

THE CRITIC.

The future greatness of this Dominion depends upon the development of her varied natural resources, and the intelligence and industry of her people.

HALIFAX, N. S., FRIDAY, SEPTEMBER 11, 1885.

THE METAL OF THE FUTURE.

The discovery of aluminum, which is one of the metals found in clay, granite, and other rocky and earthy substances, has been attributed to Wohler, but it was not until Deville pointed out its great utility, that scientific investigators directed their attention to what promises to be one of the greatest discoveries of the 19th century. Aluminum is a white metal resembling silver, but possessing a bluish hue, which reminds one of zinc. It is very malleable and ductile, in tenacity it approaches iron, and it takes a high polish. When heated in a furnace it fuses, and can then be cast in molds into ingots. It is lighter than glass, being only one fourth as heavy as silver.

A prominent mechanical engineer says the metal of the future is aluminum, and that in a few years it will displace iron and steel and revolutionize the industrial arts. He says the world contains ten times as much of it as of iron—every clay bed being an aluminum mine. It is three times stronger than Bessemer steel, will not corrode, is very ductile, is a third lighter than cast iron, and the raw materials for making it are not worth \$20 a ton.

A STEP IN THE RIGHT DIRECTION.

The Federal Government have done well in recognizing the importance of the agricultural interests in this Dominion, and the appropriations which they have made towards the establishment of a Dominion Agricultural College and Experimental Farm should prove advantageous to the farmers in all sections of Canada.

For years the Federal authorities of the United States have paid special attention to agricultural questions, and by experimenting on tree culture and by distributing seeds among the farmers, have opened up new classes of cultivation and new sources of profit. As an illustration of the results of this watchful care it may be pointed out that prior to 1857 it was not known that the Chinese sugar cane would grow in the United States. The cane was, however, made the subject of experiments, and now it is growing profitably as far north as Maine.

Russia, which in many respects is far behind the age, fully recognizes the importance of improvement in her agricultural system, and the Government is now making strenuous efforts to better the position of those engaged in farming. France, foremost among nations in that which concerns the prosperity of her people, provides facilities for the education of those adopting the profession of agriculture, and her fruitful fields and smiling vineyards bear testimony to the value of the instruction imparted. Germany, Switzerland and Holland have likewise made ample provision for the thorough training of those engaging in agricultural pursuits, and Britain has also dealt fairly with this important class in the community.

We trust that the Agricultural College and Experimental Farm may prove of great service to Canadian farmers, enabling them to reap the full reward of their labour. With a good soil and a fine climate such as we have in Canada, the Dominion should soon take a high rank among the great agricultural nations of the globe.

THE FRENCH IN CANADA.

In these days, when the destiny of Canada is made the subject of so much discussion, it will, doubtless, be of interest to notice a theory which some hold as to the future of the French Canadians. An article, setting forth this theory, which recently appeared in the *Catholic World*, has been copied and enlarged upon by several French Canadian papers, notably *La Verite* and *L'Eclair*. The writer of the article maintains that Quebec is only attached to England by the bonds of a political union, not by the ties of affection or gratitude. Only a small proportion of the population are enthusiastically English. Whither do the sympathies of the remainder tend? None of them wish to see their allegiance to France restored. While preserving a loving attachment for the France of the distant past, the home of their remote ancestors, they have no affection for the France of the eighteenth century, which abandoned them in their hour of need; and they are too devout Catholics to seek an alliance with the enemy of their church, the infidel France of to-day. Nor can the French Canadian ever become reconciled to the idea of annexation to the United States. They know too well that they would be liable to sink to the position of political nothingness, in which the French of Louisiana find themselves at present.

