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Literature, science, and art.

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## BRITISH AMERICAN MAGAZINE.

M A Y, 1863.<br>-<br>\section*{NORTH-WEST BRITISH AMERICA.}

## BY THE EDITOR.

Historians tell us that one of the characteristics of a wise and unselfish statesman is seen in the forethought and care with which he provides for the future of his country.

The public in general are too much occupied with the social and political questions of the day, and private individuals too much engrossed with personal concerns, to devote that attention to the future which they often encourage themselves to regard as a duty devolving upon posterity-the heirloom, indeed, of the actors on the stage of life, when they shall have become indifferent to its ambitions, or, are laid like their predecessors, to moulder in the dust.

The experience of Europe, in the rise of nations to power and prosperity, can scarcely be accepted for our guidance in America. Events succeed each other so unexpectedly, and with a rapidity so extraordinary, on this continent, that the wisest speculations often fall short of the reality; and the most sanguine anticipations scarcely grasp the actual results of a few years' transition and progress.

To-day a wilderness-to-morrow a populous state! To-day the wild Indian's hunting-ground-to-morrow asserting equal rights in a community of civilized nations! So rapidly, indeed, do momentous events, affecting the interest of millions, follow one another with us, springing from new commercial relations, new discoveries, new political combinations, or new invasions of a previous!y unoccupied wilderness,- that the most sagacious statesman is often behind public opinion, and vainly endeavours to hold in check the bold ideas and the broad license of popular belief which often find expression in an uncontrolled liberty of speech, the prevailing characteristic of American civilization.

British'Americans, who are true to the sympathies and patriotism of their forefathers, and who care to look forward to the future of their coun-
try, must view with some surprise, not unmingled with anxiety, the spirit of enquiry which the people of the North-Western frontier States of the American Union are exhibiting, with respect to the vast region in Central North America drained by the rivers flowing into Lake Winnipeg. Such enquiries would excite no other feelings but those of admiration at the characteristic enterprise which gives birth to them, if it were not for the unscrupulous action to which they point, alike neglectful of British feeling, and opposed to the aspirations of the majority of the people of British America who speak the Anglo-Saxon tongue. "Manifest Destiny" is by no means recognized in the physical conformation of the great North-West, when that destiny implies a union with the American States; the absorption of a vast and fertile part of British America, by a Northern federation ; and the annihilation of hopes long cherished by British American people, that their empire will one day, be established from ocean to ocean, in peaceful union with the empire from which they have sprung.
"Manifest destiny" ought only to be regarded as the dream of the American visionary or revolutionist, who, setting aside all considerations of right, nationality, descent, and blood, boldly and unscrupulously commences his crusade with this specious cry, and seeks, not unsuccessfully, to enlist even senates to his side.

It is some consolation to know, that even among Americans, " manifest destiny" does not always imply incorporation with the United States by fair means or foul. Able men there are, who, while advocating the colonization of the Basin of Lake Winnipeg, view the prospect of its continuance as a British Province, one of a series extending from the Atlantic to the Pacific, as within the limits of probability. "One thing. is very apparent: unless the English Government shall very promptly respond to the manifest destiny of the great interior of British America -the Basin of Lake Winnipeg-the speedy Americanization of tha fertile district is inevitable. The indispensable requisites to the integrity of British dominion on this continent, are such action in behalf of the Saskatchewan and Red River districts as the Frazer River excitement secured for the area fronting on the North Pacific, three years ago."*

Not much more than half a century has passed since Canada was a wilderness from the Ottawa to the St. Clair. Many men now living remember the time when the scanty settlements were threatened by famine if the snow fell so deep that the wolves destroyed the deer. Yet in two generations, this wilderness has gained a population exceeding that of the ancient kingdom of Denmark. Viewing its future

[^0]expansion in the light of its past development and progress, many now naturally turn with anxiety to the vast unoccupied region which lies between it and the gold producing mountains and valleys of its sister colony, British Columbia. Running in the race of progress side by side with the most powerful and energetic republic the world has ever seen, Canada looks with an anxious eye upon the rapid strides which neighboring states are advancing in the direction of a territory which her people always have been taught to consider as their own, either as subject to their jurisdiction, or soon to be joined to them by ties of kindred institutions and laws, - a link in one great chain of provinces acknowledging the same allegiance, and enjoying the same liberty, protection and rights.

The great North-West has become a household word in Canada; and as the time has now arrived when its admission into the family of British Provinces is about to be consummated, a knowledge of its resources should be familiar to every British American.

The North-West Territory is no longer a terra incognita. Its vast plains have been traversed; its rivers and lakes carefully traced and mapped; its mountain ranges and secluded valleys explored; its treasures of iron, coal, salt, and even gold, have been laid bare; and its rich expanses of fertile prairies are now known to possess the capability of supporting numerous inhabitants, equalling in numbers those now densely thronging the British Isles.

It is proposed to deseribe the physical features and fitness for colonization of North-West British America under the following heads :-

1. The Basin of Lake Winnipeg.
2. The Athabaska River.
3. The Rocky Mountain Region.
4. A Telegraph and Road across the Continent.

In order to examine the question in all its aspects, it will not only be necessary to include British Columbia, but also to paint in its true colors the real capabilities of that visionary far west of the United States, to which, in defiance of all known facts, popular credulity ascribes boundless fertility; converts an arid and uninhabitable desert into future populous states; and regards as a suitable and attractive field for the indefinite expansion of the Union, a vast region exceeding one million square miles in area, alike incapable of cultivation, and unfitted for the abode of civilized man.

THE BASIN OF LAKE WINNIPEG.-GEOGRAPHICAL FEATURES.
The southern portion of Lake Winnipeg lies exactly in the centre of the American continent on the 51st parallel of latitude.* The great

[^1]Basin it drains has a length of 920 miles, a breadth of 380 miles, and an approximate area of 360,000 square miles. The eastern tributaries to the Winnipeg River, rise on the boundary line of the Province of Canada, about 100 miles west of Lake Superior, and 1,485 above the sea. The great glaciers in the Rocky Mountains, from which the Saskatchewan takes its rise, near Howse Pass, for the north branch, and the Vermillion Pass for the south branch, form the western limits. Its southern extension stretches far into the State of Minnesota; but west of the Souris river, the international boundary line roughly represents its extension in that direction, as does the north branch of the Saskatchewan its approximate northern limits.
This great central Basin is drained by three large rivers-the Winnipeg, the Red River of the North, and the Saskatchewan. It is through the valley of the Winnipeg, or its tributaries, that the canoe route between Lake Superior and Selkirk Settlement lies, and through which a road will be eventually constructed, connecting the rich prairies west of the Lake of the Woods with Fort William, on Lake Superior. From the Lake of the Woods to the eastern flanks of the Rocky Mountains, there exists a belt of fertile soil, 80 to 100 miles in width, once covered with trees, but now converted in great part into prairie land by the destruction of the forests, owing to the periodical burning of the prairie grass. German creek, which rises near the Lake of the Woods, the Red River, the Assinniboine, and the north branch of the Saskatchewan, flow through this rich belt, which has an area of not less than 80,000 square miles,* is susceptible of cultivation or depasturage throughout, and extends in one unbroken broad belt from the Lake of the Woods to the Rocky Mountains.

Lake Winnipeg; and its associated Lakes, Manitobah and Winnepegoosis, occupy the lowest depression of the central basin, and are about 628 feet above the sea level, having a water area slightly exceeding 13,000 square miles, or twice the size of Lake Ontario. They are bounded on the west by a low tract of country, having an elevation of from 30 to 100 feet above the lakes, and an approximate area of 70,000
long. $117^{\circ} 35$, lat. $51^{\circ} 52^{\prime}$. Its southern boundary extends as far as Lake Traverse, in Dakotah Territory, long. 96 45, lat. 45 58. It stretches north as far as Frog Portage, long. $103^{\circ} 30^{\prime}$, lat. $55^{\circ} 26$. The elevation of its eastern boundary is 1,485 feet above the ocean; and the height of land near the sources of the tributary of the Saskatchewan, which rises farthest to the west, is 6,347 feet above the same level. Its northern boundary is separated from the valley of the Missinipi by a low ridge, over which water flows during flonds, thus connecting the valley of the Saskatchewan with that of the Missinipi. Toward the southern limit, Lake Traverse, 820 feet above the sea, sends water into the Mississippi and Red River during spring freshets. The outlet of the Winnipeg Basin is through the contracted and rocky channel of Nelson River to Hudson's Bay.

* In this estimate of the area of the pertile belt, the region about the Lake of the Woods is included, as well as the northern extension near the East flank of the Rocky Mountains towards the Athabaska or Elk River.
square miles. This low region is limited by the abrupt terraces of the Pembina Mountain, which forms the limit of the great prairie plateau of the north-west. The prairie plateau covers an area which may be roughly represented by 120,000 square miles, and in its northern part, the fertile belt of land before referred to, lies. West and south of the prairie plateau, are the great plains, bounded on the north by the continuation of the fertile belt, and on the west by the abrupl wall-like precipices of the Rocky Mountains. The area of the arid and uncultivable plains of the basin of Lake Winnipeg exceeds 100,000 square miles. These dimensions, when tabulated, furnish the subjoined view of the surface features of Central British America:-

| $01$ | $\begin{aligned} & \text { Area in sq. } \\ & \text { miles. } \end{aligned}$ | Mean elevation above the sea level. |
| :---: | :---: | :---: |
| Lakes Winnipeg, Manitobah and Winnipegoosis <br> Low country, composed chielly of swampy land or shallow <br> soil, restinr on limestone rock (1st. plateau) <br> Terraces of P ? |  |  |
|  | 13,00 | 640 feet. |
|  | 70,000 |  |
|  | 1,500 | 900-1100 |
| Great Prairie Plateau (2nd Plateau) Great Plain Plateau (3rd Plateau) for the most part arid and | 120,000 | 1,200 |
| uncultivable <br> Total of Wimipez Basin, east of the Lake of the Woods, | 108,000 | $\underline{1,600-4,00}$ |
| about ........................... | 312,000 |  |

## AGRICULTURAL CAPABLLITIES,

The area in the great central basin, available for cultivation, is fully 80,000 square miles, or very nearly as large as England; and is capable of supporting an agricultural population exceeding $15,000,000$. It extends from the Lake of the Woods to the Rocky Mountains. The outlying patches of fertile land lying within the limits of the great plains, together with the deep, narrow valleys of the rivers which run through those arid regions, the east flanks of the Rocky Mountains, and the low lands in the region of the great lakes, might support another $1,000,000$; so that the present available area of arable soil,-the greater portion of which is susceptible of being at once turned up by the plough, -would sustain an agricultural population equal to that of the Kingdom of Prussia.

The great plains rise gradually as the Roeky Mountains are approached, until they attain an elevation of 4,000 feet above the sea level. With, only a very narrow intervening belt of hilly country, the mountains rise almost abruptly from the plains, and present lofty precipices, that frown like battlements over the level country to the eastward.* North of the fertile belt"is the subarctic forest region, as far as longitude 105. Here the fertile belt greatly expands in a north-westerly direction, and includes the valleys of the Athabaska and part of Peace River. South of the fertile belt lies the true arid district. It occupies most of the

[^2]country drained by the south branch of the Saskatchewan, and reaches as far north as latitude $52^{\circ}$. This is the extension into British territory of the great American desert, an uncultivable region, extending as far south as Texas, and varying from 400 to 600 miles in breadth.

The fertile belt is occasionally diversified with clumps of aspen, and here and there a few spruce fir are found-the remains of that former extension of the forests which once reached to the northern limits of the arid plains of the great American desert west of the 98th degree of longitude. The wooded part of the Basin of Lake Winnipeg is almost exclusively confined to the first or lowest plateau west of the great lakes, the valley of the Winnipeg river on the east, and the flanks of the Rocky Mountains, where the forest extends to the height of 7,000 feet. From the western boundary of the Province of Canada to Rainy Lake, white spruce, larch, pines of several species, poplars and birch, form a thick forest. From Rainy Lake to Red River Settlement, elms, oaks, ash, basswood, beech, iron wood, largely intermingled with spruce and pines, abound. North-west of Red River, on the low plateau and the flanks of the precipitous escarpment which forms the denuded boundary of the great prairie plateau, the forest consists of aspen, larch, birch, spruce and pines.

This forest extends to the banks of the Assinniboine, but consists chiefly of aspen, although some very fair oak and elm luxuriate in the deep and narrow valleys in which that river and its tributaries flow. The most common tree in the woodland country north of the Saskatchewan, is the white spruce; then follows the canoe birch, the larch, the balsam fir, the red pine, the balsam poplar, and the ever present aspen.

The beech, ironwood, ash, cedar, arbor vitæ and the white pine, do not extend beyond Red River. The red elm has been found as far west as Carlton House ;* and the false sugar maple was seen on the North Saskatchewan, long. 108.

Within the fertile belt there are detached groves of aspen; and in the flats of the alluvial river valleys, the balsam poplar rises from a dense thicket of willows, thorns, and the poire of the French Canadian-the delicious Misaskatomina $\dagger$ of the Crees, which on the south branch of the Saskatchewan attains an altitude of eighteen feet, and is loaded with the most luscious fruit.

The northern limit of the great American desert reaches as far north as lat. $52^{\circ}$. The surface is formed of cretaceous and tertiary strata, which is often highly impregnated with glaubers salts and gypsum (sulphates of soda and lime) ; and it bakes in the early summer into a hard and cracked surface. The characteristic plants on this sterile soil are the

[^3]shrub sage or Absinthe, and the prickly prairie apple (opuntia). There are many fertile spots in the arid region, like oases in a desert; yet as a whole, it must be regarded as unfit for the abode of civilized man. Along the eastern base of the Rocky Mountains, there is a large area of fine land with very rich pasture; but the constant occurrence of sharp night frosts would render the raising of common grain crops precarious. M. Bourgeau, an accomplished botanist, accompanied the expedition sent out by the British Government in 1857-8 and 9, across the continent through British America. In a report submitted by this gentleman to Sir William Hooker, he speaks of the Saskatchewan district, in the neighborhood of Carlton House, as much more adapted to the culture of the staple crops of temperate climates-such as wheat, rye, barley, oats, \&c. -than one would have been inclined to believe, from its high latitude. "In effect, the few attempts at the culture of the cereals already made in the vicinity of the Hudson's Bay Company's trading-posts, demonstrate by their success how easy it would be to obtain products sufficiently abundant to largely remunerate the efforts of the agriculturists. There, in order to put the land under cultivation, it would be necessary only to till the better portions of the soil. The prairies offer natural pasturage as favourable for the maintenance of numerous herds as if they had been artificially created." The vetches found in the rich prairies of the fertile belt, are as valuable for the nourishment of cattle as the clover of Europe.

The agricultural capabilities of the Basin of Lake Winnipeg may be summed up as follows :-

> On the route from Fort William, Lake Superior, to the Lake of the Acres. Woods, including the valley of Rainy River.
> 200,000
> The Fertile Belt, stretching from the Lake of the Woods to the flanks of the Rocky Mountains, and as far north as the 54th parallel, on the Athabaska, west of McLeod's River, ( 80,000 sq. miles.) ............ $51,200,000$
> Isolated areas in the Prairie Plateau, south of the Assinnibojne........ $2,000,000$
> Isolated areas in the great Plain Plateau, the extension northwards of the great American Desert, and in the valleys of the rivers flowing through it. . . . . . . . . . . . . . . . . . . . . . . . . ..........................
> $1,000,000$

$$
\begin{aligned}
& \text { Desert area unsuitable for the permanent abode of man......................115,280,000 }
\end{aligned}
$$

Comparing this extent of surface with Canada, we arrive at the following results:-

[^4]Area occupied by the Sedimentary Rocks, $(80,000$ square miles $)$
$51,200,000$
Area occupied by the Orystalline Rocks
$166,400,000$
If we suppose that one sixth of the area occupied by the Crystalline Rocks is capable of cultivation, as regards soil and climate, (an estimate pro-
qu bably in excess,) the total amount of land in Canada available for the purpose of settlement, will be approximately.
$78,900,000$
Showing an excess of tand fitted for the permanent abode of man, in favor of the Basin of Lake Winnipeg over the Province of Canada, of $5,500,000$
In Upper Canada, with a population of $1,396,091$, there are 13,354 ,907 acres held by proprietors, of which only $6,051,619$ acres are under cultivation, cropped or in pasture.* If the whole quantity of land fit for cultivation were occupied in the same proportion, the population of Canada would exceed eighteen millions. At the same ratio of inhabitants to cultivable and grazing land, the Basin of Lake Winnipeg would sustain a population exceeding $19,000,000$, or leaving out of consideration the land suitable to grazing purposes, its capabilities would be adapted to support $12,000,000$ people. Tf European countries such as France and Great Britain were taken as the standard of comparison, or even many of the States of the American Union, the number would be vastly greater.

It must, however, always be borne in mind that the arid region of the great American desert, which places an uncultivable and uninhabitable wilderness between the present north-westerly settlements in Nebraska and the Roeky Mountains, extends into British America only in the form of the apex of the cone shaped figure it has on the map, with its base in the highest lands of Texas and Mexico. It is well defined in British America by the precipitous and wave worn escarpment of the Grand Coteau de Missouri, and with the outlying patches between the two branches of the Saskatehewan, it certainly does not exceed the estimated area of 108,000 square miles of surface. Much of the Prairie Plateau not included within the fertile belt contains splendid pasturage.

It is at the "Edge of Woods" within the limits of the fertile belt, from the Touchwood Hills to the Bocky Mountains, that vast herds of buffalo come in winter, to feed and fatten on the rich natural grasses which the early frosts in autumn convertinto nutritious hay. The perennial supply of food for cattle is a feature of immense importance in the North-West. Without that inexhaustable storehouse of provender it would have been impossible for the Prairie Indians to have reached the numbers they attained before the whites thinned their ranks with the diseases they imported. It would have been impossible for the buffalo to have swarmed

[^5]throughout the land if nature had not provided them with abundance of food at all seasons of the year. Nor could the Prairie Indians maintain the large number of horses which form the chief part of their worldly treasure, if fodder were not accessible in extraordinary abundance during the wiater season. The Indians and the buffalo are fast passing away, and eivilized man will soon occupy with his domesticated flocks and herds the xich pastures of the Fertile Belt, which would still be the hunting grounds of numerous nomadic tribes if the fur trade had not prepared the way for the spread of civilization.

## MINERAL RESOURCES, COAL.

A large part of the region drained by the North and South branches of the Saskatchewan is underlaid by a variety of Coal or Lignite. On the North Saskatchewan coal occurs below Edmonton in workable seams.

A section of the river bank in that neighborhood shows in a vertical space of sixty feet three seams of Lignite, the first one foot thick, the second two feet, and the third six feet thick. Dr. Hector, who made the section, states that the six foot seam is pure and compact. * Fifteen miles below the Brazeaus River, a large tributary to the North Saskatchewan from the west, the lignite bearing strata again come into view, and from this point they were traced to the foot of the Rocky Mountains. On the Red Deer River the lignite formation was observed at various points. It forms beds of great thickness; one group of seams measured twenty feet, "of which twelve feet consisted of pure compact coal." (Dr. Hector.) These coal beds were traced for ten miles on Red Deer River. At ohe point they were on fire, (1858) the beds exposed is a cliff of about 300 yards in length, being at many places in a dull glow, the constant sliding of the bank continuing to supply a fresh surface to the atmosphere. "For miles around the air is loaded with a heavy sulphurous and limy smell, and the Indians say that for as long as they can remember the fire at this place has never been extinguished summer or winter." A great Lignite formation of cretaceous age containing valuable beds of coal has a very extensive development on the upper waters of the North and South Saskatchewan, the Missouri, and far to the north in the valley of the Mackenzie. Col. Lefroy observed this Lignite on Peace River,and Dr Hector recognized it on Smoking River, a tributary of Peace River, also on the Athabaska, McLeod river and Pembina river, all to the north of the Saskatchewan, "thus proving the range of this formation over a slope rising from 500 to 2,300 feet above the sea, and yet preserving on the whole the same characters, and showing no evidence of recent local disturbance, beyond the gentle uplift which has effected this inclination." $\dagger$

[^6]South and East of the Cretaceous Lignite or Coal Region lies the great Tertiary Lignite formation of Nebraska, which extends into British America, and large denuded areas containing a vast abundance of Lignite boulders have been discovered on the Souris River, in several localities. It is very probable that the Nebraska Tertiary Lignites extend in situ to a considerable distance north of the boundary line on the grand Coteau de Missouri which is touched by the South branch of the Saskatchewan at the Elbow. In the Lignite Tertiary, beds of Lignite six and seven feet thick have been found near the boundary line in Nebraska. It has also been discovered in beds a foot thick at the Wood Hills, about eighty miles south of the Quapelle Mission. The specimens which have been brought from that locality have the appearance of cannel coal and burn freely. The existence of such extensive deposits of fuel on both the branches of the Saskatchewan and their tributaries is of great importance. The ease with which supplies can be procured on the banks of navigable rivers gives additional importance to wide areas of fertile soil, which, from the absence of timber, would otherwise lose much of their value as a region fit for settlement.

## iron ores.

A marked feature in the cretaceous rocks of the Winnipeg basin is the extraordinary abundance and wide distribution of clay iron stone. From the Souris River to the Rocky Mountains this ore is found in great profusion. It occurs on the escarpments of the Riding Mountain, west of the great Lakes, and for many miles the bed of the Souris river is formed of its concretionary nodules. It has been observed associated with cretaceous coals near Edmonton and Rocky Mountain House on the upper Saskatchewan. On Red Deer River, Dr. Hector says that " $a$ few miles above Shell Creek the lower part of the banks are to a great extent composed of a bed largely charged with iron-stone nodules, which have very irregular shapes, unlike the nodules in other parts of the Strata. The profusion of these strewn on the slepes of the valley reminded me of the heaps of wasted iron-stone scattered in the neighbourhood of iron furnaces. A little way further on, where a creek joins the valley, thick beds of coal appear at the base of the section. The lowest bed is four to five feet thick, and rery compact and pure." The association of coal and iron ore suggests, without comment, the importance of these Mineral deposits. An analysis of the clay iron stones, taken without special solution from the Souris river by the writer in 1858 showed the ore to be of remarkable purity. The specimen analysed contained not less than 82 per cent. of carbonate of iron, which would give about 40 per cent. of pure iron, the celebrated iron ore of the Glasgow coal field, containing 41.25 per cent. of the pure metal.

SALT.
This important material is distributed throughout a large part of the valley of Red River, the basin of Lakes Manitobah and Winnepegoosis, and thence north-westerly towards the Arctic Sea, the Brine Springs occur at the junction of the Silurian and Devonian rocks of the Winnipeg Basin, and have already yielded salt of excellent quality in several localities. Many years ago (1823) salt was manufactured at Pembina, and more recently at the Salt works, Manitobah Lake, by Red River natives, and at Swan river by the Hudson Bay Company. Springs rich in brine are known to exist in upwards of twenty different places along a stretch of country extending from the boundary line to the Saskatchewan. In the valley of La Riviére Sale, about twenty-six miles from Fort Garry, salt springs are numerous, and the ground in their vicinity is frequently covered with a thick incrustation. Springs issue from the sides of the hills in positions very favorable for solar evaporation in shallow basins, which might be excavated at a lower level than the spring, and salt extracted without the employment of artificial heat. The cold of winter might also be employed to obtain concentrated brines as in France and Russia. The strength of the brines in the basin of Lake Winnipeg is remarkable. The celebrated wells of Onondaga yield one bushel of salt from 30 to 50 gallons of brine; whereas in dry seasons 24 gallons of brine from the Winnepego-sis springs will yield one bushel of salt.

## BUILDING MATERIALS.

Limestone admirably adapted for building purposes exists throughout the low regions west and south of the great lakes. The sandstones of the tertiary and cretaceous series which overspread the prairie and plain plateaus are too incoherent and friable to be used as building materials, but then bands of limestone from six inches to two feet in thickness are not uncommon in those formations.

Clays suitable for bricks occur in many places, on the Assinniboine, the Saskatchewan, the Red Deer River, Battle River, and elsewhere. There is always a profusion of boulders of the unfossiliferous rocks to be found in the valleys and beds of the different streams, and in some places they are inconveniently numerous.

## (To be continued.)

## MY COUSIN TOM.

## A SKETCH FROM LIFE.

BY MRS. MOODIE.
Mx cousin was an artist. An odd man in the fullest acceptation of the word. He was odd in his appearance, in his manners, in his expressions, and ways of thinking. A perfect original, for $I$ never met with any one like him, in my long journey through life.

He had served his apprenticeship with the great Bartolozzy, who was the first copper-plate engraver of his time.
He had so won the esteem of his celebrated master, that on the expiration of his apprenticeship, he returned to him the $£ 400$ premium he had received with him, together with a pair of handsome gold kneebuckles, which were indispensable articles in a gentleman's dress of the last century.
During his long residence with the Italians, he had imbibed a great dislike to every thing English. He wrote and spoke in the Italian language. I verily believe, that he thought in Italian; and being an exquisite masician, both on the viol to Gomba and the violin, never, played any but Italian music. He was a Catholic too, although born of Protestant parents. Not that he had any particular preference for that religion, for I don 't think that he troubled his mind at all about it ; but it was, he said, "The religion of Kings and Emperors. The only one fit for a gentleman, and a man of taste?"
He admired the grandeur of the ceremonial, which he considered highly picturesque; and the works of art that adorned the beautiful chapel in Spanish Place; and above all, the exquisite music and singing.

When staying with him and his niece, during the winter of 1826, he always insisted upon our going with him to this place of worship. It was there that my soul thrilled to the inspired notes of the divine Malabran, and many of the great musical celebrities of that day.
"You Protestants," he would say, "give your best music to the Devil; we Catholics to God."

He used to repeat an aneedote of a friend of his, a Mr. Nugent, who was also a Catholic, and a brother artist, with great glee. Some gentleman, who was sitting for his portrait, was laughing at him about his religion.
"You believe in Purgatory too?"
"Yes sir," replied Nugent, "and let me tell you, that you may go farther and fare worse!"

Cousin was considerably more than sixty when I first knew him. He
was above the middle size, of a thin spare figure, and had the finest dark eyes I ever saw in a human head. His features were regular, and very handsome; but his face was sadly marred by the small-pox-a matter to him of deep and lasting regret.
"Beauty is God's greatest gift," he would say. "It is rank, wealth, power. What compensation can the world give to one who is cursed with hopeless ugliness?"

No one could look into his intelligent face, and think him ugly. But then, he dressed in such a queer fashion, and paid so little attention to his toilet, that days would pass without his combing his hair or washing his hands and face. The young artists, who loved him for his benevolence, and to whom he was a father in times of distress, had nick-named him "Dirty Dick." He knew it, but did not reform his slovenly habits. ${ }^{\text {" }}$ Pho! Pho! what does it matter. I am an old man. Who cares for old men? Let them call me what they like. I mean to do as I please."

Every thing was dirty about him. His studio was a dark den, in which every thing was covered with a deep layer of dust. The floor was strewed with dirty music and dirty old books, for he was an antiquarian, among his other accomplishments, and he sat at a dirty easel, in an old thread-bare black coat and pants, now brown with age. His fine irongrey hair, curling round his lofty temples in tangled masses-his left hand serving for a palette, and covered with patches of color most laughable to behold.
I used to laugh at him and quiz him most outrageously. I was a great favorite with the old man, and he took it all in good part. His walking costume was still more ridiculous, and consisted of a blue dress coat and gilt buttons, buff leather breeches and Hessian military boots, a yellow Cassimere waistcoat, and a high, stiff black stock. I was really ashamed of being seen with him in the streets. Every one turned round and looked at us. He walked so rapidly, that as we went up Oxford street, every coachman threw open the door of his vehicle.
"A coach-want a coach, sir. Camberwell-Peckham, sir."
Cousin would laugh, put out his tongue - an ugly fashion he hadand reply :-
"Coach be- I prefer the Apostles" horses !"
An Irishman answered him very pertly-"An' bedad they can travel purty fast!" answered him very pertly-"An' bedad they can travel Cousin was a confirmed old bachelor, but he had once been in love. But I will tell the story as it was told to me.
"The rich banker, Mr. H—, had an only daughter-a very beautiful girl. You know how Tom C_admires beauty! He met the young lady at her father's table, and fell head over ears in love. He was a fine clever young fellow in those days. The old gentleman was greatly pleased with his wit and talent, and gave him a carte blanche to his
house. Tom availed himself of the privilege, and went every day to look at Arabella H - ; for naturally shy with women, he seldom plucked up courage enough to speak to her, still less to inform her of his passion. The young lady, I have every reason to know, loved him too; but as it is not customary for women to make the first advances, she patiently waited from day to day, expecting the young artist to declare himself. This state of things lasted for seven years. The young lady grew tired of her tardy wooer. One day he went as usual, and missed his idol from her place at table. 'Where is Arabella-is she ill?' he enquired anxiously of her father.
"' Have you not heard the news, Tom? Arabella is married!'
" 'Is she!' with a great oath. 'Then what business have I here!'
"He started up from the table, and ran through the streets like a madman, without his hat, and making the most vehement gesticulations, and never entered the house again. Poor Tom! It was a dreadful disappointment; he has never studied the graces, except in pictures, since. He, however, has not forgotten his first love : I can trace her likeness in every female head he paints."

He had a collection of very fine paintings from the old masters, which covered the walls of his dining-room ; but they were so covered with the accumulated dust of years, that it hid the pictures more effectually than any veil. One day, when he was absent at a sale of books, I took upon myself to clean the neglected master-pieces. I wish I had let it alone ; they were only fit for a bachelor artist's private studio. His old housekeeper, a character in her way, stood by, quietly watching the progress of the work.
"Now you see what you have done! My dear old mistress, master's mother, always kept them naked figures behind muslin curtains; but master is so absent-minded, he 'll never notice them coming staring out upon us, in broad daylight."

Fortunately for me, her prediction was verified. He never noticed the brilliancy of the restored pictures. He had a habit of talking aloud to himself; but as it was always in a foreign language-for he was a great linguist-he had the talk all to himself. He was once coming down to —, to spend the Christmas with us, and it so happened, that he was the only passenger in the mail. Finding the time hang heavily on his hands, he began repeating, in a loud sonorous voice, the first canto in the "Jerusalem Delivered" of Tasso. When the coach stopped to change horses, old Jey, the guard, and father of the present celebrated marine artist, put his head in at the window. "For Godsake, Mr. C- , tell me to whom you are talking. I am sure there is no one but yourself in the coach."
"To the Devil!" was the curt reply.
"Indeed, sir-He does not often travel this road.-I hope you may find him a pleasant companion!"

Cousin laughed for a week over this adventure. When speaking of his younger days, it was always with deep regret that they had so soon vanished; and he generally ended such reminiscenses with blasphemously cursing his old age.

Another of his oddities consisted in his wishing to be the last man, that he might see the destruction of the earth. "What a grand spectacle," he would say. "It would be worth living for a thousand years to witness."

