

of Europe as they are here. Their works are not confined to reports of observations, but they contain important discoveries which have enlarged the range of science. In their company must be placed the names of Hinds, Bell, Billings, and Whiteaves. Principal Dawson deserves a niche all to himself.

I cannot digress into a notice of the educational institutions of Ontario and Quebec; but the great scholars who are connected with some of these and who would be the boast of any country in which they might reside, cannot be passed by in silence. Such men as Ryerson, DeSola, McCaul, Wilson, Raymond, Verreau, and Chandonnet may be styled the guardians of Canadian letters.

I am not sufficiently acquainted with the details of the literary movement in the Maritime Provinces, to enter into an account of it, but I know that owing to the compact government which both Nova Scotia and New Brunswick have long enjoyed, popular education has met with a high degree of encouragement. I know further that the names of Howe, the two Haliburtons, Gidrey, Boyd and Hamilton, are worthy to be placed by the side of the celebrities of the Dominion, and that with these they present a galaxy to which all Canadians can point with pride.

III.

These signs of progress in both the English and French languages are very satisfactory, but if Canada aims to have a literature of her own—at least, to a certain extent—something more is required. She must be self-sufficing in the way of publishing facilities, and as to "specialities" in both science and letters these must be edited here and not imported from England or the United States.

Now it is precisely in this double respect that I note the advance which Canada has made within the past three or four years. The firms of Lovell and of Desbarats have long been favourably known for their spirit of enterprise and their fine workmanship. One of the Toronto printing houses has likewise had renown. But these establishments are at present no longer restricted to mere printer's work. They have become important publishing centres. To say nothing of the school-books and other volumes put forth by the first-named firm, I shall instance *The Dominion Directory*, which, considering all the circumstances of its production, is a colossal work, creditable both to its authors and the country. *The Complete Works of Champlain*, published by M. Desbarats, at an outlay of \$12,000, is an undertaking worthy of Trubner or Plon.

The copy-right law of 1868, though by no means perfect in all its provisions, has proved of great benefit to the country, and publishers have taken advantage of it to inaugurate a series of home publications. The Canadian houses have already taken a start in the matter, and their reprints of popular works of both English and American writers prove, perhaps better than anything else, how much Canadians have learned to rely upon themselves. The time is not far distant when there will be Canadian editions of most standard authors, as well printed and sold at least as cheap as those imported from abroad.

It was long believed that literary weeklies and pictorial papers could not be produced in Canada. But several have lately sprung into existence and are flourishing. Ontario and Quebec have each a weekly of the kind, made up of light reading of every description, and while both appear equal to American papers of the same standard, their moral tone is healthier, and they really deserve the appellation of "family" papers. With regard to an illustrated paper, the Dominion can point to its own, now nearly in the third year of its existence, as not inferior in any respect to the best pictorials of London, Paris, Berlin, or New York. Nay, to Canada belongs the honour of having first invented the process of reproducing pictures directly from photographs, without the intermediary of wood engraving. This new method is destined with time to operate important changes in the pictorial art, the chief of which will be to place the copies of the finest pictures within reach of the most modest purse.

From weekly publications the natural transition is to monthly ones. It is a long step to take, but the country will take it. Nothing strikes me as better illustrating the progress about which I write, than the fact that the Canadian people are prepared for and demand monthly magazines of their own. It is only yesterday that a gentleman who had witnessed the inauguration of Confederation in 1867, and who has since been away, asked me how the "new nation" had been getting on in his absence. For my answer, I pointed to the first number of a monthly periodical which had just been laid on my table. "I am satisfied," said my friend, "five years ago such a publication would have been impossible."

Besides literary magazines there are special organs devoted to professional and technical studies. Agriculture and Horticulture have several in the different Provinces. There are at least two, to my knowledge, for the Natural Sciences. I have counted four Medical Journals, one Journal of Dentistry, two Law Reviews, and two Journals of Education.

This brief sketch would not be complete without a word respecting the newspapers of the Dominion. They are not only a special department of literature in themselves, but they are the means of fostering and propagating a taste for literature among the masses. The number of Canadian newspapers, including, for reference, those of the colonies not yet united to the Dominion, reaches the handsome total of 390. The distribution is as follows:

Ontario.....	215
Quebec.....	75
Nova Scotia.....	35
New Brunswick.....	30
Newfoundland.....	15
Prince Edward's Island.....	9
British Columbia.....	8
Manitoba.....	3

These papers present a fair average of ability and enterprise, and as to dignity of tone, they are not below the standard of the foreign press. I learn, however, they are not so remunerative as they ought to be, owing to a want of common understanding as to business management. Ontario has its Press Association, but that is not enough. There should be a Dominion Press Association to regulate the rates of advertisements, the vital question of pre-payment, a uniform system of telegraphic reports, and other equally important matters.

Canada has now only to continue the good work which she has begun. If she is destined—as there is reason for believing—to become a great and prosperous nation, it rests with her to take a distinct place in the world of letters.

JOHN LESPERANCE.

ST. CATHARINES, ONT.

St. Catharines is one of the brightest little diamonds in the coronet of Canada.

