CALENDAR FOR THE WEEK ENDING SATURDAY, MAY 25, 1872.

SUNDAY,	May 19.	—*Whit Sunday.* Bagot died, 1843.
MONDAY,	" 20.	—Columbus died, 1506. John Stuart Mill born, 1806. Montreal Water Works commenced, 1862.
TUESDAY,	" 21.	—Battle of Sackett's Harbour, 1813. Election Riots at Montreal, 1832. Confederation of the B. N. A. Provinces proclaimed, 1867. Versailles troops entered Paris, 1871.
WEDNESDAY,	" 22.	—Baronets first created in England, 1611. Great Fire at Bradford, 1871.
THURSDAY,	" 23.	—Savonarola burnt, 1498. Sir John Franklin sailed, 1845. Second Fenian Invasion, 1870.
FRIDAY,	" 24.	—Queen Victoria born, 1819. Great Fire at Quebec, 1870. Archbishop Darboy shot, 1871. The Communists set fire to the Tuileries and Hotel de Ville, 1871.
SATURDAY,	" 26.	—Recollet Fathers arrived at Tadousac, 1615. General Todleben born, 1818. Skirmish at Eccles Hill, 1870.

TEMPERATURE in the shade, and Barometer indications for the week ending Tuesday, 14th May, 1872, observed by HEARN, HARRISON & Co., 242 & 244 Notre Dame Street.

		MAX.	MIN.	MEAN.	8 A.M.	1 P.M.	6 P.M.
W., May	8.	71°	48°	59°5	30.15	30.22	30.08
Th., "	9.	74°	53°	63°5	29.60	29.68	29.63
Fri., "	10.	72°	49°	60°5	30.12	30.22	30.22
Sat., "	11.	68°	47°	57°5	30.14	30.04	29.92
Su., "	12.	67°	53°	60°	29.92	29.92	29.97
M., "	13.	65°	39°	52°5	30.05	30.05	30.07
Tu., "	14.	66°	41°5	53°7	30.20	30.26	30.27

Our readers are reminded that the subscription to the NEWS *is $4.00 per annum,* PAYABLE IN ADVANCE.

All unpaid subscribers will be struck off the list on the 1st July next, and their accounts [at the rate of $5.00 per annum] placed in our attorneys' hands for collection.

THE CANADIAN ILLUSTRATED NEWS.

MONTREAL, SATURDAY, MAY 18, 1872.

THE bill for the ratification of the Washington Treaty now before the Canadian Legislature marks an era in the history of the world's diplomacy. Principles entirely new have been asserted on the American side, and assented to by Great Britain, which never before were conceded by one independent Government to another. The water right of a nation, even of a farm, is guarded by the common law of England, just as the right to the broad acres; but in this treaty we have the giving up of the water right, or its creation into common property for what is conceived to be a consideration.

The treaty itself is one of those which free governments may assent to in the light of their own interests. But it has a special peculiarity in that it invades the territorial rights of a colony. Canada is challenged to surrender her fisheries as a part of an Imperial arrangement; and she is asked to do so for the very inconsequential reason that there are other and more important questions between Great Britain and the United States which it is of the highest importance to settle. No Canadian will argue that the Imperial Government has acted fairly by us, or even sustained the honour of the Imperial flag. The British policy, as usual, has been sneaking and cowardly. Gladstone rivals some of his predecessors in his zeal for giving up by treaty what belongs to the country of right; and in this particular case the whole case of the ownership of the three miles of sea-shore fisheries has been abandoned; but only for a special consideration, or rather for several special considerations.

To estimate the latter at their absolute value would require more of practical experience than we possess. But a few facts are patent. The persons actually engaged in the Canadian fisheries would rather have the American market open to them on the terms of the treaty than be the victims of the present illiberal international arrangements. From the West there may be a good deal of objection to the fisheries clauses of the treaty; but when we remember that the people of Ontario have aired their indignation upon this treaty business mainly because they regarded the Nova Scotia and New Brunswick fisheries as means whereby they could —through the process of barter—secure a better price for their own wheat, it is very hard indeed not to feel that the objections to the treaty should rest upon some other grounds. The idea ought not to be entertained for an instant that the sea products of the East were to be made to pay for the land products of the West; nor can we understand why Canada, an immense country, but a fraction of whose people have any direct enterest or personal property in the fisheries, should accept a money indemnity—were it awarded—from the United States and place the sum in the public treasury as a fair return for the surrender of the exclusive use of the fisheries. If there is any loss to be incurred it ought to be borne by Britain in whose interests the treaty is made; if any indemnity is to be paid then the Provinces owning the coast line are exclusively entitled to it.

