Permanent Snow Drifts.

Sailing in a north-westerly direction, near the Atlantic coast of the northern part of Newfoundland, and thence on to the Labrador, the permanent patches of snow which occasionally show themselves in the mountains, increase in number and dimensions, until on arriving in the latitude of the Mealy Mountain (54° N.) they form a constant and marked feature in the aspect of the country.

These snow patches are drifts of great extent, occupying ravines or valleys in the mountain sides, and they vary from a few square yards to many hundred acres in extent, generally increasing in area with the altitude. The mountain ranges on the Labrador, between Sandwich Bay and Ukkasiksalik, stretch from from north-east by east to south-west by west The Mealy Mountains, as seen on the coast near Sandwich Bay, do not exceed 1500 feet in altitude according to the admiralty charts, but on the south shore of Lake Melville they attain an estimated elevation of between 4000 and 5000 feet, and are very imposing in their peaked and serrated outline.

On the northern side of Hamilton Inlet and Lake Melville are the Kokkok range, the Fox Mountains, and the China range, which, with some detached peaks, give to the whole of that part of the country a rugged and elevated character. The Kokkok mountains, as seen from Lake Melville, we thought to be fully as high as the Mealy Mountains, and the Salt-water Lake Range, or Toush-ia-lik Mountains, which lie north of the Fox Range, may next approach them in altitude. On all of these separate ranges permanent snow patches exist. These masses, which in some particulars have a glacial character, diminish in character during the summer until the first snow storms in September, but they always form a marked feature in the scenery, and according to the Esquimo and residents on the coast are permanent; some years appearing larger in August than during other seasons, but always there. In a stretch of a hundred miles one sees perhaps the same number of permanent snow patches until Cape Mokkovik or Aillik is past, when they become more frequent, and reach much lower down the hill sides, in fact, actually descend to the shore on the range which terminates at Cape Hurricane (lat. 55° 50).

The snow drifts on the coast line, some of them covering many hundred acres in area, maintain themselves without much apparent diminution in size during August and part of September, even when their base is but a few feet above the sea level. Farther in the interior the bases appear to rise in vertical altitude above the sea with the increase of temperature, and probably they may disappear altogether farther inland, below an elevation which is still very considerably lower than the snow line, especially if the country should be wooded, or no surface features exist which would permit of the growth of drifts.

The coast climate, deriving its severity and humidity from the Labrador current, reduces the mean temperature to such an extent as to permit snow drifts of certain dimensions to remain throughout the year in exposed parts facing the south east or east, which is generally the lee side on the Labrador. There is thus a zone existing for hundreds of miles on this coast, thoroughout which permanent snow drifts in valleys and ravines prevail to a large extent, and the aggregate area they occupy in August gradually increases as we progress towards the north west.

The breadth of this zone varies with the mountainous character of the country, and is especially dependent upon forest growth. Where there are unbroken forests, however stunted, there are no permanent drifts. Hence conflagations destroying forests tend to foster the growth of snow drifts and their disintegrating and polishing work.

Facts worth Knowing.

—When the barometer falls suddenly in the western part of New England, it rises at the same time in the valley of the Mississippi, and also at St. John, Newfoundland.

—In great storms the wind for several hundred miles on both sides of the line of minimum pressure, blows toward that line directly or obliquely.

—The force of the wind is in proportion to the suddenness and greatness of the depression of the barometer.

—In all great and sudden depressions of the barometer, there is much rain and snow; and in all sudden great rains or snows there is a great depression of the barometer near the centre of the storm, and rise beyond its borders.

—Many storms are of great and unknown length from north to south, reaching beyond our observers in the Gulf of Mexico and in the northern lakes, while their east and west diameter is comparatively small. The storms, therefore, move side foremost.

—Most storms commence in the "far west," beyond our most western observers, but a few commence in the United States.

—When a storm commences in the United States the line of minimum pressure does not come from the "far west," but commences with the storm, and travels with it eastward.

—There is generally a lull of wind at the line of minimum pressure, and sometimes a calm.

—There is generally but little wind near the line of maximum pressure, and on each side of that line the winds are irregular, but tend outward from that line.

—The fluctuations of the barometer are generally greater in the northern than in the southern parts of the United States.

—In the southern parts of the United States the wind generally sets in from the south of east, and terminates from the south of west.

