

such as divide many interests in this country. We have no Established Church, (Applause.) We have none of those difficulties that arise from ancient systems that it may be impossible in older countries to get rid of, or that many may think desirable not to get rid of. (Applause.) We have, however, stated, no kind of class legislation—no kind of sundering differences—and we have a vast system of public free schools. In the province of Ontario there are considerably over 5,000 schools. Every child in the country can obtain a very good education at these schools. In each county of the province there is a good grammar school, where anyone can obtain, either free or at a very small cost, the elements of a classical education. There is our great University of Toronto, free to every person of every creed or class or circumstance of life—(applause)—an institution which contains an excellent library and museum, and which possesses on its staff of teachers some of the most eminent men that England and Scotland has produced. (Applause.) And we have in that institution the means afforded for the highest possible education, equal to that of any University in this country, at the smallest possible price that can be named in any country in the world. (Applause.) We have throughout the whole of the country a spirit of toleration of class and creed to creed which I think is exceedingly creditably to the whole of the country. We have, as you are aware, in the great province of Quebec a vast French population, the numbers of which are increasing at about the same ratio with that of the English. I was delighted to be able on a previous occasion to bear my testimony to the wonderful success of the French people in Canada. They are in the position of a people speaking an alien language; but, as Lord Dufferin remarked the other day in London, there is no class or population so thoroughly trained in Parliamentary practice and life, and to all the rights and feelings of an independent and proud people. They are as thoroughly British as any Englishman, Scotchman or Irishman. They are also possessed of a spirit of endurance—a power which is making itself felt in the country; and I am glad to be able to say, sir, that the English people and the French people live together in a spirit of the utmost harmony, and find no difficulty arising from the separate nationalities from which they originally sprung. [Applause.] I find myself, on returning to this country, sometimes a little curiously situated—not that I have anything to complain of, but there is, nevertheless, in a new country like Canada, habits, feelings, and practices grown out of its very freedom—things which perhaps come but slowly to older and richer communities. But, sir, I am glad to know that the same glorious spirit that animated the people of this country in former days animates the people in Canada. Burns puts into the mouth of Bruce the words—

We shall drain our dearest veins,
But we shall be free.

[Applause.] Now, sir, we are equally determined in the matter of draining our dearest veins always for freedom, and never, if we can help it, for anything else—(applause)—and I hope that the days are far distant when any occasion should arise which will compel the people of Canada or the people of Great Britain to take up arms for any purpose but for the maintenance of those institutions which Scotchmen in former days did so much to bequeath to the nation and to the world. (Applause.) You

have alluded, Mr. Provost, to the advantages which I enjoyed of having a Scottish education, and you were pleased to say that it was a commodity which could not easily be stolen. Well, I do admit, as every Scotchman must admit, the enormous influence which early Scotch training in the national schools in this country has on all the land. (Applause.) We are apt to speak of John Knox as a great preacher. I think if he excelled at all he excelled quite as much as a statesman as he did as a preacher. (Applause.) I think there is nothing for which we should revere the memory of John Knox so much as the establishment of the parochial school system of education in Scotland—(applause)—and I am sure there is no one who has gone abroad and has witnessed the influence that this early school training has had upon the Scottish character and the Scottish mind, but must be satisfied that it was the proudest day in Scotland's national existence when these schools were established. (Applause.) I have merely to say, Mr. Provost, in conclusion, that no Scotchman abroad has any reason to be ashamed of them—(applause)—and while I shall remain for the remaining days of my life in Canada—and shall remain there of course as a Canadian—I cannot throw off all allegiance to my own proud nationality of Scotland. (Applause.) And, sir, it is not necessary. When the children of Israel were taken captive by the great Eastern monarch and asked by their Babylonian captors to sing to them a song of Zion, they replied, "How can we sing the songs of Zion in a strange land? May my right hand forget its cunning if I forget thee, O Jerusalem." We can as Scotchmen sing our national songs, songs of freedom or affection, whether played in Canada or Australia, whether in the Arctic or Antarctic zones, and think our National Anthem as dear to us in one place as in another, for the broad banner of British freedom floats equally over every country of the British dominion. (Loud applause.)

