

CREAMERIES.

There was a time when the farmer's wife was but a Cinderella in the house, a drudge who worked from morn to night with her work never done. There may be a touch of romance about the whirring spinning wheel and the busy loom, but those who remember the olden times when the wool was spun and the homespun woven in almost every farm house in the country, will probably remember that the housewife of the period was a slave to her never ending round of duties, and that she had little time for that culture of intellect and social intercourse which make life sweet. Many more of us can remember the time, when the farmers' wives throughout the country were called upon to carry on miniature cheese factories, in which the product scarce repaid the labor of manufacture. But in these days of division of labor, cheese making, like the spinning of wool, and the weaving of cloth, has come to be regarded as a distinctive industry, and although there are some women who cling to the old-fashioned occupations of farmers' wives, we venture to say there are few who would willingly take upon themselves the onerous duties of a housewife of fifty years ago. As home-made cheese has given place to factory cheese, so in time will home-made butter give place to that manufactured in the creamery, and as the quality of creamery butter as far excels that of home-made butter, as does factory cheese that of the home-made article, neither the farmer's wife nor the consumers of butter can have any reason to wish the postponement of the establishment of creameries in Nova Scotia. Eight years ago the Province of Ontario was without a single creamery, there are now 28 in successful operation, all of which report a satisfactory business. The cost of manufacturing creamery butter is $4\frac{1}{2}$ cents per pound, and as it can be disposed of at wholesale for from 20 to 25 cents per pound, it is evident that the farmer would receive more than if the butter were made at home, to say nothing of the saving of labor to his wife and family. Our Provincial Government would do well to follow the example of the government of Ontario by establishing experimental creameries in different parts of the Province. These if properly conducted would be more than self-sustaining, and our farmers would have the advantage of studying butter making through the practical spectacles of experience. For the information of those who are interested we would state that the Eleventh Annual Report of the Ontario Agricultural College contains an excellent description of the method of managing these institutions with other information, and the report we have no doubt can be obtained on application to the Commissioner of Agriculture.

A LOYAL SENTIMENT.

The deputation of the Imperial Federation League, which waited on Lord Salisbury for the purpose of inducing him to appoint a Royal Commission to examine into the present condition of the respective portions of the Empire, and report upon the advantages which would be derived by each from a closer political union, have reason to be satisfied with their interview. From Lord Salisbury's reception of the deputation we are led to think that the new Premier is far from opposed to the scheme of Federation, and although he pointed out that as yet no practical means for carrying out the idea had been suggested, he stated that the rapid progress of the movement during the past decade convinced him that it must ere long become a live issue in national politics, and he trusted that in the meantime the League would do its best to further the federationist idea, both at home and in the colonies. There are few persons born under the British flag who leave their country, or forswear their allegiance, without a pang of regret. It may be only a sentimental idea to wish to continue within an empire the greatest the world has ever yet seen, but the idea is sufficiently strong to make most of us hope that destiny has not decreed that we in this Dominion should have a distinct national existence, or be swallowed up in the great Republic to the south of us. It was sentiment that induced 20,000 of our Loyalist forefathers to leave the United States and settle in the Maritime Provinces, it is sentiment that makes us love our native place, the haunts of our youth, and the old landmarks of our boyhood, it is sentiment that binds us to the land of our nativity, that make us proud of her resources and jealous of outside interference, and it is this same strong sentiment that arouses in us justifiable pride when we read of Waterloo, or Trafalgar, of Inkerman, or Tel-el-Kebir. By tradition, by race, by form of government, and by language, to say nothing of closer ties, we are drawn to our brother English, brother Scotch, and brother Irish, across the seas; and he who would break those ties with ruthless hand is devoid of that sentiment which makes manhood manly. Individuals may be induced by sordid motives to use voice and pen to shiver the Empire into fragments, but until they are prepared to prove that the moral and material welfare of the people demands that we become an independent nationality, or be annexed to the United States, we can afford to allow them to rant and write without fear of ill consequences. As an idea the federation of the Empire has the endorsement of both of our great political parties, and when the statesmen arise who shall give this idea practical shape, they will find our people loyal to the core.

THE PEACE POWERS ALARMED.