He was the first artist that used the pencil in water-color portraits. These he executed so well, that his studio never wanted a subject. Five and twenty guineas was his usual price for a likeness; which, as he worked very rapidly, was generally finished in two sittings. He was a master in his art. His pictures were very elegant; and he had a peculiar faculty of conveying to paper or canvass the exact expression of the sitter's face. He hated to paint an ugly person, and as a consequence, his likenesses were always flattering.
"You can never make a woman as good looking as she thinks herself. They like to be flattered. It is only improving the features a little, and giving a better complexion than nature gave. While you retain the expression in which the real identity lies, you must get a good likeness a picture that will please every one."
"But, cousin, is that right?"
"Yes, it pleases them, and fills my pockets, and both parties are satisfied. I never painted but one person whose vanity it was impossible to gratify. He was the ugliest man in London, and had the worst countenance I ever saw. In fact, a perfect brute! Lord George Gordon, of Wilkes and Liberty notoriety. He sat to me fourteen times, for his portrait. I improved his coarse features as much as I could; but with all my skill, he made a vile picture. His face was covered with warts. I omitted them, and gave nature the lie, by giving him an expression which she had not given. He was still unsatisfied. I then drew him just as he was-warts and all. He was in a furious rage, and said 'I had painted him like the Devil!' "' I do not think, my Lord, that the Devil would be flattered with
the likeness. You are a ugly fellow. You may take the portraits or leave them; but you shall pay me for the time I have wasted on such a disagreeable subject.' He tore the pictures to pieces, and left me, foaming with passion. 'But I made him pay me,' he said, rubbing his hands with glee. 'Yes; I made him pay me!'"

He had a beautiful half-length portrait of Lady Hamilton. It was taken at the time she was struggling for bread, and sitting as a model to
young artists. It was a charming face. I was never tired of looking at it.
"Ah, poor Emma!" he said, gloomily. "She was one of nature's master-pieces-a Queen of Beauty! Like Absalom, from the crown of her head to the sole of her foot, she was without spot or blemish. You will find the models of her foot and hand in that closet. The Venus de Medici could not show finer. And what was her fate?"
"She deserved it!" I said, coldly.
"Bah! that's the way women judge each other. They are merciless. She married for bread - to obtain a home-a kind, talented man, double her age. The result might have been anticipated. Clever, fascinating, beautiful-think of the temptations that surrounded her! the admiration she excited wherever she went! She made Nelson a hero! He dying, bequeathed her to his country ; and that country left her to perish in poverty, heart-broken and alone. When I was last in France, I went to see her grave. No stone marks the spot ; and the grave was so shallow, that by putting down my stick through the loose sand, I could touch the coffin. It makes me savage to think of it."

With all his eccentricities, cousin Tom had a large, generous heart. He heard that a young, promising artist, whom he had not seen for some time, was without employment, and starving in a garret. He sent him, anonymously, thirty pounds; and rubbing his hands, and laughing, said, as if to himself, "Poor Devil, he will get a good supper to-night, without feeling obliged to any one!"

In one of his rambles, he found two forlorn cats locked up in the area of an old stone house in Charlotte street. The creatures could neither get out of the area, nor back into the house. "They were perfect skele-tons-mad with hunger," he saia. "I had to buy them meat, or they would have devoured each other."

For more than a month he visited these cats every day, bearing on a skewer a supply of cat's meat. The animals knew his step, and used to greet him with a chorus of affectionate mews. One night we were just sitting down to tea, when he suddenly started up, with an oath. "I hare forgotten to feed my prisoners!" and rushed out to supply their wants.

New tenants came to the house. The cats were released from durance vile; but he called upon the fresh occupants, and recommended his poor pensioners to their protection.

While I am upon the subject of cats, I will relate one of the drollest things that cousin did, while I was staying at his house. He had a large cat, whom he called "Black Tom." The creature was without a white hair-as black as night. It had a weird, ghost-like appearance, sitting, silently staring at you, with its large yellow eyes, in the dim
twilight of a dingy London house. Cousin was very fond of his black namesake, and made him the sharer of both his bed and board. The attachment was mutual. Tom always followed close at his master's heels, or sat perched upon his knee, by the hour together.

It was droll to see cousin nursing his favourite. He had a habit of leaning back in his chair, with his hands clasped behind his head-his eyes closed, and himself in a half-dreamy state,-only that he kept up a perpetual tattooing with both his feet, which not only made him shake all over, but jarred the room and every thing in it. As the motion increased in violence, Tom actually danced up and down upon his master's knee, uttering now and then a plaintive remonstrance, in sundry low mews. It was impossible to witness this without laughing.

For three days Black Tom disappeared. At the end of the first, cousin began to grow fidgety; at the close of the second, he speculated sadly about his pet, and went ont into the street calling "Tom! Tom!" in a melancholy voice, and enquiring of the wondering foot passengers, if they had "seen his black cat?"

The people, I have no doubt, thought him mad.
The next day his anxiety and grief grew desperate. He wrote a large placard, describing Tom's personal peculiarities, and offering the reward of a sovereign to any one who would restore him to his rightfnl owner. This he pasted, with his own hands, upon a large iron gate opposite, that closed a short cut from Newman street into Rathbone Place.

Before three hours had elapsed, the house was beseiged with boys, bringing (in hope of getting the reward) cats in baskets-cats in bags, or lugged by the neck and tail. Dire were the mewings, as each poor puss was held up for inspection; and loud the execrations of cousin, when a red or gray cat was offered to his notice, or a slim, lean cat of the genus feminine. At length a boy more fortunate than the rest, presented a black cat in a pillow-case, which cousin was determined must be Tom, because it was black; and he paid the joyful bearer the sovereign, without further parley. The animal was set loose in the hall; but instead of answering to the call of the delighted owner, it gave a loud squall, and rushed down into the kitchen, taking refuge in the copper-hole.

An hour after, I found cousin's housekeeper, Jane, upon her knees, peering under the copper, and talking thus:-"Is it Tom? No, it is 'nt. Well, I think it is; but he don't seem to me to behave like him. Tom! Tom!'"
"Mew!" from the frightened puss. "Law! I don't think it can be he. That's not his way of mewing. It is'nt Tom. I believe master has thrown that sovereign of his into the dirt. Do, Miss S —, just look here, and tell me if that is our own Tom!"

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I was soon down on my knees beside her, peeping at the rescued Tom, whose eyes glared at us, like two burning coals, from his dingy retreat.
"Had Tom a white patch on his breast, Jane?"
"No, no. He was as black as soot!"
I fell a laughing. "Mercy! what will cousin say to this beast with a white shirt-frill?"
"It isn't Tom, then? He shan't stay a moment here," cried Jane, starting up, and seizing the broom. "I knew it was'n't our own decentbehaved cat. Out, brute!" One touch of the broom, away rushed the surreptitious Tom. I opened the door, and he passed like a flash into the street.
"Law! how shall I tell master? He 'll be so mad; and when he gets angry, he swears so. It is awful to hear him."
"I'll tell him."
To me young and full of mischief, it was a capital joke. I heard the floor shaking as I approached the parlour. Cousin was tattooing as usual, with both his feet, and talking to himself. I opened the door; was it ghost or demon! The real Simon Pure was dancing up and down on his master's knee !
"Where did you find Tom?"
"Oh, he came home of himself. I was sitting thinking of him, when he jumped up upon my knee, and began drumming with all his might."
"But it was not Tom for whom you gave the sovereign."
"I know it," said cousin, quietly. "It's all the same. I gave the sovereign to recover Tom, and he is here. I should have lost it anyhow; and that poor boy has got a famous price for the lean family cat. I'm contented; Tom's happy; and that young imp is rejoicing over his good fortune-perhaps buying bread for his starving mother."

Tom played his master a sad trick a few weeks after this, which in the first moments of exasperation, nearly cost puss his life.

Cousin had been four years painting a half-length picture in oils, of the Madonna. Many beautiful faces had looked out from that canvass, but none satisfied the artist. Whenever the picture was nearly finished, he expunged it, and commenced a new one. His old friend, C. G-, the Consul-General for Prussia, used to step in every day for a chat with him. "Ah! dere he is, at de everlastin' virgin," was the common salutation he gave the artist.

It was during my stay with him that the picture was finished to his entire satisfaction. It wanted but a few days for the opening of the Exhibition at Somerset House, and he was anxious to send something.
"Ah! she will do now!" he cried, after giving the last touches. "What do you think S—," to me.
"She is divine! But how will you get the pieture dry in time to send?"
"I will manage that." And he whistled, sung, rubbed his hands, and tattooed with his feet, more vigorously than ever.
I was going out to a party in the evening with my cousin Eliza, his niece. We had washed some lace edge to trim the front of our dresses. There was a paved court behind the house, into which the studio opened. Against the cingy brick wall, cousin had tried to cherish a few stunted rose trees. Upon the still leafless boughs of said trees, I had hung our small wash to dry. Opposite the dingy brick wall on the one side, was the steep side of the next house, with no window looking into our court, but a blank, which was meant to represent one. In this blank, brick recess, cousin had placed the Madonna to dry in the shade ; and truly no sun ever peered into that narrow court, surrounded by lofty walls.

After we had dined, I went to fetch in the lace, and prepare for the evening.
"What are you laughing at, in that outrageous manner? Girl, you will kill yourself!" and cousin Tom emerged out of the studio. I was holding to the iron rails, on either side of the stone steps, that led down into the court.

The tears were running down my cheeks. I pointed up to the picture. "Did you ever see before a Madonna with a moustache?"
How he storm'd, and raged, and stamped-and how I laughed! I knew it was cruel. I tried to stop it. I was sorry-really sorry-but if I had had to die for it, laugh I must. The Madonna had been placed head downwards in the blind window. Black Tom, who had followed his master into the court when he put up the picture, no sooner found the court clear than he jumped up to the stone ledge of the blank recess, and began walking to and fro in front of the painting, touching it every time he passed; and as the color was quite wet, he not only took that off, but left a patch of black hairs in its stead. One of the virgin's eyes had been wiped out with his tail ; and he had bestowed upon the elegant chin, a regular beard. She looked everything but divine-the most ridiculous and disreputable caricature of beauty.
In the meanwhile, the author of the mischief, unconscious of the heretical sacrilege of which he had been guilty, jumped down from his lofty perch, and began rubbing himself against the poor artist's legs bestowing upon the old shabby pants a layer of paint, mingled with black hairs. "Tom, you rascal! You have ruimed me! I will kill

He would have kept his word, had not Tom looked up in his face, and
uttered one of his little affectionate greetings. This softened his master's ire.
"Take him out of my sight, S-. You were worse than him, for laughing at the destruction of my best picture, for you knew how it would annoy me!"
"I plead guilty ; but just look at it yourself. How could any one help it?"

He looked-fell a laughing; took down the unlucky picture, and flung it back into the studio, then turning to me, said, with his usual air of quiet drollery: "I forgive you, Gipsy! I wonder the transfiguration did not make the cat laugh!"

He came home one night very gloomy and sad, and began walking to and fro the long drawing-room, with rapid steps, and talking half-aloud to himself. "John Milton dead-dead in the workhouse-and I not know it! I his old friend and fellow-student. Dear me! it's too dreadful to be true! A man of his talent to be allowed to perish thus! It's a disgrace to the country. Yes! yes! such is the fate of genins."

This Milton was a landscape painter and engraver of some eminence. Cousin Tom brooded for months over his sad fate.

Dear old cousin,-some of the happiest months I ever spent in London were spent in that dirty house in Newman street. Though I laughed at your oddities, I loved you for your real worth. I was young thenfull of hope, and ambitions of future fame. You encouraged all my scribbling propensities, and prophesied _. Ah, well! it never came to pass. Like you, I shall sink to an unknown and unhonored grave, and be forgotten in the land of my exile.

## EARLY NOTICES OF TORONTO.

## by the rev. dr. scadding.

The antiquarian in Canada has to sustain his mania on meagre fare, so far as the land in which he lives is concerned. Quebec and Montreal, in their early structures of solid masonry, present some objects of interest; but elsewhere, for the most part, the traces of the past are slight. A few grass-grown earthworks, a few depressions on the surface of the greensward, are all the restiges that will reward diligent research; and even these are fast disappearing before the builder and engineer. The remains of the old French Fort, to the westward of Toronto, which used to be explored on holidays by the rising youth of the place some thirty years ago, are now obliterated by the new stone barracks; and certain pits and irre-
gular mounds, shewing the site of the first public buildings on the left bank of the Garrison Creek were utterly cut away in the construction of the Esplanade. Where the long government store-houses and enclosures for ship building, with a quaint guard-house above, stood within recent memory, distinctive objects and well known reminders of the primitive day, the ruthless steam-excavator has devoured down to the very rock.

For the re-construction of its infant history Toronto must have recourse to the records of the original French settlements in the country, and to the journals of early explorers. Impressed as we are with the fact that our western Capital is but of yesterday, and that it received its present euphonious Italian-sounding name so recently as 1834, we are somewhat startled at stumbling so frequently as we do on the familiar and home-like Toronto in documents nearly two centuries old.
The French settlers in Canada soon had reason to feel alarm at the audacity of the English of the Atlantic seaboard, who were unceasing in their efforts to draw away the trade from the channel of the St. Lawrence. Their emissaries were everywhere, tampering with the native tribes even in the territories confessedly French. In connexion with proceedings of this kind the name of Toronto comes up in the year 1686.
M. de Denonville, the Governor General of the day, thoroughly alive to the machinations of Col. Dongan, Governor of New York, who, in spite of general prohibitions from headquarters, will persist in unduly patronizing the Iroquois, thus writes to the home minister, M. de Seignelay that " M. de la Durantaye is collecting people to fortify himself at Michilimaquina, and to occupy the other passage at Toronto, which the English might take to enter Lake Huron. In this way, our Englishmen will find somebody to speak to."
In the following year, however, this same Governor writes "I have altered the orders I had originally given last year, to M. de la Durantaye to pass by Toronto and to enter Lake Ontario at Gandatsitiagon, [about Port Hope] to form a junction with M. du Lhu at Niagara. I have sent him word by Sieur Juchereau who took back the two Huron and Outaonas chiefs this winter, to join Sieur du Lhu at the Detroit of Lake Erie, so that they may be stronger, and in a condition to resist the enemy, should he go to meet them at Niagara."
In 1637 it is decided that the Iroquois must be humbled, if the French power in Canada is to be maintained. But to effect this, it is reported to Paris 3,000 men would be required. Of such a number, M. de Denonville has at the time only one half, though, as the memoir goes on to say "he boasts of more for reputation's sake, for the rest of the militia," it is stated, " are necessary to protect and cultivate the farms of the Colony; and a part of the force must be employed in guarding the posts of Fort Frontenae, Niagara, Toronto, Missilimakinak, so as to secure the
aid he (M. de D.) expects from the Illinois and from the other Indians, on whom, however, he cannot rely, unless he will be able alone to defeat the five Iroquois nations."

Toronto in these despatches lapses occasionally into Tarento, Taronto, Toranto and Torronto.

After a brief prosecution, this war with the Iroquois is brought ingloriously to a close, the government of Louis XIV. being unwilling to incur further expense. The Colonial minister writes out-"This is not the time to think of that war ; the king's troops are too much occupied else-where, and there is nothing more important for his service, nor more necessary in the present state of affairs than to conclude peace directly with the Iroquois, His Majesty not being disposed to incur any expense for the continuation of that war." The truth being, that William III. having just taken possession of the throne of Great Britain in the place of James II, a war between England and France was imminent.

In 1749, we find in the usual Journal of Canadian events periodically $y_{y}$ transmitted to France, directions given by Governor General M. de la: Galissoniere for the erection of a stockade and store-houses at To-s ronto.
By this time, it appears the English of the sea-board had obtained permission from the Iroquois to establish for themselves at the mouth) of the Oswego river-a "Beaver-trap," which speedily took the form of a stone-fort and trading post. Here such prices were offered that the trade of the North Shore was diverted thitherward. This Choueguen - so the post was named-became to the authorities at Quebec a veritable Carthago delenda. It not only damaged the Canadian trade, but was an assumption of right and title to the Iroquois territory, which lay, as it was believed, within the limits of New France. It was in connexion with the establishment of this hateful Choueguen, that Toronto was first fortified and made a French trading-post.
"On being informed," says the Journal above referred to, " that the Northern Indians ordinarily went to Choueguen with their peltries, by way of Toronto, on the north-west side of Lake Ontario, twenty-five leagues from Niagara, and seventy-five from Fort Frontenac, it was thought advisable to establish a post at that place, and to send thither an officer, fifteen soldiers, and some workmen to construct a small stockade-fort there. Its expense will not be great, the timber is transported there, and the remainder will be conveyed by the barques belonging to Fort Frontenac. Too much care cannot be taken to prevent these Indians continuing their trade with the English, and to furnish them at this post with all their necessaries, even as cheap as at Choueguen. Messrs. de la Jonquiére and Bigot will permit some canoes to go there on license, and will apply the funds as a gratuity to the officer in com-
mand there. But it will be necessary to order the commandants at Detroit, Niagara, and Fort Frontenac, to be careful that the traders and storekeepers of these posts furnish goods for two or three years to come at the same rate as the English. By these means the Indians will disaccustom themselves from going to Choueguen, and the English will be obliged to abandon that place."
From a despatch of M. de Longueil in 1752, we learn that this Fort was named Fort Rouillé, from Antoine Louis Rouillé, Count de Jony, Colonial Minister, 1749-54. M. de Longueil says that "M. de Celoron had addressed certain despatches to M. de la Lavalterie, the commandant at Niagara, who detached a soldier to convey them to Fort Rouillé, with orders to the storekeeper at that post to transmit them promptly to Montreal. It is not known what became of that soldier. About the same time a Mississague from Toronto arrived at Niagara, who informed M. de la Lavalterie that he had not seen that soldier at the Fort, nor met him on the way. It is to be feared that he has been killed by Indians, and the despatches carried to the English."

One more extract from the same document will enable us further to realize the uncomfortable anglophobia prevalent at this time at Toronto.
"The storekeeper of Toronto," the despatch reports, "writes to M. de Vercheres, commandant at Fort Frontenac, that some trustworthy Indians have assured him that the Saulteux, who killed our Frenchman some years ago, have dispersed themselves along the head of Lake Ontario, and seeing himself survounded by them, he doubts not but they have some evil design on his fort. There is no doubt but 'tis the English who are inducing the Indians to destroy the French, and that they would give a good deal to get the savages to destroy Fort Toronto, on account of the essential injury it does their trade at Choueguen." Montealm's destruction of Choueguen in 1756, was speedily avenged in 1758. Hannibal ante portas ! was no longer a false alarm along the northern shore of Lake Ontario. The capture of Fort Frontenac in that year by the irrepressible English counter-balanced their loss of the strong-hold which commanded the entrance of the Oswego river; and M. de Vandreuil is necessitated to inform the minister, M, de
Massiae, thater Massiac, that "if the English should make their appearance at Toronto, I have given orders to burn it at once, and to fall back on Niagara."
The last French order, issued in regard to Toronto, was in the following year. After stating that he had summoned troops from Illinois and Detroit, to rendezvous at Presquisle on Lake Erie, M. de Vandreuil adds-" as those forces will proceed to the relief of Niagara, should the enemy wish to beseige it, I have in like manner sent orders to Toronto, to collect the Mississagues and other natives, to forward
them to Niagara." All in vain. The enemy it appears, did wish to besiege that place, and on the 25th of July it surrendered, an event followed on the 18th of September in the same year, (1759) by the falk of Quebec.

The physical conformation of the site of Toronto, must have always rendered it a noticeable spot. Here was a sheet of quiet water lying between the mouths of two rivers, sheltered by a natural mole of sand, which, extending itselt gradually from the highlands to the east, had striven to grasp the shore by a succession of hooks. On this low barrier, groves of trees, often strangely lifted into the air by the effect of refraction, were landmarks from afar, guiding the canoe from every quarter of the lake, to a tranquil haven within.
Two favorite interpretations of the designation of the spot have been "Trees rising out of the water"-and "The place of meeting" -the Rendezvous, or Chepstow, perhaps, as our Saxon fore-fathers would have said-the Trading-place. But we are sadly in want of an infallible authority to decide the signification as well as the orthography of native Indian names.

Some persons have very gratuitously suggested that "Toronto" is a perpetuation of the name of the engineer who constructed the fort; but the fort, we see, was originally called Rouille. Others have thought that it was some such expression as au tour de la ronde d'eau, caught up and repented by the Indians from the French, as "Yankée" has arisen from an Indian effort to say "Anglais." I once thought it had some connection with the Gens de Petun-the Tobacco-tribe-the Tionnontates-who stretched in this direction from the west, and may have had here a bourgade or pagus. Kania-toronto-quat also, on the opposite side of the lake (hodie clipped down into Irondequoit, Monroe Co., N. Y.), said to signify "an opening into or from a lake"tempted to further speculations on this subject. On maturer consideration, however, I think it not improbable that one of the native appellations of Lake Simcoe has something to do with the question. This lake, called by the French Lac le Clie, and Lac aux Claies, besides Siniong or Sheniong-had also the name of Toronto. The chain of lakes, extending from the neighbourhood of this lake southeasterly, and discharging by the Trent, are called the Toronto lakes; and the river Humber, once styled St. John's, was also described as the Toronto river.
Though small in area, and of slight elevation above the sea, yet, as occupying the summit level of a vast water-shed, Lake Simcoe is a very distinguished sheet of water; and it is possible that several watercourses and localities may have derived their designations from their relation to it. Ouentaronk is given as one of its native names; and
it may not be unreasonable to imagine that this is the term, which has been gradually rubbed down, while passing from trader to trader, into Toronto.
Although the Ottawa and the Trent were the high-roads from the north-west to the east, the southward trail across the neck of the peninsula, between the lakes Huron, Erie and Ontario, along the courses of the Holland river and the Humber, was, as we have seen, far from being unimportant; and the terminus of this track was a notable locality.*. By this route came down many a pack of Beaver; and here landed the war-parties of the Iroquois, whenever that domineering confederacy found it necessary to make a demonstration among the tribes on the north-western border of the lake. And here, from time immemorial, stood a native village. In an early MS. map of the time of General Simcoe's administration, I remember seeing sketched on this site a few acute-angled wigwams, with the inscription, "Torontoan Indian village now deserted." The name probably indicated the landing-place for the portage to the lake Ouentaronk. $\dagger$

Some early maps give the name of the village situated here, as Teïaiagon; whilst other authorities place this name in the neighbourhood of the present Port Hope.

At the moment when the localities along the north shore of Lake Ontario were receiving the names which their new owners were pleased to impose, the star of Northumbria seems to have been in the ascendant

[^7]in the office of the surveyor-general for the time being. Hence, we see along the border of the lake to this day, Newcastle, Alnwick, Percy, Darlington, Whitby, Pickering, Scarborough. And hence it was that "Tork," up to 1834, dislodged "Toronto" from the map of Upper Canada.
Bouchette's well-known description of the harbour of Toronto, as he found it in its natural state, in 1793, is as follows:-
"I still distinctly recollect," he says, in 1832 "the untamed aspect which the country exhibited when I first entered the beautiful basin, which thus became the scene of my early hydrographical operations. Dense and trackless forests lined the margin of the lake, and reflected their inverted images in its glassy surface. The wandering savage had constructed his ephemeral habitation beneath their luxuriant foliage, the group then consisting of two families of Mississagas, -and the bay and neighbouring marshes were the bitherto uninvaded haunts of immense coveys of wild fowl; indeed they were so abundant as in some measure to annoy us during the night. In the spring following, the lieutenant-governor removed to the site of the new capital, attended by the regiment of Queen's Rangers, and commenced at once the realization of his favourite project. His Excellency inhabited during the summer and through the winter, a canvas house, which he imported expressly for the occasion; but frail as was its substance, it was rendered, exceedingly comfortable, and soon became as distinguished for the social and urbane hospitality of its venerated and gracious host, as for the peculiarity of its structure."
Two years later (in 1795), the Duke de la Rochefoucault Liancourt, in his travels through North America, reports: "There have not been more than twelve houses hitherto built in York. They stand on the Bay, near the river Don. The inhabitants," he takes the trouble to add, "do not possess the fairest character. ** In a circumference of one hundred and fifty miles the Indians are the only neighbors of York." Again he remarks" From a supposition, that the fort of Niagara would certainly remain in the possession of the English, Governor Simeoe at first intended to make Newark the chief town of his government. But since it has been decided that this fort is to be given up, he has been obliged to alter his plan. A chief town or capital must not be, seated on the frontiers, and much less under the guns of the enemy's fort. He has since thought of York, situated on the northern bank of Lake Ontario, nearly opposite to Niagara; it is in this place he has quartered his regiment; and he intends to remove thither himself, when he shall withdraw from the frontiers." This place, he adds elsewhere, "has a fine extensive road (roadstead for ships) de tached from the lake by a neck of land of unequal breadth, being in
some places a mile, in others only six score yards broad ; the entrance of this road is about a mile in width; in the middle of it is a shoal or sandbank, the narrows on each side of which may be easily defended by works erected on the two points of land at the entrance, where two blockhouses have already been constructed."
Here we have a reference to the early fortifications, standing not many years back, which caused the north-western extremity of the Toronto peninsula to be humorously designated Gibraltar Point, and which have left a souvenir in the little inlet still named Block-house Bay.
The question of a seat of government, only of late decided, has, as we have seen above, been agitated since 1792 . Our forefathers in that year were much harassed with it. The people of Newark, being in possession, thought it ought to remain where it was. Governor Simciee had decided that it should be at York; but still only temporarily, until the west should be settled, and London built. Lord Dorchester, the Governor General, was of opinion that Kingston was the proper place. In 1796 the Newarkers vainly flattered themselves that the retirement of Gen. Simcoe from the Government would put an end to the project of removal.
"The town of Niagara" writes Isaac Weld in 1796, in his Travels in North America, 1795-7, "hitherto has been and still is the Capital and (as he elsewhere speaks) "the centre of the Beau monde of the Province of Upper Canada ; orders, however, had been issued before our arrival there for the removal of the seat of Government from thence to Toronto, which was deemed a more eligible spot for the meeting of the Legislative bodies, as being farther removed from the frontiers of the United States. This projected change is by no means relished by the people at large, as Niagara is a much more convenient place of resort to most of them than Toronto; and as the Governor who proposed the measure has been removed, it is imagined that it will not be put in execution." It will be observed that Weld uses the name Toronto in preference to York. He makes the following remarks on the changes which had recently been made in the names of places. "On the eastern side of the river" he says, "is situated the fort, now in the possession of the people of the States, and on the opposite or British side the town most generally known by the name of Niagara, notwithstanding that it has been named Newark by the Legislature. The original name of the town was Niagara; it was afterwards called Lennox, then Nassau, and afterwards Newark. It is to be lamented that the Indian names, so grand and sonorous, should ever have been changed for others. Newark, Kingston, York, are poor substitutes for the original names of these respective places, Niagara, Cadaragui, Toronto."

To those who have seen the actual developement of Toronto, some of the
expectations of its original projectors seem not a little astonishing. The first Parliament house, at the time of its destruction by fire in 1824, a substantial building of brick with an east and west aspect, occupied the site of the present Stone Jail. Hence to this day "Parliament Street" in that direction. Here was the primitive Belgravia of the capital. Here on the low accumulations of alluvium and sand at the embouchure of a slow-paced stream-amidst miniature bayous, lagoons and marshes-it was supposed a new Venice in the course of years, would appear-a lucustrine Cybele,

> " Rising with its tiara of proud towers."
"The tiara of proud towers" has to some extent become a reality, but their foundations have, for the most part, been laid further to the west, in localities preferred for elevation of position and wholesomeness of air.

In the Canadian annals for the year 1813, our Western Capital comes prominently and rather painfully into view. Since June in the preceding year the United States had been carrying on a war against Great Britain, nominally on the question of the right of search on the high seas, but in reality with the hope of "driving the leopards" off the American continent. The policy of Napoleon at the moment was engaging all the attention of England; and at no time had more than 3,000 regular forces been spared for the protection of the Canadas; and these in the course of a twelvemonth had been seriously reduced in number by casualties. It need not surprise us then that York, though a depot of shipping and stores was poorly defended. "On the evening of the 26th, (of April, 1813) information was received that many vessels had been seen to the eastward. Very early the next morning, they were discovered lying to, not far from the harbour; after some time had elapsed, they made sail, and to the number of sixteen, of various descriptions, anchored off the shore, some distance to the westward. Boats full of troops were immediately seen assembling near the Commodore's ship, under cover of whose fire, and that of other vessels, and aided by the wind, they soon effected a landing." So writes the unfortunate Gen. Sheaffe, who, after eight hours' resistance, had to evacute the town, and leave it in possession of the United States' general, Dearborn, "preferring the preservation of his troops to that of his post, and thus carrying off the kernel, leaving to the enemy only the shell." The great preponderance of the attacking force forms an apology for the retreat. The little band of regulars and militia retired step by step within their defences, pursued by overwhelming numbers; and as Gen. Pike, who led the furces which had landed from the vessels, approached the second or main battery, the magazine exploded, crusbing him and two hundred of his men. Fragments of the building struck, in their descent, the ships in the harbour and "the water shocked as with au
earthquake." Two of the articles of capitulation were "That the troops, regular and militia, at this post, and the naval officers and seamen, shall be surrendered prisoners of war. The troops, regular and militia to ground their arnis immediately on parade, and the naval officers and seamen be immediately surrendered. That all public stores, naval aud military, shall be immediately given up to the commanding officers of the army and navy of the United States-that all private property shall be guaranteed to the citizens of the town of York." Before, however, the actual capitulation, Gen. Sheaffe with the remains of the regular soldiers, escaped in safety by the Kingston road. The flag of the Fort, and the Speaker's mace were transmitted to Washington as trophies of this success. The American Secretary, Armstrong, offered to Gen. Dearborn, the following criticism on his proceedings on this occasion:-"In your late affair, it appears to me that had the descent been made between the town and the barracks, things would have turned out better. On that plan, the two batteries you had to encounter, would have been left out of the combat, and Sheaffe, instead of retreating to Kingston, must have retreated to Fort George.,

Three months after this event a second visit of the United States flotilla is thus described in the report of Sir George Prevost:-"The enemy's fleet of twelve sail, made its appearance off York on the 31st (July, 1813.) The three square-rigged vessels, the Pike, Madison, and Oneida, came to anchor in the offing; but the schooners passed up the harbour, and landed several boats full of troops at the former garrison, and proceeded from thence to the town, of which they took possession. They opened the gaol, liberated the prisoners, and took away three soldiers confined for felony; they then went to the hospital and paroled the few men that could not be removed. They next entered the storehouses of some of the inhabitants, seized their contents, chiefly flour, and the same being private property. Between 11 and 12 that night they returned on board their vessels. The next morning, Sunday, the 1st instant, the enemy again landed, and sent three armed boats up the river $\mathrm{D}_{\text {on, }}$ in search of public stores, of which being disappointed, by sunset both soldiers and sailors had evacuated the town, the small barrack wood-yard, and store-house, on Gibraltar Point, having been first set on fire by them; and at daylight the following morning the enemy's fleet sailed." It is furthermore added that this foraging expedition was under the command of Commodore Chauncey, and Lieutenant-Colonel Scott, "an unexchanged prisoner of war on his parole." This is the still existing Lieutenant General Scott.

By the treaty of Ghent in 1814 peace was restored; and Canada, left to itself for a series of years, became the victim, in both its subdivisions of innate, organic social disease. It was the misfortune of York to
partake of the general mediceval condition of the country Visitors, impelled across the Atlantic by the awakening spirit of emigration, gave dreary reports of the place and its society. To Rochefoucault's remark in 1794, that " the inbabitants of Toronto do not possess the fairest character," Gourlay in 1821, rather spitefully adds "nor have they yet mended it." But the explorers of this period seem very unphilosophically to have expected to find in remote colonial communities, a higher social condition than that which the mother country itself, at the corresponding time exhibited. The state of things in England up to the passing of the Reform Bill is confessed not to have been politically satisfactory. What a miracle would it have been to have discovered prior to that event, a Colony boasting that its institutions were exact transcripts of those of the mother-state, and yet ruled in an exceedingly enlightened manner.

