APRIT， 1861. | Direction of | REMARKS． | Rise and Fall of the <br> Barometer． |  |  | Thermometer <br> Outside． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { gi } \\ & 0 \\ & Z Z \end{aligned}$ |  | $\begin{gathered} \text { 总 } \\ \text { 邑 } \\ \text { 足 } \end{gathered}$ | 品 | 感 |
| Monday，1st | N E | Blowing heavy with clear weather．Commenced to exhibit the light．．．．．．．．．．．．．．．．． 30. | 29.60 | 29.74 | 29.80 | Zero | 8 | 16 |
| Tuesday，2nd | N E | Blowing heavy with clear weather．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 29.80 | 29.80 | 29.80 | 7．B． | 5 | Zero |
| Wednesdey，3rd．． | NE | Blowing heavy with clear weather． 10 A．M．－The wind increased to a severe gale with showers of snow．William Crow，one of my men died at 7 P．M．；he has been sick all the winter． | 29.60 | 29.30 | 28.80 | 2．B． | 7 | 23 |
| Thureday，4th | N E | Blowing a gale with showers of snow occasionally． 6 A．M．－The wind veered to E， blowing heavy with rain． | 29.10 | 29.20 | 29.34 | 18 | 30 | 34 |
| Friday，5th．． | $\mathbf{E}$ | Blowing heavy with snow | 29.39 | 29.40 | 29.50 | 28 | 25 | 22 |
| Saturday，6th | E N E | Blowing heavy with clear wea | 29.40 | 29.40 | 29.39 | 14 | 21 | 11 |
| Sunday，7th | NE | Blowing strong with clear weather．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 58. | 29.29 | 29.20 | 29.20 | 5 | 18 | 14 |
| Mondsy，8th． | NE | Blowing heavy with cloudy weather．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 80.8 | 29.14 | 29.10 | 29．14 | 16 | 29 | 25 |
| Tuesday，9th． | E | Blowing a strong breeze with cloudy weather． 3 P．M．－A shift of wind to W．．．．．．．．．．． 94 | 29.29 | 29.30 | 29.29 | 24 | 33 | 27 |
| Wednesday，10th．． | W | With a light breeze and clear weather． 9 A．M．－A shift of wind to NE，blowing strong． | 29.10 | 29.00 | 29.09 | 19 | 32 | 23 |
| Thureday， 11 th．．． | N | With a streag breeze and clear weather．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 133 | 29.09 | 29.19 | 29.20 | 5．B． | 7ero | －5 |
| Friday，12th．．．．． | $\mathbf{N} \mathbf{N W}$ | With a light breeze and clear weather． 6 P．M．－A fresh breeze from W．．．．．．．．．．．．．． 140 | 29.30 | 29.44 | 29.50 | 7．B． | 10 | 14 |
| Saturday，13th | W | Whit a strong breeze and clear weather．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 115 | 29.50 | 29.50 | 29.40 | 13 | 33 | 27 |
| Sundsy，14th．．．．． | S W | With a frish breeze and cloudy weather． 6 P．M．－Rain．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 70 | 29.29 | 29.29 | 29.10 | 28 | 42 | 35 |
| Monday，15th．．．． | SjW | Blowing heavy with rain． 3 A．M．－Wet fog． 7 A．M．－Clear weather． 5 P．M．－A <br>  | 28.80 | 28.89 | 28.80 | 33 | 40 | 34 |
| Tnesday，16th．．．． | W | With a fresh breeze and clear weather． 8 A．M．－A shift of wind to NE，with a strong breeze and light snow． | 28.90 | 29.09 | 29.30 | －29 | 32 | 25 |
| Wedneaday， 17 th． | $\mathbf{N E}$ | Blowing strong with clear weather． 4 P．M．The wind veered to E，blowing a gale．．．．．． 50 | 29.50 | 29.60 | 29.20 | 5．B． | Zero | 10 |
| Thursday，18th．．． | SE | Blowing a gale with showers of hailstone．IO A．M．－The gale abated with a shift of wind to S ，with rain and fog． 8 P．M．－A shift of wind to W ，with clear wea－ ther． | 28.80 | 28.63 | 28.60 | 23 | 38 | 35 |
| Friday，19th | W | Blowing heavy with showers of hailstone occasionally．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 37 | 28.59 | 28.80 | 28.90 | 25 | 37 | 27 |
| Seturday，20th．． | Calm． | With clear weather． 9 P．M．－A strong breeze from E．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．－．．．． 41 | 29.00 | 29.20 | 29.29 | 25 | 40 | 30 |
| Sundsy，218t．．．．． | E | Blowing a heavy gale with rain． 1 A．M．－A shift of wind to SW，with showers of snow occasionally． | 28.60 | 28.44 | 28.50 | 28 | 38 | 25 |


