

2. SIR HENRY SMITH.

The telegraph brings the not altogether unexpected intelligence of the death of another prominent public man of the country, Sir Henry Smith. Sir Henry, though in public life for over a quarter of a century, never held a high position as a politician. As a Conservative, and a near neighbour of Sir John A. Macdonald's he succeeded in obtaining a position in the original Coalition Cabinet of 1854. When the McNab-Morin Ministry took office in the fall of that year, he was appointed Solicitor General for Upper Canada. That he was an acquisition to the Cabinet we cannot doubt, for he was frequently placed in difficult positions, and always acquitted himself with credit. His debating powers were above mediocrity, and many a gallant stand he made on the floor of the House of Assembly. He continued Solicitor General four years. The year after he was elected Speaker of the House, and was commissioned to proceed to England to present an Address from parliament, inviting Her Majesty the Queen to visit Canada. In the following year, it will be remembered, His Royal Highness the Prince of Wales came to this country as the Queen's representative in this particular instance, and as a memorial of the visit he conferred the honour of Knighthood upon the then Hons. Henry Smith, and Narcisse F. Belleau, the latter being at the time, Speaker of the Legislative Council. At the close of this year, Parliament was dissolved, Sir Henry ceased to be Speaker of the House of Assembly, and on going back to his constituents, in the County of Frontenac, he was defeated by Mr. Morton. After Confederation, he was elected for his old constituency as a candidate for the Local Legislature. As an active member of that body he was extremely industrious, but notwithstanding his introduction of many important measures, he carried out but little legislation. His position in the Legislature was rather anomalous, and he did not secure the respect he ought to have commanded, as an experienced Legislator. His measures were treated as the emanations of a disappointed politician, rather than a practical member, who had been longer in political life than any other member of the House, except the Hon. John Sandfield Macdonald. Sir Henry was born in London, England, April 23rd, 1812, and came to Canada when only eight years of age. He has thus seen the country gradually progress, until it has become what it is. He resided in Montreal until he received his elementary education, which, however, was completed at Kingston. He studied Law with Judge Hagerman, and commenced his career as a lawyer in 1836. In 1846 he was made a Queen's Counsel, and soon after the Union of Upper and Lower Canada, entered Parliament for the only county he represented during his long Parliamentary career. As a member he was painstaking, and always ready to do the most he could for his constituents; and had he been always true to his party, he might possibly have been one of its ornaments.—*Hamilton Spectator*.

VI. Papers on Science and Natural History.

1. IMPORTANT FACTS ABOUT TELEGRAPHING.

The unusual activity at this time of Telegraph Companies in extending their wires, and in enlarging their field of operations among our neighbours across the line, and the appearance in our midst of a new Company, organized under the name of the Dominion Telegraph Company, by some of our most wealthy and influential citizens, has led us to investigate the causes which superinduce the present extraordinary telegraphic developments which are everywhere presenting themselves.

Mr. Scudamore's report to the late and present Postmaster General of the Home Government, was laid before Parliament at its last Session. Satisfied with the arguments and facts detailed by Mr. Scudamore, after a full and critical examination of the entire Continental system of telegraphing, the Imperial Government has bought all the telegraph lines of Great Britain, with the view of withdrawing this important agent of civilization from the hands of private Companies (who by virtue of the control of certain exclusive patents, imposed a repressive tariff,) and making its magic achievements the cheap and general blessing the people demand.

To accomplish this result, the strong arm of the Imperial Government was required, owing to the continued life of the patents, upon the peculiar kind of instruments used in the United States, where the Morse system has been adopted, (that patent having expired) to accomplish the same results of cheaper rates and more efficient service, nothing but a well ordered competition need be invoked.

The following table taken from Mr. Scudamore's report, shows the rapid increase of telegrams as compared with letters, during the six years ending within 1867, on the Continent and the United Kingdom:

PROPORTION OF INLAND TELEGRAMS TO INLAND LETTERS.