Mrs. Jameson in 1836, discerned more clearly how matters stood; and while commenting with severity on persons and things as she found them, expressed hopes which have turned out to have been well grounded. "Toronto is, as a residence," she says, "worse and better than other small communities-worse insomuch as it is remote from all the best advantages of a high state of civilization, while it is infected by all its evils, all its follies; and better, because, besides being a small place, it is a young place, and in spite of this affectation of looking back, instead of looking up, it must advance; it may become the thinking head and beating heart of a nation, great, wise, and happy; who knows? And there are moments when, considered under this point of view, it assumes an interest even to me; but at present it is in a false position, like that of a youth aping maturity; or rather like that of a little boy in Hogarth's picture, dressed in a long-flapped laced waistcoat, and ruffles and cocked hat, crying for bread and butter. With the interminable forest within half a mile of us-the haunt of the red man, the wolf, the bear -with an absolute want of the means of the most ordinary mental and moral developement, we have here conventionalism in its most oppressive and ridiculous forms. If I should say, that at present the people here want cultivation, want polish, and the means of acquiring either, that is natural-is intelligible, -and it were unreasonable to expect it could be otherwise; but if I say they want honesty, you would understand me, they would not; they would imagine that I accuse them of false weights and cheating at cards; so far they are certainly "indifferent honest" after a fashion, but never did I hear so little truth, nor find so little mutual benevolence. And why is it so ? because in this place, as in other small provincial towns, they live under the principle of fear-they are all afraid of each other, afraid to be themselves; and where there is much fear, there is little love, and less truth. I was reading this morning of Maria d'Es-
cobar, a Spanish lady, who first brought a few grains of wheat into the city of Lima. For three years she distributed the produce, giving twenty grains to one man, thirty grains to another, and so on,-hence all the corn in Peru. Is there no one who will bring a few grains of truth to Toronto?" The authoress doubtless deemed berself a second Maria d'Escobar in this regard; and perhaps, to some extent, she was. It is amusing to read her remarks in another place. "The strange, crude, ignorant, vague opinions I heard in conversation, and read in the debates and the provincial papers, excited my astonishment. It struck me that if I could get the English preface to Victor Cousin's Report printed in a cheap form, and circulated with the newspapers, adding some of the statistical calculations, and some passages from Duppa's report on the education of the children of the poorer classes, it might do some goodit might assist the people to some general principles on which to form opinions; whereas they all appeared to me astray, nothing that had been promulgated in Europe on this momentous subject had yet reached them; and the brevity and clearness of this little preface, which exhibits the importance of a system of national education, and some general truths without admixture of any political or sectarian bias, would, I thought-I hoped-obtain for it a favourable reception. But, no ; cold water was thrown upon me from every side-my interference in any way was iso visibly distasteful, that I gave my project up with many a sigh, and I am afraid I shall always regret this. True, I am yet a stranger-helpless as to means, and feeling my way in a social system of which I know little or nothing; perhaps I might have done more mischief than good-who knows? and truth is sure to prevail at last; but truth seems to find so much difficulty in crossing the Atlantic, that one would think she was 'like the poor cat i' the adage,' afraid of wetting her feet."

> (To be continued.)

## THE BANK OF CREDIT FONCIER.*

No matter how well governed a state may be, there is always some reform needed, which the people believe, if made, would conduce to their greatness, their happiness and their prosperity. The grievances of which the nations have had, throughout the world's history to complain, are for the most part diverse as the circumstances amid which

[^8]ment, upon their laws, upon their modes and customs. But there is at least one which has been felt by all, no matter what their race, or what their form of government. The men who have given hope of its removal, have ever been among the most popular of their time. It has furnished the theme upon which the selfish agitator has declaimed; the subject upon which the philosopher has reasoned, and the evil for which the statesman has legislated, ever sirce agitators, philosophers and statesmen have existed. For no sooner have men become so far civilized as to make laws by which their mutual intercourse shall be regulated, than society divides, not necessarily into patrician and plebeian, but certainly into rich and poor. And the poor have always desired to possess themselves of the substance of the rich; or, as they have become more civilized, to obtain at least, upon easy terms, the use of that by which wealth may be created. We need not trace the process. The money lender has arisen ; and with him have come complaints and distress. He has been legislated against from the time of Moses downward; he has been persecuted; he has been "regulated" in his incomings and his outgoings; but all to little purpose. He has reasserted his sway. By the fact of his existence, he has dissipated the theories of the wisest, and well nigh deprived men of all hope of remedy against his exactions. But in recognising the laws on which his power rests, there are not a few who maintain, that we of this generation, have allowed them too unimpeded a sway. We have by the light of civilization, ameliorated many results of the natural laws which we are accustomed to designate evils. May we not lighten the effects of this? Because the extraction of Jewish teeth-that remedy so firmly believed in by our ancestors-has failed to check usury, are we at the end of our resources? Is there no means by which the law which regulates the price of money may be made to press less heavily against the upward struggling of the poor; not as did Patterson and Briscoe, Chamberlayne and Law by setting up in rebellion against it ; but by pressing it into the service of mankind. May not its effect be lessened, by bringing to bear against it other natural forces equally powerful and unyielding? These questions are well worthy the consideration of the statesman and the philanthropist; and to them the advocates of the Credit Foncier, hold that they give a satisfactory reply. It is our present task to enquire into this claim.

The scheme, as propounded in the work before us, has two aspectsthe economic and the political. If it be shown that it is based upon ideas which contravene established principles, we must not, therefore, come to the conclusion that it cannot be of any possible use. We see that in France, in times of scarcity, the rate at which bread shall be sold to the people is fixed by the state. We know that such regulations have per se a tendency to increase the price of food; but when the
government steps in and pays to the baker the difference between the legal and the market price, the immediate object in view-that of supplying the starving masses with something to eat at a cheap rate-is obtained. The argument that such legislation has a tendency to make a people improvident and careless, does not affect the fact that, for a time at least, they do get their bread at a less price than they would were the laws of commerce allowed to press with full weight upon them. Applying this illustration, then, to the system of the Credit Foncier, it remains to be seen how far it obeys economic laws ; where it departs from them, and the means whereby the evils consequent upon such departure may be limited, if not entirely cured.

Banks of landed credit are by no means a novelty. They have existed, in one form or other, for many years, in most countries on the continent of Europe, differing very considerably in the details of their plan, and instituted with different views, but all established upon one broad principle. The main object of the promoters of those with which we have to deal, has been to furnish to the proprietors of land, means whereby they may obtain the use of capital, for long periods, upon the easiest possible terms, at the lowest possible rate. To effect this, it has been found necessary to furnish the best security to capitalists for repayment. It has therefore been agreed to offer nothing, save the land itself, and never to mortgage it for more than one-half; in some cases, for not more than one-third of its actual value at the time of making the loan. The securities so obtained are to be placed in the keeping of the Bank. With this understanding, capitalists are invited to embark in the enterprise. They are required to subscribe for shares to a given amount; and this done, they become the proprietors of the concern. The Bank having thus been established, issues bonds secured upon the mortgages it makes; not upon any individual mortgage, but upon the whole, in solido. Meanwhile, the association has been looking for customers. It represents to the owners of land, that they may obtain the use of money at a low rate of interest; and that by means much more easily than if they dealt after the ordinary fashion. The common usurer would require of them a heavy interest; would loan them his money for a short term only ; and at the end of that term, when exhausted by their efforts to meet the interest as it fell due, would swoop down upon them, and deprive them of house and home. But the Credit Foncier has a different way of doing business. Not only will it lend money at a low rate, and for any term not less than twenty nor more than fifty years; but by the machinery of its sinking fund, the farmer will find that the exertions which would be necessary to

[^9]pay the simple interest to the usurer, will amply suffice to pay to his new friend principal and interest together.

These, then, are the general features of the Credit Foncier scheme. It manifestly has its advantages. But these advantages are by no means so entirely one-sided as its more enthusiastic advocates would have us believe.

We will examine the two most prominent features ; first the security of ered en masse to the capitalist; and secondly, the sinking fund.

In ordinary transactions, the landholder offers his farm to the moneylender, as security for the re-payment of the loan which he seeks. The money-lender makes enquiry into the value of the farm, and into the title by which it is hed; and in proportion to the risk he runs, so he adds to his charges for the use of his capital. He knows the mortgage he will actually hold is the only security he will have ; and he is therefore trinute and particular in his investigations. But in buying the bonds of the Credit Foncier, he is placed upon a different footing. The whole of the mortgages held by the company are his security; and upon a prima facie view of the case, he would be disposed to purchase them, even though they bore the minimum rate of interest. The risk he would run would be small perhaps; still there is a risk which many men would esteem fatal. By the constitution of the Credit Foncier, the managers of the company are elected by the shareholders, not by the bondholders. By the constitution of the company, also, for every dollar lent on mortgage, one dollar in bonds may be issued. Consequently, the managers of the Bank are pecuniarily interested to a very small extent, compared with the bondholders. It is not their own money that they loan, but the money of other people. While according to them, then, the utmost conscientiousness in the discharge of their duties, we cannot believe that they will give that minute investigation to each security tendered, which they would give, did they occupy the position of the ordinary moneylender. The plea that the bondholder has the whole of the securities to fall back upor, does not meet the difficulty; for a number of fallible parts cannot make an infallible whole. We all know how easy men find it to dispose of funds which do not belong to them. Writing on a subject akin to this, Adam Smith said:-"The directors of such companies being rather the managers of other people's money than their own, it cannot well be expected that they shall watch over it with the same anxious vigilance with which the partners in a private co-partnery frequently watch over their own. Like the steward of a rich man, they are apt to consider attention to minor matters as not for their master's honor; and very easily give themselves a dispensation for having it. Negligence and profusion must therefore always prevail in the management ${ }^{\text {º of such a company." }}$

Speaking of the Ayr Land Bank, established in 1769-which had some features in common with that of the Credit Foncier-the same writer says:-"A bank which lends money perhaps to five hundred different people, the greater part of whom its directors can know very little about, is not more likely to be judicious in the choice of its debtors, than a private person who lends out money to a few persons whom he knows, and in whose sober and frugal conduct he has good reason to confide." We do not offer these as fatal objections to the Credit Foncier system. All we contend is that there are grounds for taking exception to the security offered. The argument that if the owners of money had the loaning of it, they would endeavour to extract from the farmer the highest possible rate of interest, and thus defeat the object for which the Credit Foncier is established, does not make its security one iota the more valuable.

We have next to examine the principal upon which the sinking fund is established; and as it is the essential feature of the Credit Foncierthe one which takes precedence of all others-we will explain its working at some length. In countries where banks of landed credit exist, the annual payment which the borrower makes is termed the "annuity." It consists of three parts : first, of the interest, which is supposed to be at the same rate as that which the bank pays upon the bonds; secondly, of the expenses of management, generally estimated at one per cent.; and thirdly, of an amount for the sinking fund. With the two firstmentioned parts, the Credit Foncier meets the interest upon its bonds, and defrays all the charges necessitated by the maintenance of a large establishment. The third portion is placed to the credit of the borrower, as so much paid towards the extinction of the debt he has contracted. Moreover, and herein it is that the great triumph is achieved : this payment to the sinking fund is invested at compound interest ; and in order that it shall grow the more rapidly, it is divided into two portions, payable in advance every six months. Now it will be seen, that by so much as the sinking fund is increased, by so much is the amount remaining due decreased; and the rate of interest being the same throughout the the agreed upon, the portion of the bi-annual payment needed to meet the interest, is periodically lessened, leaving the portion to be applied to the sinking fund simultaneously greater. And thus it is contended, the whole debt may be cleared off, with far greater ease, than if a borrower paid to a common usurer an annual interest, and at the end of the term, had to re-pay, in a "lump" sum, the money loaned to him. In order to make this matter as plain as possible, we will avail ourselves of the figures furnished by M. Gerdolle, Chief Accountant of the Credit Foncier of France, as given by Mr. Macaulay, premising that the expenses of the management are there estimated not at $\$ 1.00$ per cent., but at 60 c ., 88 mills.
"A landed proprietor borrows from the Credit Foncier, the sum of $\$ 100$, to be re-paid by annuities in fifty years. The loan is made at the fixed rate of $\$ 5.45$ per annum, thus divided : interest, $\$ 4.25$; cost of management, 60 c ., 88 mills ; sinking fund, 59 c ., 12 mills. This small sum of 59 c ., 12 mills, being capitalised each six months, will produce in interest, at the end of the first year, 63 mills - or in all, 59 c., 75 mills. This sum produces in interest, at the end of the second year, $2 \mathrm{c} ., 55 \mathrm{~m}$., which added to the sum of $59 \mathrm{c} ., 75 \mathrm{~m}$. paid by the borrower, gives a sinking fund of $62 \mathrm{c},, 30 \mathrm{~m}$. Add this sum to that of $59 \mathrm{c}, 75 \mathrm{~m}$, which represents the sinking fund of the first year, and we will find, at the end of the second year, a sinking fund (paid in) of $\$ 1.22 \mathrm{c}$., 05 m .; so that on the loan of $\$ 100$, the balance remaining due is $\$ 98.77 \mathrm{c}, 93 \mathrm{~m}$. At the end of ten years, the sinking fund will have reached $\$ 7.27 \mathrm{c}$., 26 m . ; at the end of forty years, $\$ 60.89 \mathrm{c}$., 31 m .; and finally, at the end of fifty years, it will have reached $\$ 100$; consequently the capital is paid in full, and the debtor is free."

We will now inquire into the soundness of this system. That it is plausible we confess ; but for many years, the greatest political economists have ceased to place faith in it.

The object the farmer has in borrowing, is to improve his land. By this improvement, he hopes to be able to obtain a return upon the sum he has borrowed, larger than the interest he has to pay. And out of the return thus earned, he estimates that he will not only be able to repay the principal, but that he will have "something over," for his own share. It is to obtain this "something over," this profit, that he borrowed. It matters not, so far as the fact of its existence is concerned, whether it be in his pocket in the shape of gold, or in his farm in any shape which goes to the increase of his capital stock. If he has it, he is a gainer on the transaction; if he has it not, he is a loser by so much as he is deficient.

Now, according to the Credit Foncier system, he ought, when he borrowed the money, to have reasoned thus:-"First I will pay my interest; then I will take a portion of the money I have borrowed, which I will inrest outside my farm, and leave to grow by the inherent virtue of compound interest; and thus at the end of the term, I shall have a sum set on one side sufficient to repay the principal." Having come to this conclusion, we will suppose he communicates his determination to a friend, and the following colloquy ensues :-
"Friend. - What did you borrow money at all for?"
"Farmer. - 'I borrowed that I might make improvements on my farm, and increase my profits.'
"Friend. - 'Will the sum you propose to set aside, be invested in
something more profitable than if-like the remainder of the money you have borrowed - you invested it in farm improvements?'"

The farmer may reply: "No! I hope to make greater profits by the balance which I invest on my farm, than the money I invest elsewhere will make."

Friend.-"Well, then, I would advise you to keep the sum you propose to invest in the sinking fund, and employ it upon your farm; for the difference between the profit you would get for it there, and the profit you will make upon it, if you invest it upon your farm, will be a dead loss to you."

Or suppose, on the other hand, in reply to the second question put to to him, the farmer answers: "Yes! The sum I invest in the sinking fund will make a greater profit than that which I shall use upon my land."

The friend would naturally ask: "If that be so, why not take the whole sum you have borrowed, instead of a part, and invest it on your compound interest theory, for according to your own showing, that being done, it will bring you a greater profit than if youspent it upon your land?" This conclusion, we think, is self-evident. If, by the authority of the legislature, the Credit Foncier could confine the growth of capital to its own coffers, then its advocates might justly claim for their sinking fund a marvellous virtue. But the farmer who adds to his capital the profit he each year makes upon it, increases that capital just as quickly as if it were placed in the care of the directors of the land bank.
A comparison unfavorable to the common method of borrowing money, is drawn after this fashion:-The farmer who makes a loan with the Credit Foncier of $\$ 10,000$, payable in twenty years, at an annuity of $\$ 807.23$ c. (i. e., $4 \frac{1}{4}$ per cent., with the contribution to the sinking fund and the expenses of management added), repays only $\$ 16,144$. Whereas if he borrow from the usurer, he has to pay an annual interest of $\$ 425$ for twenty years, which at the end of that time amounts to $\$ 8,500-$ giving, when added to the capital sum, a total of $\$ 18,500$-a difference in favour of the Credit Foncier of $\$ 2,356$. And furthermore, from the sum of $\$ 16,144$ repaid to the Bank, it is claimed, might fairly be deducted the profit the farmer must have realized by the employment of the capital for so long a period of time. But the borrower from the Credit Foncier does not enjoy the use of the whole capital for the period named: he parts with a portion of it each time he makes a payment to the sinking fund; and upon the money so invested, he is a loser to the extent of the difference between the amount it actually yields, and the amount it would have yielded had he invested it in improvements upon his farm. It is not the borrower from the Credit Foncier who can
deduct from the sum he repays to the bank; he must add to it to the extent of the loss he has sustained by the alienation of his capital. But it is the man who deals with the common usurer who must deduct from the amount he repays, the profit he has derived by the retention of the whole of the sum he borrowed, for the whole period for which he borrowed it.

We see, then, from the arguments we have offered, that the Bank of Credit Foncier is not established upon a thoroughly sound, economical basis. The questions forthwith are raised-can the state interfere in its favour? and if so, how far can that interference be beneficially carried? Are there no forces legislation can bring to counteract those which exist by virtue of natural laws.

The advocates of the Credit Foncier, feeling the difficulties that exist, at once propose the guarantee of the state. That given, and the fears of capitalists would be altogether removed, the bonds of the Credit Foncier would at once be placed in the highest rank; and consequently but small annual interest upon them would be required. In other words, the state is requested to take the risk from the shoulders of the bondholders, and to place it upon those of the country. The argument is, that by so doing, the struggling farmer will be enabled to avail himself of the use of money at a low rate of interest, which he will apply to the improvement of his land, and thus largely add to the national wealth and prosperity. In France this argument has prevailed; and the example is set up for the imitation of other people. But it is a matter of doubt, whether in any country where self-government exists, so powerful an instrument should be placed in the hands of those whom the people temporarily elevate to office. In nothing has the genius of Napoleon the Third been made more manifest, than in the manner in which he has drawn all power to himself. While on the one hand, he has done more than any ruler who has preceded him, to benefit materially the people at large, he has spread over the whole country a closely-woven net, which has placed a large portion of the property of the nation entirely in his hands. Every thing centres in him. No institution is free from his control. The banks, the railways, the municipal organizations, the vast institutions of the Credit Mobilier, and of the Credit Foncier, are his creatures, capable of being used by him to carry out his purposes ; dependent upon him for their very existence; certain to collapse the moment they are visited with his anger. It is easily seen that a man, desirous of instituting such a system as this, would readily avail himself of any instrument placed within his reach,-if not for the good of the country, at least for the enlargement of his own power. Although it would strengthen our argument much to show how this has been done by the Emperor-

Napoleon in many instances, the limits of our paper confine us to the Credit Foncier.*
The guarantee of the State being demanded for the Credit Foncier, the State necessarily demands a guarantee in return. It is therefore proposed to place in the national safe the mortgages in the possession of the company; in other words, to transfer to the government those securities which capitalists deem insufficient. Can the offer be accepted? $H_{0 w}$ is the government to know whether these mortgages are negotiated upon the basis set forth in the published prospectus or not? What Farrant has it for believing that the directors, with the guarantee of the nation at their back, while they themselves are interested pecuniarily to a small amount only, will not enter upon a course of reckless and ruinous transactions? Clearly, the mere deposit of the mortgages will not be sufficient ; and therefore it is, that when M. Dumas, the Minister of Commerce and Agriculture, submitted, in 1850, his bill to the Legislative Assembly, he made use of these words :-"The State should exercise a general supervision, and should protect every branch of labour, and the general pecuniary interests of the people. Its control, however, is indispensable in the case of Credit Foncier institutions ; but to give the Government the management of them, would be to impose too much responsibility upon that body." In what is this control to exist? How far is it to extend? It is, it appears, something more than "general *upervision;" something less than actual "management." It would, We think, be difficult to give a theoretical definition of the word. Practically, it means in France, that the Emperor may interfere, when his ${ }^{0} \mathbf{W n}$ interests or those of the nation require it ; but of the necessity, he must be the judge. This, we think, is a wise conclusion. The guarantee of the State once given to the Bank, the public faith once pledged, it cannot be withdrawn. No matter how badly the managers may conduct themselves-no matter though it be seen they are incurring great debts Which they will never be able to repay-they have the government guarantee, so that none who buy their bonds can be losers. What would the simple power of supervision; the mere right of protesting avail? It Would be utterly worthless. Nothing short of full controlling power can ever be accepted by a wise government in exchange for its pledge of the national faith.
There is another reason for coming to this conclusion. We will suppose, for instance, that the uncontrolled bank managers have a " misunderstanding" with the representatives of the government, at a time when the latter are about issuing proposals for a loan. The Credit Foncier, in order to coërce the State, places upon the market a great quantity of its

[^10]bonds, and proceeds to force a sale. A brisk competition would immediately ensue, or else the government would consider it better to yield to the wishes of the Bank, rather than incur inevitable loss by braving its hostility. This is not altogether a suppositious case. In 1855, the French Government and the Credit Mobilier both sought loans at the same time (the latter for $120,000,000$ francs) ; but the State having the control of the institution, immediately caused it to withdraw from the Bourse.
It is impossible to estimate the value of the Credit Foncier of France, as a commercial speculation; since it has been in the receipt of adventitious aid, without which it might long ago have been numbered among the things that were.

We will mention two instances. By a decree of the 28th February, 1852, the municipalities and the departments were ordered to invest, each to a certain amount, in the bonds of the Bank. And on the 10th December of the same year, the Emperor caused a donation to be made to it of $10,000,000$ francs. There is little doubt, if similar assistance were given to an institution of the kind in Canada, that the shareholders would be able to loan money at a very low rate. The advisability of doing so, it is beyond our province to discuss.

Among many other privileges conferred upon the Credit Foncier in France, it has been placed in a position superior to that of the common money-lender, in that extraordinary facilities for the collection and the protection of its debts have been accorded to it. We will give a short synopsis of some of the principal among these.
In the event of a borrower from the Bank being in arrears, a very summary process is provided, by which the Credit Foncier may sequestrate the property mortgaged, and apply the revenue to the discharge of the debt; taking precedence of all other creditors save those to whom wages are due. Or if, after the failure to pay one annuity, the Credit Foncier should think more energetic measures necessary, it may give one month's notice, and sell the land-still retaining its position as a preference creditor. These provisions are perhaps tolerable; but the law has been carried much further. The mortgagor is bound to inform the bank of any deterioration in the value of his property, and of everything relating to his right of possession, which may affect the security of the bank, under penalty of sequestration or expropriation, at the pleasure of the mortgagee. Moreover the capital would be exigible, in the event of it being discovered that any misrepresentation or dissimulation had been practised at the time of contracting the loan. All disputes are to be referred to the civil tribunal of the district, and disposed of in a summary manner. From its decision there is no appeal.

Here we have one of the methods by which Louis Napoleon secures
that unanimous public opinion, of which his friends never cease their praises. It is a charming system! The Credit Foncier holds mortgages amounting to some hundreds of millions of francs. Its debtors are spread over the length and breadth of France. Each one among them is bound to give notice, among a multitude of other conditions by which he holds his loan, of anything which occurs to deteriorate the value of his property, under the penalty of expropriation. How can the mortgagor teil, if he dares to disobey the hint given by the maire, to vote for the government candidate, that the Credit Foncier will not suddenly discover that something has oceurred to lessen the value of his farm, and at once subject him to the penalties in such cases made and provided? If the judges were independent, he might hope that the law would protect him, despite the large significance of the terms by which he is bound. But as the judges are removable at the pleasure of the Emperor, and are not in the habit of acting in opposition to his desires, there is but one alternative. Either Jacques Bonhomme must collect his farm labourers, and all whom he can influence, and take them to the poll, to vote for the government candidate, or be turned out of house and home. Rarely, we may be sure, does he hesitate long; very seldom does political heresy compel the Bank to have recourse to the procedure speciale $d^{2}$ expropriation. It would be strange if it did. The debtors to the Credit Foncier are all sound Napoleonists!

But setting aside the political argument, and taking it for granted that the privileges enjoyed by the bank are used only for the purpose of giving value to its securities, it would appear but right that some of these privileges should be extended to the ordinary money-lender. If the facilities given to the Credit Foncier to ascertain the value of properties which it is proposed to mortgage ; if the rapid and inexpensive methods by which judgment against a defaulter may be obtained ; if its position as a preference creditor enables it to lend and to borrow at a minimum rate of in-terest-why should not the same privileges be accorded to all capitalists who loan money on land? Let us put theargument in another light. It certainly would not be advisable to place additional difficulties in the way of the money-lender collecting his debts-thereby increasing his risks, and consequently his charges, for the use of money, in order to enable the Credit Foncier to make loans at a less rate than he. If this proposition be true, the converse is equally true, that it is not desirable to maintain difficulties which increase to the individual capitalist his risks, and to repeal them in favour of the Credit Foncier exclusively. M. Vernes, deputy-governor of the Bank of France, says :- "It is not necessary to create a Credit Foncier -it exists ; it is only necessary to free it from the embarrassments which sarround it, and which curb its free operations." The large body of isolated capitalists who loan their money on mortgages, is the Credit

Foncier referred to. "Remove the embarrassments which surronnd them "-the difficulty of investigating titles, of obtaining judgment, of collecting debts; and one of the main arguments urged in favour of the establishing of a central, all-absorbing, all-powerful Credit Foncier bank, falls to the ground.

In some countries, banks of landed credit have been allowed to issue notes based upon the mortgages they hold. As this, however, is an exceptional feature, we do not feel called upon to examine it in the present paper.

The two contending schools of protection and free trade, will regard the faults and evils of the Credit Foncier system from an entirely different point of view. The one which believes it to be the duty of the government to make up for the lack of individual enterprise among its subjects by means of State aid, and to interfere generally in the concerns of commerce, will see in the simple fact, that by means of the Credit Foncier, as established upon the continent of Europe, money is made available, at a low rate of interest ; full compensation for any p-litical evil, for any increase of the imperial authority, for any decrease of the popular power to which it may lead. On the other hand, those who, upon principle, oppose any attempt of government to interfere with or to restrict the full and free operations of the laws of commerce, and who would leave everything appertaining thereto, to free trade and individual enterprise, will see in the centralising tendencies of this State bank of Credit Foncier, an evil far counterbalancing any good it can possibly effect.

## HOLIDAY MUSINGS OF A WORKER.

## BY MRS. HOLIWELL.

## No. 1.-The Poetry of Every-day Life.

THIs is a sceptical age,-in mundane things as in heavenly, nothing is taken for granted, or received without inquiry. Like the old pagan Coifi, who in the time of the Saxon Redwall, rode full tilt against the false gods of his fathers, and hurled a sacrilegious lance within the holy precincts of the fane, do we assail with bold, defiant brow, the unquestioning faith of our ancestors; and with profane hands, raze to the ground the goodly edifice of ancient credulity. There is no superstition so sanctified by antiquity; no prejudice so hallowed by time. honoured adherence; no custom so venerable by long observance;
whose just claims to respect, the analytical, curious, doubting mind of the nineteenth century does not test and examine. There is no subject too sacred for argument; no being too exalted for criticism; meekness and reverence are old-fashioned qualities, thrust aside to make way for more exalted virtues (?). It is delightful when this sceptical spirit attacks and annihilates abuses that we individually desire to see attacked and annihilated (and where is the man who does not foster some pet grievance, religious, social or political ?) ; but when not content with demolishing what we consider an evil, it ridicules and overturns our long-cherished prejudices; praiseworthy reformation becomes revolutionary, and we shrink with horror from its unholy touch. There are many minds constructed on such thoroughly conservative principles, that every innovation is a pain; and frequently the aged experience a severe trial in observing the onward march of irreverence and discovery. They dislike novelties of all kinds; and will persevere in the good old Ways, even when convinced of the superiority of the new, -sadly feeling it is time for them to go, since every thing is changed, and they are not permitted to retain a relic of the sainted past. Their grandchildren puzzle them with unanswerable questions; demonstrate by argument the impossibility of facts piously believed in upwards of half a century, or discuss with nonchalance subjects long since buried, in some secret chamber of the heart, as too high and sublime to be approached by the finite intellect of man. Radicalism in thought must follow ages of reasoning in leading strings, just as arbitrary power finds its firmest adherents in the disappointed apostles of liberty. All this pulling down and irreverence are doubtless necessary to dissipate the thick clouds of ignorance, and give intellectual food to the starving million. Perhaps we are living in times when these things are carried to extremes : the beauty and poetry of life appear to be destroyed, the skeleton alone to remain. We are taught to believe nothing but what we can understand; pursue only the practical ; cultivate only the useful. True, superstition and prejudice have received their death blow; but devotion and humility have suffered in the conflict, as also that sweet handmaiden of rare souls-Poetry. Where is the beautiful fairy lore and simple faith of the past in elves and brownies? Where the wild songs of Sagas and Skalds? Where the romance of tournament and gallant prince; of persecuted beauty and faithless knight? Passed-passed away down the broad stream of time, like the mythological poetry of the ancients, and the rich allegories of the East. Yet the ethereal essence is not extinct; it needs no peculiar food; is not dependent on circumstance or place; does not exist in Arcadia or Provence only ; nor can it be summoned into being by external beauty or favourable surroundings. Poetry is an emanation from within, and
can find house-room everywhere. The eye that can see no poetry in the well-freighted merchantman, sailing out of the busy dock, to scatter civilization and draw distant peoples nearer together by the bond of mutual benefit, would be equally blind to the more romantic beauty of the Indian's canoe, floating on the blue bosom of the St. Lawrence. Poetry adapts herself to the spirit of the age; and although the songs of the troubadour are hushed, the mystic poets of Germany-the cold classic dramatists of France, and the glorious old writers of the Shakespearian school are silent now, poetry yet clothes herself in language congenial and natural to her listeners. Our poets no longer woo nature or action alone-giving us pastoral eclogues or heroic narratives ; but being scholars and thinkers, their poetic inspirations share in their philosophy, and partake of their metaphysics. But to love poetry-to be cognizant of her charming and elevating presence-is not always to write it. Here and there only at certain epochs the silent poetry of an age finds tongue in one individual; and with throbbing hearts and humid eyes we hear the echoes of our own thoughts, beauti-fied-transfigured! These are the highest manifestations of poetry: to feel it so profoundly, so overpoweringly, that it must burst forth in words of fire, and to appreciate so keenly, that no turn or figure, no height or depth, of the inspired singer, is lost or misunderstood. Here we have the preacher and the devout worshiper, the master and the pupil; cultivation, intellect, leisure, are implied in these relations; but poetry does not confine herself to so limited a sphere. She is democratic, universal, enlarging and improving minds of fair development and generous culture, and even elevating the thoughts and humanising the sentiments of the ignorant and rude. The laborer hieing homewards, unconsciously soothed by distant music, or the fragrance of flowers - the factory ehild, gazing with tearful awe into the starlit sky-are not inimical to her influences. We need no learning to experience some of her sweet power. We need no language to reveal our sensations, for they scarcely take the definite form of thought. Down deep in human Learts and brains, lie unwritten poems, lyrics, epics, dramas, -that, like dim revelations of a brighter world, float before dreamy eyes, and beguile the lonely or the idle hour. Who has not met, in his observation of humble life, certain refined and delicate traits of character, of feeling, or of fancy, that have struck him as out of keeping with the rough, uncultured whole? A coarse kitchen maid "can't abide sad music: it makes her lonesome;" yet she has not heard of Jessica,-"I am never merry when I hear sweet music." A rude teamster, dwelling in his $\log$ shanty, will cut the wood for his wife's stove, and draw the heavy bucket of water, ere he goes to his daily toil; yet he did not learn his lesson of chivalry from the medi-
eval ages. "Such harmony is in immortal souls;" and although it only shines forth rarely, let us believe with the poet, that it is "the muddy vesture of decay," that prevents the more frequent manifestation of it. A half-naked beggar child throws its bronzed limbs into an attitude of perfect beauty, without ever beholding the graces, or hearing of art.