|  |
| :---: |




| 우유ㅇㅠㅏ <br>  |  |
| :---: | :---: |
| O-1000 | क्¢¢ ${ }^{-1}$ |
|  | 玉่ส่ร่ |
|  | ¢ ${ }^{\circ} \mathrm{O}$ - |
|  | ส่่ํํ ( |


D
官
0.
0.0
10 A.M.-Less wind.

$\qquad$
With a light breeze and clear weather. 4 P.M.-The wind veered to S, blowing strong. Blowing a strong breeze with snow and thick weather Wet snow and thick weather. Elowing blowing a gale with rain and fog. One crystal chimuey broken........... Blowing strong with fog and rain. 2 A.M.-Fog occasionally.................... With a light breeze and clear weather. 4 A.M.-Fog occasionally. Calm during the


| Monday, 22nd.... |
| :--- |
| Tuesday, 23rd..... |
| Wednesday, 24th. |
| Thursiay, 25th.. |
| Friday, 26th.... |
| Saturday, 27th... |
| Sunday, 28th.... |
| Monday, 29th.... |
| Tuesday, 30th.... |



$52$

METEOROLOGICAL REPORT，\＆C．－（Continued．）

| JUNE， 1861. | Direction of Wind． | －$\quad$ REMARKS． |  |  | Rise and Fall of the Barometer． |  |  | Thermometer Outside． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | B ¢ \％ \％ | 芯 | 免 | 号 | 这 |
| Saturday，1st． | W | Blowing strong with clear weather． 3 A．M．－A sudden shift of wind to ENE，with heavy snow．Wind light and variable during the afternoon． 16 Brigs and 2 Barks outside the island inward bound．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 10 | 220 | 29.19 | 29.30 | 29.30 | 29 | 34 | 29 |
| Sunday，2nd | N N E | With a fresh breeze and heavy snow． 3 A．M．－Clear weather．A quantity of heavy packed ice outside the island． 16 Brigs， 3 Schooners and 3 Barks in sight inward bound．One of the Montreal Ocean Steamships passed inward bound at 10 A．M．The first vessel that passed through the Strait this spring． A．M．－Strong wind from W． | 6 | 229 | 29.34 | 29.59 | 29.50 | 25 | 42 | 30 |
| Monday，3rd | W | Blowing heavy with clear weather． 3 Barks and 7 Brigs in sight inward bound．．．． |  | 296 | 29.49 | 29.40 | 29.19 | 29 | 40 | 34 |
| Tuesday，4th．．． | S W | Blowing a gale with rain and fog．I P．M．－Less wind from W，with clear weather．．． | 14 | 189 | 28.89 | 28.60 | 28.89 | 30 | 41 | 39 |