Year.	Belgium.		Switzerland.		U. Kingdom.	
	Tel'gs.	Let'rs.	Tel'gs.	Let'rs.	Tel'rs.	Let'rs.
1860.....	1	to 218.....	1	to 84.....	1	to 296
1861.....	1	to 195.....	1	to 87.....	1	to 273
1862.....	1	to 187.....	1	to 80.....	1	to 221
1863.....	1	to 114.....	1	to 74.....	1	to 197
1864.....	1	to 83.....	1	to 70.....	1	to 169
1865.....	1	to 73.....	1	to 69.....	1	to 151
1866.....	1	to 37.....	1	to 69.....	1	to 121

The influence of cheapening the rates in increasing the volume of business, is pointedly shown by this table, in connection with the history of telegraphing in Belgium. In that country the charge was uniformly one franc, irrespective of distance, from December, 1862, until December 1865, the rate was reduced *half* a franc, and immediately, in a single year, notwithstanding the large augmentation of the previous three years, the number of despatches increased about 233 per cent. This was upon wires managed solely by Government Officials in the usual stated style of that little German Kingdom. What it would have been had the additional stimulant of competing private interests, adapting new modes, multiplying facilities and dependent, not on Government, but the people, entered into the experience, we are only left to conjecture. We can, however, judge something of the regular annual increase of telegraphing by taking the figures reported by Mr. Scudamore in relation to the telegraphs of the United Kingdom, and noting the history of the tariffs they have established for the last few years.

From 1860 to 1865 the tariff of English Companies, except for a short period of struggle between the United Telegraph Company and the London District Telegraph Company, remained stationary, and during that time telegraphing by its own normal development increased from the ratio of 1 telegram to 296 letters in 1860 to 1 telegram to 196 letters in 1864.

Early in 1865 an arrangement was arrived at between the owners of the various patents which excluded the possibility of competition, and tariffs were advanced and in some instances by the London District Telegraph Company, doubled, yet, notwithstanding this, of such irrepressible growth is the nature of telegraphing, that in 1866 the ratio of telegrams had again increased in two years, from 1 dispatch to 169 letters in 1864, to 1 dispatch to 121 letters in 1866. No modern agency of science and civilization has developed and is developing as rapidly as the telegraph. Europe, Asia, the United States, and even the North coast of Africa, are alive with schemes having for their object the increase of its facilities. Continents are spanned, and oceans crossed by multiplying wires.

Entering upon a new era of consolidated material and political advantages, it is proper that the public of the Dominion should liberally foster all enterprises which tend to yield enlarged means of intercommunicating between its parts, while at the same time, they give to the citizens of each the advantage of surer and better service at reduced rates.

On this side of the Atlantic, where the distances are greater from one city to another, and where the growth of trade and commerce keeps pace with the influx of population from all parts of the world, the growth in the receipts from telegrams cannot be estimated by the same standard as in the densely populated countries of Europe.

The rapid developments of the telegraph business in the United States opens to the people of the Dominion what we may expect, if we cultivate in the proper spirit the enterprise of extending and multiplying telegraph lines.—*Hamilton Spectator*.

2. THE TRADES OF ANIMALS.

The following observations, which we copy verbatim from an "Old Curiosity Shop," have reference to animals, and exhibit their least apparent knowledge of the sciences; also their professions, occupations and enjoyments:—

Bees and geometricians; their cells are so constructed as, with least quantity of material, to have the largest sized spaces and the least possible loss of interstice. So also is the ant-lion; his tunnel-shaped trap is exactly correct in its conformation as if it had been made by the skilful artists of our species, with the aid of the best instruments. The mole is a meteorologist. The bird called the nine-killer is an arithmetician; so, also, is the crow, the wild turkey, and some other birds. The torpedo, the ray, and the electric eel, are electricians. The nautilus is a navigator: he raises and lowers his sails, casts and weighs his anchor, and performs other nautical evolutions. Whole tribes of birds are musicians. The beaver is an architect, builder and woodcutter; he cuts down trees and erects houses and dams.

The marmot is a civil engineer; he not only builds houses, but constructs aqueducts and drains to keep them dry. The white ants maintain a regular army of soldiers. The East India ants are