All this is native poetry, betraying itself in deed or thought; humanising and softening such souls as entertain the gentle guest. If the barren field of ignorance can thus put forth sweet buds of fancy, how much more can the cultivated mind enjoy its blossoms! An eye for the beautiful, an ear for the harmonious, a memory well stored with the riches of the past-make a man a prince. Nature is his heritage; art his birthright. He sees, with a different vision to others; a country walk, a visit to a museum, are not bare facts but embellished with the wealth of his knowledge, and gilded with the glory of his imagination. Nothing so material or so coarse but the poetic spirit can find a side of brightness, or glean a forgotten ear of loveliness, from the contemplation. The earth-gazing farmer sows his seeds, watches their growth, gathers his harvest, and only counts the profit. A higher mind labours as effectually; but in the progress and process of vegetation, he catches glimpses of another world, of the laws divine intelligence has set over creation's works; reads allegories moral or fanciful-in the changes and phenomena he observes; and in the flush and splendour of nature's beauty, imbibes delicious draughts of enjoyment. For him the corn is not only ripe, but gold-coloured, and dashed with red poppies and blue flowers! For him the fruits of autumn are not only ready to pluck, but the glorious season has painted and decked the woods in gorgeous tints of yellow and purple dyes! For him the birds put on their gayest plumage, and warble their wildest notes! He loses nothing. Eye and ear are ever on the alert to perceive and feel what omnipotence has lavished on his appreciative creature!

[^11]chanting with enthusiastic and solemn fervor, the hymn of Rouget do Lisle!

Poetry looks beneath coarse face and rugged hands, and seeks an Arkwright, a Hargreaves, a Hutton, among its workmen. The genius of Stephenson, Lombe, Franklin, Wedgewood-honours the fraternity of workers; and the "nobility of labour" inspires respect for its representatives.

Thus with all things, simple realities, common facts are beautified by association ; or are types of a fair futurity, hallowed with the riches of forseeing thought. The tutor shrinks not from his task, however unpromising the soil, if he brings home to his heart that he is training candidates for life's honours. That when an infirm old man he will hear of proud intellects that once fed on his teachings, thrilling with surprise and admiration the rostrum or the bar; and that when quietly sleeping in his narrow grave, great men and good may point out his resting-place, and speak with respectful sadness of one who first shaped their thoughts and awakened their ambition to higher, nobler aims than ordinary mortals.

The commonest sights are suggestive to the cultivated poetic mind. A barefooted boy, pausing thoughtfully with his empty milk-can, recalls the Sheffield sculptor, his beautiful young dreams, his patience, undaunted energy, and final success. Or, who passing a group of ragged urchins, listening to the unscrupulous narrative of some bolder, more inventive spirit, does not remember the youthful Curran holding forth, in Ball's Alley, his boy's heart swelling with triumph at the power of his untaught eloquence ; dim forshadowing of the oratory that was to make its voice heard above the angry tempest of rebellion, and the wail of executions, startling long-forgotten feeling in the bosom of the stern judge, and transforming the terror of the prisoner into the proud glow of martyrdom.
The black-robed priest, as he passes to and fro on the busy street, is not simply Père this or Frère that, but a representative of men-great, good, ambitious or criminal - whose lives are blended with the history of the Christian world. If patriotic, he will recall the peaceful villages of La Nouvelle France, the fertile fields, the white cottages of the quiet settlers, -suddenly the sweet silence of the picture is broken by the wild war-whoop of the Iroquois; then follows the savage attack-the slaughter of the habitans; and above the groans of dying men, and the shrieks of terrified women, see a Père Daniel, or Breboeuf or Lalemant, inspiring fainting hearts with fortitude; pointing the sufferers' hopes heavenward, promising an immortal crown in exchange for a death of violence ; and thus exhorting, thus praying, thus consoling, bearing the children in his arms, be falls at last, pierced with many wounds-an example of the stern courage that can possess a Christian.

Anon, and the dreamer's thoughts wander to the enterprising, adventurous missionaries of those early days-their bold discoveries, their untimely ends. An effort of imagination paints the dark, deep wood, where Père Mesnard left his companion, to go and commune with his God. As the sombre foliage of the pines closes over his retreating figure, he feels it is the covering of the grave. Never again will those benevolent, thoughtful eyes meet the kind glancés of his civilised fellows! Never again will his faithful hand be grasped by brothers and by friends! No legendno stone-tells his fate, or marks his resting-place. His only monument -his cassock and breviary-recognized long afterwards in the possession of the fierce Sioux. The picture brightens! Down the blue Wisconsin floats a rude bark, bearing two brave, noble hearts, fired with the hopes of discovery. Marquette and Joliet handling the oar or adjusting the clumsy sail, bending their quick glances on the wonders of the unknown shore, or averting shipwreck and death by their foresight and activitymight form a worthy theme for poetry, or subject for art. Who cannot realize the proud throbbings of their human breasts when their canoe launched into the turbulent Mississippi, and they knew they were on the track for the great Southern gulf? The wild luxuriance of the vegeta-tion-the crowd of savage nations, appearing in strange fantastic garb on the banks of this rapid, dangerous river, never before ploughed by the keel of a white man's boat-the change of climate as they continue their journey-the increasingly tropical appearance of the trees and flowering shrubs, and the gorgeous plumage of the birds,-" the winged jewels "the brilliant insects of a southern clime-all combine to form a scene of surpassing fascination. And whence the inspiration? A frère Chrètian walking at the head of the orphans, or Father McDermot going to visit the sick.

[^12]ship," in times long ago. The inharmonious tones of the preacherhis scant and whitened hair-awake the memory of a Robinson or a Knox, or of men less known to fame, perhaps, but whose piety was so earnest, that life - the best, most precious of God's gifts - was freely yielded up in its defence. Imagination thus let loose, as it were, in the regions of the past, revels over other saintly recollections, and hears the godly strains of prisoners, singing like Paul and Silas, in their dungeons, or over their cruel toil in foreign galleys, or the fiercely-shouted psalms of Cromwell's Ironsides marching to the battle-field.

There is another poetry in the starry sky than sentiment or astronomy can see. The face of nature is ever linked in a reflective mind with manifestations of humanity. Nature is the book : man the interpreter; and thus in contemplating one, we review the lives and destinies of those associated with the peculiar object of our thoughts. The whole panorama of the ancient world unfolds itself to our dreamy gaze, as we behold the glories of the sky at night. The wise Chaldean, from his lofty temple, with heart and brain-with passions and aspirations like our own-peering ambitiously into the deep ether, wrestling for knowledge from Deity, to fathom the enigma of these unknown and incom* prehensible worlds. The pure Persian bending his knee, in adoration of the great mother, the moon; or the fierce Phœnician, worshipping her as Astarte,

> "Queen of heaven, with erescent horns,
> "To whose bright image, nightly by the moon,
> "Sidonian virgins paid their vows and songs."

What a galaxy of glorious names pass before us as we travel in thought through many centuries. Thales losing himself in wild theories ; an ancient mariner on the starry sea, without compass or rudder, guessing at truth. Galileo, immured in the dungeons of the inquisition, and through his prison bars, plucking vast knowledge from his narrow heaven, and his royal mind. With stealthy step and cunning mien, pass in review the astrologers of later days, and the laborious and successful astronomical students of our own and the last generation. Few can understand in detail, the objects of these great men. We can only surmise their difficulties, or faintly realize their triumphs; but we can heartily sympathise, and entirely enter into the aspirations of sublime souls seeking after truth; the strong efforts of powerful minds to unravel the mysteries of nature, scaling the very heavens, or delving into the deepest recesses of earth, to unlock the secrets of those natural laws that the Infinite has set over his works.

The yearning of the human heart for peace-the aspirings of the human mind for knowledge-hopes onward and upward, we have in common with all. So vast is the field open for study, for analyses, for
conjecture, - that the greatest genius, after a life-time of mental toil, can experience, in no greater degree, the triumph of mastering or solving the intricacies of science, than the rude mechavic who, pausing momentarily in his treadmill of labour, wonders if the end and aim of human life is to work iron or spin cotton? Sir William Hamilton says, finely, on this subject: "The highest reach of human science is the scientific recognition of human ignorance. 'Qui nescit ignorare, ignorat scire.' This learned ignorance is the rational conviction by the human mind of its inability to transcend certain limits; it is the knowledge of ourselvesthe science of man. This is accomplished by a demonstration of the disproportion between what is to be known, and our faculties of knowing the disproportion, to wit, between the infinite and the finite. In fact, the recognition of human ignorance, is not only the one highest, but the one true, knowledge; and its first fruit is humility."
Poetry, with her ample sympathies and extensive scope of thought, enables her votaries to form a tolerably correct estimate of the joys and griefs, the hopes, and fears and yearnings of life, not their own. There is no condition so exalted the poetic dreamer cannot fill. No sorrow so poignant he cannot comprehend its anguish. There is no ambition beyond his $\mathrm{ken}^{2}$; no fortitude or love exceeding his belief. The meanest things have their beauty; the most trifling their use. The wild flower, the laughing child, the "stray bar of melody-are all links in his being, uniting him to other and higher things.
$\mathrm{T}_{0}$ enjoy this pure spirit, is to find-
"Sermons in stones, and good in everything."
And to such a disciple of true poetry, may be addressed the answer of Annius, to the philosophising Duke :

[^13]
## THE EMIGRANTS.

A TALE OF THE BACKWOODS.

## I.

The youthful Spring, in beauty glowing,
Had sped from Southern climes away;
And life and joy around her throwing,
Held thro' the Western woods her way.

And she had teased old Winter so, With many a jeering smile and taunt,
That gathering up his robes of snow, Around his form, so frail and gaunt, He hobbled off with angry scowl, And cursed her with his parting growl.
But little recked the blythsome maid, Of what he did, or what he said;
But laughed; and bade him hie him forth, To his wild kingdom of the North;
And find a fit and frozen throne, Upon some iceberg's glittering dome.

## II.

And now the woods are all her own, And joyously her pranks she plays;
Her laugh is heard in every tone Of the soft wind, that gently strays
Where countless boughs of countless trees,
Make harp-strings for its harmonies.
The light that's gleaming far and nigh, Is streaming from her gladsome eye;
And many a wreath she deftly weaves, Of sweet wild flowers and bursting leaves With which she crowns her forehead fair,
With such a smiling grace, I ween,
And yet with such a regal air,
As well befits the Forest Queen!
111.

She reigns unquestioned 'midst the woods ;
Her's is an undivided throne ;
Few voices wake their solitudes,
Save the sweet whisperings of her own.
Unless, perchance, some Indian strays
Thro' their wide-stretching, pathless maze;
And when his rifle shot outrings,
Wakes Echo from her slumberings.
But for such sounds no trace is there
To tell of human want or care ;
For 't is alone the voice of Spring, That murmureth forth from every thing.

## IV.

You hear it in the merry brook, That, free'd from Winter's icy chain, Goes babbling through its leafy nook, On its long journey to the main.
In very sooth, it seems to be
As full of mirth and noisy glee
As childhood, when on hope's own wing,
It sets out on a journeying.
And tho' the West's a songless land,
Yet there is heard, on every hand,
The pleasing sound of simple notes,
Breathed from a thousand feathered throats.
The lake leaps up with tones of glee-
Rejoicing in its liberty,
Like captive with his chain new riven-
Rev'ling amidst the light of heaven.
The rippling waves rush up the shore,
To kiss the young leaves bending o'er,
With such hot haste as marks the greeting
Of lovers, after absence meeting.

## v.

Another year! the Spring has come.
Hark! how the partridge beats his drum ;*
And the woodpecker's noisy stroke,
Resounds from some decaying oak-
So loud and sudden as to cause
A stranger to look up and pause.
And there was many a stranger there,
Since Spring last graced her flowery throne,
Amidst those woodlands wide and fair,
And rightly called them all her own.
Waving her sceptre o'er them all-
Flowers, forest, lake and waterfall!
VI.

When Spring forsook these regions last,
And Summer's self was growing old,
Hundreds of men came, trooping fast,
And towards them like a tide they rolled.

[^14]And then they scattered here and there : Each chose the spot he thought most fair ;
And soon it seemed as tho' the wood Had swallowed that vast multitude, As rivers, flowing to the sea, Are lost in its immensity.

## VII.

They came from England's ancient shore, That isle of glory 'midst the sea !
Whose honored name is evermore The countersign of liberty!
They came-of every craft and age, Of lowly birth and high degree ;
Men skilled to scan the learned page, And rude, unlettered peasantry.
And they had come a war to wage, Against the forests of the Weist; Hoping their weary pilgrimage Would lead them to a place of rest. And there were many 'midst the band, That came to that wild forest land, As little fit, as fit could be, For life beneath the greenwood tree ; Or for the hardships wild and rude, They met with, 'midst its solitude.

## VIII.

Yet light fell o'er its darkest scenes, From gentle woman's beaming eyes ! As here and there a bright star gleams,
'Midst the wild clouds of troubled skies.
Hope in the sinking heart would spring,
When cheered by her sweet minist'ring;
And care she almost could beguile
Even into joy, with her glad smile.
And as the rainbow's hues are brightest,
The darker lowers the thunder cloud;
And as the virgin snow looks whitest,
When cast upon some sable shroud.
E'en so in trial's darkest night,
Her blessed brow was aye most bright ;

Even when the strong were giving way,
She in her weakness proved their stay.
Like as the ivy's tendrils, twined
In beauty o'er some ancient wall, Help in their feebleness to bind,
And keep it from its threatened fall.

## IX.

But care and disappointment yet
Had scarcely time to play their part;
Romance could not her dreams forget ;
Hope had a throne in every heart.
Hands all unused to toil before,
Now boasted many a blister-sore;
A conqu'ror scarce more proud than he
Who first cut down some mighty tree!
Altho' a woodman would have laughed,
To see them as they plied his craft ! By deep wood dell, by tangled brake, By fair hill side and limpid lake, The white man's axe was opening fast, A pathway for the rushing blast; Which until then had scarcely power,
To shake the feeblest woodland flower.
The former tenants of the woods, Fled to still deeper solitudes.
The Indian looked with mournful gaze, And called to mind those by-gone days, When all around him was his own: And tho' his pride forbade the groan, That echoed through his quivering breast, To pass those lips so coosely pressed; Yet, oh ! in mercy deem it not
An easy thing, to leave each spot
Fruitful in thoughts of other years-
Familiar since he was a boy;
Hallowed by all his holiest tears, And brightened by his deepest joy.

## x.

> A beauteous lake was gleaming bright,
> 'Midst those dark woods, all hoar with age ;

Like day, within the arms of night,
Or youth begirt by many a sage.
Upon its still and wooded shore,
Within a small and tranquil bay,
Not much above a bow shot o'er,
A newly opened clearing lay.
'Twas here old Chester pitched his tent,
And round was many a beauty blent-
Of wood and water, stream and sky-
To soothe the ear or please the eye,
'Twas here his stalwart sons first plied
The woodman's axe, and earliest tried
Their might against the ancient trees,
Amidst whose boughs the wailing breeze,
Sung wild and dirge-like melodies.

## XI.

Of gentle birth-of ancient race-
His noon of life in arms was passed;
His form and features wore the grace,
That birth and battle o'er them cast.
And though he now was growing old,
His bearing still was high and bold;
And none were better graced than he,
In arts of gentle courtesy !
But dark misfortune's withering blight,
Had quenched his hearthstone's happy light ;
And forced him, in his failing days,
To distant scenes and novel ways.
But his was still a soldier's heart-
And bravely did he play his part;
Tho' there were times, when none were by,
That a hot tear would dim his eye,
To think of wife, sons, daughters, all
Lone exiles from his father's hall.
(To be continued.)

## FLOWERS, AND THEIR MORAL TEACHING.

## by the authoress of "the backwoods of canada."

"Flowers! wherefore do ye bloom? We strew the pathway to the tomb!"-MONTGOMEEX.
The love of flowers is the first dawning of that higher inward life that is the gift of God to man.

The first perception of the Beautiful may be traced by the observing mother, to the pleasure that lightens up the eyes of the infant in her arms, when she first presents to its admiring gaze the bunch of brightly coloured flowers, with which she strives to attract its attention.

How eagerly the tiny hands are stretched forth to grasp the treasure! What joy beams in the young face. It has caught a glimpse, as it were, from heaven, of its Maker !

Children always love flowers; and are they not the first of nature's books placed in the mother's hands for the teaching of the infants whom God has committed to her trust? Meet emblems, too, of his life, who cometh up, and is cut down like a flower.
Mothers of Canada! cherish and encourage among your little ones this early and natural love of the fairest of God's fair works ! Nothing tends more towards refining the minds of children, and keeping them from gross tendencies, than a lively and practical interest in the culture of flowers, and an intimate knowledge of the names, habits and uses of the familiar plants that they meet with in their daily walks.
This is an enduring source of pleasure, and of increasing useful knowledge to the young, and it is open to the simplest capacity. If mothers will only teach from the book of nature, children will always learn readily and eagerly.
Mothers! this is one of the easiest of all helps towards imparting religious knowledge to your young children-leading them through the excellence of God's works from earth to heaven!

Our blessed Redeemer taught his disciples by such simple illustrations as this :-"Behold the lilies of the field, they toil not, neither do they spin, and yet I say unto you that Solomon in all his glory was not arrayed like one of these."
Beautiful example! eloquence most touching, because so simple and so true!
The love of God's works is an enduring source of pleasure. Even increasing age does not lessen it-for when the eye grows dim, and can no longer contemplate the glories of the world outwardly, the mind, which has long been stored with its riches, can turn inwardly to them, and feast upon that which it had gleaned in brighter days. Mem-
ory-that inward painter of the soul-presents to the mental vision the flowers that never fade.

Other and more wordly amusements, weary and become irksome to us in age, and we care little for those things that charmed us in youth; but the sight of an old familiar flower-the daisy or the primrose of the meadow where we played when children-will fill our hearts with tender emotions, often unlocking the fountain of tears in those that are greyheaded, weary and worn, in this hard world's strife !
I remember hearing one of my sisters relate, that when she was staying in London, she was one day walking with the children of a friend, and their Swiss bonne (nurse,) in the garden at Tavistock Square.

Among the border-flowers was a plant of the yellow globe ranunculus, a native of the Alpine valleys. Melanie suddenly flung herself on the turf beside it, and passionately kissed the flowers, exclaiming, in her foreign patois :-"Ah! flore de ma contrie," and her face was bathed in tears when she raised her head.

The sight of the simple blossom had stirred the heart of the Swiss bonne to its very depths-bringing back to her mind, in all their freshness, home, kindred and friends! Such pathos lay in the silken folds of a simple flower !

Before Botany was studied as a science, the names given to plants were devised from some distinguishing quality, or were named after some holy person or familiar object. Of the two last classes, we have such illustrations as Sweet Cicely, Sweet Basil, Lady's Tresses, Lady's Bedstraw, Marygold, Rose-Mary - (these last in honor of the Virgin Mary ;) Aaron's Golden Rod, Solomon's Seal, Jacob's Ladder. Our own beloved Rose is said to have owed its origin to fair Rosamond, the fair, frail paramour of our second Henry; though it is equally probable that the lady was named after the flower-Rosa-munda-Rose of the World !

Of flowers named from their qualities, among others we find such fanciful ones as Heart's-ease, Love-in-a-mist, Love-lies-bleeding. Then we have Heal-all, Goat's-beard, Wall-flower, Stitch-wort, Meadow-sweet, Ground Ivy-all these were famed for some rare virtue, real or imaginary, and still are held in repute by the poor in remote country-places in England.

Any one who is so fortunate as to be the owner of that rare old tome, Gerrard's Herbal, can learn the simple, and some of the more learned names of many common wild flowers, with their derivations. Many of these old familiar names have crossed the Atlantic, and have become household words in the ears of the children of the emigrant. So we have our Columbine, our Anemone, Butter-cup, Violet, Colt's-foot, Chickweed, Forget-me-not, and many others equally familiar-though in many instances, we would hardly recognize these floral-name children, so different are they from the originals after which they have been called.

Canada, too, has her herbalists and simplers, especially among the old U. E. Loyalists and their families, who knew how to extract virtues from the wild plants of the forest, the fields and swamps. It is true, that they have few written recipes, but are often possessed of much sanitary knowledge: many of their remedies have been gleaned from the Indians, and they can give a name for almost all the herbs of the field-experience has stood to these simple folk in the stead of books, and learned physicians.
Shakespeare says: "What's in a name?" but do not the old names, as Schiller says, "bring back the old memories?" Does not the name of violet call up sweet images of bowery lanes and grassy banks, sheltered by overarching hazels, woodbine and wild-rose? Primrose-
"The rathe primrose that forsaken dies,"
awakens long-sleeping images of rural sports among hawthorn glades and green knolls, starred over with that sweet, pale spring flower! It is the cottage child's flower, even as much as the daisy and the cowslip.
How one feels inclined to envy those persons who see the March and April flowers of England for the first time, and who first hear the full chorus of her wild song-birds in some sweet country place! It is worth a voyage across the Atlantic to see the flowers and hear the music of the birds, at a season when all here is cold and dreary-when our flowers lie buried beneath a pall of snow, and our birds are silent. But I have wandered from my subject-seduced into digression by old memories which cling to me, and will, I think, while life lasts; though I am now old, and like the flowers-passing away !
I was about to shew how many of the harsh-sounding, unmusical names, among our botanical nomenclature, have been derived from just the same cause as the devotional names of our old herbalists already instanced.

The father of modern Botany, the great and good Linnæus, indulged himself by immortalizing many of his favourite friends and revered associates, by naming flowers in honour of them. Thus the Kalmia, one of the choicest ornaments among American shrubs, one species of which is, I think, a native of our Canadian swamps, was named for Professor Kalm, his beloved pupil.
Linnæus also gave the name Cinchona to a valuable genus, including the Peruvian Bark, in honor of a Spanish lady (the Countess Cinchon, wife of a Spanish viceroy)-who suffering severely from intermittent fever, tested the skill of the Indian herbalists in the use of this valuable febrifuge. She afterwards recommended its healing qualities to the attention of the physicians of Spain. The Jesuits adopted it-from thence also came the name of "Jesuit's Bark."

Linnæus chose as an emblem of himself, that lovely little flower, the Linnea borealis, which he described as a little northern plant, flowering early; depressed, abject, and long overlooked. It was gathered by him in Lycksele, on the 20th May, 1732, in West Bothnia." It is a native of the great northern forests; "but it may," says the author from whom I now quote,* "be easily overlooked-because it grows only where the woods are thickest, and its delicate twin blossoms are almost hidden among moss, and interwoven with ivy. Their scent resembles the smell of the meadow sweet, and is so strong during the night as to discover the plant at a considerable distance.
"When the great Botanist received his patent of nobility, he adopted this flower as a part of his crest. The helmet which surmounts the arms of the family being adorned with a sprig of the Linnæa."

The flower, though so simple, has now a classical renown, being so intimately associated with the name of Linnæus. This delicate trailing plant is widely spread over the colder portions of the temperate, and extends its geographical range within the frozen zone. In frozen Lapland, and inhospitable Labrador, it flourishes as cheerfnlly as in our own pine forests. Here in Canada, its haunts are among rocky, mossy woods, near lakes and rivers. Among the rocky islands of the rapid Otonabee, it flings its graceful garlands over rugged stones and mossy-twisted roots. Its flowering season is with us in June ; and its sweet twin bells of shaded pink may be found even through July and August, in deep shady spots. A more elegant head wreath could scarcely be found than the long slender branches of the Linnæe, garnished with its fairy bells.

This elegant plant for the summer, and the still more becoming Mitchella repens, or partridge berry, with its glossy leaves and bright scarlet fruit for Autumn, are frequently worn by the young ladies of our northern townships, as ornaments for their hair, and trimmings for their white muslin dresses, at evening parties, or picnic balls-nor can they devise a more tasteful and becoming costume, not the less lovely, because so simple.

Before I dismiss Linnæus, I will recall the anecdote, known indeed to all botanists, but possibly new to a few of my readers. It is interesting, as it shews the fervor and simplicity of this enthusiastic naturalist's mind.

It is said, that when he paid his first visit to England, on beholding the golden blossoms of the furze whins, or gorse as it is generally called, he flung himself down on the heath, and kissed the ground whereon it grew, with exclamations of rapture in his native Swedish-so great was his admiration of this sweet, honey-scented flower, rude and rugged

[^15]though its prickly defences be. He tried in vain to induce the plant to grow in Sweden, but it resisted all his efforts to acclimatize it in that country, though it grows and flourishes on the bleakest sea-side heaths in Suffolk and other portions of England, where it is made available for fences, and supersedes the less hardy white-thorn. In March and April, these golden-blossomed hedges fill the breezy air with a rich perfume, gladden the eye of the traveller, and afford delicious honey for the hives of the cottage-garden. About the third or fourth year they become rugged, and they are then cut down, and bound into faggots, which are sold for oven wood, or used by the farmers for filling in the cattle sheds, and fencing in farm-yards. When used for this latter purpose, the whins are cut when green; and very warm and cosy the yards look when neatly fenced in with these bushes.
The climate of Canada does not suit the gorse. The writer once succeeded in raising a few plants from seed, and very healthy they appeared to be, till the setting in of the severe winter frosts, which killed them all.

The gorse belongs to the numerous and valuable Nat. order Leguminosex, or Pulse family, of which we have many representatives in Canada, some of which are very ornamental, and others might be rendered valuable by cultivation.
There are teachings that lie within the book of Nature that exceed the wisdom of the most learned philosophers; and the simplest may glean therefrom knowledge so excellent, that it elevates the soul-fitting it the more readily for enjoying the presence of the great Creator, in that fair garden of the Lord, where the flowers are immortal, and fade not away!

## SKETCHES OF INDIAN LIFE.

## BY THE EDITOR.

## SALMON-SPEARING IN LABRADOR BY TORCHLIGHT.

All tribes of Indians from the Red River of the North to the Atlantic coast of Labrador, draw a considerable share of their support from lakes and rivers, by means of the fish-spear ; the "negog" of the Montagnais of the Gulf of St. Lawrence. But spearing any kind of fish during the daytime, is a tame and monotonous occupation compared with the irrepressible excitement which attends spearing salmon by torehlight with Indians who understand their work. It unfolds the real character of the Indian race in its most striking peculiarities; it displays untutored man in the full strength of his natural gifts; expresses his capabilities
for intense enjoyment, and shows how he may be roused to exert for hours together the utmost activity of body and the greatest presence of mind.
See how gently they step into their canoe in the gloom of the evening, just passing into night! They whisper to one another, although there is no fear of the sound of their voices disturbing the prey of which they are in search. Watch the one in the bow trying the flexible clasp. ing tines of his "negog" or salmon-spear; springing them backward to see if they have lost their elasticity, or if they can be trusted to hold a powerful fish in their grasp; now he straightens the long and slender shaft and lays it tenderly under the bars of the canoe within reach of his hand. He next examines the rolls of birch-bark which he will use for torches, and fastens a cleft stick to the bow of his canoe, in which he will insert one extremity of the flaming roll. Turning round to ask his companion if he has "fire;" he receives a low grunt in reply, which is followed by a subdued howh! howh! and both grasping their paddles, away the canoe glides towards the foot of the rapids, to a well known shallow, or close to the tumbling waters of a cataract where the fish are known to lie.

The torch is lit, and the spearman relinquishing his paddle stands in the bow of the canoe, glancing eagerly from side to side. Suddenly he pushes his spear in a slanting direction, and quickly draws it back, lifting a salmon into the canoe; a second push and another victim. Now he attaches a thin line of sinew to his spear and twines it round his arm. Swiftly he darts his weapon; it is whirled away with a sudden jerk, and trembles in the stream; he gently but steadily draws it towards him with the line of sinew, and grasping it when within reach, lifts his quarry into the canoe. Look over the side of the little craft! the salmon are coming to the light, they gaze for a moment and glide away like spectres into the black waters ; some of them swim round the canoe, and come to look again and again, pausing but for a moment to speculate upon its brightness, and the next lie quivering in the agonies of death.

Both Indians at the same moment see a fish of unusual size approach the light, gaze without stopping and quickly move off, hover about at some little distance, suspicious and distrustful, but still attracted by the glittering lure. Gently and noiselessly the canoe is urged towards him by the Indian in the stern, no words pass between him and his companion; both saw the fish at the same moment and both know that they will take him. But look at the Indian with the spear! look at his face illumined by the red flare of the burning toreh! his mouth is half open with suspense, but he does not breathe through it; his dilated eyes are flashing intent; he stands so motionless, with uplifted spear ready to strike, that he looks like a statue of bronze. But there is life in that
expanding and contracting nostril, life in the two thin streams of vapor which puff from his nostrils into the keen night air ; and is there not sudden and vigorous life in that swift dart of the spear, those parting lips closing together in unison with the fling of his arm? is there not intelligent life in that momentary light which flashes from his eyes, red like the gleams which they reflect, and in that smile, triumphant and assured, which he throws at his companion, as without uttering a word or sound he lifts with both hands the heavy fish straight from the Water, holds it struggling over the canoe, and shakes it from his spear? Is this the languid, drowsy savage which you have often seen slouching through the day, indolent and listless, a sluggard and a drone?

They go to the foot of the cataract; the largest fish lie there in little eddies close to the rocks, waiting for an opportunity to take their leap up the tumbling waters, to sheltered parts above where they may rest in their difficult ascent. Now is the full measure of the Indian's skill required; the broken water at the edge of the main rapid at the foot of the cataract rocks the canoe, and would seem to destroy the spearer's aim; the water is deep and he must throw his weapon, he cannot push it as in the shallows or in a quiet stream. The Indian who is steering and paddling must beware of strong eddies, of whirlpools, of getting under the cataract, or of sidling into the rapid below. He must have his eyes on the canoe, the water and the salmon, and his hand ready at any moment to edge off from danger, and never give way to momentary excitement, even when the spear is thrown, and a heavy fish struck, the rocks, the impetuous torrent, the tumbling waters at his bow, the flickering light not always to be relied on, must be watched, for a slight change in an eddy may swamp the fragile craft, or break it on a rock.