In 1775 a corps of loyalists, known as Butler's rangers, first settled the district, principally, however, locating themselves in what is now called Niagara. In 1796 Sheriff Thomas Merritt, an officer of high standing in New York State, and of course a loyalist, settled in Grantham, as it was then called. A large proportion of this Grantham was owned by Robert Hamilton, Esq., of Queenstown, who on the death of his wife, Catherine, named the settlement after her, St. Catharines. This name was given the town in 1808. The first church erected was in 1797, the Rev. R. Addison being rector of the same. In 1802 the first hotel was built by Captain Adams, a leading gentleman of the place, and leased by him to another party. This hotel used to stand to the left of the city as seen in the illustration. Capt. Adams' son, the present Col. Adams, is paymaster to the Welland Canal, and an esteemed resident of the district. In the war of 1812 we find the Hon. Wm. Hamilton Merritt, son of the brave old Sheriff, an active officer of cavalry. St. Catharines was often crossed and recrossed by antagonistic troops during the war, in which Captain Merritt played no inconsiderable part. This same gentleman may be considered the actual maker of the present stirring town, as it was he who projected the Welland Canal in 1824 and opened it in 1829. It extends twenty-eight miles from Dalhousie to Port Colborne, and forty-four to Port Maitland. Like the magic touch of the conjurer, this canal caused to spring up not only St. Catharines, but Thorold, Merriton, Port Robinson, Welland and other flourishing little places. The principal manufacturers among the "saints" are first and foremost—Louis Shickluna, shipbuilder, who has spent four million dollars; next, John Rierdon, the largest paper manufacturer but one in the world; Norris & Neelon, who own a large smithy, cooperage and saw factory; Tuttle & Date, proprietors of an edge tool business, one of the most extensive in operation in the Dominion; McFate & Co., variety factory; Helms & Wilson, who carry on an immense lumber and planing mill business; Bishopric, soap factory; Disher & Hait, woollen mills; Von Porphor, established oil works; Wait, Beaver cotton mills, the first established in Canada; Gordon, McKay & Co.'s cotton mills, which are the largest in the Dominion.

Besides these, a host of minor mills, factories and workshops, worked by water and steam power, make the Welland Canal throb with machinery from St. Catharines to Thorold, and give employment to some two thousand operatives of all kinds. The hotels of St. Catharines are superior, the Stephenson and Well nd being very fine buildings.

Besides her manufacturing privileges, St. Catharines owns particularly disagreeable water, which medical men have declared to have curative elements; hence hundreds of people in summer through the hotels of the place to drink of the "bitter waters of Marah;" and the town has become a celebrated watering-place. Dr. Hill has recently added to the water cure establishments, and deservedly enjoys a considerable success.

Papers in St. Catharines obey the Divine injunction given to man after the flood, as they certainly multiply rather fast. First comes the *Evening Journal*, owned and edited by Messrs. Grant, Montgomery, and Cuff; this is a smart racy daily and weekly ministerial paper. It was first started in 1824. The *Evening, Daily and Weekly Times* is owned and run by Mr. P. P. W. Moyer, who has done good service to the Clear Grits in the Welland Election. The *Constitutional*, conservative, edited by a most respected gentleman, Mr. Seymour, now Inland Revenue Commissioner. The *Free Press*, Mr. Fitzgerald, and the *Advertiser* complete the list. Yet another daily paper is in contemplation.

Two large pork packing establishments add to the wealth of the town. The largest is run by Brownlee & McArthur, and is a decided credit to the place. The other is owned by Wingrove & Co. Both firms are vigorously building; as, indeed, half the wealthy people of St. Catharines are doing at the present time.

Still maintaining that prestige which their grandfather, Sheriff Thomas, and their father, the Hon. Wm. Hamilton Merritt, handed down to them, at the present moment we find one of the family member of the Dominion Parliament, and President of the Welland road, another the most eminent historian in the Dominion of Canada.

M.

In this issue we give an illustration of St. Catharines, and two street views, showing some of its principal buildings. The population of the town is said to be about ten or eleven thousand.

THE EPISCOPAL CHURCH, STAYNER, ONT.

The thriving county of Simcoe, in the Province of Ontario, has many flourishing villages, and among these may be mentioned the village of Stayner, situated in the township of Nottawasaga, nine miles distant from Collingwood. It owes much of its prosperity to the fact of its being a station on the Northern Railway. The population is estimated at about one thousand. We give an illustration, copied from a photograph, of the Episcopal Church there, which is a handsome structure and very creditable to the enterprise of the congregation. The Rev. S. Briggs, M.A., is the Incumbent.

The Communist, Félix Pyat, one of the arch-spirits of the movement, who has so long evaded the searches of the Paris police and soldiery, has finally escaped and got to London. Pyat always possessed a happy knack of steering clear of the dangers of enterprises in which he embarked, and on this occasion he was the only considerable exception to the general rule that the leaders of the Commune were killed or taken. He has been in London some time. He remained hid in Paris until the strength of the Anti-Communist storm had in some degree spent itself, until the search had relaxed. He then stole out by the Strasburg railway, and went eastwards towards Switzerland, wisely avoiding the direct route to England, where men who knew him well were specially posted. Next he made a circuit and came to England. He dwells in the classic region of Leicester-square, and like many minor lights of the Commune now in England he is much dependent upon the friendliness of his more fortunate fellow-countrymen.