| Wednesday， 5 | W | With a fresh breeze and clear weather． 3 A．M．－Fog and snow． 8 A．M．－Clear weather． | 7 | 191 | 28.90 | 29.09 | 29.19 | 33 | 43 | 40 |
| Thursday， | W | Blowing heavy with hazy weather．．．．．．．．．．．．．．．．．． |  |  | 29.20 | 29.29 | 29.29 | 34 | 42 | 44 |
| Friday，7th．． | W N W | Blowing heavy with hazy weather． 6 A．M．－A shift of wind to E，with a fresh breeze and cloudy weather． 3 P．M．－Heavy snow． 8 P．M．－Clear weather．．．．．．．．． | 6 |  | 29.29 | 29.39 | 29.39 | 37 | 34 | 30 |
| Saturday， | N N E | With a light breeze and cler weather． 2 P．M．－A fresh breeze from SW． 4 Brigs， 5 Schooners and 5 Brigantines passed during the day going N．A Steamship passed inward bound at 5 P．M．． |  | 195 | 29.49 | 29.49 | 29.40 | 39 | 37 | 31 |
| Sunday，9t | W S W | With a fresh breeze and hazy weather． 2 P．M．－Fog and rain． 11 P．M．－A steam－ ship passed inward bound． 5 Brigs， 8 Brigantines and 3 Schooners passed going N． 4 Brigs passed inward bound． 6 P．M．－A shift of wind to N，with clear weather． | 15 |  | 29.20 | 29.10 | 29.10 | 28 | 39 | 32 |
| Monday，10th． | E | With a strong breeze with fog and sleet．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 24 |  | 29.00 | 28.95 | 29.09 | 29 | 32 | 30 |
| Tuesday，11th．．．． | ESE | With a fresh breeze and fog．＇ 6 A．M．－Clear weather． 9 A．M．－Fog and rain occa－ sionally． 11 A．M．－A Steamship passed outward bound and 4 Brigs and 7 Brigantines going N | 14 |  | 29.10 | 29.20 | 29.20 | 28 | 40 | 33 |
| Wednesday，12th． | S | Blowing heavy with wet fog． 8 P．M．－Clear weather．．．．．．．．．．．．．．．．．．．．．．．． | 20 |  | 29.00 | 28.99 | 28.90 | 32 | 40 | 36 |
| Thursday，13th．．． | S W | With a light breeze with fog and rain． 10 A．M．－A shift of wind to NE，blowing heavy with clear weather． 7 Brigs， 9 Brigantines passed during day guing N．． | 11 | 80 | 28.70 | 28.70 | 28.99 | 39 | 46 | 39 |
| Friday，14th．．．．．． | S W | With a hght breeze and wet hazy weather． 5 A．M．－Fog． 10 A．M．－Clear weather． 10 Brigs， 8 Schooners and 26 Brigantines passed during the day going N．．．．．． | 11 | 92 | 29.10 | 29.20 | 29.29 | 33 | 42 | 40 |