The Provost then said—I am desired to state that, at the request of the workmen of Dundee, Mr. Mackenzie will meet them to-morrow in the Kinnaird Hall, when an address will be presented to him and he will address them.

Baillie Edward then called for three cheers for the youngest burgess in Dundee, which were very heartily given.

A vote of thanks having been passed to the Chairman, the meeting terminated.

A banquet held in the evening, at which Provost Cox presided, passed off successfully. Mr. Mackenzie's health was proposed and responded to, and Mr. E. Jenkins replied for the House of Commons.

The Meteorological Observatories of the Dominion of Canada.

THEIR ORIGIN AND OBJECTS.

We have received a copy of the fourth annual report of the meteorological office of the Dominion of Canada for the year ended 31st December, 1874. The following interesting facts are gleaned from the appendix to the report prepared by Mr. G. T. Kingston, M. A., Superintendent of the central station at Toronto:—

"The efficiency of a station depends on the skill, knowledge, and other qualities of the agent in charge, on the quality of the appliances at his command, and on a judicious selection of site. When a person, qualified by previous study, is placed in charge of a station, it is probable that he

will only need instruction on certain conventionalities, to become all that is desired; but, as the points where stations are most necessary are often those where no experienced observer resides, it becomes necessary either to send an observer to the station, or to procure the services of some person on the spot, whose premises are suitable, and to instruct him, as one best can. I believe that it would greatly contribute to the improvement of our system, if we possessed a small corps of well qualified observers, who might be made available wherever needed, especially if the service required a station at some remote locality, where no resident, qualified by education and circumstances, could be found to undertake the charge of it. To train a permanent corps of observers, by causing them to go through a regular course at head quarters, or to instruct other observers who, for that purpose, might visit the central office for a short time, a special instructor should be employed, to avoid interruption of other business of the office. Printed and written instructions alone, without oral instruction are not sufficient. The Magnetic and Meteorological Observatory at Toronto was established, and has been since maintained, for the purpose of procuring materials to aid in the general advancement of two great objects of physical research—terrestrial magnetism and meteorology—and is one of the four colonial observatories which were set in operation by the British Government in 1839, in compliance with a joint application made in 1838 by the Royal Society and the British Association for the advancement of science, an application which, in the same year, resulted in the equipment of a naval expedition for a magnetic survey of the high southern latitudes. Of these four colonial observatories, that at Hobart Town was placed under the management of the Admiralty, the director and observers being naval officers, while the other three, at the Cape of Good Hope, St. Helena, and Toronto, were under the Board of Ordnance, the directors and observers being officers and non-commissioned officers of the Royal Artillery, and Major, now General, Sir E. Sabine, R. A., the Director-in-Chief. Lieutenant Riddell, R. A., the first director of the Toronto Observatory, accompanied by the three non-commissioned officers, Messrs. Johnston, Walker and Menzies, reached Canada in November, 1839, when, after examining various localities, he finally gave the preference to Toronto. In the spring and summer of 1840 the observatory and residence were erected on a lot of two and a half acres granted by King's College (now Toronto University), on the condition that the building should not be appropriated to any other purpose than that of an observatory, and should revert to the College if the observatory should be discontinued. The several directors of the observatory, while it continued under Imperial control, were Lieut. Riddell, R. A., Lieut. Younghusband, R. A., and Lieut. H. Lofroy, R. A.; now Governor of Bermuda; the latter officer having continued in charge from the autumn of 1844 until the withdrawal of the detachment of Royal Artillery in the spring of 1853, when an arrangement was effected between the Imperial and Canadian Governments, by which the former handed over the building and instruments to the Canadian authorities, on condition of their continuing the observations. The non-commissioned officers, Messrs. Walker, Menzies and Stewart, whose services were temporarily granted by the Commander-in-Chief till they obtained their discharge from the army in 1853, carried on the duties of the observatory under the