

now among the finest in Canada; opened preaching stations in many districts, and had the happiness before his death of seeing many of these become large and flourishing congregations. Dr. Thornton has, in addition to his more immediate work as a clergyman, taken, during all his forty years' residence in Whitby township, an active and enlightened interest in the cause of education, and has done more, perhaps, than any other person to raise the character and efficiency of the schools in that district. He was an indefatigable worker, and spared neither toil nor personal exposure if anything were to be done for the social education or religious interests of the community. As one so long and so prominently identified with Canadian Presbyterianism, the Doctor will be much missed, and will be long remembered by many as an able preacher, a well-read theologian, an upright citizen, in one word, "a good man."—*Ex.*

Captain THOMAS G. ANDERSON, who died at Port Hope, late Superintendent of Indian Affairs, was well known in the early history of Canada. He was born at Sorel, Que., on the 12th of November, 1779, and had consequently attained the advanced age of 96 years. He was son of Samuel Anderson, a captain in what was then known as the Continental army, and who at its reduction in 1783 was placed on the half-pay list, removing the year after with his family to Cornwall, where he had obtained a grant of 1,200 acres of land. Having served an apprenticeship of five years to the late Thomas Markland, of Kingston, Thomas joined Mr. McKenzie, the latter's half brother at Montreal, and went with him by way of the Ottawa and French rivers to Mackinaw, taking with them a heavily laden bark canoe, manned by eight men. There he remained a year trading with the Indians, proceeding afterwards to other points for the same purpose. It is related of Captain Anderson that while at Milwaukee, he rode to Chicago on horseback to see Captain Whistler, of the American army, commanding the first troops stationed there, and was invited to dine with him. While the company were waiting dinner, a band of wild Indians in war paint, entered the room, and the chief going round the table, took the bread that had been placed beside each plate and gave it to his men. The ladies and gentlemen all left the room, Captains Whistler and Anderson alone remaining, and the latter, turning to the Indians, with much presence of mind, asked them why they had come ready for war, when their great father had sent them an army to protect them from their enemies. They thereupon turned and left the place peaceably, and Captain Anderson's tact in dealing with them probably averted an attack in which the whole company would have been murdered. It is also related of him, that one day while he was lying in his tent, a drunken Indian came and bent over him, knife in hand, pretending to stab him in several places, and would have done so in good earnest, had not the Captain with customary coolness, and knowing the Indian character, pretended to be asleep and refrained from making the slightest movement.

After amusing himself in this way for some minutes, the Indian left. Captain Anderson then called to his men to ask what was wanted. "Rum," was the reply. He asked for the bottle, and on its being handed him knocked the Indian down with it, gave him a good beating, and never saw him again.

In 1807 he returned to Mackinaw and got a supply of goods to trade with the Sioux Indians on the Mississippi, and continued trading with these Indians till 1813. Up to this time he knew nothing about the war of 1812 except by vague reports. In 1814, leaving his goods at Prairie-du-Chien, he went to Mackinaw, but had not been there a week when an express arrived from Prairie-du-Chien informing him that a portion of the American army had gone up to that place from St. Louis and were building a fort. His reply to the messenger was, "We must go and take it; you try how many volunteers you can raise." At this time Col. McDowell, whom Captain Anderson had never seen and who was not aware of what he was doing, was glad to hear that there was some chance of support from the rear in the shape of Indians, and sent to his aid Col. McKay, giving him what small stores and ammunition he could spare.

They started on the third day after receiving the news, and on the next day the Indians began to collect around them, supplying themselves with such provisions as in their hurry they could obtain. On reaching Green Bay a number of white volunteers joined them, and they arrived at Prairie-du-Chien the latter end of August. After pitching their tents Captain Anderson went with a flag of truce to the fort and called on them to surrender, which they refused to do. They then commenced an attack on the fort, the Indians and volunteers firing upon it with their small arms from all directions, and wounding some of the American soldiers through the port-holes of their block-houses. On the night of the third day they approached within a short distance of the fort, and by daylight had a rousing fire heating a shot with a view to setting fire to the fort, which the Americans saw, and at once hoisted the white flag. Our