METEOROLOGICAL REPORT，do．－（Oontimued）

| JULY．， 1861. | Direction <br> of <br> Wind． | REMARKS． |  | Rise and Fall of the Barometer． |  |  | Thermometer Outside． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { 夢 } \\ & \text { 品 } \\ & \hline \end{aligned}$ | $\begin{array}{r} \dot{8} \\ \text { B } \end{array}$ | $\begin{aligned} & \text { ざ } \\ & \text { む. } \\ & \text { 苟 } \end{aligned}$ | 菷 | 号 | 蔀 |
| Monday，lst．．．．． | W | With a fresh breeze and clear weather． | 50 | 29.24 | 29.30 | 29.30 | 46 | 5 | 49 |
| Tuesday，2nd．．．． | Variable． | With light airs and rain． 7 A．M．－Fog with rain occasionally． 4 P．M．－A fresh breeze from W，with clear weather． | 940 | 29.30 | 29.39 | 29.44 | 45 | 50 | 47 |
| Wednesday，3rd．．． | W S W | With a fresh breeze and clear weather． 2 P．M．－A Ship passed ontward bound． 3 <br> P．M．－A shift of wind to ESE，blowing strong． | 39 | 29.49 | 29.50 | 29.49 | 46 | 68 | 45 |
| Thursaiay，4th．．．． | S | With a light breeze and fog occasionally． 11 A．M．－The Steamer Napoleon arrived here with supply for the lighthouse and workmen to repair the tower． |  | 29.40 | 29.30 | 29.10 | 39 | 47 | 44 |
| Friday，5th．．．．．． | W | Blowing heavy with wet fog occasionally． 2 P．M．－A shift of wind to E，with a light air． 3 Schooners passed going N． | 6 | 29.19 | 29.19 | 29－10 | 39 | 47 | 62 |
| Saturday，6th．．．．． | W | Blowing heavy with fog occasionally． 6 P．M．－A shift of wind to E，blowing heavy． 7 P．M．－A Ship passed inward bound and 1 Schooner going N． |  | 29.20 | 29.10 | 29.20 | 47 | 53 | 65 |
| Sunday，7th．．．．－ | E | Blowing a gale with wet fog． 6 A．M．－The wind veered to SE，with less wind and hazy weather． |  | 29.30 | 29.50 | 29.49 | 39 | 44 | 39 |
| Monday，8th．．．．． | S | With a strong breeze and fog． 2 P．M．－Clear weather．A steamship passed inward bound at 11 A．M．－and 4 Schooners going N | 14.36 | 29.30 | 29.30 | 29.24 | 38 | 45 | 45 |
| Tuesday，9th．．．． | W | With a fresh breeze and fog occasionally． 13 Schooners passed going $N$ during the day． 4 P．M．－Blowing heavy． |  | 29.10 | 29.24 | 28.99 | 47 | 57 | 54 |
| Wednesday，10th．． | W | Blowing strong with fog． 2 Schooners passed going $N$ ，wind light and variable du－ ring the afternoon with fog and rain occasionally． | 11. | 29.04 | 29.09 | 29.19 | 48 | 49 | 47 |
| Thursday，11th．．． | ${ }_{5}^{\text {E }}$ | With a light breeze and rain． 6 A．M．－Clear weather．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 41 | 29.30 | 29.40 | 29.54 | 43 | 54 | 46 |
| Friday，12th．．．．－ | ESE | Blowing heavy with clear weather． 6 A．M．－Fog and rain． 1 P．M．－Less wind from SSW．Fog occasionally． | 1344 | 29.50 | 29.40 | 23.39 | 43 | 46 | 45 |
| Saturday，13th． | W | Blowing heavy with fog and rain． 4 P．M．－A sudden shift of wind to E，blowing heavy with clear weather | $15 \quad 47$ | 29.19 | 29.30 | 29.50 | 47 | 52 | 45 |
| Sunday，14th．． | E | With a fresh breeze and clear weather． 3 Schooners passed going to | 44 | 29.64 | 29.74 | 29.70 | 41 | 47 | 42 |
| Monday，15th．．．． | S | With a light breeze and clear weather． 8 A．M．－Wet fog．．．．．．．．．．． | 16 | 29.74 | 29.80 | 29.70 | 39 | 48 | 41 |
| Tuesday，16th．．．． | $\underset{\text { S }}{ }$ | With a light breeze and wet fog．．．．．．．．．．．．．．．．．．．． | $24$ | 29.59 | 29.40 | 29.30 | 43 | 54 | 56 |
| Wednesday，17th． | W | Blowing strong with wet fog．．．． |  | 29.30 | 29.30 | 29.30 | 49 | 55 | 48 |