WHEN WILL I MARRY?

When geese upon the rose tree grow
And oysters wing the realms of space,
When wintry hills are void of snow
And honest toil is no disgrace,
When warmth shall freeze, when frost shall bake,
And old maids leave off drinking tea,
Why then, unless I much mistake,
My love and I shall wedded be.

When doctors cure their patients all
And lawyers think no more of fees,
When small is great and great is small
And pigs make honey like the bees,
When bigots teach the world good will
And all religious sects agree,
And Dick and Tom are Jack and Jill,
My love and I shall wedded be.

When poverty our coffers fillz
And man to man is brother true,
When heartache's cured by Bristol's pills
And you are I and I am you,
When right is might, when black is white
And swells no longer love to spree,
When owls and burglars shun the night,
My love and I shall wedded be.

When matrons never more will scold
And babies all have ceased to cry,
When Constancy grows firm and bold,
And bliss attends the nuptial tie,
Then, when the wintry fields are green,
And May-day decks her Christmas tree
While Folly's nowhere to be seen,
My love and I shall wedded be.

When wise Economy makes all
Young wives with moderate dress content,
Who, ere they answer Fashion's call,
Agree that we should pay our rent,
Yes! when within the book of Time
These glorious changes we shall see,
In that glad day,—that hour sublime
My love and I shall wedded be.

QCILL.

SCIENTIFIC.

A man will die for want of air in five minutes, for want of sleep in ten days, for want of water in a week, for want of food at varying intervals, dependent on constitution, habits of life, and the circumstances of the occasion. Instances have been given where persons have been said to live many weeks without eating a particle of food, but when opportunities have been offered for a fair investigation of the case, it has been invariably found that a weak and wicked fraud has been at the bottom of it.

WARM BATHING.—The warm bath is a grand remedy, and will often prevent the most virulent of diseases. A person who may be in fear of having received infection of any kind, should speedily plunge into a warm bath, suffer perspiration to ensue, and then rub dry, and dress securely to guard against taking cold. If the system has imbibed any infectious matter, it will certainly be removed by this process, if it be resorted to before the infection has time to spread over the system, and even if some time has elapsed, the drenching perspiration that may be induced in a hot bath will be pretty sure to remove it.—*Family Herald*.

POSTURE OF THE HEAD IN SLEEPING.—It is often a question among people who are unacquainted with anatomy and physiology, whether lying with the head exalted, or on a level with the body is the more unwholesome. Most people consulting their own ease on this point, argue in favour of that which they prefer. Now, although many delight in bolstering up their heads at night, and sleep soundly without injury, yet we declare it to be a dangerous habit. The vessels in which the blood passes from the heart to the head are always lessened in their cavities when the head is resting in bed, higher than the body; therefore, in all diseases attended with fever, the head ought to be pretty nearly on a level with the body; and people ought to accustom themselves to sleep thus and avoid the danger.

STRASBURG CATHEDRAL.—The cathedral is thought by the Strasburgers to be sadly damaged; perhaps the fact that the Germans have taken possession of it is considered by them as only a trifle less horrible than if it had been actually razed to the ground; but I must confess that to stranger eyes it looks, externally, much as it did eight years ago. When the effect of the balls was pointed out, one could, of course, perceive that here a statue had lost an arm or leg; there a long piece of parapet shot away; and, further on, the mullion of a window was splintered; yet, as I have said, these misfortunes were not very noticeable to the eyes of strangers. But on going within the beautiful edifice we were greatly grieved to see the fearful gaps—now closed by boards—and numerous speckings all over the grand coloured glass of the windows. The one most seriously damaged is the clerestory of the nave, immediately facing the organ. The large cinque-foil in the head of this is entirely shot away, and great damage is done to other portions of this and the neighbouring windows. A horrible "obus"—a huge pointed cartridge—came crashing through the glass, flew across the nave of the cathedral, and, smashing in the organ pipes, lodged in the organ itself. Here, wonderful to tell, it remained without exploding. Had it burst, of course annihilation of not only the beautiful organ, but also of great part of the cathedral itself, must have been the consequence. The custodian of the tower has had the dreadful missile mounted on a foot of marble, and on it fixed a brass plate telling the day (or rather the night), month, and year, when the fearful hail of iron and fire fell on the devoted town. The organ pipes have not yet been replaced, but white linen blinds are drawn down over the cruel gaps. More than half of the organ is so covered, thus showing the extent of the damage done. The marvellous mechanical clock is apparently uninjured.—*Builder*.

The more prominent members of the British Association, as a result of some private conferences held during the Edinburgh meeting, have resolved to attempt the founding of a permanent Science Union, for the discussion of scientific topics and the diffusion of scientific knowledge in other ways. It is felt that annual meetings, and then only of a fortnight's duration, give to the British Association a somewhat ephemeral character, which does not guarantee positive, and lasting good results.