The question of the treaty in so far as Canada is concerned is not a very serious one. The Lower Province fishermen would prefer its acceptance because in return for open competition in American waters it offers them open competition in American markets; and the latter is to them a handsome return for the former. Another class would like to see the fisheries clauses ratified—the merchants and ship chandlers of the lower ports. They can undersell American dealers because of our lower duties and less expensive modes of doing business generally. American skippers will understand this fact, and instead of taking their equipment from their ports of debarkation, will become the customers of Canadian merchants for their season's supplies. In all this we can see very substantial reasons for the acceptance of the only clauses in the agreement between Great Britain and America upon which Canada is permitted to officially pass judgment. Were another argument wanting, after dismissing the probable money consideration upon which no sensible person would set any store, it is to be found in the fact that the fisheries arrangement is merely for ten years. Perhaps at the end of that time the Americans may get tired of it. Certainly Canadians will then have had an opportunity of estimating its value; and no matter which party may first get restive under the agreement, it will be at least creditable to the nations concerned that they made mutual concessions with the design of obliging each other and preserving the world's peace.

It is hard, however, for the British Empire to be compelled to accept treaty after treaty with America, to acknowledge the Republic as her first-born, and to suffer in almost every way from her audacious diplomacy. Britain cannot assert her rights of treaty. It has passed into a proverb that what the Empire gains by war it usually surrenders by treaty, and the same unpleasant feeling regarding the general bearings of the Washington negociation must have impressed every Briton. That our negotiators were shewn to be wrong, or incapable, by the American claim for consequential damages, was bad enough; but that they should have given the slightest opportunity for making that very definite idea a leading feature in the pro-American view of the treaty is really remarkable. With the portions of the treaty that relate to the war questions, Canada is fortunately relieved from dealing. We cannot, however, omit to record our firm conviction that Mr. Gladstone and his colleagues have taken their "humble pie" in a kind of sneaking way unusual to their countrymen. As for Canada, we do not think that the clauses of the treaty upon which she has the opportunity of pronouncing are at all inimical to her interests. Our country undoubtedly owes an obligation to England. The protection we have so far received,—and in this nobody we hope includes the Quixotic guarantee offered in lieu of the Fenian claims brings us under much obligation to the Mother Country. But the whole conduct of the latter, especially in regard to this treaty business, is a warning to us that we, Canadians, are to be counted at second rate when Britain is concerned. Can we blame Britain? Perhaps not. But we have duties towards ourselves.

A LOST ART—GLASS CLOTH.

More than thirty years ago, M. Bonnel, of Lille, France, discovered a method of weaving cloth, out of spun glass threads, which was described as perfectly flexible and applicable to a variety of purposes, more especially the ornamentation of the walls of apartments. This fabric, the making of which seems to be at present a lost art, was described in the papers of 1837 as follows:

This cloth of glass is extremely beautiful; and, from the manner in which it reflects the light, it surpasses in brilliancy everything that has ever been attempted with silk, even when combined with gold and silver. Some specimens of this new manufacture have been exhibited in the Passage de l'Opera in Paris; and the Queen of the French was so much pleased with them, that she ordered a golden medal to be sent to the inventor. The following passage is extracted from a French paper: "When we figure to ourselves an apartment decorated with cloth of glass and resplendent with lights, we must be convinced that it will equal in brilliancy all that it is possible for the imagination to conceive; it will realise, in a word, the wonders of the enchanted palaces of the Arabian tales. The lights flashing from the polished surface of the glass, to which any colour or shade may be given, will make the room have the appearance of an apartment of pearls, mother-of-pearl, or diamonds, or composed of garnets, sapphires, topazes, rubies, emeralds, amethysts, etc., or, in short, of all these precious stones united and combined in a thousand ways, and formed into stars, rosettes, bouquets, garlands, festoons, and graceful undulations, varied almost to infinity."

HAWTHORNE HILL, N. B.

This delightful spot is situated on the banks of the river St. John, about one mile from Fredericton, the political capital of the Province of New Brunswick. It commands one of the most admirable views on the whole of St. John River, and being of capacious dimensions, doubtless furnishes an agreeable residence for its occupants. The railway connections between Fredericton and all points in the United States and Canada places Hawthorne Hill, though a rural retreat, within easy reach of the outer world.

MISCELLANEOUS.

From the report of the Hon. Mr. Campbell, Postmaster of the Dominion, we learn that during the year 1871 the number of letters and postal cards transmitted was 27,050,000, besides a large number of newspapers, registered and free letters and parcels. The total expenditure was $1,271,006, while the revenue was only $1,079,767.