Mr. Fleming, the writer of the article in the *Catholic World*, predicts that one day there will be an independent French State on the banks of the St. Lawrence. Should the Dominion of Canada become disintegrated, this prediction would be in a fair way of fulfilment. But so long as the English Provinces of the Dominion remain united, the people of Quebec will probably remain in their characteristic, we had almost said chronic, state of contentment. It is true that their numbers are increasing with what may appear an alarming rapidity. There are at present 1,200,000 of them in the

Province of Quebec, and 1,490,000 in the Dominion. It is claimed that they increase, even without the aid of immigration, more rapidly than their English-speaking fellow-citizens. Mr. Fleming draws this startling inference:—"The fact is, that the Canadian confederation is silently but surely becoming French. Municipalities are changing English names of streets and localities into French names, and everything indicates that the English must go." More slowly, Mr. Fleming, if you please. Even granting that your wish is not father to this thought, that your figures are not exaggerated, or your facts partially stated, we demur to your conclusion. Leaving many other considerations out of the question, there is a single ethnological principle in which we find sufficient ground for confidence. It is well known to the student of history that some races are so adapted to govern others that they are called dominant races. The Osmanli Turks in Europe number only 700,000, yet they hold sway over 10,000,000 of other races. The English belong to the most pre-eminent dominant race of all. Their ruling power is sufficiently apparent from the fact that 150,000 English in India rule over 240,000,000 of divers religions and races. Now, the French are not a dominant race, and the French Canadians are no improvement on their European cousins. Their political position will always depend on circumstances which they have no hand in creating.

"Their level life is but a smouldering fire,
Unquenched by want, unfanned by strong desire."

Of this we may feel sure, that whatever the future of the French Canadians may be, it will not be of their own making; that the formation of a French State on the banks of the St. Lawrence will follow, not precede, the breaking up of confederation; and that in any event, we have little cause to fear French Canadian supremacy in Canada.

A PAYING BUSINESS.

We referred in a recent issue to the peculiar advantages offered by Nova Scotia to those engaged in the wood pulp industry, and as our reference to the subject attracted the attention of many persons throughout the Province, we think it well to subjoin a few facts respecting the growth of this industry in Norway, as they may serve to illustrate the growth and magnitude of the wood pulp industry now being carried on in that country.

Year.	Tons.	Value.
1875	8,540	\$ 753,600
1876	12,400	1,098,000
1877	14,866	1,189,270
1878	19,321	1,410,433
1879	20,773	1,389,111
1880	26,055	2,344,950
1881	42,779	2,652,298
1882	60,033	3,361,848
1883	70,000	3,920,000
1884	82,000	4,100,000

These returns are most satisfactory for Norway, but they prove that even in Nova Scotia have for years been neglecting a business for which the country is admirably adapted, and which could not fail with good management to be a safe and profitable enterprise.

BRITAIN'S MILITARY POWER IN INDIA.

The military strength of Britain is too frequently measured by the size of her standing army, which has, during the past decade, fallen below 200,000 men, actually in service. When, however, the native armies of India are taken into account, it will be found that Britain takes a leading place among the great military powers of the world. The *New York World* says:—

"The strength of India in war time is at present a subject of much interest and attention. There are now in the Indian peninsula about 60,000 British and 140,000 native troops. These comprise the usual standing army. But in addition to these forces the Maharajahs or native princes maintain large armies that could be made available in an emergency. The three great Mahratta states of Gwalior, Indore and Baroda can turn out 59,600 infantry and cavalry and 116 guns. At least one-half of this force of 60,000 men could easily be spared for a war with Russia. Then there are ninety-three Hindoo States possessing 188,000 infantry and cavalry and 3,096 guns, one-half of which would be immediately available.

"The state of Cashmere alone has 27,000 troops and 160 guns, while the twenty-two Mohammedan states, possessing 74,760 troops and 865 guns, would no doubt be largely utilized against Russian aggression. Then there are 3,048 European volunteers in Bengal, 1,100 in the Panjab, 3,500 in Bombay, and 2,340 in Madras, who would relieve the British garrison of a considerable portion of their duty, so that the greater portion of them could be spared for the frontier. The Afghans have an army of 60,000 which, in the event of war, it is said could be raised to 200,000. Taking all together—the Afghans 200,000, Cashmere 27,000, the Mahratta States 30,000, the Hindoo States 98,000, the Mohammedan States 40,000, and the British troops 50,000 out of the standing army, we have a grand total of 437,000. If Nepal joined, there would be probably 50,000 more, bringing up a total of 487,000 men. These troops could be thrown on the Afghan frontier from the furthest point of India in little more than a week. The military system of railways in India enables the Government to concentrate the troops from all parts in the shortest space of time. The science of railway strategy has been brought to a greater degree of perfection there than in any other country."