There is indescribable excitement in the dancing motion of a tiny birch-bark canoe at the foot of a cataract, by the red light of a torch, during a night without a moon. You see before you a wall of water, red, green and white tumbling incessantly at your feet; on either hand you gaze on a wall of rock, rising so high as to be lost in the gloom and apparently blending with the sky. You look behind, and there is a foaming torrent rushing into the blackness of night, sweeping past the eddy in which your birch craft is lightly dancing to the loud music of a object meets your eye which does not reflect a red glare and assume an unaccustomed character which the warm and cheery colour imparts. Suddenly the torch falls and is instantly extinguished in the rushing Waters ; absolute darkness envelopes you, the white foam, the changing green of the falling water, the red reflected light of the broken waves, all become uniformly and absolutely black. Nothing whatever is discernable to the cye, but perhaps another sense tells of swift undulating
motion, a rolling ride over stormy waves, with lessening roar. Your eyes gradually recover their power of vision, and you find yourself either swaying up and down in the same eddy, or far away from the fall, on the main channel of the river, secure against whirlpools and rocks, with the Indians quietly paddling the canoe and about to turn again to resume their savage sport. The moment the light fell into the water, an event which often occurs with bireh-bark torches, the Indian at the stern decided whether to remain in the eddy, or to enter the rapid and descend it until his power of vision was restored. This is a contingency for which all salmon spearers in such situations must be prepared. Indecision might prove fatal, for if the eddy were safe in absolute darkness for a quarter of a minute, it would be wise to remain, if there is danger of being sucked under the fall, it would be well to seek refuge from a sudden deluge, or from rocks and whirlpools in the swift but tumultuous rapid. This can only occur on a large river, and at the foot of a fall. Water in rapid motion is a terrible power, and none know how to take advantage of its humors better than the wild Indian salmon-spearer, who avoids its dangers with matchless skill and self-possession, and who seeks the excitement it offers as if it were the mainspring of his life, or the aim of his existence.

## GIVEN AND TAKEN.

BY MRs. LEPROHON.
The snow-flakes were softly falling
Down on the landscape white,
When the violet eyes of my first born
Opened to the light;
And I thought as I pressed him to me
With loving, rapturous thrill,
He was pure and fair as the snow-flakes
That lay on the landscape still.
I smiled when they spoke of the dreary
Length of the winter's night,
Of the days so short and gloomy,
The sun's cold cheerless light-
I listened, but in their murmurs,
Nor word nor thought took part,

For the smiles of my gentle darling, Brought light to my home and heart.

Oh, quickly the joyous spring-time
Came back to our ice-bound earth, Filling fields and woods with sun-shine, And hearts with hope and mirth, But still on earth's dawning beauty,

Rested a gloomy shade,
For our tiny household idol
Began to droop and fade.
Shuddering, I felt that the frailest
Flower in the old woods dim,
Had perchance a surer and longer
Lease of life than him :-
In the flush of summer's beauty,
On a sunny, golden day,
When flowers gemmed dells and wood-lands;
My blossom passed away.
How I chafed at the brilliant sun-shine
Flooding my lonely room,
How I turned from the sight of nature
So full of life and bloom.
How I longed for past wintry hours
With snow-flakes falling fast,
And the little form of my nursling
In my loving arms clasped.
They put up each tiny garment
In an attie chamber high,
His coral-his empty cradle-
That they might not meet my eye;
And his name was never uttered,
What e'er each heart might feel,
For they wished that the wound in my bosom Might have time to close and heal.

It has done so, thanks to that Power
That kas been my earthly stay,
And should you talk of my darling,
I could listen now all day,

For I know each passing minute
Brings me nearer life's last shore, And nearer that cloudless kingdom

Where we both shall meet once more.

## THE POST OFFICE AND THE RAILWAY.

The right of domain over its public highways, is one which has been asserted and exercised by every country, whether its roads have been constructed by private and corporate enterprise, or by the State. Upon the turnpikes and canals of England, the mail-coach and the mailpacket pay no toll to the proprietors, though passengers as well as mails are carried; and, in many instances, this exemption of the whole vehicle secures the free conveyance of the mails. Whether such exemption be regarded as the consideration paid for a monopoly, as the purchase money of the franchise, or as a royalty or suzerainty due by the corporation to the rights of the public, as represented by the Crown-so clearly is it in accordance with the common law of England, that when it first became necessary to legislate for the conveyance of mails by railway, in 1838, the committee of the House of Commons recommended that power should be given to the Post Office to run their own engines over the railways, with a limited passenger train, without payment of toll. Upon turnpikes and canals, the carrying business was in the hands of the public, and regulated by wholesome competition ; and it was expected that the same principle could be applied to railways. The early enactments, therefore, provided for the admission of the public as carriers upon them, subject to specific regulations. The Post Office also claimed its special train, and the right to carry a limited number of passengers with the mails, free of toll, as on the coaches and packets. When, however, it was seen that the railway was a machine which must be worked as a whole, the Post Office consented to treat with the companies as carriers only-but not as proprietors-to pay the cost of transport of the mails, with a fair profit thereon ; but resisted anything like toll for the use of the new highway. The Post Office contended that the monopoly which the railways had acquired, had not been obtained with the consent of the legislature, but in spite of it-by the unforseen practical working of the system. But another and more serious question arose. The companies must regulate their passenger trains at hours to suit the traffic of each line : the Post Office wished to start the mails at hours to suit the whole public of the Kingdom-as well as the localities. Moreover, the Post

Office wanted the power to change these hours at will, according to the seasons, the opening and extension of new routes, \&c.; and to regulate the speed and stoppages on all the rontes. These postal luxuries raised the question of interference with the general traffic of the railway. They involved the question of running night trains when and where no passengers wanted to go ; and of keeping open, all night, railways which, but for the mail trains, would be closed all night. Moreover, an alteration of an hour or two in the starting of a passenger train, to accommodate the mails, might derange the traffic of the whole line to a serious extent.

In 1838 , before any legislation was had, and when the idea of determining the payment by arbitration was first suggested, an experimental one Was entered into with the London and Birmingham Company, represented by Robert Stephenson. Col. Harness, R.E., A.D.C. to the Queen, acted on behalf of the Post Office. Col. (then Major) Harness proposed to apply the principle upon which the Post Office was paying for their mails on the roads, to give a fair commercial profit to the Company as carriers; but not to pay for the use of the road further than it was clear that the Post Office put the Company to actual expense. Stephenson assented to this principle, and an award was mutually agreed upon, of $7 \frac{1}{2} \mathrm{~d}$. per mile run, for the use of a whole carriage. The Railway Mails Act was thereupon introduced -but Sir James Graham representing the railways, proposed (for the purpose of doing away with the principle admitted by Stephenson) a clause, directing the arbitrators to include the value of the railway, in making their decision. Mr. Labouchere, Who had charge of the Post Office Bill, threatened that if this were insisted upon, he would move a clause proposing the contrary principle. The consequence was, the Bill does not determine the principle on which the Post Office payments are to be calculated.
This Act, which the preamble states, is to provide for the conveyance of mails by railways "at a reasonable rate of charge to the public," gives the Postmaster-General absolute control over every railway in the Kingdom, with power to regulate the hour of starting, the speed and stoppages of every train carrying a mail-bag, and to demand a special thein at will. Twenty-eight days' written notice must first be served on the Company, specifying the kind of accommodation needed; and the same for every change required; and the value of such service, on each occasion, if not agreed upon, is left to arbitrators, one service, on each party; and in case of disagreement between these, the whole quy each compensation there is no is left to an umpire chosen by them. Under this system is the jury, majority agreement of a court of arbitration; but the umpire views jury, and the two arbitrators the advocates of their respective vol. I.
either of them. Another peculiarity is, that whereas the two arbitrators are selected for their special knowledge of the subject, the umpire, in most cases, is selected solely for his supposed impartiality, and is, on that account, disconnected with and ignorant of the subjects on which he gives judgment. The working of this arbitration system is shewn by the evidence taken by a committee of the House in 1854. Major Harness said "the whole effort of the railway arbitrator, with very few exceptions, was to get the highest possible price he could: and to do this, he claimed for every train which carried a mail-no matter how profitable its passenger traffic might be-the whole cost of the train, at the average of all their trains, light and heavy, with a profit thereon, the same as if it had been run exclusively for the Post Office. His experience was, that the umpire should not be named by the arbitrators : and his successor (as Post Office arbitrator), MajorWilliams, endorsed this opinion. In one case, the Post Office arbitrator valued the service at 1 s .8 d . per mile; the railway nominee claimed 12 s .10 d . : the umpire awarded 3s. In another instance, 2s. 3d. was the Post Office estimate ; 9 s . that of the railway; and 3 s .6 d . the award of the umpire. Rowland Hill shewed that the Post Office had been offered exclusive trains at 2 s .6 d . per mile ; that the cost on one line had been increased by an. award from $£ 9,115$ per annum to $£ 27,659$, although there were thesame number of ordinary trains running as before. He had been a railway manager, and knew the price the company were getting (3s. per mile) was double the total cost of the train, passengers and all. He was a shareholder in that company, and knew the cost of locomotion had only been 6 d . per mile; and allowing 1s. for other expenses, there was. still a margin. On that train, he said, the company were making 200 per cent. profit from the Post Office alone, besides all the earnings from passengers and parcels. On the South Devon Railway, he had had two awards following each other quickly for the same service-one at 2 s ., the other at 3 s .6 d . per mile. In cases where the service would only justify a certain moderate payment, and nothing beyond, he was deterred from putting a railway under notice. He was three years negotiating with the Edinburgh and Hawick Company ; and after getting the service performed by a mail-cart, at half the rate demanded by the railway, the latter accepted a double service for one-third less than the rate they asked for a single one. He said the Post Office would be glad to be put upon a par with the public, and pay the same rates as paid by the latter for the same service; for, as a rule, the Post Office paid for its bags higher than parcel rates, while he knew that persons sending newspapers daily, on the London and North-Western Railway, paid only half the usual parcel rates. The high rates paid to railway companies, he found fo stand in the way of public accommodation, as the cost of the conveyance of the mails by railway was far greater than by other means."

The difficulty was, that the Act of 1838 drew no distinction between a single bag or supplementary mail sent by a regular train, and the night mail from London with its tons of newspapers, its sorting carriage, \&e. Both were to be valued by arbitration: and thus a mail which did not yield 6 d . per mile, would open the door for the railways to urge upon the bewildered umpire their peculiar figures for the cost of each train, and the return required to pay a fair interest on the investment. Not daring to risk an arbitration by putting a train under notice, and yet unwilling to deprive the public of the accommodation, the Postmaster-General at last despatched one of his guards as a 2nd class passenger, with mail bags as his luggage, tendering the extra baggage rate for over weight. Horrified at the prospect, the railways resisted, but were beaten by the common law decision; and to set the matter at rest, an Act passed in 1847 compelled them to receive and deliver bags as parcels. A great point was thus gained, and Liverpool and Manchester received, under that decision, an accommodation mail by an ordinary train, at $\notin 700$ a year-for which the railways had previously demanded $\subset 6000$ a year! The Post Office-wishing, however, to send the bags in charge of their own messengers-found that though the guard could travel as a passenger, he could not throw out his bags and take in others at intermediate stations-for the railways refused to let the Post Office messengers on their platforms for this purpose, until a Committee of the House of Commons, in 1854, reported in favor of compelling them to do so.

Rowland Hill told the committee, as his opinion after sixteen years' experience of arbitration, that "the Legislature should fix the rate of pay-ment-even at some risk of fixing a rate which might be found occasionally excessive or inconvenient." To prove that the awards were unwarrantable, he shewed that where there was competition the day mail had been voluntarily taken on one line at 4 d ., and on another at 2 d . per mile-by their ordinary trains. He admitted that when the Post Office prescribed hours and speed they should pay for the restriction; and in eases where a night train had been demanded, a night police had to be brought on, and other expenses incurred, which would not otherwise be required on some lines, particularly in Ireland.

The Postmaster-General, Viscount Canning, informed the committee that "the system of arbitration had not worked satisfactorily to the Government, the Post Office, or the public-mainly as to the uncertainty Which it throws on every suggested improvement in which railways are concerned." He would prefer a fixed rate if possible. In cases where the circumstances were almost similar, the awards were far from being so ; and where they varied, the decision of the umpire was out of all proportion to the circumstances. Allowance should be made for the constancy of the service; and he instanced season ticket-holders as pay-
ing but a fraction of the regular fares. The umpire should not be a juryman : he may feel a deficiency in the evidence without knowing what to call for to supply it; or matters may be left out, in the evidence placed before him, which ought to be taken into consideration-and he may be unable to hit the blot, and call for the wanting evidence. Finally, he said, "my objections are solely to the principle of arbitration, as carrying with it a great semblance of fairness and of satisfactory arrangement, and not proving to be so in fact."

On the part of the Railways, five general managers appeared before the Committee, all of whom agreed that "arbitration was the right principle for settling the sum" to be paid by the Post Office, and they were unanimous in their opposition to fixed rates and permanent umpires. They charged the Postmaster-General with altering the service merely to obtain a new reference, in the hope of getting the amount reduced by a new umpire-a charge which was not only repudiated but conclusively disproved by Rowland Hill. Then they complained of the delays during the struggle with respect to the nomination of the umpire; sometimes years elapsed before they agreed, during all which time they were compelled to perform the service, and got no pay, thus losing interest; for the Post Office never paid "on account:" if it had done so, Rowland Hill remarked, awards, instead of four would be forty years in hand. The General Manager of the Great Western said he had known twelve or fourteen meetings and forty or fifty names proposed, without the arbitrators being able to agree upon an umpire: he proposed to compel them to agree within a reasonable time.

The General Manager of the London and North-Western stated that there were on his line ninety-nine mail trains daily, only twenty-two of which were " under notice," and therefore subject to arbitration. These trains gave an annual mileage of 494,575 miles, while the seventy-seven carrying bags at a few pence per mile had an annual mileage of 958,106 . By this means the average was reduced to eight pence per mile; the seventy-seven trains-having double the mileage of the twenty-two under notice,-cost less than one-fifth of the latter.

But the great complaint of the Railways was that the Post Office had robbed them of their parcel traffic. Rowland Hill, who was responsible for the penny post, shewed that it was established in 1839, when very few railways were in existence ; that the parcels sent by post consisted mainly of small articles at a penny or two pence each, which would not otherwise be sent at all; that as the railways did not, like the Post Office, reach every town and hamlet, the latter, as the more perfect distributing machine, would always take the single parcels; that the railways had no monopoly of the parcel traffic; and lastly, that the awards had been so influenced by this consideration, that the Companies were getting from
the Post Office far more for the carriage of the parcels, in the mails, tham they would have receivel from the public. He also proved that the railway parcel traffic had diminished by a decision of the courts, and not by the competition of the Post Office. As the parcel system became developed, carriers collected parcels for the different towns in which they had agencies, and packed them in one, sending them at single rates; but the Companies tore them open and charged their rate on each. Brought into Court they contended they had a right to charge by value, and this could only be ascertained by examination, but the law said they could only take the weights, and not the contents of parcels into consideration, and so the packing went on.

The General Manager of the London and North-Western, Mark Huish, vigoronsly defended the award complained of by Rowland Hill (the case where the amount was increased from $£ 9,115$ to $£ 27,659$ ), and declared that "if it had any fault at all, it was much less than should have been given under the circumstances." As his reasons embrace the whole case of the railways, we give his summing up before the umpire. "Seeing that by the deliberate decisions of Parliament, the Post Office is not entitled to any privilege whatever over private individuals, so far as pecuniary considerations are concerned; that the duty is now performed at greatly increased speed; that the original payment was totally inadequate; that all recent awards between the Post Office and the Railway Companies have given a large increase; that the Post Office has entered in a vigorous competition with the railways for the carriage of small parcels, by means of the very low rates which they have been able to obtain, and lastly, that the working expenses of the company were vastly increased by the rise in wages and materials of every description, I can have little doubt that the sum I have named,-viz., 4 s . 6 d . per mile-may be justified on every principle of fairness and equity. The Marquis of Blandford," he added, "gave me 2s. 6d. per mile." Captain Huish apologized for an award of 5 s . per mile made to an Irish railway, which though the highest paid, was one of the slowest in the kingdom, by explaining that it was kept open from five in the evening till nine the next morning, for Post Office purposes ; and that although the Irish lines as a whole rafi very slowly, the remuneration paid them depended "upon the expenses of keeping open all night railways which would otherwise be closed all night." The Manager of the Bristal and Exeter line also stated that the greater part of the expense on his line at night was occasioned by the mails; but for them the stations would not then be worked.

The Committee, in reporting, do not express any direct censure of the system, but quote the evidence of Lord Canning, Postmaster-General. "It is difficult to argue against the justice of the system of arbitration ; but in practice it certainly, in my opinion, has tended to great uncertainty
in the amounts which the Post Office have to pay. I attribute it to the fact that umpires, selected by the arbitrators, do not bring to their decision a sufficient amount of knowledge and experience of the matters on which they are consulted." The Committee made the remarkable statement that "there had rarely been an instance of agreement between the arbitrators named by the Post Office and the Railway Companies as to the principles on which compensation should be awarded; " and they recommended that the umpire should be named by one of the Judges, if after a certain time the arbitrators did not agree. They say the umpires should in all cases be fully qualified by general knowledge and experience; and, without proposing principles on which compensation should be based, they admitted that the penny post had so far encroached upon the parcel traffic as to justify "the departure from practice, in charging Her Majesty's mail with toll." They recommended a system of fines for failures in performing a service so highly paid for; that mail guards travelling as second class passengers should be empowered to exchange bags with Post Office servants at stations, and that Railway Companies should be compelled to deliver Post Office bags, sent as parcels, to Post Office servants. On the question of compensation they said there was no difficulty in fixing the price when mails are carried by ordinary passenger trains; but that the trains put under notice raised the question of "tolls" and "interference," which caused the disagreement. The weight of the night mail from the inland office, London, in 1854, averaged 14 tons 7 cwt. 3 qrs. 19 lbs. daily, of which newspapers formed 76 per cent., letters 13 per cent., bags 9 per cent., and book packets 2 per cent. In conclusion the Committee, in which the Railway interest was not without friends, so far adopted the Post Office view as to recommend that " a commission of two or more experienced engineers should be appointed expressly to consider whether a tonnage toll or mileage rate, to include every charge, could not be fixed for Post Office service, which though not exactly suited to each particular case might be generally fair to all parties."

With this report Parliamentary action ended. The Railway Companies warned by the result of this investigation ceased to meddle with the Post Office guards and bags by ordinary trains, for fear they might kill the goose that laid the golden eggs in the "noticed" trains; and the Post Office having power to keep down the average mileage rate, by sending mails by ordinary trains, and so to confine the "noticed" trains to the important mails, was willing to risk the ordeal of arbitration on these.

The extension of the Railway system also brought about competition, and the tenders of competing lines could not be without its influence on the umpires. And lastly, the consideration that the railways in England pay a government duty of five per cent. on their nett passenger receiptsby which the Companies pay back the greater portion of their mail
moneys, no doubt induced both Parliament and the Post Office to treat them with extra liberality.

The umpire was generally selected from the nobility, as less likely to be influenced by either the Post Office or the Railways; or rather, as the only class on whom the arbitrators could agree. Some of these, however, were connected with railways, and most of them knew nothing either of Post Office requirements, or of railway traffic; and when the Post Office arbitrator ascertained, from dearly bought experience, that certain names were invariably associated with excessive awards, he threw these out and naturally entugh struggled for fair play. The Railway arbitrator was as pertinaceous to obtain, as the other was to avoid, his man, and hence the delays complained of. In fact, this power of resistance was all the check the Post Office had-for there was no appeal from the decision of the umpire-and it behoved it to exercise it with firmness and circumspection. The Post Office arbitrators were officers of the Royal Engineers, and they asserted that their estimates were liberal. The railway arbitrator, however went before the umpire claiming several times the amount as the surest means of getting half what he asked. The Post Office arbitrator represented a department which was authorized and expected to pay the full value of the service rendered; and he dare not offer less than this without proving to Parliament and the country his unfitness for his position. Nor could he compromise himself by attempting to "feel" a proposed umpire. On the other side, a zealous manager, whose success with his employers depended on the amount he could procure,-or a needy corporation,-were under no such restraints; and the result in England has been that which has obtained in every other country where the government deals with a private corporation, or a municipal corporation with an individual; the delegate of the many defends his trust with one hand tied. The importance attached to the selection of the umpire is shewn in the history of the abortive arbitration entered into last year with the Grand Trunk Railway. That company, as stated by Mr. Baring, claimed an umpire in England, and when this was refused, their commissioner made a special trip across the Atlantic for further powers, before he could consent to the nominee of the Canadian Government.

The cost of mail conveyance by railway in England ranges from 3s. $8 \frac{3}{4} \mathrm{~d}$. per mile, down to one farthing per mile run: the average rate for 1861 was $6 \frac{3}{4} \mathrm{~d}$., which shews a steady decrease, as it was $8 \frac{1}{4} \mathrm{~d}$. in 1857, and 10 d ., as stated by Rowland Hill, in 1854 . This decrease is in the face of an enormous increase of mail matter. In 1861,593,000,000 of letters and $38,000,000$ of book packages passed through the British Post Office. The mileage of mail trains in 1849 was $4,000,000$; in 1857, $8,000,000$; and in 1861, 11,000,000; for England and Wales. The book packets have increased 50 per cent. since 1857.

The mileage of mail trains, the rates, Government duty, and other taxes paid by railways in the United Kingdom, in 1861, were as under :


In the United States, the railways are under the control of the State governments, while the postal service is managed by the Federal power. The position of the general government, therefore, as compared with other countries, is in this respect a very weak one-no attempt having been made to assume control, by any civil law, over corporations which hold their privileges from the State governments. In 1838 (the year in which England first legislated upon the subject of railway mail conveyance), Congress simply declared the railways to be post routes, and authorized the Postmaster-General to send the mails by them, "provided he can have it done on reasonable terms-and not paying therefor, in any instance, more than twenty-five per cent. over and above what similar transportation would cost in post coaches." The next year, a maximum rate of $\$ 300$ per mile per annum was fixed, for any amount of mail service, but still restricting payments to a maximum of twenty-five per cent over the cost of coach service, under similar circumstances. In 1845, another Act was passed, "to secure an equal and just rate of payment according to the service performed"-which directed the Postmaster-General to divide the railways into three classes, according to the size of the mails; the speed at which they were carried; and the importance of the service; and authorized him to contract with them, provided the first class received no more than the maximum which had been already established by the laws of 1838 and 1839 ; the second class no more than $\$ 100$ per mile; and the third class no more than $\$ 50$ per mile. If he could not contract on these terms, he was authorized to separate the letter mail, and forward it by horse express, and the residue by vehicles. But if one-half the service on any railway were performed in the night, he might pay for that twenty-five per cent. over the classified rates; and finally, if there were more than two mails daily each way, he could allow what was just and reasonable for the extra service.

Where Congress granted lands in aid of railways, as in the case of the Chicago and Mobile road in 1850, it declared that, in consideration thereof, the road "should be free of toll or other charge to U. S. troops and property;" and that the mails should be carried upon it "on such terms as Congress shall fix."

The nature of the seryice performed by the United States railwaysas defined in the printed forms of contract used-is as follows:-

1. That the mails (including British, Canada, and other foreign mails) shall be conveyed in a secure and safe manuer, free from wet or other injury, in a separate and convenient car, or apartment of a car, suitably fitted up, furnished, warmed and lighted, under the direction and to the satisfaction of the Post Office Department, at the expense of the contractor, for the assorting and safe-keeping of the mails, and for the exclusive use of the Department and its mail agent, if the Department shall employ such agent; and such agent is to be conveyed free of charge. When there is no agent of the Department, the Railroad Company shall designate a suitable person on each train, to be sworn in, to receive and take charge of the mails, and of way-bills accompanying and describing them, and duly deliver the same. And the mail shall be taken from and delivered into the Post Offices at the ends of the route; and also from and into intermediate Offices, provided the latter are not over one-quarter of a mile from a depôt or station.
2. That if the Company shall run a regular train of passenger cars more frequently than is required by the contract to carry the mails, the same increased frequency shall be given to the mails, and without increase of compensation ; and the like as to increased speed of the mail trains, when desired by the Postmaster-General.
3. That the Company shall convey, free of charge, all mail-bags and Post Office blanks ; and also all accredited special agents of the Department, on exhibition of their credentials.

In every case of any failure to perform the trip, not beyond their control, there is forfeiture of the pay for the trip; and the loss of a connection, if avoidable, involves a double penalty. Neglect to take or deliver a mail, or allowing one to become wet or injured, are subject to fine. And lastly-the Company are made " answerable for the adequacy of the means of transportation; for the faithfulness, ability and diligence of its agents; and for the safety, due receipt and delivery, as aforesaid, of the mails."

There are 320 railway routes on which the mail is transported, having a total length of 21,230 miles, with an annual mail mileage of $22,777,219$ miles-for which the sum of $\$ 2,498,115$ is paid-about eleven cents per mile run. The greater number, length and mileage, are in the second and third classes-the average rate for which is $\delta_{\frac{3}{5}}$ cents per mile run.

These classes embrace 232 routes, having a total length of 13,195 miles, and an annual mileage of $11,609,170$, which costs $\$ 998,730$.

In the reports published in connection with the Grand Trunk Postal Subsidy discussion, much stress has been laid on the price paid the New York Central for mail transportation ; and there is a good deal of discrepancy in the statements made by such high authorities as the Government Commissioner of inquiry, in 1861-our Postmaster-General and Mr. Brydges, in 1862. The former made the average rate of the whole amount received for $1860, \$ 172.24$ per mile of road. The Hon. Mr. Foley states it correctly, as far as it goes, at $\$ 51,600$, for 298 miles of railway-a fraction over $\$ 173$ per mile per annum. Mr. Brydges says the Company receives an aggregate of $\$ 91,550$, which is at the rate of $\$ 307$ 2le. per mile. It is true, he says, that for " a portion of the distance they have a duplicate line; but these double lines do not average twelve miles apart; they accommodate the same district of country and for all practical purposes, the amount paid is for a line of 298 miles in length."

The New York Central receives now $\$ 94,650$ per annum, for a length of railway (including one leased line) of 659 miles of main line and branches, or an annual average rate of $\$ 14350 \mathrm{c}$. per mile of road, There are on this road 243 miles of double track; and the payment, therefore-though for a line of country 298 miles between its termini at Buffalo and Albany-is really for a line of single track of over 900 miles in length-about $\$ 105$ per mile of single track. The length of sidings, in addition to the double track, is 120 miles, which brings up the total length of track to 1,023 miles-a greater length than that possessed by the Grand Trunk in Canada. This Company has also more locomotives and cars than are on the whole Grand Trunk, both in Canada and the United States.

If the Grand Trunk were in the United States, the portion between Quebec and Toronto would receive $\$ 100$ per mile, and all the rest $\$ 50$. This would give $\$ 68,500$ per annum, for which side service would be required. We pay the Company $\$ 60,000$, besides $\$ 18,000$ to other parties, for the side service.

The cost of side service on Grand Trunk ( $\$ 20$ per mile) must be added to the $\$ 70$; and at $\$ 90$ per mile per annum, the mail mileage rate for this road would be $8 \frac{4}{5}$ cents, as compared with the $8 \frac{1}{12}$ cents on the N. Y. Central. The Central, carrying vastly more of mail matter, receives a less rate per mile run.

The real question, however, for comparison, is the service performed by the two roads respectively. Mr. Watkins, at the meeting held in London last August, stated the Grand Trunk weekly mileage of mail trains in Canada, to be 17,000 miles-or 884,000 miles per annum. The
|mileage of the New York Central, as will be seen from the statement below, is $1,170,940$ miles. It will be observed in this table that the highest rates are paid on second rate sections. The old stage route was the longest, and the highest rates are continued on it-by a process known to Congress as "constructive mileage."

| Sections. | Length in miles. |  | Trips per week. | Annual payment | Annual mileage. | Cost per mile run. in cents. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Albany to Buffalo...... | $\begin{array}{r} 218 \\ 80 \end{array}$ | $\begin{array}{r} \$ 200 \\ 100 \end{array}$ | 25 | $\begin{array}{r} \$ 43,600.00 \\ 8,000.00 \end{array}$ | $\begin{aligned} & 566,800 \\ & 208,000 \end{aligned}$ | $\begin{aligned} & 7.69 \\ & 3.84 \end{aligned}$ |
| Troy to Schenectady. . . . . | 22 | 75 | 12 | 1,650.00 | 27,456 | 6.00 |
| Syracuse to Rochester, via Auburn | 104 | 200 | 12 | 20,800.00 | 129,792 | 16.02 |
| Canandaigua to N. Falls $\}$ | $\left.\begin{array}{l}50 \\ 47\end{array}\right\}$ | 62.89 | 12 6 | 6,100.00 | 91,628 | 6.65 |
| Rochester to Niagara Falls. | 76 | 150 | 12 | 11,400.00 | 94,848 | 12.02 |
| Batavia to Attica. . . . . . . | 11 | 50 | 6 | 550.00 | 6,864 | 8.01 |
| Buffalo to Lockport. . . . . . | 22 | 50 | 12 | 1,100.00 | 27,456 18,096 | 4.01 8.01 |
| " to Lewiston....... | 29 | 50 | 6 | 1,450.00 | 18,096 | 8.01 |
|  | 659 |  |  | \$94,650.00\| | 1,170,94 | 8.08 |

In addition to the mileage run, the bulk of the mails, and the speed at which they are carried, are elements of comparison. We have no statisties of the weight or bulk of the mails carried on the Grand Trunk. The English mails carried by special train do not disturb the general average, as they have been paid for at very profitable rates, varying from 30 cts . to $\$ 2.00$ per mile. But we believe neither the bulk nor the weight of our ordinary mails has reached the capacity afforded by the one-third of the ear devoted to Post Office purposes. The westward mail on the New York Central averages $5 \frac{3}{4}$ tons, and the eastward one $3 \frac{1}{4}$ tons, daily. This amount of mail matter could only be disposed of by frequent trains, and as a matter of fact, it is nearly equally distributed between the four trains which run each way daily, three of which are express trains at 30 miles the hour including stops-the other at 21 miles. On the Grand Trunk we have no express trains proper-but one passenger trian at 20 miles, and one mixed one at $12 \frac{1}{2}$ miles the hour, on the principal sections; and one mixed one only at the two extremes of the road.

Mr. Brydges states $\$ 100$ per mile to be the lowest rate fixed by Congress in the classification of the railways,-though he adds that he believes "a few small branch lines have been paid at rather less than $\$ 100$ per mile." We have already seen that by the act of 1845 , Congress fixed $\$ 50$ per mile as the maximum rate of the lowest class ; and there are 127 routes
having a total length of 4,605 miles paid at and below that figure,-one as low as $\$ 10$. Thirteen of these roads carry the mail twice each way daily, as is done on the most important sections of the Grand Trunk. The number of routes paid at rates under $\$ 100$ per mile is 179 , having a length of 7,526 miles -36 of which carry two mails daily each way. The maximum rate, with 25 per cent. added for night service, is paid. only to the New York and New Haven, a double track line, which running only three mail trains daily, receives $\$ 375$ per mile-nearly double that paid to the New York Central for four trains and a greater amount of mail matter. This anomaly - which is similar to our own practice in paying the same rate per mile per annum below Quebec, that we do above Montreal - is accounted for by the United States Postmaster General who says that "some corporations when the public treasury was full succeeded in obtaining too much from the treasury." This may be a delicate way of hinting that when a Postmaster General had the power to sign a contract for a term of years, binding the general Government to pay anywhere between $\$ 10$ and $\$ 375$ per mile-he might not always be proof against the solicitations of a political broker employed by the corporation to get the best terms he could.