—If there were no wind, weather would be immovable. It would rise up and disappear on the same spot, according to local causes. There would be no sort of relationship or sympathy between the weathers of different districts. If there were no wind the modern science of meteorology would have no existence; for if nothing carried storms and rain in a recognized direction, and with a recognized speed, we could not be told by telegraph what will probably be the nature of the weather round our coasts to-morrow.

—Without wind, weather would often be sulky, gloomy, disagreeable, but it would never be ferocious. Hurricanes, cyclones, tornadoes, and typhones, are, virtually, mere wind, and yet they incontestably present the most outrageous forms which weather can assume. Without wind all the other elements of weather would be passive; in themselves alone they constitute mere local agencies, it is only when their inherent power is multiplied by the speed which wind bestows upon them that they acquire destructive force. It is the wind which enables the snow to drift and deepen, the rain to travel over whole countries and to inundate them all; the hail to beat down the crops of entire districts; the fog to march along from sea to land. If "life is movement," it is evidently wind which bestows life in weather.—*Scrap Book.*

—For the daily, constant work of wind we have no gratitude; if, indeed, we think of it at all, it is rather to cry out against its violence than to thank it for its services, they pass, unperceived, before our negligent eyes. Here, however, we are forced to recognize and proclaim them, for, without wind, all the other elements of weather that we have been talking about would be as motionless and as torpid as a mushroom in a hollow tree,

A Mound Across the Strait of Belleisle.

ITS EFFECT ON THE CLIMATE OF CANADA.

When the Nova Scotia Railway Syndicate purpose building the Eastern Extension to Louisburg or Cape North, to connect by steamer with Cape Ray, and thence by rail to St. John's, Newfoundland, in order to shorten the ocean distance between Newfoundland and Great Britain from two to four days, they do themselves the honor to entertain a good, feasible and profitable undertaking. By choosing the Louisburg Terminus, the company will be rewarded with the best harbor in the world, and a variety of good, profitable mining acres on the path of the line, with abundance of coal; by choosing Cape North as a terminus, the line will ship on board its supply of coal in Broad Cove, and by tunnelling their way through the angles of the Cape North mountain plateau range flanking on the waters of the Gulf of St. Lawrence, across the lowlands of Cape St. Lawrence, and curving round to Young's Cove, Aspy Bay, in Cape North, they will find a good, practical harbor by some engineering skill being first supplied, and they will kill two birds by one shot in the bosom of the rocky way made thither, viz:—a roadway defended from snows and torrents, and abundance of remunerative mines; such as gold, silver, copper, iron, mangenese, mica and other minerals not positively discovered yet. This whole rock region is possessed of commercial importance. Here is gypsum for the world! Asbestos, too, and gems! Good farmlands, too! There will always be found people to ask how is this railway to pay, or what is there for it to carry. Well, the railway will pay itself without our assistance. It would pay the Broad Cove Coal Co. to build that part of the road from the Strait of Canso and hand it over a free gift to the Syndicate for the use of the Syndicate's line from Canso to Cape North and the Syndicate's custom in coal. Tourists will immensely patronize this line and its mineral springs. In fact both lines to Louisburg and Cape North should be simultaneously built for the benefit of the Syndicate; and it would be their wisdom to have that stipulation made in their engagement with the Government.

Although for the present time this is the most practicable idea, yet the time is perhaps at the threshold when the Syndicate will conceive the Herculean idea to connect Newfoundland with the Dominion by the best possible means, viz., that of building a mound across the Strait of Belleisle, and connecting St John's with Winnipeg by building as near as possible upon a certain line of latitude trusting to the mineral fortunes of the way; or by way of Quebec, Montreal, Ottawa or other leading cities.

By filling up the Strait of Belleisle the climatic effect produced would be great, and would extend a "Horn of Plenty" generally and all around to the Lower Provinces and to the neighboring States. The increase of revenue to all the provinces concerned, for three years, when fairly responding to the benefice of the charge brought about, would pay for the expenditure of the rampart across Belleisle.

For such a climate as we have, we would have a climate approaching that of France or Holland. The Gulf of St. Lawrence would be an inland sea about as warm as the Bay of Biscay. We may imagine what a change would supervene in the suitableness and fertility of these countries for all cereal grains, and also the abundance and variety of their fruitage,—and the manufactures, industries, and commerce generally, and wealth and refinement that would spring up therewith; and the desirableness and enjoyment of life in such healthy countries, such as gold cannot buy! Only bar the gate on the Lethal frigid-breathed dogs of the Artic ice and iceberg!—*Rev. D. Southerland, of Gaba-us, in Halifax Evening Mail.*