The iron sea forts now in course of construction for the defence of the prominent naval stations of Great Britain, will, with the foundations, cost five million dollars apiece. The iron shell of one of the forts for Spithead, near Portsmouth, has been shipped by rail for that harbour from the works of the Whitworths, in the iron districts. This shell or skeleton weighs twenty-four hundred tons, and is to be fitted up with fifteen inch iron plates twenty-six feet in length. Each fort is to be seven hundred feet in circumference and two hundred and thirty feet high. They are to be armed with two tiers of guns, one tier of twenty-four 600 pounders, and the other of twenty-five 400 pounders. The guns, it is calculated, will pierce twelve inch iron ships at two thousand yards distance.

EXPOSED ARMS.—A very distinguished Paris physician says: "I belive that, during the twenty years that I have practised my profession, twenty thousand children have been carried to the cemeteries, a sacrifice to the absurd custom of exposing their arms Put the bulb of a thermometer into a baby's mouth and the mercury rises to ninety degrees. Now carry the same to its little hand; if the arm be bare and even cool, the mercury will sink to fifty degrees. Of course, all the blood that flows through these arms must fall from ten to forty degrees below the temperature of the heart. Need I say, when these currents of the blood flow back to the chest, the child's vitality must be more or less compromised? And need I add that we ought not to be surprised at the frequent recurring affections of the tongue, throat, or stomach? I have seen more than one child, with habitual cough or hoarseness, entirely relieved by simply keeping the hands and arms warm."

COSTLY GUNS.—In these days of costly armaments for offensive and defensive warfare, we give our readers the latest prices at which our wrought-iron, steel-lined, muzzle-loading rifled guns are produced, and charged for to Imperial Government departments, minus their sights and elevating plates, but including the cost of their proof: 12 in. 600-pounder guns, 23 tons weight, £2,627 each; 12 in. 600-pounder guns, 25 tons weight, £1,997 each; 11 in. 500-pounder guns, 25 tons weight, £1,893 each; 10 in. 400-pounder guns, 18 tons weight, £1,305 each; 9 in. 250-pounder guns, 12 tons weight, £912 each; 8 in. 180-pounder guns, 9 tons weight, £693 each; 7 in. 115-pounder guns, 7 tons weight, £560 each; 7 in. 115-pounder guns, 6½ tons weight, £503 each; 64-pounder guns, 3 1-5 tons weight, £240 each; 9-pounder guns, 8 cwt., £84 each; 9-pounder guns, 6 cwt., £78 each. In round numbers these prices show an increase of 400 per cent. over what cast-iron guns cost, that is, taking the old standard for cast-iron guns of £20 per ton. Surely, in view of these figures, we are justified in again calling attention to the fact of many of these costly guns have had their A, or inside tubes split in the lines of the rifling after an insignificant number of rounds had been fired, thereby clearly indicating fault in their rifling. There can be no question as to the superiority of the present manufacture of our iron and steel built-up guns over that of the system originally adopted, nor as to the very large saving to the country effected thereby; but that is not the present question—namely, have we the best system of rifling? Unhesitatingly we believe not; and there are cogent reasons that the persons responsible to the country in this matter should wake up, and not rest in a "fool's paradise" any longer.—*Naval and Military Gazette.*

THE VALUE OF SOOT AS A MANURE.—As soft or bituminous coal becomes more extensively used west of the Alleghanies, it will be of great importance to farmers of the Western coal districts to understand the value of the soot which is left in large quantities as a deposit in the chimneys where this coal is consumed. Soot accumulates in chimneys so rapidly that it is necessary to remove it very often, and it is far too valuable to be allowed to be lost or wasted. A French chemist has made an analysis of coal-soot, by which we ascertain that in 1,000 pounds the following quantities of valuable ingredients as fertilizers are contained, viz:

A substance resembling vegetable matter, soluble in caustic potash	302	pounds.
A substance, soluble in water, containing nitrogen	200	"
Carbonate of lime and magnesia	150	"
Sulphate and acetate of lime and magnesia	112	"
Phosphate of lime	15	"
Chloride and acetate of potash	45	"
Acetate of ammonia	2	"
Charcoal powder (carbon)	38	"
Water and sand	136	"
	1,000	pounds.

A glance at these constituents will readily show that soot contains valuable fertilizing properties, while its very fine state of division renders it most easily and effectively applicable to crops. In Europe it has been used for years as a top-dressing to all crops, but with notably most effect on grass, wheat, and oats. Its pungent character and very bitter taste make it desirable as a preventive against the turnip-fly and the cut-worm and caterpillars, which injure cabbages. As it is a new article of use to American farmers, it would be of interest to experiment with it on various crops, and note its effects, with the precaution to be observed, that in quantities greater than ten bushels per acre it is apt to *burn* the crops in dry seasons. It should therefore be applied previously to the rains of spring or fall, or in small quantities of say four bushels per acre, repeatedly.