| SEPT. 1861. | Direction <br> of Wind. | REMARKS. | Rise and Fall of the Barometer. |  |  | Thermometer Outside. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { 8̇8 } \\ & \hline 8 \end{aligned}$ | $\begin{aligned} & \stackrel{\rightharpoonup}{\mathbf{a}} \\ & \stackrel{\rightharpoonup}{5} \\ & \stackrel{0}{2} \end{aligned}$ | \% | \% |  |
| Sunday, lat | S E | Blowing strong with clear weather. 2 Schooners passed going S. and 1 Brig going N. during the afternoon. .................................................................. 11 | 29.40 | 29.49 | 29.49 | 42 | 46 | 44 |
| Monday, 2nd. | E S E | Blowing strong with clear weather. 1 Bark and 1 Brig passed inward bound at 9 A.M. and 29 Schooners going S. A Brigantine going N. | 29.50 | 29.60 | 29.60 | 43 | 50 | 44 |
| Tuesday, 3rd | W S | With a light breeze and clear weather. 8 A.M.-A Steamship passed outward bound. | 29.50 | 29.49 | 29.39 | 39 | 50 | 42 |
| Wednesday, 4th | S W | With a fresh breeze and hazy weather. 5 P.M.-Rain and fog. ........... | 29.30 | 29.20 | 29.10 | 40 | 46 | 45 |
| Thursday, 5th | S W | Blowing strong with fog. 12 P.M.-The wind veered to W, blowing heavy with clear weather. 6 P.M.-Fog and rain. 10 P.M.-Clear weather. | 28.99 | 28.99 | 29.00 | 46 | 51 | 47 |
| Friday, 6th | N W | Blowing heary with clear weather. 1 P.M.-Less wind. 7 A.M.-A Bark passed outward bound, and 33 Schooners going S during the day. 9 P.M.-A Steamship passed inward bound. | 29.10 | 29.30 | 29.39 | 43 | 54 | 49 |
| Saturday, | S W |  | 29.30 | 29.24 | 29.24 | 45 | 54 | 52 |
| Sunday, 8th | S W | Blowing heavy with rain and fog. 4 A.M.-The wind veered to NW, with clear weather and less wind 27 Schooners, 2 Brigantines passed going $B$ during the afternoon. 7 P.M.-A Ship passed outward bound.............................. | 28.99 | 29.10 | 29.20 | 4 | 52 | 47 |
| Monday, 9th | w | Blowing strong with clear weather. 12 Schooners and 3 Brigantines passed going S. and 1 Brigantine going N , during the day.. | 29.30 | 29.39 | 29.40 | 2 | 51 | 44 |
| Tuesday, | W | Blowing strong with clear weather. 0 P.M.-Fog. 10 A.M.-Clear weather. 6 P.M. <br> A sudden shift of wind to E. . | 29.39 | 29.30 | 29.40 | 44 | 57 | 43 |
| Wednesday, llth.. | E | With a fresh breeze and clear weather. 10 A.M.-A shift of wind to W, blowing strong. 15 Schooners passed during the day going S, and one Brigantine outward bound. | 29.49 | 29.49 | 29.49 | 38 | 52 | 48 |
| Thursday, 12th. | W | Blowing fresh with clear weather. 10 P.M.-A shift of wind to SSE, blowing heavy with rain. | 29.40 | 29.40 | 29.30 | 6 | 54 | 48 |
| Friday, 13th | S S E | Blowing a gale with rain. 9 A.M.-Fog and rain. 5 P.M.-Less wind. 9 P.M.-A shift of wind to NW, wish clear weather. | 29.10 | 28.90 | 28.90 | 5 | 47 | 49 |
| Saturday, 14th... | N N W | Blowing strong with clear weather. 34 Schooners and 3 Brigantines passed gong S , during the day. | 29.19 | 29.30 | 29.39 | 1 | 48 | 46 |
| Sunday, 15th | S W | Blowing tresh with clear weather. 1 Schooner passed going S. 10 A.M.-Wind veered to W, blowing heavy with fog occasionally and showers of rain. 1 P.M.Wind increased to a gale. 6 P.M.-A sudden shift of wind to NE, with less wind. | 29.10 |  | 29.00 | 47 | 52 | 57 |



## APPEINDIX

## Shewing the Lat., Long. and distances from one headland to the other ; from St.Pauls to Quebec; as also from the East entrance Strait of Belle Isle, along the Labrador coast, to Quebeo.

The western entrance of the Strait between Greenly Island and point Zerolle, is nearly 21 miles wide, the joint bearing from the island S.S.W. the eourse and distance through the strait is S. 54 W . true or according to the meau variation W. $\frac{1}{4}$ S. 65 miles.