Germany and Austria, the two great Empires of Central Europe, have at length become alarmed at the constant intrigues and grasping policy of Russia. The recent meeting of the two Emperors at Gastein, and the conspicuous absence of the Czar, at what has come to be regarded as an annual meeting, has created wide-spread speculation as to the reasons which induced Alexander to remain at home, but right or wrong as these speculations may be, there can be no doubt but that both Germany and Austria,

the peace powers of Europe, have reason to fear the sincerity of Russian pretensions. They well know that the peace of the Balkan Peninsula is threatened by a renewal of the disturbances in Macedonia, which Russian agents have long been engaged in fomenting. Turkey is sending fresh reinforcements to her Armenian frontier because she is alarmed at the concentration of Russian troops in that quarter. Roumania is fortifying Bucharest to protect herself from being used as a Russian high road in a fresh invasion of Bulgaria. England has just been compelled to protest against Russia's breach of the Treaty of Berlin in the matter of Batoum, and to resist her renewed attempts at encroachment on the Afghan boundary. China is alarmed about Russia's intentions with regard to Port Lazareff. They see that in the Balkan Peninsula, in Central Asia, and in the far east, Russia is pursuing one and the same policy, and although their interest in Asiatic matters may be limited, they realize that a further extension of Russia's domain in Europe would be a constant menace to their own peace at home. Britain's support of Turkey has hitherto been coldly seconded by Germany and Austria, but it is probable that the task of checking Russian encroachments in Europe will hereafter devolve upon the subjects of the two Emperors referred to above.

IT WILL YET BE.

Looking back over the past twenty years and noting what has been accomplished in the field of electrical science, we are forced to the conclusion that before the close of the century the application of electric motive power will become not only feasible but absolutely essential for the carriage by rail of both freight and passengers. So long as we were obliged to depend upon chemical action for the generation of electricity, no important application of the power for mechanical purposes was possible, but by means of the modern dynamo we can convert mechanical into electric energy upon the largest scale, and by reversing the process we can obtain from this electrical energy mechanical power, the cost of producing which is even now much less than that of equal steam power. The first electric railway successfully operated was constructed in Berlin by the Siemens firm in 1879. It is one mile and a half in length, and has been found to work most satisfactorily. The longest electric railway which has yet been built is that constructed by the London firm of Siemens Bros., in the north of Ireland, between Portrush and Bushmills, a distance of six miles. The line is a single track one, of three foot gauge, and is laid at one side of the country road following its grades, which are heavy, being in some parts steep as 12 in 55, and curves which are often sharp. A test was recently made upon this road as to the comparative cost of propulsion by electricity or drawing by a steam tramway engine. With equal weights in each train, and similar passenger capacity, it was found that the cost of fifty-two trips, a total distance of 312 miles, was for the train drawn by the steam tramway \$40.00, and for that propelled by electricity only \$30.00. Recent experiments on the elevated railway in New York have demonstrated beyond a doubt that we are on the eve of some startling revelations with respect to the application for railway purposes of this wonderful motive power; revelations which it is said will revolutionize the railway system of the world. Edison, Field, Ayrton, and Perry, are at present busily engaged in the study of the problem of how best to utilize electric power, and from the semi-official announcements which have been made public it is evident that their labors have already been crowned with partial success. When we consider that to generate sufficient steam power the weight of the ordinary locomotive, in order to ensure strength, has to be enormous, and that in consequence the road bed, bridges, and rails, have to be made correspondingly strong in order to support this weight, it is plain that if the electric motor comes within the region of practical use, the weight of the trains and the relative strength of the road way will be greatly reduced, this will of course greatly diminish the cost of construction, and will in turn lead to a reduction in passenger and freight rates. It may appear incredible, but it nevertheless is within measurable distance of being accomplished, that the present ill-lighted, badly heated, smoky, dusty, jolting railway carriages, will yet be replaced by cars propelled, heated and lighted by electricity, in which the traveller will at any moment be able to communicate with his friends by means of the telephone. Undoubtedly the keys of science are unlocking for us the gates of a wondrous world.

THE WORLD'S RAILWAYS.

The marvellous increase in manufactures that has taken place in the past fifty years finds its complement in the surprising railway development that has gone on during the same period. The railway statistics of the world, which were prepared by Mr. Paul Trasenster, of Liege, have now been supplemented by those compiled under the direction of the French Government, these no doubt are approximately correct, and are worthy the perusal of those who take an interest in the progress of civilization. The statistics are as follows:—

	1840.	1850.	1860.	1870.	1880.	1884.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
Europe.....	2,130	14,550	32,350	64,670	105,270	118,510
America	2,860	9,600	33,550	58,850	106,470	149,670
Asia.....			840	5,120	9,970	12,730
Australasia....			350	1,040	4,880	7,540
Africa.....			300	950	2,870	4,100
	4,990	24,150	67,390	130,630	229,460	292,550