That the system now existing in the United States is by no means satisfactory is proved by the following pregnant extracts from the last report of the Postmaster General at Washington :
"I renew the recommendations of my report of last year for the establishment of some system to enable the department to procure contraets on fair terms with railroad companies for mail service. Many eases have risen since then to illustrate the necessity of further legislation to prevent the serions prejudice to public interests, likely to occur if these corporations are left as at present entirely unrestrained by law. Some of these corporations when the public treasury was full, succeeded in obtaining too much from the treasury; and even now, when the resources of the country are so severely taxed to preserve the Government, there are, I regret to say, some companies threatening to throw off the mail, unless: terms even more onerous than any heretofore exacted from the Government, by any other company, are agreed to by the department. The effects of yielding to such exactions on the part of the few has been to raise the terms required by all ; for the more liberal justly say - whilst they agree that the terms allowed are too high-they cannot compete with rival lines unless they demand and receive the same rates for carrying the mails. * * It has been suggested that in lieu of the classification by which compensation is now fixed, reference should be had to the actual cost of transportation; and I am disposed to think arrangements could be more satisfactorily made on such a basis than in the present system. I think it probable it would be generally acceptable, and that a compensa-
tion to cover the actual cost of transporting the mails, would be satisfactory to the railways; for the considerations which preclude the Government from desiring revenue from the mails, ought to operate even more directly on the railroad interest, to preclude it from attempting to burden a machinery which, in so many ways, creates its business. All increase and acceleration of mails promotes the transfer of persons and property, for which these roads were constructed, and of which the transportation of the mails is but an incident."

The cost of mail transportation by coaches in the United States averages 24 cents per mile, while in England, Ireland and Scotland it only averages about one-fifth, and in Canada (before the Railway era) about one-fourth this amount. The mail contracts in the United States have long been the perquisites of the party successful in the Presidental election; and often were the only means by which the Federal patronage could be made to reach certain districts. The fact that the early rates for railway mail service were fixed with reference to the cost by coaches, and 25 per cent. was allowed to be added for the additional speed, may explain how that Governmert has been gradually led into an outlay which is now found to be intolerable.

In Canada no legislation was had bearing on the question of mail transportation, before the Union, for the reason that our Post Office was then in Imperial hands. In chartering the early Railway Companies, Lower Canada regulated the tolls-but the Upper Province left these to the discretion of the proprietors: the same principles were applied, respectively, to the railways chartered in each section after the Union, until 1846, when the first legislative reference to mail transportation was made. Although the transfer of the Post Office from the Imperial to Colonial control did not take place until 1851, the Legislature, in view of it, inserted a clause in the Great Western, and Montreal and Kingston Acts of 1846 , compelling these railways to carry mails, troops, munitions of war, police, \&c., on terms to be fixed by the Governor in Council, in case of disagreement ; but the Companies procured a qualification to the effect that they should not be required "to start any train at any other time than their ordinary time of starting the same." In 1849 when the first guarantee Act was passed, another general railway act of the same date repealed this qualification, in the case of any railway subject by its charter or amended act to the provisions of any future railway act : and the General Railway Act of 1851 put all railways, thereafter to be made, under the obligation to carry mails, military and militia, artillery, ammunition, proyisions and stores, policemen and constables in Her Majesty's Service, "with the whole resources of the company, -at all times when thereunto required by the Postmaster-General, the Commander of the Forces," \&c., the terms to be fixed by the Governor in Council. By the
same act the Railways were empowered "to regulate the time and manner of transporting goods and passengers, and fix the tolls thereon;" the latter subject to the approval of the Governor in Council. The companies are subject to action for any refusal or neglect to forward goods and passengers ; but the Railway act does not fix the minimum speed or frequency of trains. The Grand Trunk Act, however, obliges that Company to run at least one train every day having third class carriages taking passengers at one penny per mile. The Canadian PostmasterGeneral has the power, though we have not learned that it has ever been exercised, to fix the hours for the departure of mail trains; but he cannot regulate the speed or stoppages. The United States Post Office has not this power, nor does it seek it; but it seeks the other and more important power possessed by Canada, that of compelling the Companies to carry the mails, not on their own terms, but those on which goods and passengers are carried in all countries-under the same conditions of speed and accommodation afforded. In practice we have wisely followed the American system of sending our mails by the ordinary trains, and have thus avoided the excessive demands which have been made upon the English Post Office Department-while we possess what neither of the other governments have - the very necessary power of confining the compensation to what is just and reasonable.

In 1840, the average cost of mail conveyance by daily coach, was six cents per mile run on the main routes : in 1852 , just before the railway era, it was five cents per mile travelled. The cost by steamboat varied as opposition or monopoly existed. In 1852 a mail was taken by Mr. Holton's through line from Montreal to Hamilton, for ten dollars per tripabout two and a half cents per mile. Reasanable as this appears, it doubtless paid the steamer better than any other freight carried.

In 1853, upon the opening of the Grand Trunk between Montreal and Portland, the first extended railway mail service began, and on application from the Government the Company offered to transport mails by all their ordinary trains, including the conveyance of a mail conductor, for $\$ 110$ per mile, per annum. In 1854 the Company ran through trains to Portland in $11 \frac{1}{2}$ hours-and in 1855 the express trains between Montreal and Quebec, made the distance, 168 miles, in five hours. On the opening of the line from Montreal to Toronto, day and night express trains were established,-in addition to local passenger trains. The Company, up to a recent period, had no idea of mixed trains, and contemplated the usual combined baggage and mail car with all their passenger ones. The tender of 1853 therefore involved at least three mail trains each way daily, with a conductor for each. No action was taken by the Government until the increase of the railway mileage became important and its effect could be seen, the Companies in the
meantime receiving what the Goverment tendered on account. In 1858 an order in Council fixed the price of $\$ 30$ per mile per annum for each day train, and $\$ 40$ for each night train carrying a mail, over every railway without reference to the weight or bulk of mails. In 1853 the Company made an offer which the Government would not take the responsibility of accepting-as binding them for any fixed period-but paid nevertheless at the rates demanded. In 185 S the Government fixed a rate which the Company in their then position as prospective applicants for further aid, (which they received in 1860) did not protest againstmost probably because it was unnecessary, for their accounts shew that down to the end of 1860 they were paid at the old rate, notwithstanding the order in Council of 1858 .

In 1860 this Company became bankrupt, and a Committee of Bond and Shareholders virtually took its affairs out of the hands of its former managers, and made their first report in December of that year. In this they suggested that "one of the easiest and fairest means of obtaining present financial relief for the company, would be the capitalization by the Province of the annual amount to which the Company was entitled, for postal service"-the extreme inadequacy of the payment for which by the Canadian Government, they drew attention to. They said that "the great object to be accomplished was the raising of two or two and a half millions sterling-and that the Company had a right to look to Canada [for the third or fourth time] for aid," on the ground of our moral responsibility. Mr. Newmarch, the moving spirit in the matter, and understood to speak the views of the Messrs. Baring, declared at the public meeting which followed, that " at this crisis of our fate we have a fair right to look for assistance to the Canadian Government. Now there is a mode of affording assistance, and that is by increasing the postal subsidy. So strongly has the Company felt the inadequacy of this payment, that up to this time they have only accepted the money on account. If it should appear that we can substantiate a claim of $£ 85,000$ or $£ 95,000$ sterling per annum, $(\$ 420,000$ to $\$ 470,000)$ there will be some considerable arrears to draw from the Government of Canada, on account of the subsidy."

In the second report of the above committee, in July, 1861, they recommended that " the Canadian Government be applied to, to advance to the Grand Truuk Company, in Province bonds, bearing five per cent. interest, payable in London-a sum of one and a half millions sterling, as the payment for twenty-five or thirty years, of the total amounts for postal and military subsidy-reasonable provision being made for limiting the extent of the service to be required by the Province." This would be about six times the amount now fixed by law ; and the Committee admitted that they might be charged with "reckon-
ing on a degree of liberality, on the part of Canada, of very improbable occurrence."
It will be remembered, that at the last session, our Legislature refused to capitalize a postal subsidy; but authorized the Company to issue bonds secured on all monies derived from postal or military services. An arbitration was then in progress to fix the amount-but a change of government broke it up, and the news reached England only a short time before the Grand Trunk meeting in August last, and after Mr. Watkin's report, announcing the fact that the arbitration was in progress, had been issued. Much feeling was exhibited at that meeting, in consequence of this miscarriage of the arbitration scheme. Mr. Baring acknowledged that "the Arrangement Act was in reality based on an increased award by arbitration;" while Mr. Wilson charged our Government with a gross breach of faith, and said that for "Canadian" they should read "jobber." Mr. Newmarch "hoped a place of penitence might yet be reserved for the Canadian Government. He was sorry, not for the Company, but for Canada. The stick was now in the Company's hands-no longer in those of the Canadian Legislature. They might depend on it, that occupying, as their railway did, the back-bone of the Province, and being the only possible line of communication, the time was not far distant, when the Province of Canada would be suitors to them, and not they to the Province. The judgment creditors [among whom are the financial agents of the Province] held $£ 700,000$ sterling of collaterals for advances, the release of which was contingent on the postal arbitration ; but he could not now ask them to surrender." Mr. Watkin, in his report, explained that though "he had failed to get the Province bonds in capitalization of a postal subsidy, he had altogether avoided governmental control, and the power of temporary seizure, which would no doubt have been insisted on to secure the performance of a postal contract." At the meeting, he said "so long as the repudiation of a solemn contract, legal or illegal, still honourably made, shall mark the parliamentary history of a country with which we should wish to be on terms of affection, neither you nor any other body of shareholders will ever send out another shilling." If they failed in obtaining "adequate remuneration," he told them they "must come together and strengthen the hands of the directors in taking those measures which must be successful in case you are compelled to resist grievous injustice." At the meeting of October following, Mr. Hartridge said "he expected little from the justice of the Canadian Government. The Company was not bound to serve the Government; and he would like to know the position of Canada, if they refused to carry on the postal service."

Canada now pays annually over $\$ 900,000$-or more than $\$ 1,000$
per annum upon every mile of the Grand Trunk within her borders by way of interest, and in a few years more will have to meet a principal sum of fifteen millions of dollars, as her contribution to this Company ; and there cannot be the slightest doubt, that if our Legislature had stipulated the free conveyance of the mails, in consideration of this gift, it would bave been assented to as reasonable. This advantage of the company's necessities was not taken; and, as a consequence, all our contributions have been credited to the moral responsibility side of the account. What the precise valuation of the moral responsibility of a colony of our age, area, and population, should be, we have no means of determining upon this side of the Atlantic: but it would seem that a commission, for the final adjudication of this matter-if that be possible-should precede any further negotiations on account of postal services with our Trunk line, by arbitration or otherwise.

We have neither the resources of England, nor those of the United States, and cannot be expected to pay as well; but neither of those governments have incurred indebtedness, to aid railways, as we have done. Proportionally, we have been more liberal than either: we do not exact the special trains, nor the speed, as in England; nor do we hold the companies responsible for the mails, and make them perform the side service, as in the United States.

In Mr. Brydges' reply to the Postmaster-General, wo have an indication of the ground which will be taken by his Company in entering upon an arbitration. He derotes at least one-fourth of his letter to the moral responsibility asject, which clearly has no relation to the commercial value of the service; and then he proceeds to the latter, after this fashion :- "The fares of the forty Post Office clerks travelling on the Grand Trunk, calculated at rates paill by ordinary travellers, would amount to more than half the rate of seventy dollars per mile. The Post Office cars, if used for the ordinary passenger business, would accommodate at least sixteen passengers, whose fares, at the regular rates between Montreal and Toronto, would produce, in that district alone, upwards of $\$ 100,000$ per annum, or at the rate of more than $\$ 300$ per mile of railway, per annum." The same calculation might be made with respect to the baggage compartment, and that for the express ; both of which are in the same ear with the mails; the first producing nothing - and the second though as large, and also carrying a non-paying passonger and a greater weight, does not yield the Company as much as the one occupied by the mails.
There are several ways in which the service may be valued-but mileage or tonnage calculations seem superfluous in the face of the rates which the Companies have themselves fixed for the express service.
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The relative receipts for Mail and Express service on the undermentioned roads in 1860, were:

|  | $\begin{aligned} & \text { Length } \\ & \text { in } \\ & \text { miles. } \end{aligned}$ | Receipts from mails. | Receipts from Express. | $\begin{gathered} \text { Mail rate } \\ \text { per mile } \\ \text { per annum. } \end{gathered}$ | Express per mile per ann. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grand Trunk | 1,090 | \$110,339 | \$27,596 | \$101 | \$25 |
| Great Western. . . . . . | 345 | 40,369 | 23,295 | 117 | 67 |
| New York Central ... | 659 | 95,765 | 62,735 | 145 | 93 |

On the Grand Trunk the express mileage is only half the mail mileage, where there are two passenger trains daily. On the Great Western it is less than the mail mileage;* but on the New York Central they are equal on the main route - and so great is the bulk and weight that in some trains several cars are required for the express, while no additional ones are needed for the mails.
As to the service itself, it appears that we have in certain districts two sorting cars daily, while only one is used on more important routes in the United States, and that this is because both trains do not stop at all stations. If two sorting cars are to double the value of the highest rate demanded, it will be necessary to serve the smaller stations by side service from the larger ones : for small places have no greater claims, to increase the Post Office outlay because they happen to be near a main line, than the larger places more distant from it which are not so favored-merely because the railway commenced a speed and frequency of trains which it has been unable to continue.
There is an important distinction between an arbitration to meet the requirements of the Grand Trunk Company and that which is obtainable in England, -which makes our position, strange to say, worse than that admittedly bad one. The amount fixed will be the basis for an issue of bouds : if excessive it cannot virtually be set aside-as is done in England when a change of service abolishes the existing award-because it is not within the limits of probability that our Postmaster-General will assume the responsibility of changing the hours and regulating the working of mail trains, as is done in England : moreover, a reduction would destroy the boad basis and aggravate our moral responsibility. If hours of starting and stopping are prescribed, the Company can make out a case for the whole cost of the train, on the ground of "interference;" and Mr. Brydges warns us that the average earnings of passenger trains do not amount to 75 cents per mile run, while the cost is very nearly $\$ 1$ per mile.

The principles on which payment ought to be made, should be asserted by the Legislature. Mr. Cardwell's committee of the House of Com-

[^16]mons in 1853, laid down the principle that the railway should receive no more than the public would be required to pay for the same service.

Rowland Hill, from whom, says Uapt. Huish - the railway manager opposed to him -"every thing which emanates is characterized by sound, practical common sense," went further, and insisted that Para liament should not only fix the principles, but the rate itself. Under any circumstances a maximum rate should be fixed by the Legislature for the different classes of service, as Congress had done. Without this it will be in the power of an umpire to bind the Province to an annual tribute to the Railway interest-over and above the commercial value of the service-msufficient to subsidize a line of ocean steamers: for the main objection to arbitration upon the English plan is that the Government and Legislature delegate the whole question of the amount to be paid--to one person over whose appointment they have no control, It is true that the Post Office arbitrator has a voice in naming the umpire, but he cannot object to the railway nominee except for cause, which cause cannot be demonstrated until the mischief is done. The firgt umpire will virtually settle the whole question.

## INSECT LIFE IN CANADA-MARCH AND APRIL.

## by the rev. Charles J. S. bethune, m. a.

Insects in Canada are looked upon in general as objects only of detego tation and abhorence, to be trodden under foot and erushed upan every opportunity. It is true, indeed, that the injuries they inflict upon the agriculturist and the gardener are almost infinite in number and degree, and thus to some extent justify the treatment they receive, but at the same time it must not be forgotten-as, unfortunately, it too often is that they likewise confer upon us a large number of benefits, which are not duly appreciated, because not fully known or acknowledged. More${ }^{\text {over, }}$ the pleasure to be derived from contemplating the beauty of their appearance, and inrestigating their various habits and all the interesting details of their natural history, though by no means inconsiderable, is for the most part, not thought of for a moment in this utilitarian age, and especially in this new country where work and money-making are too generally the order of the day. To attract attention they must be exhibited as noxious or beneficial,-as inflicting injury upon our property, or as affording means for obtaining wealth : in the former light they are but too well known, as many an anxious farmer can abundantly testify; but
in the latter they are little regarded. While we look upon them, then, in both these aspects, let us endeavour at the same time to derive some gratification from the observation of them in all their life and beauty, as they busily pursue their varied avocations, or bask in short-lived pleasure beneath the sumny sky.
After a long, dreary winter, when Nature has for months remained enshrouded in her chilly mantle of frost and snow, devoid of animation and sunk in a death-like sleep, how cheering is the return of Spring I How joyous to all is its first mild breath which steals over us as if wafted from the bowers of Paradise! But for the Entomologist it possesses even a greater charm ; to him it brings visions of bright morning rambles over fields and meadows now released from their fetters of ice, and soon teeming with insect life in all its wondrous variety, -of hours to be spent in the exploration of some shady grove or woody glen,-of excited chases after some rare butterfly which hovers like "an embodied breeze at play" over the vernal flowers,-or of visits by night to the haunts of the owlet moths which, bat-like, dart hither and thither through the gloom. Such are some of the pleasures to which be looks forward as natural accompaniments of returning Spring, and to which he eagerly devotes his leisure hours. The first mild, balmy day in March is sure to find him a-field, peering about anxiously in every warm, sunny spot for signs of returning life and animation in the long torpid insect tribes, and feeling a thrill of pleasure whenever he lights upon some chance specimen that he had not before observed.

But let us join him in his rambles, and observe with our own eyes the waking up of Nature from her long repose. The first insect harbinger of Spring, is generally a tiny little gnat that sports in the sunshine, joining with its fellows in some mystic dance, as if it too rejoiced in its recovered animation. Let us catch one, and see what it is like. At the first glance it reminds us of the Daddy-long-legs, that old friend of our childhood, of which, indeed, it is a liliputian representative ; on closer inspection we find that, like all other two winged flies, it is furnished with two curious little organs placed, one on each side, just behind the wings, called poisers or halteres, and consisting of a short membraneous thread terminating in a round or triangular button. When at rest the insect moves these organs with great vivacity, and probably also when flying; their use, however, has never been satisfactorily ascertained, though they are generally thought to be intended for keeping the body steady in flight; ; it is asserted, indeed, that if one of these be cut off the insect will fly as if one side overbalanced the other, till it falls to the ground; and that if it be deprived of both it will fly very unsteadily, snd sometimes be unable to take wing at all. Every one, no doubt, has observed the choral dances of these little creatures at various seasons of the year; they
have been described by many writers on insects, and have not escaped the notice of the poets. Wordsworth, in his "Excursion," forms probably a true conjecture respecting the principle that impels them to join in their airy and ceaseless dance, when he thus alludes to them:-

> "Nor wanting here to entertain the thought, Creatures that in communities exist, Less, as might seem, for general guardianship Or through dependence upon mutual aid, Than by participation of delight, And a strict love of fellowship combined. What other spirit can it be that prompts The gilded summer flies to mix and weave Their sports together in the solar beam, Or in the gloom or twilight hum their joy ?"

To the same order as these gnats belong those terrible foes to our grain crops, the far-famed Hessian fly, and the wheat midge-both of the family of gall-gnats (Cecidomyiades). These minute insects have been so often described,* and are alas! so well known throughout the length and breadth of our land, that it is unnecessary to enlarge upon them here. It is consoling, however, to find that in this, as in many other cases, Providence has beneficially provided a host of parasites which prey upon these destructive insects in all their stages, and which are computed to destroy at least nine-tenths of all that emerge from the egg in erery season. While, then, we cannot but feel humiliated when we find our chief means of support at the mercy of such small and apparently insignificant creatures as these, how great should be our thankfulness that the Almighty, in His wisdom, has created still more minute agents of His will to keep in check the work of destruction, and prevent the fair face of our land from soon becoming a desolate wilderness !

In singular contrast to the gall-producing insects of this order, are those four-winged ones of the order Hymenoptera; while the former are eminently destructive, to the latter we owe one of the most useful products afforded by insects-the gall-nuts, from which ink is made. To quote the words of those well known authors, Kirby and Spence : $\dagger$ "How infinitely are we indebted to these little creatures, which at once enable us to converse with our absent friends and connections, be their distance from us ever so great, and supply the means by which, to use the poet's language, we can

> - - give to airy nothing

A local habitation and a name!'

[^17]- Second Report on the Noxions, ete., Insects of the State of New York, 1856, p. 53s.
+ Introduction to Entomology, seventh edition, p. 181.
enabling the poet, the philosopher, the politician, the moralist, and the divine to embody their thoughts for the amusement, instruction, direction, and reformation of mankind."

If we now go into the woods we may find crawling about on the surface of the snow beneath the pine trees, some gnats of the same family (Tipu$l i d a)$ as those mentioned above, but-a curious exception to the general rule-utterly destitute of wings. These tiny creatures look more like spiders than gnats; their bodies are short and of a yellowish colour, with the usual poisers notwithstanding that the wings are wanting; the thighs of their hindermost legs present a very odd appearance, being disproportionately thick and bowed, hence their name-the bow-legged gnat (Chionea valga). In company with these is sometimes observed, as Mr. Gosse tells us, another apterous insect (Borus Hyemalis), resembling a flea in its general aspects, though belonging in reality to a winged family. Occasionally it is found in perfect myriads, blackening the fair surface of the snow; one writer, indeed, relates that he counted no less than 1,296 ,000 upon a single square yard, and adds that the snow throughout the whole forest appeared to be equally densely populated with them.

These are all the insects we are likely to see until the snow is well off the ground, unless we follow the example of many an ardent Entomologist, and with stiffened limbs and aching back, explore beneath the loose bark and moss of decaying trees for beetles that are snugly stowed away for their long winter sleep. As, however, our object at present is nọt so much to collect specimens as to observe whatever may be curious in their habits and actions, we will leave the sleepers unmolested, to dream away for a few weeks longer till the sun more fully exerts his power, and gently wakes them up once again to renewed life and activity.

When rude March with his blustering winds and chilly rains, has come and gone, and gentle April steals upon us with her soft showers and bright sunny days, let us sally forth again, and observe the changes in our insect world. See! here comes flitting towards us with outspread pinions a gaily painted butterfly, -that welcome herald of the pleasant days of spring, the Camberwell Beauty (Vanessa antiopa). This well known, and, at times, extremely common insect, makes its appearance as early as the middle of March, if the weather be at all propitious, retiring, however, to its winter quarters again, if Jack Frost resumes his sway for a few days, as he so often does, before finally giving place to his gentle successor. Though so common in Canada, this is esteemed a wonderful prize in England (from whence, probably, it was introduced into this country) and the fortunate individual who captures one forthwith chronicles the event that his neighbours may either rejoice with him, or envy his good luck. Like others of the same genus it passes the winter in a torpid state in some sheltered spot. Dr. Harris relates
that he has "found it in mid-winter sticking to the rafters of a barn, and in the crevices of the walls and stone-heaps, huddled together in great numbers with the wings doubled together above the back, and apparently benumbed and lifeless; but it soon recovers its activity on being exposed to warmth." Its wings expand about three inches, and are of a velvety purplish brown above, with a rather broad cream coloured margin, and a row of light blue spots parallel to it ; beneath, it is of an almost uniform black colour. The caterpillar which is transformed into this beautiful creature, is an ugly black bristly worm; it may be found in great herds on willows, poplars, and elms in the month of June, and again in August, two broods coming forth in the year. It is rather destructive, as it devours the leaves, and often strips quite bare the branch on which it has taken up its abode. When fully grown it descends the tree and crawls about seeking a safe place in which to pass its chrysalis state. Its favourite spots are projecting boards of fences and buildings, to the under-side of which it suspends itself by its tail, and patiently remains in a deathlike torpor, till at length it bursts its cerements and comes forth as a bride out of her chamber, prepared for the enjoyment of a new and more perfect mode of life.

In company with the Camberwell Beauty we sometimes find in early spring a few individuals of kindred species that have also survived the winter. This power of hybernation appears to be confined, among Canadian butterflies, to what may be termed the sub-family Vanessidi; it is generally thought that only the females which have not been impregnated, and therefore have not been able to accomplish the great object of their existence-the laying of their eggs, have their term of life thus prolonged beyond the usual period.* This supposition, however, rests as yet upon very insufficient data, and cannot be deemed conclusive until further observations have been recorded.

Around the stump of a recently felled birch or maple tree, where the exuding sap affords them and other insects many a dainty meal, we may observe some specimens of the common Forked Butterfly (Vanessa Milberti) ; see them now hovering in the air, in alarm at our approach, and now again feasting on the sweets so providentially afforded them in the absence of their usual food-the honeyed juices of the summer flowers. This very common butterfly is much smaller than the Cam. berwell Beauty, though it resembles it to a certain extent in the sombre hue of the ground color of its wings, which on the under side are entirely

[^18]deep brown. The upper side is set off by a bright orange-red band, parallel to the outer edge of both wings, and terminating in a short fork in froni, from which character the insect derives its common name. Its caterpillars live together on the common nettle, the leaves of which they devour, and thus tend to keep in check this unpleasantly irritating plant; nor are they alone in this useful task, for it is related that no less than thirty distinct species of insects feed upon this unattractive herb. But while it is thus beneficially employed, the caterpillars of some closely allied species of butterflies (Grapta interrogationis, and G. comma, ) are no less busily engaged in the work of destruction, feeding upon the leaves of the hop, and, by uniting with myriads of other insects, causing to the growers the annual loss of many thousands of pounds.

Like many other insects this butterfly is burdened with two distinct appellations, having had the misfortune to be named by two naturalists quite independently of each other. Mr. Say, an American, very appropriately called it the Forked Butterfly ( $V$. furcillata,) but unfortunately it has since turned out that a French entomologist, who had received some specimens of insects from this Continent, described it first and called it after a friend-V. Milberti; so in accordance with the laws of science, by the latter name it must henceforth be distinguished.

But see how joyously it flits about, ever and anon alighting to sip a few drops of its ambrosial food, and then to bask in the warm sunshine, and its "golden pinions ope and close" as if in thorough enjoyment. "Enough," it seems to say, "enough for wretched men to weary themselves about hard dry names for a tiny creature like me; let them squabble and contend, while I enjoy each passing hour, no need for me to waste my little spaz of life in aught but pleasure and delight; 'tis for them, the vaunted lords of earth, to toil and sweat and strive, while I in happiness make all one long bright holiday." And thus too the poet contrasts our life of trouble, pain, and disappointment with that of the fairy butterfly :-

[^19]But to turn from these gaily-attired creatures to some less showy members of the inseet world-here, on the top of this warm sandy bank wo are sure to meet with the purple tiger-beetle (Cicindela purpurea, ${ }_{3}$ ) the first of its class to come forth in the spring. These "insect tigers,"
as they are so justly named, are especially interesting both from the benefits they confer upon us by destroying innumerable numbers of their noxious fellows, and from the singularity of their habits. "Though decorated with brilliant colors, they prey upon the whole insect race ; their formidable jawswhich cross ench other are armed with fearfill fangs, showing to what use they are applicable; and the extreme velocity with which they can either run or fly, renders hopeless any attempt to elude their pursuit. Their larvæ, also, are equally tremendous with the imago, having eight eyes (four on each side), seated on a lateral elevation of the head, two above, and two very minute below, which look like those of spiders; and besides their threatening jaws, armed with a strong internal tooth, being furnished with a pair of spines resembling somewhat the sting of a scorpion, which stand erect on the back of the abdomen, and give them a most ferocious aspect."-(Kirby and Spence, page 156.) In the summer season, the perfect insects are aiways to be seen on roads and pathways exposed to the burning rays of the sun, or on dry sandy banks, where their movements are unimpeded by plants or grass. At the approach of the passer by, they suddenly take wing and fly swiftly for a few yards before him, alighting again as suddenly as they rose, but always with their heads turned in the direction of the advancing danger. The same individual may be started up again and again ; but after a few times, wherr he begins to perceive himself the object of particular pursuit, he craftily eludes further persecution by making a long and circuitous flight back to his original station. In the larva or preliminary stage of existence, they are quite as voracious, if not more so, than when their powers are fully developed; but being unable to move with any degree of rapidity, they are obliged to make up by stratagem what they lack in agility, in order to satisfy the cravings of an appetite sharpened by their rapid growth. Accordingly, their first proceeding is to dig a circular hole in the ground with their feet and jaws, large enough to admit their whole body; but with the aperture at the surface sufficiently small to be closed by the top of the head, and thus to deceive their unwary prey. No sooner, then, does an incautious or unsuspecting insect approach sufficiently near, than it is seized by a sudden effort, and carried off to the inmost recesses of the burrow, there to be leisurely devoured by the ogre-like creature within.

Of this most useful genus of insects, no less than ore hundred and seven different species have been found in North America-eight of Which are known to inhabit this Province-and probably more remain to be discovered. It is difficult to estimate and feel sufficiently grateful for the benefits these beetles, and other kindred ones, confer upon us; for while we cannot but observe and deplore the havoe
made in our property by their voracious fellows, we do not miss the countless numbers that they destroy, since to our casual investigations they ever appear as numerous as before. Still the fact remains the same, that were it not for these and other insect benefactors, to whom is given the commission of keeping the animals of their own class within bounds, we should be reduced to a most miserable condition; but for them, indeed, as has been well remarked, we should soon be " divested of a covering, unsheltered, except by caves and dungeons, from the inclemency of the seasons; exposed to all the extremities of want and famine ; and, in the end, driven with all the larger animals from the face of the earth."

During the month of April, especially towards the latter part of it, many a beetle comes forth to "wheel his droning flight," as he wends his heedless way in search of food or pleasure. Among those to which this expression of the poet is particularly applicable, and which we are likely to find at this season, is the Indian Cetonia (Cetonia inda). This modest-looking beetle may sometimes be seen on warm days in April, flying about, with a few comrades, over sloping banks on the borders of woods, and in dry open fields. When on the wing it makes a loud humming noise like a bumble-bee, for which it might easily be mistaken, as it whirls along a few inches above the tops of the grass. It is about half an inch long; the head and thorax are dark copperbrown, thickly covered with short yellowish hairs; the wing cases are of a lighter hue, somewhat resembling ivory, and sprinkled with numerous dark spots; beneath, the insect is very hairy, and of a black color. During the summer months it disappears altogether-another brood coming forth in September, when they may be found eating the pollen of various flowers, and feeding upon the sweet sap of the Indian corn, and of willows and locust-trees. Where peaches are successfully grown, it is said that this beetle's love of sweets, leads it to attack the finest fruit, which it begins to devour as soon as ripe, and in a few bours completely destroys. Its grubs are thought to live upon the roots of herbaceous plants and grasses. On the whole, however, this pretty creature can hardly be ranked among our insect foes-its comparative rarity causing the injuries it inficts to be but slightly felt. But as much cannot be said in favour of other members of the widelydistributed family (Scarabaida) to which it belongs; the Maybeetle, the rose-chafer, and many more well-known insect-ravagers, give an evil character to the tribe, and cause even its innocent members to be generally regarded with feelings anything but kindly or compassionate; but we cannot stay to make their acquaintance now-any further observations of them must be deferred for the month in which they eliefly make their appearance.