Greenly island lies $1 \frac{1}{2}$ miles S.S.W. from Grand point which is on the northern or Labrador side of the entrance of the gulf of St. Lawrence through the strait of Belle Isle, the coast which will form the subject of this chapter lies between that island and the Southmakers' lodge, near Cape Whittle from the southo point of Greenly island to the Southmakers' ledge, the course is S. 56 W . true or nearly W. $\frac{1}{3} \mathrm{~S}$. by compass and the distance is $=28$ miles, this line, however, could not be safely run upon at night, or in foggy weather because it would take a vessel too near the Murr rocks, and the black reef and would pass just within the St. Mary rocks. The safe coarse to be steered from Greenly island, by a vessel bound up the St. Lawrence, would be, W. by S . which would elear all danger up to the east end of Anticosti, bearing from the south point of Greenly island S. 5230 W . true 218 miles.

## ANTICOSTI ISLAND.

This island situate in the entrance of the N.W. or in the gulf of St. Lawrence is 122 miles long, 30 miles in extreme breadth, and about 270 miles in circumference, following the coast from point to point across the bays.

Course from St. Panl to east point of Magdelene is N.W. $1 \mathbf{4}$ W., distanee 56 miles and to Entry island N.W. by $\frac{3}{4}$ W., distance 33 miles, and from the north Bird lock to the lightheuse on the ${ }^{[5} \mathrm{W}$. by compass 134 miles, the east point of Anticosti or $\mathcal{N} . \frac{3}{4}$ E. by coupass 80 miles.

Course should be stecred along course from S.W. point to W. end, the coast, so as to pass 8 or 10 miles to the southward and westward of Cape Henry and west point N.W. $\frac{1}{2}$ N., will be a safe course at night, or in thick weather.

From the west point of Anticosti to the south extremity of point De Monts, bears W. $\frac{1}{2}$ N. by compass, distance 116 miles. From the south extremety of point De Monts to north side of Bicquette island, bears S. 48 W . true, or W.S.W. by compass 79 miles, and the south point of the Manicoungon shoals S. 84 W ., by compass 33 miles.

Having made the light on point De Monts, and being 3 or 4 miles off it to southward with usual easterly winds, nearly, or right up the Estuary, steer W by S. by compass, until up nearly as high as the Manicoungon shoals, then keep half a point more to the southward, W.S.W. $\frac{1}{2}$ W.. These are safe courses with either ebb or flood, and if the vessel has left point De Monts at, or near, the commencement of ebb tide, will usually bring her into soundings off Metis, where 30 fathoms, over sandy bottom, will be found 3 uiles off shore, and 50 fathoms 5 miles off shore, and on the edge of the bank from the nerth side of Biequette island to the lighthouse on Green island, which shows a fixed light, bears S. 44 W. trur, or S.W. by W. $\frac{1}{2}$ by eompass, distane: $30 \frac{1}{2}$ miles, and the light ean be seen in elear weather from distance of 17 or 18 miles, course ton Green island to Brandy pots, bears S.W. $\frac{3}{4}$ W., the whole distance from Green island lighthouse to the light vessel at the Traverse is it miles; fron Traverse to Quebee 56 miles.

## VrRGIN ROCKS IN APPROACHING CAPE RACE 29 LEAGUES S.E. $\stackrel{\circ}{4}$ E.



PRINCE EDWARD ISLAND.


Point Prim, Hiloborouil Bay.


| Magdalin Island. |  | Latitude N . |  |  | Longitude W. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 46 |  | 30 | 50 | 51 | 30W |
|  |  |  |  |  |  |  |  |
| Entry Isle E. P | 47 | 17 |  | 0 |  | 40 | . 30 |
| Diadman Islet. | 47 | 16 |  | 8 | 62 | 12 | ... 20 |
| Amherst Harbour | 47 | 14 |  | 8 | 61 | 49 | ... 21 |
| Coffins Issland. | 47 | 37 |  | 0 | 61 | 23 | ... 0 |
| Northern Bird Island. | 47 | 51 |  | 2 | 61 | 9 | ... 10 |
| Byron Islet, E. P. | 47 | 47 |  | 8 | 61 .. | 24 | . 30 |

Coast of Labrador, the East End.


## West Point of Anticosti.



South Shore of the St. Lawrence.

Welcome ..... 2560.
Belle-Isle ..... 846.



[^0]:    