volunteers had now one of the American boats, into which Captain Anderson hurried all the garrison troops, and sent them away under the British flag to pass Rock river, where they would be safe from the attacks of the Indians. The Americans in the other boat continued to fire upon them, but were soon conquered, and having cut their cable, drifted off down the Mississippi, which Capt. Anderson permitted lest they should be massacred by the Indians. They were now rid of their enemy, and Capt. Anderson remained in command of the fort in Prairie-du-Chien until the end of the war. He then returned to Mackinaw, discharged his volunteers, and was immediately sent back to the fort again with loads of presents for the Indians, and to declare peace formally. On his return from this service he found the garrison moved to Drummond Island, and was appointed to take charge of the Indian Department at that place. In November, 1828, the garrison was removed to Penetanguishene. In the course of the winter he went to Toronto at the request of Sir John Colborne to make systematic arrangements for the civilization of the Indians, and it was determined that the first establishment should be formed at Coldwater, where he built saw and grist mills, a large school-house, in which divine service was held, houses for himself and the Indian chief, besides some fourteen smaller ones for the Indians. At Orillia a similar establishment was formed, and at both places proper teachers were placed over the children, making great improvements. Three years afterwards Sir John's ideas were enlarged, and he determined to form a general settlement at the Manitoulin Island, with a view of drawing the Indians from the settled parts of the Province to that place. A commissariat store, a church, and several other public buildings were erected there. The boys were taught several trades, and the girls taught to spin and knit. In 1845 Capt. Anderson was removed to Toronto to fill a different office in the same department. He had now to visit ten tribes of Indians annually to pay them the annuity allowed by the Government, and to perform this he had to travel from the Rideau to Owen Sound. In 1858, finding himself growing old and unable to perform his arduous duties satisfactorily, he memorialized the Imperial Government for a retired allowance, which was kindly granted, and which he enjoyed till his death.—*Mont. Witness.*

V. Papers on Scientific Subjects.

1. THE BIRTHDAY OF MODERN CHEMISTRY.

Although the science of chemistry is of very remote origin, reaching far back into those ancient times when Moses, learned in all the mystic lore of Egypt, performed the exceedingly difficult feat of reducing into a potable liquor the golden calf of Horeb; and although many valuable processes were discovered by the ancients and by the alchemists, it underwent, about a century ago, a change so radical and so swift that it may almost be said to have been born anew.

Chemistry, says a learned French *savant*, (with that naïve forgetfulness of all outside nations which is so charming a characteristic of French philosophers,) "is a French science, invented by Lavoisier." No chemist can ever forget the obligations of his science to Lavoisier; but Lavoisier (we can scarcely refrain from quoting the classic A. Ward) is not everybody. Black, Cavendish, Sheele and Priestley all assisted at the birth of modern chemistry. And it is this auspicious birthday which, upon the 1st of August next, all the leading chemists of America will assemble at Northumberland to celebrate. There, at the grave of Priestley, they will commemorate that grand discovery which one hundred years ago opened up a new world of wonders—the discovery of oxygen. Seeing that the innumerable legislative assemblies and corporations which infest our fair country are in vacation, and that, in consequence, there is less than the usual amount of mischief in the air, we may take breath freely and pause a while to think of Joseph Priestley and of the approaching gathering of the *savants*, and to discuss briefly the appropriateness of the time selected for this celebration.

It may be said with truth that one of the fundamental ideas upon which modern chemistry rests, is the true theory of combustion which Lavoisier discovered and demonstrated. During the years 1773 and 1774 he had been experimenting by calcining metals in a current of air, and had observed that, when a substance is burned, it gains in weight precisely to the extent that the air loses; in short, that in burning there is neither gain nor loss, but that the aggregate weight of the metal and the air taken remains the same. In August 1774, Priestley discovered oxygen, and in October of the same year demonstrated it to Lavoisier in Paris. Then Lavoisier first conceived the brilliant idea that burning and oxidation are convertible terms, and that what happens when a substance is burnt in air, is merely that it is combining with oxygen, and the heat and light evolved are the visible signs of the intense, though invisible, che-