Here is another little beetle (Aphodius fimetarius), flying hither and thither, as if wishing to draw away our attention from its larger congener. How attractive it looks with its jet-black head and neck, and bright coral-red wing-covers; and yet how disgusting, though useful withal, is its office! It is one of nature's pigmy seavengers, and performs an important part in the economy of the world, and the preservation of our health and comfort. In fresh manure heaps it may always be found, diligently pursuing its horrid avocations, and carefully providing for the well-being of its offspring. But we must pause no longer here ; other forms of insect life await a passing notice before we dismiss from our contemplations the early visitants of Spring.

Every one has probably observed, in autumn and spring, an oddlooking caterpillar, crawling about by itself, as if always in search of something which it never finds. It is commonly called the wooly bear, from its being so thickly clothed with stiff short hairs, like the bristles of a brush, and is easily recognized by the peculiar distribution of the colors of its body-tan-red in the middle, and black at each end. When touched, it immediately rolls itself up into a ball, like a miniature hedge-hog; and, from the elasticity of its projecting hairs, becomes difficult to pick up-readily slipping from between the fingers of its captor. It feeds upon the leaves of many common plants, such as the dandelion, burdock, plantain, and others; forming, when full-fed, a dark oval cocoon, chiefly composed of the hairs of its body; from this cocoon emerges, in June or July, the Isabella Tigermoth (Spilosoma Isabella), a pretty dull-yellow insect, with scattered black spots on its wings, a row of similar spots down the middle of its back, and another along each side.

While this moth is only in its caterpillar stage of existence, others have arrived at maturity. Among these may be mentioned the swordgrass moth (Calocampa vetusta), as it is called in England, whence it was probably imported into this country. This insect comes tapping at our windows for admittance to the light, even during the chilly nights of April, when one would think so delicate a creature might prefer to remain in some sheltered nook, instead of wandering abroad in the cold damp air.

Other insects-butterflies and moths, beetles and wasps and beessoon present thernselves in quick succession, when Spring has once fairly established her sway; but our limited space forbids us to enlarge upon them here. Future rambles, it may be, are in store for us, in which we hope-perhaps too fondly hope-to be accompanied by those who have borne with us thus far.

## REVIEWS.

Prehistoric Man: Researches into the Origin of Civilization in the Old and New Worlds. By Daniel Wilson, LL.D., Professor of Histocy and English Literature in University College, Toronto. 2 Vols., octavo. Macmillan \& Co., London. Rollo \& Adam, Toronto.

Thrse delightful volumes, fair in outward adornment and beautiful in the spirit which pervades them and the language in which that spirit finds expression, will be welcomed and read with peculiar interest by Canadians and Americans. The Red Indian, the misnamed 'noble savage' of this continent, the 'wild forest man' about whom so much has been written, and so little that is true is really known, forms the prominent subject ; and it is to him and the mysterious prehistoric remains of man in North America that we shall endeavour to limit this notice. The tenor, we have said, of Dr. Wilson's work is admirable, but his views of the Red Indian Race, and especially of their future, as expressedin the introduction, are very discouraging and even in some instances peplexing; indeed, adverse to the experience which many have hitherto supposed both Canada and the United States have already furnished of their capabilities to rise in the scale of civilization when properly educated and removed from artificial, but too often fatal influences. We are willing to admit that the 'noble savage' in a state of nature is generally a superstitious, revengeful and dirty heathen, indolent, reckless and indiscreet; supremely happy if supplied with plenty of food and smoking weed; not wholly regardless of the future, but satisfied if the present affords enough for his wants. Let this 'forest man' be made practically acquainted with the gentle influences of the Christian religion, and ho becomes transformed into a different creature, or let him be educated from early youth, and he no longer remains the careless 'forest man,' thinking himself the equal in his own sphere of the enterprising and civilized whites.

Unlike many other speculative enquirers into the early history of man, Dr. Wilson, in the first pages of his work, points reverentially to the Great AUTHOR he has taken as his guide in those enquiries which have occupied a large share of his attention since he first set his foot in Canada, not ten years ago. "The history of civilization," he says, "is, in one sense at least, an enquiry into the developement of society, and the progressive growth of man, in his social condition, towards an ideal perfection of civil life. In the calm, ever-present eye of God, each whole race is a unit. To the individual man

## "'The drift of the Maker is dark, an Isis hid by the veil!'"

And again, "Christianity indeed lifts for us the veil of Isis, tells of the Righter of all the wrongs of ages ; the Divine One, to whom man is no scientifio abstraction of races, but each individual the offered heir of an inheritance the worth of which will make life's greatest sufferings lighter than forgotten in-fant-tears. Science cannot supersede the work of the great Consoler ; but in searching into those lesser truths with which alone it has to deal, it may grope
and peer hopefully, if still darkly, gladdened by the faith which rests on 'the evidence of things not seen?'"

In the introduction to his work the learned author asks whether the 'forest man' " is in his natural condition," and appears to consider the answer doubtful on account of the invasion of his wilderness by the white man. This argument sucely could not apply to many tribes described by Sir Alexander Mackenzie (Crees and Chipewyans), or other numerous people which have been but comparatively recently discovered on the Mackenzie, Anderson and Yucon rivers, the interior of Labrador, and the interior of British Columbia and Russian America. The habits of life, the superstitions, the social customs of these different people are similar in all important particulars to those of the wood and prairie Indians remote from civilization, yet who have long had intercourse with the whites.
"The Indian does not believe in the superiority of the white man. The difference between them is only such as he discerns between the social, constructive beaver and the solitary, cunning fox. The Great Spirit implanted in each his peculiar faculties; why should the one covet the nature of the other? Hence one of the great elements of the unhopeful Indian future."-(Introduction page 7). This passage will be read with surprise by many. It appears to be opposed to the hopes of most of those who have taken an active interest in the Red Man. However, the future of the Indian race is not individually unhopeful. As a distinct race they may pass from the earth, but perhaps a remnant will remain. The neat little houses, gardens and small farms of 500 Ojibways and Crees at the Indian Settlement on Red River, show what they can do when properly educated.
In a note at the foot of page 115, Vol. III. of the Canadian Journal of Science, of which the author of "Prehistoric Man" was at the time editor, reference is made to Francis Assikinack, a warrior of the Odahwahs, and author of a paper on "the Legends and Traditions of the Odahwahs," in which the progress made by Assikinack in Upper Canada College is advanced as a reason why "so creditable and satisfactory a result of an experiment which at first seemed so hopeless, ought surely to encourage its repetition, and that on a much more extended scale."

Nor must we forget Keeshick, an Ojibway, who was also educated at Upper Canada College, and who greatly assisted the Rev. Dr. O'Meara in translating some of the Gospels; nor Powlas, a full-blooded Mohawk, who was one of the best arithmeticians at the Provincial Normal School ; nor the Rev. Henry Budd and his son, both full-blooded Ojibways, and now missionary clergymen of the Church of England; nor the Rev. Peter Jacobs, ordained by the Bishop of Toronto, \&c., \&c. Many Indians have shown great aptitude for different trades, and the real reason why whole tribes have not progressed, but on the contrary have dwindled away at the approach of the white man, is more owing to early training, early associations, and the Fur Trade-that bane of Indian progress-than to a mental incapacity which would render their future unhopeful in contact with a civilized race.

The Bishop of Rupert's Land says that with Indian children it is difficult to go beyond reading, writing and arithmetic, but this experience was obtained under unfavourable circumstances, such as the instruction being given by
those who were deficient tutors at the best ; unskilful novices in the difficult art of communicating knowledge, especially to forest or prairie children, surrounded by all those exciting associations which life in the free prairies and woods possess for the young, whether white or red, forest born or cradled in the lap of luxury.

It is the opinion of many, says Lieut. G. K. Warren, that the Dakotas on Sioux are increasing in numbers, rather than diminishing, except where they mingle with the settlements on the frontier. Even now the Sioux number 24,000 in 3,000 lodges, and can bring 4,800 warriors into the field. Smalk pox has been their enemy ; even so late as 1856-7, not let less than $3,000 \mathrm{In}$ dians died in the western prairies from this scourge alone. All the Sioux are now vaccinated under instructions from the United States Government.

The Indian has been, and still is, sorely dealt with in North America; hei was first known as a hunter, he was kept by the Fur Traders as a hunter, for two hundred years he has served the whites, and all the advantages of civilization which might interfere with his occupation as a hunter have been studiously screened from his view. Some of the prairie Crees have expressed the strongest desire that their children should be educated in the white man's cunning. They do not wish for any change themselves, but they look so far into the future as to comprehend the condition to which their descendants will be reduced if the wave of civilization rolls on.

Dr. Wilson commences his work with a chapter on "The Old World and生b New." "Words," he says, "can not convey to the old dweller amid Europe's thousand-fold associations and inherited ideas, the strange sense of freedom that stirs the blood in the New World's clearings, where there is nothing to efface, to undo, to desecrate." The primeval occupation of man is supposed to have been that of learning to talk. Adam was alone in the garden of Eden and was without need of speech for the interchange of thought. The origin of language is suggested to be a natural one, not a divine gift to the first man, at least so we understand the author, although in this, as in other instances, no decided opinion is given, but the reader is left to form his own conclusion from the data laid before him. The 19 th verse of the 2 nd chapter of Genesis is cited as the first evidence of the existence and use of human speech; yet many will be inclined to regard the 16th verse of more imporatnce, and decidedly in favour of the divine origin of speech, "And the Lord commanded the man, saying, Of every tree in the garden thou mayst freely eat, but of the tree of knowledge of good and evil, thou shalt not eat of it; for in the day that thou eatest thereof thou shalt surely die. ${ }^{4}$ Thousands will accept this declaration of the Almighty to Adam, implying the divine origin of speech, to one who will be persuaded by the numerous illustrations the author presents of this primeval occupation in framing a language. Passing over the chapters entitled "The Primeval Transifion: Instince" and "The Promethian Instinet : Fire" we proceed to one more intelligibly connected with 'Primeval man,' namely, "The Martitime Instinct : The Canoe." Nothing can be more elegant than a well made birch-bark canoe, and of all the varieties of this necessary means of transportion in America, the delicate and symmetrical canoe of the Nasquapee of the Labrador Peninsulax is by far the most beautiful. The Inaians of North

Americs appear to have adopted or used from the earliest times most of the varieties mentioned by Dr. Wilson as characteristic of different races in various parts of the world. The birch-bark canoe is by far the most common, but the spruce-bark canoe, as well as the ordinary "dug out," were used by the Indians with whom Sir Alexander Mackenzie first came in contact in his explorations. The "Bull boat" made by stretching buffalo hide over a framework of willow wands has been and is still used by the Prairie Indians of the Saskatchewan and Missouri Basin, and completes the analogy between the coracle of the ancient Briton and the production of the Red man's "maritime instincts." We were surprised to find it mentioned as a curious fact that "throughout the American continent, seemingly so dependent on maritime colonization for its settlement by man, the use of sails as a means of propelling vessels through the water appears to have been almost unknown, and indeed, so far as North America is specially considered, was entirely unknown to the native Indians." If this be a real 'fact', the Indians are apt inventors, for we remember seeing a fleet of canoes, in the far North-West, each containing a Swampy Cree family, raise a birch-bark sail six feet by three in dimensions, as a turn of the river made a strong wind fair, using for a mast the paddle with which they had been propelling their delicate craft against a rapid current. The birch-bark sails were a 'length' of the covering of the birch-bark tents, and are always used as sails in modern times when Indians are changing their camp ground and the wind is fair. When hunting, a birch-bark sail is never used, as it would frighten the game.

The chapter on the "Teohnological Instinct : Tools" contains a very interesting account of the Iroquois or Mohawks, "a people whose conquests extended from the Atlantic to the Mississippi, and from Tennessee to the St. Lawrence," and, we may add, to the head waters of the Ashwanipi on the table land of the Labrador Peninsula four hundred miles below Quebec, where their battles with the Montagnais are still spoken of in half suppressed voice. The Iroquois preserved for nearly two centuries a nearly unbroken front to European encroachment, but when civilized and uncivilized races come in contact, the invariable tendency is towards the degradation and final extinction of the less advanced race, and thus we may intrepret the 'unhopeful' future of American Indians. Polish sympathizers will be horror struck by the extension of this doctrine to the Serfs of that unhappy country, who, as well as those of Russia, are said to be "now in the condition of the Saxon unfree long prior to the conquest. It may well be doubted if it either ameliorates his present condition, or accelerates his healthful progress, that he has to work out his elevation alongside the advanced nationalities of Europe's nineteenth century. France, amid all her æsthetic civilization, is, in point of political progress, scarcely in advance of the England of the seventeenth century; and more than one false step in her past history is traceable to her effort to assume the greater maturity of England without passing through England's preliminary training." (Page 229).

The ancient miners of Lake Superior are still a great mystery. The relics of their combined labours cover a wide area on the South Shore, and not only has Isle Royale revealed ancient works, but on the North Shore deserted trenches, with copper and stone implements, have been found in several places. "Since
the shores of Lake Superior rang with the echoes of the industrious toil wrought by an ancient, but long-extinct population, many centuries must have passed away. Four centuries are indisputably recorded by recent survivers of the forest growing in the trenches dug, and on the mounds raised by these mysterious people." "We are thrown back into dim centuries corresponding to Europe's early mediæval period to which to assign at the very latest those singularly interesting relics of a lost American civilization."

The chapter on the "Metallurgic Art" is particularly interesting, and at its close we cannot help feeling a strong desire to know more about the ancient miners of Lake Superior. We know of the incipient civilization attained by the Iroquois, and their fate; we see in the grand pine forests of Keweenaw Point a more advanced civilization than the Iroquois ever knew, but without the slightest trace of the people who have left these astonishing remains of primeval art and industry, near the centre of the North American continent.

But if the ancient miners of Lake Superior are mysterious, what shall we say of the mound builders who have left their gigantic memorials scattered in countless thousands over the interior of the American continent. Some of these mounds are of vast dimensions, that of Miamisburg, Ohio, is 68 feet high, and 852 feet in circumference at its base ; the truncated pyramid of Cahokia, Illinois, rears its level summit 90 feet, and is 2000 feet in circumference. The exploration of these earth mounds has entirely set at rest doubts respecting their artificial origin; "they are the monumental structures erected to preserve the memory of the honored dead in ages utterly forgotten, and by a race of which they preserve apparently the sole remaining vestiges." Throughout the State of Ohio alone, the mounds or earthworks are estimated at betwen eleven and twelve thousand. They extend from the great lakes to Mexico, and west of the Mississippi ; but we must receive with caution the statement that they have been found in Nebraska territory extending towards the Rocky Mountains; for it has been conclusively proved that a vast number of these supposed mounds in the valley of the Missouri are nothing but Sand Dunes.* The arid and inhospitable character of Nebraska Territory, east of the 98th degree of long., is itself enough to show that it could never have been occupied by a numerous people who practised agriculture, such as would be required by those who erected the large number of the supposed mounds which have been divcovered by many passing travellers. The ancient monuments of the Mississippi valley are divided into two classes, enclosures and mounds. An antiquity exceeding one thousand years is ascribed to some of these mysterious and marvellous remains. In some of these strongholds, to which the enclosures belonged, artificial reservoirs of water wero formed. The ancient forts in Ohio are of surprising magnitude, walls twenty feet high ard extending in the aggregate four miles, are ovidences of immense labour and skill. In the Scioto valley the main defences of a stronghold and the uniform octangular outwork embraces an area of 127 acres, even a stream has been turned from its course to admit of the completed circuit. of the water. Relics are numerons in the vast enclosures, coiled serpents carved iu stone, pottery, carved fragments of ivory, discoidal stones

[^20]and numerous fine sculptures of the same material. Three million cubic feet of earth were used in the erection of this ancient memorial of the Mound Builders. The conclusion suggested to careful observers is that all the most important ancient monuments, whatever their magnitude, were built of sundried bricks. Many of those of a circular form are exact circles, one 1050 feet in diameter ; some of the rectangular works are exactly square, and five or six measure 1070 feet a side, a coincidence which must possess some significance. Of the numerous, intelligent, and powerful people who once occupied the valleys of the Mississippi, we know absolutely nothing. Like the ancient miners of Lake Superior they are gone and have. only left their works of combined industry behind them, to tell that before the forest which now waves over the Mississippi valley existed they were there, active, energetic, intelligent, and perhaps in a measure civilized. Their Sepulohral mounds, Sacrificial mounds, and Symbolic mounds, are scattered everywhere over the broad Mississippi valley, as far as the northern lakes. They have been fully investigated and described by numerous American writers, an Dr. Wilson's chapters on the subject afford an excellent summary of the results of their researches.

Ancient Mexico and Pern are next graphically described, and many of the "cloud capped towers and gorgeous palaces" of ancient Mexico are stripped of their marbled glories, and reduced to the ordinary level of sun-dried brick. Of Peru, the author makes the following important observation. "But for the more intellectual tribes and nations whose ancient monuments lie to the south of the Rio Grande del Norte, not without intermingling some faint traces of their influences along the more northern regions of the Pacific ; and, perhaps, also, even for the strange and mysterious race of the mound-builders, the most probable hive of America's civilized and semi-civilized nations, appears to me to be sought for in the rich plateaus of the Peruvian Cordilleras, where the country rises through every change of climate under the vertical rays of the Equator; and its rocky steeps are bound with exhaustless treasures of metallic ores, in such a condition as to lead man on step by step from the infantile perception of the native metal or a ductile stone, to the matured intelligence of the skilled metallurgist, mingling and fusing the diverse ores into his most convenient and useful alloys."

The first volume closes with a chapter on "The Artistio Instinct: Imitation." The author had the opportunity of examining some of the relics of the mound-builders which were figured by American artists, and from the exaggerated representations, bold conclusions were drawn by some respecting the identity of the Red Indian race and the mound-builders. But the more accurate delineations of Dr. Wilson upset this view, and although he shows a striking connection between the sculptured representations of the msyterious race and the form of the skull, yet they remain mysterious still.

The Peace Pipe is the peculiar characteristic of the Red Man, and the to baceo plant, a native of America, one of the coveted of his luxuries. Even among the mound-builders, the practice of smoking was very general, if not universal. The traditions and legends connected with the Peace Pipe and the

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pipe-stone quarries, are numerous, and among the Sioux give rise to many strange ceremonies they practise at the Red pipe-stone quarry on the Coteau des Prairies.

Of colonization before the discovery of the continent by Columbusof ante-Columbian traces-the author states "that if any such did precede Columbus in his great discovery, they turned their visit to no permanent account, and have left no memorials of the premature glimpse of the Western Hemisphere." The chapters on he "The American Cranial type" and "Artificial Cranial distortion" occupy a considerable portion of the second volume. It is satisfactory to have the author's assurance that the proof that the American man is in any sense separated by essential physical differences from all other nations or races, fails on minute examination.

The fate of the Indian race in America may be summed up in two words, "absorption and extinction." "If," says Dr. Wilson, "the survivers can be protected against personal wrong; and, so far as wive policy and a generous statesmanship can accomplish it, the Indian be admitted to an equal share with the intruding colonists, in all the advantages of progressive civilization : then we may look with satisfaction on the close of that long night of the Western World, in which it has giren birth to no science or no philosophy, no moral teaching that has endured; and hail the dawn of centuries in which the states and empires of the West are to claim their place in the world's commonwealth of nations, and bear their part in the accelerated progress of the human race."

With regard to the first peopling of America, the author considers that idea which best harmonizes with the imperfect evidence adduced, conceives. the earliest current of population destined for the New World to have spread through the Islands of the Paciic. This was followed by an Atlantic oceanio migration, by the Canaries, Madeira, and the Azores, to the Antilles, and last of all Behring's Straits and the North Pacific Islands may have become the highway for a northern migration, although the most obvious traces rather indicate that the migration through Behring's Straits was from America to tho Continent from which its elements were originally derived.

Although these volumes contain a great variety of interesting information respecting the Red Indian of America, yet they cannot be said to embody much that is really new. Dr. Wilson's opportunities have not yet brought him into actual contact with the "Wild Forest Man." His travels, he tells us, have not extended beyond Lake Superior, where the Indian has for a hundred years been more or less in contact with the White Man, hence his illustrations of really savage Indian life and arts, are all second hand, and as the authorities he quotes may have been men of widely different observant powers, it is probable that much has yet to be learned respecting this interesting race. In some instances we notice so-called "characteristics," which are entirely new to us and opposed to some experience in these matters -such for instance as the habit of Indians always exhaling the smoke of tobacco through their nestilils (page 44, vol. ii). The Indians of the Mackenzie River valley understood the art of weaving vessels of watap (the divided roots of the spruce fir, ) in Sir Alexander Mackenzie's time, when first seen by white men. Their vegetalle vessels held from two to six gallons, (Journal
of a voyage, dc., 1789.) The practice of smoking does not appear to have been universal (p. 2, vol. ii.) among the Indians, for Sir Alex. McKenzie describes some of the Slave and Dogrib tribes on the river which bears his name, as "not knowing the use of tobacco."

Dr. Wilson's work will no doubt be worthily regarged as a very valuable and extremely interesting summary of facts, traditions and theories, respecting prehistoric man, and particularly of the American Indian, in the infancy of our acquaintance with this mysterious subject ; but we must patiently wait for more extended and decisive discoveries before the degree of his former civilization on this Continent can be determined, or how long he has been an occupant of the prairies and forests of America. Recent discoveries show that some of the most notable characteristics of the celebrated Iroquois exist in full foree among the Indians of British Colnmbia, and there yet remains an immense area of British and Russian America, North of British Columbia, and in the direction of that vast river the Yukon, respecting which positively nothing is known, except that it is peopled rather thickly with nomadic tribes, and is rich in fur-bearing and other animals. Numerous prehistoric remains have been recently discovered in Peru, and are noticed in another page of this magazine. Remains of man similar to those found in Denmark and other European countries, which have excited such interest among geologists and archæologists, have been found in the State of Maine. These remains consist of the bones of "man and beast, fish and fowl, in every stage of decomposition," associated with the shells of oysters no longer known to exist upon the coast of Maine. Under such circumstances and with such a vast unexplored field still before him, the enquirer into the condition of prehistoric man in America, may well pause in arriving at conclusions until more facts have been gathered together bearing upon this veiled and mysterious question, and agree with Dr. Wilson, in regarding the different theories which are offered for our consideration, to be as yet "guesses at truth."

Britanno-Roman Inscriptions, with Critical Notes. By the Rev. John McCaul, LL. D., President of University College, Toronto, \&c. Toronto: Henry Rowsell. London : Longman \& Co., 1863.

As a specimen of Canadian literature, this is certainly a very remarkable volume. It is one which, wherever produced, would do credit to the learning, ingenuity and good taste of its author, and could hardly fail to obtain the high approbation of those who can appreciate such $p$,ursuits ; but it could scarcely have been expected in the old world, that in the remote capital of Western Canada a scholar would devote his time to correcting by accurate knowledge and acute reasoning the ertors of those who would seem to have much better means of examining the particulars requining to be known than himself, and however high our aspirations may be, it is not exactly in this department that we should expect our countrymen to obtain distinetion : Yet our judgment is altogether at fault if this work is not receired as a valu-
able contribution to an interesting department of Archæological study, extending the reputation of its author for curious research, accurate scholarship and judicious criticism and proving that materials and encouragement for such pursuits are not altogether wanting to us, far as we may be removed from the objects themselves of whose warn and partially defaced inscriptions we atiempt to penetrate the meaning.

It is possible that many of our readers may not be fully alive to the kind of interest belonging to the study of ancient inscriptions, or to the nature of the difficulties which must be encountered in attempting to explain them. We may thevefore be excused for offering a few words on these subjects. We desire, of course, to understand as far as possible the moral and social condition, the customs, habits and sentiments of the more celebrated nations of antiquity, from whom we have in part dexived our own civilization, whose litenature still informs our minds and cultivates our taste, whose remaining works of art display the grandeur as well as refinement of their ideas, and every particular of whose history, as known from their own records, engages our attention, as increasing our experience of human character as well as interesting our feelings. We are even curious to learn what we can of the condition, opinions and customs of savage nations and in this connection look with interest at specimens of their rude arts which may fall in our way. How much more then must inscribed monuments, giving particulars of former occupants of a country who were eminent in war, in arts, and in cultivation, deserve investigation as being likely to illustrate some things we have read of, or to afford some fresh insight into the condition and habits of a great nation. Whilst examining such objects we have a conseiousness of the reality of the records of long distant periods which otherwise we could scarcely attain. We can never forget the feeling with which we ourselves surveyed the impression of a shoe on an antique tile taken from a Roman Sepulchre, which must have been accidently made before the tile was burned and which seemed to bring up before us the life of a remote age ; and if such a trifle as this can produce such an effect, how much more interesting and suggestive would be the disentombed expressions of the religious and domestic sentiments and the Business transactions of long departed generations. It is truly wonderful to observe in how many ways knowledge of the past obtained from other sources is confirmed, cleared and realized to our conceptions, and how many particulars which could not have been otherwise obtained are brought to our knowledge by the intelligentstudy of ancient inscriptions. It needs indeed to be an intelligent study, for were all remaining inseriptions perfect in their condition, what difficulties have to be overcome in correctly expanding the contractions so abundantly found in them; what knowledge of ancient names, of old forms of letters, and archaic or provincial terminations of words; of the names of the numerous pagan deities, of places and tribes, of official titles military and civil, and above all of the contents of other known inseriptions in which something similar may often be found, is required to give even a chance of success, and with all this what cultivated reasoning powers, what patient thought, what quickness in perceiving analogies, find their exercise in such inquiries! But in assuming the completeness of the monuments, we have set aside in very many instances much the largest portion of the actual
difficulties. Broken stones leaving us to deal with fragments, and supply by conjecture what is lost ; obliterated or obsoure letters, and sometimes perhaps, errors in the original execution from the ignorance or carelessness of the workmen, create difficulties which might often drive the utmost ingenuity and patience to despair. Well may we wonder that so much has been accomplished in the interpretation of ancient inscriptions, and reasonably may we be disposed to view with indulgence the attempts made even when they appear to us to be erroneous

The subject is one naturally attractive to the scholar though putting his attainments to a severe trial, and although working on a transcript instead of the original may in some respeets involve inereased nncertainty, it is in other ways a saving of time and trouble, and by a very natural division of labour it often happens that the publisher and the interpreter of an inscription are different persons. Dr. McCaul has performed his part well, His interest being awakened in the Roman inseriptions which have been found in Britain, he applied himself zealously to their study and the result is, that he has corrected various errors, cleared up many obscurities, explained some things which had seemed unintelligible, offered some very ingenious conjectures where nothing more certain could be obtainea, and in many waysafforded valuable aid and guidance to the student. We shall not here attempt to select examples displaying the skill, acuteness and various resources of the author, but we will take one or two ahmost without selection, illustrating the kind of information derived from these inscriptions which is the foundation of their claims on our attention. Among religious inscriptions we have altars dedicated not only to the well known gods and godesses of the Roman Mythology, butoccasionally to deities otherwise unknown, belonging apparently either to the conquered people, or to the Barbarians who fought as auxiliaries in the Roman armies. Among the gods unfamiliar to the classical student we may give as an example Nodons, Nodens or Nudens, to whom inscriptions are found at a Roman villa, the remains of which were discovered at Lydney in Gloucestershire. Respecting the origin of this name nothing satisfactory has been elicited, but the identity of the deity in his symbols and his functions with Fisculapius seems pretty well made out, his statues found at the same place having the dog, cock and rod entwined with serpents, and representatives of limbs having been met with, which were no doubt offerings of those who had ; been cured. Two legible votive tablets to the god may be supposed to have been offered on recovery from disease. There is another inseription dedicated to him and making mention of his temple, remains of which are believed to have. been found at Lydney, but the meaning of this is so obscure, that we confess even our author's ingenuity has failed to give us any satisfaction. It relates to a ring, possibly, as Dr. McCaul conjectures, the subject of a wager between. Silvianus and Senecianus and there is a manifest reference to the power of this god over health, but the circumstances referred to remain altogether doubtful. It is a very remarkable fact, (pointed out by Dr. MeCaul,) that an ancient gold ring found in another county, bears the name of Senecianus and may be the one referred to, though we seem to derive no help from such a supposition in explaining the inscribed tablet.

But besides meeting with deities either new to us or appearing under a new
name, we sometimes find new names apparently originating with the conquered nations attached to the most familiar gods of Roman Mythology. The eis an altar found at Ribchester in Lancashire the inscription upon which, as given in Gough's Camden, is justly characterised by Dr. Bruce when he says of it: "Never perhaps was so unmeaning a concatention of letters submitted to the gaze of a bewildered antiquary," but which by the united labou:s of several learned men, and not least of Dr. McCanl, as given in the volume before us, is shown to be the dedication of the altar conjointly to Apollo and Diana, to the former by a body of Sarmatian cavalry, to the latter by a soldier of the $\mathrm{VI}^{\text {th }}$ Legion, and it will be perceived that to the name Apollo is added his British designation as it is believed to be. Dr. McCaul's interpretation of the restored inscription is as follows: "To the holy god, (called) Apollo (by the Romans), Maponus (by the Britons) for the health of our Lord (the emperor) the detachment of Sarmatian cavalry (stationed) at Bremetennacum : To the Ores'ean Diana Antoninus (a soldier) of the sixth Legion (styled) the Victorious, a native of Melitene (erected this altar)."

Of the practice here noticed of identifying Barbarian deities with Roman by uniting the names other instances occur. One of the features in the religion of the Romans which to our view most strangely shows their facility in admitting deities and the ideas they entertained respecting them, is their worship of their emperors as expressed in such inscriptions as these : "To the deities of the Augusti, (the emperors-there being in that time more than one) the fourth cohort of Gaulish cavalry placed this" and "To the deities of the Augusti and to the genius of the second legion called Augustan, in honour of the whole divine family (Imperial family) the prosperous Julian Isca," i. e. Isca Silurum, a British Roman town, the remains of which have yielded a rich crop of antiquities to the modern investigator, (dedicates this). The latter is an imperfect and very obscure inscription restored with great probability by Dr. McCaul's labours. The first, however, admits of no doubt.
Illustrations of Roman military arrangements and customs are amongst the most numerous and interesting results of the British inscriptions as might be expected under the circumstances. There are stones recording the work done by certain bodies of soldiers, as on the Roman wall-there are others maiking, according to our author's ingenious explanation, the number of feet to be occupied in the camp by a particular centuria or company as "The Company of Candidus, 24 feet." Again we have memorials of the restoration of buildings, as soldier's quarters, public granaries, \&c. In illustration of information derived from inscriptions confirmatory of history, we may refer to those which show where certain Legions and auxiliary forces were stationed, and even afford some evidences as to the time they continued in the same quarters. A remarkable case of this kind is thus introduced by Dr. McCaul, §7, p. 12 :-"From a well-known passage in the Agricola of Tacitus, c. 35 [36], we learn that among the Roman auxillaries serving in Britain in A. D. 84, were two cohorts of Tungrians. The numbers of these cohorts are not stated, but the inscriptions which have been found warrant the belief that they were the first and secund. The continuance of the first in the island, is attested by many memorials, and was long, ago known to Archæologists, but
no traces of the second were discovered until a comparatively late period." This had led to the conclusion that they must have left the island. More recent discoveries, however, have shown that the 2nd cohort of Tungrians was quartered at Castlesteads in Cumberland, and at Birrens in Dumfriesshire, at the first of which places, their presence is proved as late as A. D. 241. And in addition to these discoveries, which admit of no doubt, our author shows that two longer known, but imperfect, inscriptions, which had been supposed to refer to the first cohort, rea'ly belong to the second. Thus not only is the statement of Tacitus confirmed as to a minute particular by independent evidence, proving him to deserve our confidence, but we are enabled to trace the position of a particular corps of Roman auxiliaries for abont one hundred and fifty years. A curious class of inscriptions consists of stamps on pigs of lead. These have been carefully considered by Dr. McCaul, and he has been successful in greatly improving their interpretation. As a matter of course, a very large proportion of the inscriptions is sepulchral, and a very great number of these commemorato soldiers or their families. They contain many things curious to the antiquary, and their mode of expressing feelings which are common to all mankind in circumstances in which all are successively placed, engages the attention of every reader. Many of the monuments are in a condition which seems to set at defiance the skill of the interpreter, yet their meaning has been explained so plaasibly, to say the least, that we readily accept it as nearly certain. There are many excellent contributions of this kind in Dr. McCaul's work. Sometimes his suggestions seem so obviously right that we wonder how they could have been overlooked by his predecessors. In other cases an effect is produced by means which seem so difficult to employ that our wonder is only that light is at last cast on what seemed so impenetrably ob-scure-instances of both kinds equally bearing testimony to the merit of the author. An ingenious and highly probable but difficult restoration is that of the inonument to Caius Julius Calenus. As corrected and expanded by Dr, McCaul, it is read :

> DIIS MANIB [VS]
> C[AII] IVLI[I] GAL[ERIA [sc.tribu] CALENI LVG[DVNO]
> VET[ERANI] EX LEG[IONE] VI
> VIC [TRICE] P [IA] F[IDELI] V[IVVS] M[ANDAVIT] S[VA] P[ECVNIA] M[ONVMENTVM] F [IERI]
i.e. To the divine shades of Caius Julius Calenus of the Galerian tribe a native of Lugdunum, a veteran of the VI Legion (called) conquering, devoted, faithful. Whilst living he ordered at his own expense this monument to be made.

In the following, of which we only need give the translation, we think owe author's expansion and interpretation certain :

> To the divine shades Julius Valius a soldier of the $\mathrm{XX}{ }^{\text {th }}$ legion (called) Valerian, conquering, who was 40 years old, is here deposited Attius Flavius his heir undertaking this monument.

The following short inscriptions are in different panels, a third being vacant, of one stone dug up a hundred years ago at Wroxeter in Shropshire, the ancient Viroconium - they may probably belong to one family, the vaeant panel being left for the husband and father, but from some cause not having been used.

To the divine shades Placida 55 years old.
Her husband of 30 years erecting this.

> To the divine shades Deuccus 15 years old-his father erecting this.

Among the sepulchral inscriptions are several in which, as is also common in modern times, the words are represented as spoken by the deceased; and to some are added moral and sentimental reflections in verse. There is, if Dr. McCaul's very ingenious restoration may be admitted, a curious example of both these particulars in an inscribed stone lately found at Wroxeter, in Shropshire, commemorating a soldier of the XIVtin Legion. It is thus res. tored :
[TITVS FLA]MINIVS T[ITI filius] POL[L]IA[tribu]
[ANN]ORVM XXXXV STIP[ENDIORVM] XXII MIL[ES] LEG[IONIS]
[XI]III GEM[INAE] MILTTAVI AQ[VILIFER] NVNC[HIC] S[VM]
[PER]LEGITE ET FELICES VITA PLVS MIN[VS] JVTA
OMNIBVS AEQVA LEGE ITER EST AD TAENARA DITIS VIV ITE DVM [STYGIVS] VITAE DAT T[EM]PVS HONES[TE]

Which may be thus translated:
I Titus Flaminius, son of Titus, of the Pollian tribe, 45 years old, of 22 year's service, a soldier of the 14 th double Legion served as eagle bearer; now I am here.
Read this also to your profit, your life being more or less benefitted, [since] all without distinction must travel the road to the realms of Pluto.

Live, whilst the Stygian God allows the time for life, virtuously.
This is an example of a sepulchral inscription in the first person and with a moral sentiment added in verse; and as to its general nature, we see no. reason for doubt, but it would be doing injustice to Dr. McCaul to quote it as an instance of perfectly successful restoration, since, though exceedingly ingenious and plausible, the latter part of the inscription was too far gone for very satisfactory treatment, and the author himself whilst giving us his conjectural idea of it, hardly allows to some part of it higher pretentions than as expressing something like what must have been found on the stone. We thank him for giving us his attempt. His volume affords abundant instances where, from very imperfect materials, he has prodnced an interpretation which must almost be deemed certain.

One of the most remarkable discoveries made by $\mathrm{Dr} . \mathrm{McCaul}$ is that of the:
inscription on the celebrated Rudge cup at present in the possession of the Duke of Northumberland. He has pointed out that the names form a hexambter and thus has cleared away all the difficulties which have perplexed antiquarians as to the order in which the towns were named.

All the interpretations of inscriptions which we have noticed, would be much better estimated, if we could here state the condition in which they are found in books, the errors respecting them of very able men, and the reasons which justify the improved readings and expansions, but many we hope, will refer to the book itself and those who cannot do so will be pleased to know the nature of its contents and the credit which it justly confers on our distinguished countryman. When the substance of a portion of this work was communicated by its author to the Canadian Institute, it afforded a high treat to the members of that society-and in its improved and more complete form, it may be recommended with confidence to a wider circle of readers.

## THE BRITISH QUARTERLIES.*

## THE WESTMINSTER REVIEW.-JANUARY, 1863.

The third article in this Review is a bona fide defence of Bishop Colenso's Book on "The Pentateuch and the book of Joshua." The author considers that the value of the Bishop's work is not lessened because it is the first of a series to which the Christian world is to be treated, involving amongst other ' difficulties' the general doctrine of Miracle; and he considers that the book must win for itself a candid perusal from all but the "bigoted and narrowminded." He evidently belongs to the Colenso school, and is quite ready to go much further than the arithmetical and Theistic Bishop. He thinks that it is reasonable to suppose that the effects of such criticism must reach the New Testament; "it also must, when the time comes, be subjected to the same treatment as the Old Testament; the dates and authorship of its several books will be sifted in an intelligible way ; the authenticity of its historical portions will be brought to the test." He hopes also, this critic does, that there will ultimately be courage enough in the people of England to acknowledge it. In reviewing the consequences to which doubts respecting the authenticity of other parts of Scripture, and to received Christian doctrine must lead,-such as the robbing of believers of their trust and confidence in the Bible, their best and only comfort in the trials of life and the prospects of death, that without the Bible there will be no virtue, no courage, no kindness among men in this world, and no hope in the world to come-he points with the little triumph and consolation his argument can yield him, to-what ? To many generations of many tribes who have had no Bible, and who have manifested courage and geodness. They shall be judged according to the light which is given to them, but how many will be found willing in the hour of death to rest their hopes

[^21]of forgiveness and mercy on the poor apology for disbelief with which tho writer of the review of Colenso's book endeavours to quiet his own soul. Ho appears to take all the statements of the Bi hop as wholly truthful, and not to be gainsaid or resisted, gainsaying and resisting meanwhile, the hallowed Word of God, which he vainly endeavours to undermine.
'Les Misérables, by Victor Hugo,' is characterized as a remarkable work. Ita great fault consists in its enormous and wearisome digressions. It is described as a "book of marvellous power, keeninsightinto human nature, bitter sarcasm, tender and touching pathos and one of the great literary monuments of this century." Its chief characters are, a good Bishop, two happily drawn female members of the Bishop's household, a convict, a pretty country girl, a polico officer, a military officer wounded at Waterloo, an infant who grows up to be a man, who plays a great part in Les Misérables, and a bride.
'The Microscope andits Revelations' The Palæontologist and the Microscopist have gained two rich and popular provinces for the Biologist within the last half century. The dead treasures rescued by the Palæontologist are surpassed in value by the liviug wonders crowding the invisible world of space which everywhere surrounds the Microscopist. The different forms of Microscope are of essential importance to the student in this delightful branch of scientific investigation. Simple Microscopes, Compound Microscopes, and Binocular Microscopes are all employed to advantage in special departments. The care of the eyes, so necessary in these investigations, is reduced to the simple rule of not continuing to observe any longer than can be done without fatigue. Tho beginner should learn to use either eye indifferently and acquire the habit of keeping open the unemployed eye. The power of visual endurance is usually in relation to the vigour of the general system. Among the curious and instructive revelations of the Microscope is the probability that the singular little. Red-Snow plant is nothing more than a transitive phase in the development of the "Gonidiæ," or green buds of Lichens. The Pollen-grains and soeds of most accessible plants present exquisite objects for investigation. The
ating reversal course of the blood in the circulation of the Tunicata is of great interest to the Physiologist. The length of time intervening between the changes in the blood current does not appear to be constant. Sometimes an interval of from five to fifteen minutes and even as much as half an hour elapses before the change takes place. The Microscope has lent its assistanco to Palæontology. Some fragments of bone were found some years since in a chalk pit which were considered by no less authority than Prof. Owen to have formed part of the wing bones of a long winged bird allied to the Alcatross. Others thought it more probable that these bones belonged to a large species of the extinct Pterodactylus, a flying lizard. An appeal was made to the Microscope which decided in favour of the extinct lizard; a decision subsequently confirmed by the discovery of undoubted Pterodactyle bones in the same and other chalk quarries. Much has been done by the use of inferior instruments, and now that superior instruments can be procured at comparatively small cost, the wide field for investigation open to the Microscope promises most attractive and important results, The rapid sale of Dr. Carpenter's book on this subject attests the value which the British public now give to the 'Microscope and its Revelations.'
'Indian Annexations. Treatment of native Princes.' British rule has been cruelly associated with misrule in India. Bribery, corruption, force, and intrigue, have vastly increased of late years the dominion of Britain in the east. Onde produced a rebellion, proving the t:uth of Jean Paul Richter's saying, that 'experience is an excellent school, but the school fees are rather heavy.' Our system in India is compared by the natives to a screw, slow in its motion, never violent or sudden, but always screwing them down to the very earth.
'Grecce and the Greeks,' is the title of a long and favourable review of Frederika Bremer's new work.
'M. Rattazzi and his administration,' paints in poworful language the rascally rise and unlamented fall of this daring schemer. 'The painful offspring of unscrupulous and dirty plotting, his ministry dragged itself for somo months crawlingly along, through a course strewn with broken promises, foul snares, glaringly cruel treacheries, and a series of the most deliberate attempts at vitiating, by noxious infusions, the infant health of the libertios of Italy ; his administration fell, overtaken by just vengeance, as universal as it has been well founded and worthily expressed."

## THE EDINBURGH REVIEW.-JANUARY, 1863.

'India and Lord Dalhousie.' Lord Dalhousie took a personal and eager part in the prosecution of public works in India. In the Punjaub great line of road were surveyed and undertaken. In the same province the Baree Doab Canal was designed and vigorously prosecuted. The entire length of the canal with its branches is 450 miles. The Ganges canal is a gigantio work ; its main stream was opened for the double purpose of navigation and irrigation in 1854. It is 520 miles long; it is fivefold longer for the purpose of irrigation, than all the celebrated canals of Lombardy united; as regards navigation it nearly equals the aggregate length of the four greatest navigable canals in France ; it greatly exceeds all the first class canals in Holland pu togetl er, and is greater by nearly one-third than the greatest navigation cana in smerica. The lines of the Electric Telegraph already extend over 3000 miles. The Postage system is cheap and uniform ; strange to say, in India $a^{\text {a }}$ single letter is carried from Peshawur on the borders of Affghanistan to the southernmost village of Cape Comorin for three farthings. A Capital of $£ 43,000,000$ sterling for the construction of Railways now receives a guarantee of 5 per cent. from the Government-a heavy draw, it is true, but the benefits are becoming every day more vast, more fruitful and more secure. Governor's General of India who really do work as Lord Dalhousie did, labour with intense activity. In future ages Lord Dalhousie's administration will be counted with the greatest, and the name of its chief ranked among the noblest benefactors of the Indian people.
'Gold Fields and Gold Mines.' The immense increase which has taken place in the production of gold, has been fruitful of great advantages. Millions of human beings, for whom there was but the workhouse, or a hopeless future, have escaped to happy homes in distant and previously unexplored solitudes. The wide spread dependencies of the British Crown have brought the chief gold fields of the world undor her rule. Gold is now found ind New

South Wales, Vietoria, British Columbia, Nova Scotia, New Zealand, Can ada, and in the Basin of Lake Winnipeg on the east flank of the Rocky Mountains. The laws affecting the distribution of gold are of immense interest. The most usual original position of the metal is in quartz-ore veinstones that traverse altered Silurian Slates, chiefly Lower Silurian, and frequently near their junction with eruptive rocks. The Laurentian and Huronian system contain no gold as far as ascertained. There exists apparently a great gold bearing mountainous fracture encircling the globe, and roughly marked by the shores of the Pacific ocean. The Pacific is, and has been for ages, slowly sinking, and the line of fracture which marks this separation of so large a part of the earth's crust, is distinguished by a line of volcanoes, numbering seven-eighths of those known to exist. Along this line of fracture which thus encircles the Pacific, gold is found to a very great extent. From Chili to Russian America, the gold miner is now at work, Gold is found also on the spurs of the main line of fracture, and indeed, the whole of the Victorian goldfields are in a spur penetrating 300 miles from the principal range.

Under the title of 'The Campaign of 1815,' M. Thier's history of the Consulate and the Empire is reviewed. M. Thier's account of the battle of Waterloo is described as a caricature of absurdity. The value of the entire work is greviously impaired by the evidence which it bears of a want of accuracy.
'Les Miserables,' Victor Hugo's writings are here described as screaming discords both of form and matter. Black is laid upon white,-great things are opposed to small-beauty to hideousness-excessive sanctity to excessive crime-pompous terms are applied to trivial things-and homely expressions to the most lofty ideas. It is the influence he exercises as a social and political teacher, the wide circulation attained for his pernicious book, that imposes upon the reviewer the necessity of judging him.
'Public Affairs.' The confidence imposed by the British Government in the British people, a confidence never before shown by a government in an equal degree, is attested by placing arms without restriction in the hands of 100,000 volunteers, and teaching them to use them. The colonies are considered to be in every way entitled to the naval protection of Britain, without any cost to themselves, but in the event of the colonies refusing to tax themselves for the maintenance of troops, it is suggested that they should be gradually withdrawn. In the face of the American war the revenue has increased by $£ 2,393,578$, and the general result is one of rapidly increasing prosperity. Even fresh cotton mills are being built to take advantage of the first return of the cotton trade, and many cotton towns have shown a great disinclination to resort to emigration or other means of reducing the population, because they think that they will ere long again, want "all their hands." The present administration is represented to have held in the face of great difficulties, a high, independent and prudent course. Lord Russell has thrown. prudence and skill into foreign questions, and contributed in the highest degree to support the present cabinet. There are now no longer five great European powers. There are but two, France and England. There is no longer any relation of equality, or even of party, between the actual power
of the Western and of the Eastern Monarchies. Prince Alfred has public duties to fulfil in England from which there would be great unwillingness to release him, but if he afterwards should be led to quit his native country, it is not Greece but the American provinces of the empire which would become the natural and appropriate seat of his government. Paris may be the Metropolis of Europe, but London is the Metropolis of the world.

## THE LONDON QUARTERLY.

'Peru,' the mythical Peru, forms the subject of the first article. The ancient empire contained $30,000,000$ souls, and the country was cultivated in a. manner of which China now affords the only example. There was an earlier civilization in Peru than that which is supposed to have been introduced by the Incas. Strange to say, near Lake Titicaca, 12,846 feet above the sea, the ruins of vast edifices attest the existence of a people far advanced in arts; and this ancient civilization had its seat in a region so elevated, that the soil is now almost constantly frozen. It is suggested that a subsequent upheaval of the country has changed its climatic condition. Here is work for the geologist, and work, too, which may throw a flood of light upon the age of the immense monolithic doorways, masses of hewn stone, colossal male and female figures, which remain to us as witnesses of a people passed away, 135 feet above Lake Titicaca. Nor is the geology of Peru less interesting than the remains of its former inhabitants. Sorata, 24,812 feet high, is fossiliferous to its very summit. The forests of Pern are of marvellous luxuriance, but trade and commerce are sadly on the wane. The Province of Tarapaca alone, contains nitrate of soda that will supply the world for centuries. In the desert of Atacama, there is an open cemetery, in which the bodies are left above ground, and owing to the desiccating influence of the winds, they become naturally embalmed. Six hundred men, women and children, all in a perfect state of preservation, sit arranged in a semicircle, gazing on vacaney, in one of those wonderful cemeteries. How long they have been there none can tell. By the side of each body is a jar of maize and cooking utensils. Tombs are sad enough, and catacombs are awe-inspiring, but what scene can equal six hundred human forms, for many centuries dead, sitting in the open air, untouched by the destroyer Time, and staring into the clear, rainless sky! Every one has heard of the guano of Peru, of the Alpacas, of the silver and gold which aroused the crpidity of the Spaniards-of the voleanoes, rising from 17,000 to 20,000 feet-and more recently, of that wonderful slow upheaval of the land, which has probably made the remote civilization bordering on Lake Titicaca an instance of change in climate, retarding instead of accelerating human progress.
From Peru we pass to 'Russia,' a country full of doubt and difficulty. The grandest reform, in the relation of the governed and the governing, took place on the 3rd of March, 1861, when $23,000,000$ serfs were emancipated; but as two years were given the proprietors and peasants to make arrangements respecting the cottages and gardens of the former serfs, the result of the experiment will not be known until the present month. The serf is free, but until he receives from the landed proprietor the means of living
and a home, he is a free pauper. Little progress has been made in adjusting the difficulties which beset the settlement of the amount of land each liberated serf shall have-and there is trouble ahead. The reformers of Russia appear to be frightened at the ghost of despotism, and the present outbreak in Poland may increase their indecision. The future of Russia is still under a cloud. The serfs are brutally ignorart, and the peasant is in doubt respecting the results of his emancipation.

The article on the 'Life of John Wilson' (Christopher North) must be read in extenso. The critic thiuks his poetry can never take a foremost place among Euglish classics. His prose tales had their day. His criticism is considered to that of an impulsive rather than a judicial mind; but as a "Rhapsodist" he soars above witers of his class in any age. As a teacher of moral philosophy, he proves himself to have been a man of enormous power, and he never seems to have wielded that power except for the good of others.

The 'New Testament' is an elaborate and learned disquisition on the accuracy and precision of the original. It presents excellent arguments why every educated gentleman ought to be able to read that portion of the Bible in language selected by Providence for the commemoration of His last Rerelation to man. Translatiou must be clouded with many shades of human imperfection. Our English version, admirable and generally correct as it is, is not infallible. Nevertheless, the writer thinks that we are not yet ripe for any new authorized text. The summary is this:-That, beautiful and admirable as our own authorised version is, it does not, and could not, approach to the accuracy and precision of the original ; that the original must be studied by all who would really appreciate and profit to the fullest extent by the written word of Revelation; that this study must be carried on in faith in the distinctness, the correctness, the definiteness, of the language of Scripture ; that as yet we are not ripo for any new authorised text; that every student of Scripture may add something by careful observation to the materials for hereafter attempting such a solemn work, under authority of "the constituted Witness and Keeper of Holy Writ ;" that the more faithfully, and honestly, and impartially we examine the Written Word as the work of a Divine Creator, the more marvellously will the scrutiny bring forth treasures which will confirm the plain and simple truth, which has been preserved to us as the inheritance of Christians ; and the more that truth is thus developed and traced out in Scripture, the more our unhappy divisions will melt away ; and all earnest, honest, humble and thoughtful minds will cling to one standard of belief-one definite and positive body of Divine truthin defiance of all the audacities of that presumptuous and most miserable scepticism, whose beginning is conceit-its ccurse ignorance-its fruit misery, and its end death.

## THE BRITISH MONTHLIES.*

## BLACKWOOD,-JANUARY AND FEBRUARY,

This eldest of the monthlies is always attractive and sterling.
' A Montri's Visit to the Confederate Headquarters,' conveys a favourable impression of the stuff of which the Confederate army is composed. Such men are not to be beaten by "mobs of Irish and German mercenaries." The heart and soul of the South is in the war ; and there appears to be a unanimous opinion in the South, that nothing but foreign mediation can ever end the war.
'Caxtoniana' is a series of essays on Life, Literature and Manners, and has already reached Part XII.
'Progress in China,' points to a unity of action between the people, officials, and rulers, in their relations with the foreigner. There is a disposition shown to take advantage of European inventions and knowledge. Steam vessels have been purchased; officers and men, from Western Europe, are now engaged in teaching the Chinese to handle them. China is, in fact, progressing, and a new and most important era is about to dawn upon this selfsufficient and arrogant race, and English influence will be supreme.
'Mr. Thomas Trollope's Italian Novels,' are criticised, illustrated and praised; they have a merit apart from works of fiction; they give an insight into Italian life, and more especially into the temper and character of the lower stratum of society, and the manner in which the religious teaching of the Italian priesthood affects the morality of the people.
'A Sketch from Babylon,' continued through two numbers, is a well-told story, not uncommon in London life. A vulgar wife of a rich city banker, is desirous of shining in society, and marrying her daughters to titled names. A foreign Count is a successful lover. He is, however, found out to be an impostor. His associate, a soi-disant Hungarian Countess, who escaped from Haynau, peraaps unfortunately, and took to the millinery business in London, receives both sympathy and employment from the highest nobilitymakes money by pandering to the foolish and vulgar mother. The daughter finally marries the man who exposes the Count, and pays the bills incurred by the mother. It turns out that the young lady was willing to sacrifice herself to serve her mother, who has plunged herself deeply into debt. Instead of becoming a sad though willing sacrifice, under which, however, her heart would have broken, she is won by the man she really loves, and who has saved her from the foreign "Count."
'Lady Morgan's Memoirs' will be uninteresting to meny ; for although they are severely handled by the writer of the criticism, as well as their versatile suthor, there is too much self-conceit, vanity and worldliness about Lady Morgan, for people to sympathise with her. The authoress was formerly a

[^22]Miss Owenson. She wrote the "Wild Irish Girl," and some other romances, which excited interest at the time. When staying with Lord and Lady Abercorn, they formed a plan for her happiness, by marrying her, at the age of thirty-six, to Dr. Morgan, a dull, piggish, and most conceited individual. The Morgans persuaded the Lord Lieutenant to confer the honour of Knighthood on the Doctor, and such was the origin of Lady Morgan's title. Her works cannot be accepted as illustrative of the domestic life to which women of society are accustomed in the reign of Victoria.
'Our New Docter' is a capital description of the little scandals, little troubles, and littleness generally, of the society of many an English and American country village or town. "The new Doctor" boldly pursues his own course, and disgusts the young ladies of Mudford, by marrying a delightful girl to whom he was engaged before he came to the village with the suggestive name. He makes electrical and chemical experiments, and throws the neighbourhood into consternation, and the wise-acres and old maids into confusion. He leaves them with his bride and twin brother, who is exactly like "the new Doctor," and the cause of many ridiculous mistakes, in rather a "mixed" state.
'Politics at Home and Abroad' is, of course, very much tinctured with the political bias of Blackwood's contributors. Earl Russell is perpetually playing fantastic tricks. Lord Palmerston holds him in leading strings. Mr. Gladstone, notwithstanding his two million pounds surplus, is, with characteristic restlessness, going to do something with the Bank of England; and generally, the Conservative party is awaiting the pleasurable responsibility of office soon to be thrust upon them, and likely to last for a very long term indeed.

TO THE READERS OF THE BRITISH AMERIOAN MAGAZINE.

The notices of British, American, and Canadian Monthlies, and other Periodicals, will be continued in the June number, and, in future, regularly every month. They will include, British-Cornhill, Temple Bar, St. James' Magazine, Good Words, London Society, Exchange, Churchman's Magazine, \&c. American-North American Review, American Journal of Science, Atlantic Monthly, Harper, \&c., \&c. Canadian-The Canadian Journal, The Canadian Naturalist, The Proceedings of the Botanicul Society of Kingston, The Transactions of the Literary and Bistorical Society of Quebec, Canacian Parliamentary Documents, \&cc., \&c.


[^0]:    * Relations between the United States and North-west British America. Executtve Document, House of Representatives, 1862. Letter from James W, Taylor to the Hon. S. P. Chase ${ }_{r \text { r }}$ Sec. of the Treasury.

[^1]:    *The Basin of Lake Winniper extends from the 90th to the 118th meridian. Its most east. erly point is the lake and swamps from which the Savanne river takes its rise, in long. $90^{\circ} 14$, lat. $48^{\circ} 53^{\prime}, 108$ miles by the Kaministiquia canoe ronte from Lake Superior: and the most westerly limit from which its rivers draw contribut'ons, is probably the great ylacier near Howse Pass,

[^2]:    * Dr. Hector, on the physical features of the central part of British America.

[^3]:    *Dr. James Hector, on the physical features of Central British North America.

    + Amelanchier Canadensis.

[^4]:    Area of the Province of Canada, Acres.
    .217,600,000

[^5]:    - The number of acres given in the ceusus returns for 1861 as cropped by fall and spring wheat is $1,386,366$ or differing from the population by 9725 ; from whieh it appears that in 1861 there were about the same number of acres under wheat as the we were people in Upper Canada.

[^6]:    *Proceedings of the Geological Society; 1861, page 421.
    $\dagger$ Tbid page 420,

[^7]:    -That the trade of this post was not inconsiderable, appears from a statement of Sir WirSiam Johnson, about eight years after the conquest from France. In a despatch to the Earl of 8helburne on 'Indian affairs, in 1767, he affirms that personce. could be found willing to pay cial tactics of the Indian monopoly. As this document gives us some insight into the commerthe reference to Toronto.
    "The Indians Toronto.
    each bunt they have a recess to follow when at peace," he says, "but hunting: between become daily better a mese of several months. They are naturally very covetous, and everywhere at hotter acquainted with the value of our goods and their own peltry; they are them. On the othe, and travel without the expense or inconvenience attending our journey to with some risk, and hand, every step our traders take beyond the posts, is attended at least chase of their and a very heavy expense, which the Indians must feel as heavily, on the purwould rather empmodities; all which considered, is it not reasonable to suppose that they returns as they mus their idle time in quest of a cheap market, than sit down with such slender instance concerning Toronto in their own villages ? As a proof of which, I shall give one tion of Major Rogers, Toronto, on the north shore of Lake Ontario. Notwithstanding the assersupply a dependent post'-yet even a single trader would not think it worth attention to affirm that for the exclusive -yet 1 have heard traders of long experience and good circumstances, -so certain were they of a quiet for that place, for one season, they would willingly pay $£ 1,000$ goods there."
    The customs' returns kive the value of exports from Toronto in 1860 as $\$ 1,786,773$, and of im ports in 1861, as $\$ 4,619,149$. The receipts of the Corporation in 1862 amounted to $\$ 692,207.74$. $\dagger$ Latinized by du Creux (see his map in Bressani's Relation Abr gée) into Lacus Owontaronius. In a paper on the Etymology of Ontario, in Canadian Journal, No. 42, I was led, by an inaccuracy in the engraving of this map, to suppose that Lacus Ouentaronius denoted Lake
    Ontario.

[^8]:    - The System of Landed Credit; or, La Banque de Credit Foncier. The work ing of that institution in Europe. Quebec: Desbarats \& Derbishire, Printers to Her Majesty the Queen.

[^9]:    VOL. 1.

[^10]:    * Por further information upon this subject, the reader is referred to able articles which lately appeared in the National and Wostminster Reviews.

[^11]:    A manufacturer may regard his cotton, silk or wool, as so much raw material only, and his employees as so many necessary assistants and agents in his work and success; or he may, with a flash of immortal thought, picture the vast snowy cotton-fields of the South; the swarthy negro, and the tropical sun; the polished, generous planter, and the brutish overseer; the voluptuous beauty of the master's daughter, and the sad dark face of the slave girl. Or he may realize the mulberry grown plains of Marseilles, and the innocent occupation of silk raising, and contrast it with the wild, fierce spirits who, not a century ago, marched from that fair neighbourhood, with liberty and noble aspirations in their hearts, too soon, alas! to be stained with blood and crime,

[^12]:    We stand within a little white-washed country church: the singing is discordant; the congregation Beotian, in the stolid expression of their couatenances ; to crown the dull picture, the minister may be commonplace, and guilty of a vile accent. There is small food for a poetic and fanciful spirit; but barren, indeed, must be the soil, where no charm of retrospection or association can be found. Memory, handmaiden-like, recalls old tales of persecution, when such a body of worshippers must have met in mountain or morass ; when danger converted the most ordinary individual into a hero, and drew forth the highest qualities of which be was capable. Stories of the Puritans, who defended an innovation of their strict simplicity with their lives ; of the Scottish Covenanters, the murdered pastor, and the scattered flock! The rough voices of the village choir, seem like the echo of those pious hymns chanted by men already wreathed with the martyr's crown, singing on board "Jesus'

[^13]:    ' Happy is your Grace,
    "That can translate the stubborness of fortune,
    "Into so quiet and so sweet a style!"

[^14]:    *The Canadian partridge, or pheasant, in the Spring, places himself upon some fallen tree, and beats his sides with his wings, producing the peculiar sound called "drumming."

[^15]:    * "Brightwell's Romantic Incidents in the Lives of Naturalists and Travellers,"

[^16]:    - This line has foreign as well as Canalian services.

[^17]:    * For a full description of the ravages of these destructive insects, see the following accounts of them :-

    Harris. Insects injurious to Vegetation.-New Edition, Boston, 1862, page 565.
    $\$_{\Delta X^{\prime} \text { 's American Entomologs.-New Ecition by Le Conte, 1859, vol. ii., p. } 4 .}$
    Firci. The Hessisu fly, its history, character, habits, ete.-Transactions of the Ner York State Agricultural Society, 1846.

[^18]:    *As if to afford an argument against this theory, the writer was presented the other day (Mareh 12th,) with a fine live specimen of the beautiful hickory tnssock moth (Halesidota caryce), which had been captured by a lady in Toronto, in a room in her house. This specimen proved to be a male, and therefore the singular prolongation cf its life cannot be accounted for by such a supposition as that mentioned above.

[^19]:    "Behold! ye pilgrims of this earth, behold I See all but man, with unearn'd pleasure gay; See her bright robes the butterfly unfold, Proke from her wintry tomb in prime of May ; What youthful bride can equal her array? Who can, with her, for easy pleasure vie? From mead to mead with gentle wing to stray, From flower to flower on balmy gales to fly, Is all she hath to do beneath the radiant sky."

    > -Thompson's "Castle of Indolence."

[^20]:    * Preliminary report by Lieut. G. K. Warren, U. S. Topographical Engineers.

[^21]:    *The American reprints of the Brivish Quarterlies, together with Blackwool's Magazine can be procured from Messrs. Rollo and Adam, Toronto.

[^22]:    - The British Monthlies, jncluding Blaelavood (imeriean re rint), Cornliell, Temple Bar, Tio S' ames's Majazine, Good Worls, London Suciety, The Churchman's Mayazine, The Exchange, \&is, \&c., can be procured each month at Messrs. Rollo and Adam's, 'Toronto.

